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Title

Amended Application for the Extension of the Exclusive Use Period for Cyflumetofen as Provided by FIFRA Section 3c(1)(F)(ii)

EPA Guideline(s)

Not Applicable

Author(s)

Mitchell Stamm Ph.D.
J. Thomas Wofford
John Baldwin Ph.D.
Danny O'Byrne Ph.D.
Rianna Guethling
Chris Hofelt Ph.D. DABT

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Test Facility / Performing Laboratory

BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709 U.S.A.

BASF Registration Document Number

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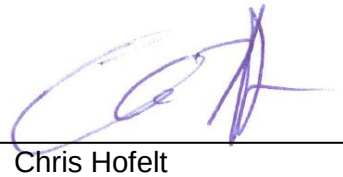
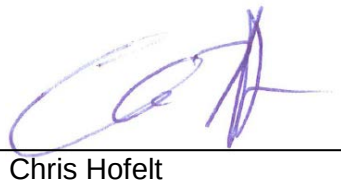
Submitter:  August 14, 2017

Chris Hofelt
Product Registration Manager
BASF Corporation

Date

GOOD LABORATORY PRACTICE (GLP) STATEMENT

This report does not meet the definition of study under 40 CFR part 160 and is not required to be conducted in compliance with 40 CFR part 160. As such there is no study director or sponsor.

Submitter:  August 14, 2017

Chris Hofelt
Product Registration Manager
BASF Corporation

Date

Application for the Extension of the Exclusive Use Period for Cyflumetofen as Provided by FIFRA Section 3(c)(1)(F)(ii)

May 31, 2017

BASF Corporation, the sole registrant of the proprietary miticide active ingredient, cyflumetofen, is hereby petitioning the Environmental Protection Agency (EPA) for a three-year extension of exclusive use of data supporting the registration of cyflumetofen on minor crops, as provided under FIFRA Section 3(c)(1)(F)(ii).

Cyflumetofen was first registered by EPA on May 9, 2014 under the tradenames cyflumetofen technical, Nealta® Miticide and Sultan® Miticide, with EPA Registration Numbers 7969-335, 7969-336 and 7969-337, respectively. The initial 10-year period for exclusive use of data currently extends to May 9, 2024.

As described in this petition, 37 minor uses have been registered for cyflumetofen during the initial commencement of the exclusive use period. BASF is hereby submitting a rationale and supporting information for these 37 minor crops in an effort to establish that at least nine of these minor crops meet the criteria and therefore qualify for extending the exclusive use period for cyflumetofen by 3 years.

The cyflumetofen-based end-use products used to develop the minor use data supporting the extension as described in this rationale, and on which these uses are registered, include:

- **Cyflumetofen Technical** (EPA Reg. No. 7969-335)
- **Nealta® Miticide** (EPA Reg. No. 7969-336)
- **Sultan® Miticide** (EPA Reg. No. 7969-337)

The justification presented in this document is based on fulfillment of at least one of the four criteria identified in FIFRA 3c(1)(F)(ii) which states that:

"The period of exclusive data use provided under clause (i) shall be extended 1 additional year for each 3 minor uses registered after August 3, 1996, and within 7 years of the commencement of the exclusive use period, up to a total of 3 additional years for all minor uses registered by the Administrator if the Administrator, in consultation with the Secretary of Agriculture, determines that, based on information provided by an applicant for registration or a registrant, that ....

1. There are insufficient efficacious alternative registered pesticides available for the use;

2. The alternatives to the minor use pesticide pose greater risks to the environment or human health;

3. The minor use pesticide plays or will play a significant part in managing pest resistance;

4. The minor use pesticide plays or will play a significant part in an integrated pest management program."

A summary of the minor uses cited to satisfy the Criterion for extending exclusive use period is presented in Table 1 on the next page.

Table 1 Summary of Rationale to Extend Exclusive Use for Cyflumetofen

Count	Minor Use Crop	Cyflumetofen Use Pattern	Criteria used by EPA to determine if minor crop is counted for data exclusivity extension			
			1. *There are insufficient efficacious alternative registered pesticides available for the use*	2. *The alternatives to the pesticide use pose greater risks to the environment or human health*	3. *The minor use pesticide plays or will play a significant part in managing pest resistance*	4. *The minor use pesticide plays or will play a significant part in an integrated pest management program.*
1	Calamondin	*Citrus Crop Group 10-10A* Foliar application to the canopy for mite control			✓	✓
2	Citrus citron				✓	✓
3	Citrus hybrids				✓	✓
4	Chironja				✓	✓
5	Grapefruit				✓	✓
6	Kumquat				✓	✓
7	Lemon				✓	✓
8	Lime				✓	✓
9	Mandarin				✓	✓
10	Pummelo				✓	✓
11	Satsuma mandarin				✓	✓
12	Tangelo				✓	✓
13	Tangerine				✓	✓
14	Tangor				✓	✓
15	Azarole	*Pome Fruit Crop Group 11-10* Foliar application to the canopy for mite control			✓	✓
16	Crabapple				✓	✓
17	Loquat				✓	✓
18	Medlar				✓	✓
19	Mayhaw				✓	✓
20	Asian Pear				✓	✓
21	Pear				✓	✓
22	Quince (incl. Chinese, Japanese)				✓	✓
23	Tejocote				✓	✓
24	Beech nut	*Tree Nuts Crop Group 14:* Foliar application to the canopy for mite control			✓	✓
25	Brazil nut				✓	✓
26	Butternut				✓	✓
27	Cashew				✓	✓
28	Chestnut				✓	✓
29	Chinquapin				✓	✓
30	Filbert				✓	✓
31	Hickory nut				✓	✓
32	Macadamia nut				✓	✓
33	Pecan				✓	✓
34	Pistachio				✓	✓
35	Walnut, black				✓	✓
36	Walnut, English				✓	✓
37	Strawberry	*Other Crop Group*			✓	✓

Minor Crop Uses used to Satisfy the FIFRA 3c(1)(F)(ii) Criteria for Extending the Exclusive Use Period for Cyflumetofen

Each of the crops or group of crops listed in sections **I.**, **II.**, **III.** and **IV.** of this document, are minor crops within EPA crop groupings for which residue studies were conducted to establish permanent tolerances (MRLs) for cyflumetofen.

Mites of the family Tetranychidae, also referred to as spider mites, are among the most numerous and most damaging phytophagous arthropods in the world. These mites cause damage to a wide range of plants including row crops such as corn and cotton, as well as specialty crops like grapes, apples, citrus and other fruits. Under the right environmental conditions, spider mite populations will escalate quickly and the mites will significantly reduce yields and/or detrimentally affect crop quality. Tetranychids cause damage to the plant by feeding behavior, which involves inserting mouthparts into the plant and literally siphoning out the plant cell contents. The resulting "stippling" affects the plant's ability to produce a crop when the feeding occurs on the leaves and affects the quality of the crop or fruit when the feeding damage occurs there.

Low populations of spider mites can sometimes be managed with the use of "beneficials" such as predatory mite species and sixspotted thrips (*Scolothrips sexmaculatus)*. However, the use of insecticides to control other pests often diminishes or repels beneficials, necessitating the use of selective miticide(s) to manage spider mite populations. Cyflumetofen (End-use products: **Nealta®** and **Sultan®**) is one such selective miticide which effectively controls tetranychid mites while having little to no impact on beneficial populations, including pollinators.

Mode of Action (MOA)

Cyflumetofen belongs to the benzoylacetonitrile class of chemistry. Cyflumetofen is the only mitochondrial complex II mitochondrial electron transport inhibitor (IRAC Class 25a) registered in the US (Table 2). This MOA is unique compared to the other miticides. It inhibits the mitochondrial electron transport complex II enzyme within mite cells. This inhibition interrupts the production of ATP, eventually depleting the cell of energy, leading to paralysis and death.

Cyflumetofen has demonstrated high efficacy against mites that have developed resistance to other acaricides (Hu et al. 2010, Stavrinides et al. 2010). No instances of target site cross-resistance have been observed. Because of its unique mode of action, cyflumetofen is an important insecticide resistance management tool when used according to good agricultural practices and when local resistance management recommendations are followed. The Insecticide Resistance Action Committee (IRAC) recommends rotating products so that the same mode of action is not used on successive pest generations.

The unique MOA of cyflumetofen, selectivity to mite pests, and only registered Group 25a product in the US satisfies **FIFRA 3c(1)(F)(ii) Criterion 3** guidelines: *The minor use pesticide plays or will play a significant part in managing pest resistance.*

Integrated Pest Management (IPM) Considerations

Due to its highly selective nature, cyflumetofen will be a good fit in integrated pest management programs. For cyflumetofen, the contact LD_{50} is > 102 µg/bee which is classified as "Practically non-toxic" by EPA standards. Standard laboratory bioassays indicate that cyflumetofen has a low impact on a wide range of beneficial arthropods, including parasitic wasps, predatory mites, predatory bugs, ladybird beetles, rove beetles and lacewings when the organisms are exposed to fresh residues on inert substrates (Table 3 and 4). Because of cyflumetofen's relatively low aquatic, avian and mammalian toxicity; impact on other non-target wildlife species is also low.

Cyflumetofen fits into an IPM program because of the low risk to honeybees, predatory mites, and other beneficial arthropods, which may be used in biocontrol programs. Cyflumetofen should be applied at the first sign of mite infestation. Importantly, it controls all mite life stages (eggs, motiles, and adults) and an ideal choice for application early in the season. It delays population growth of target mites while at the same time allowing the population of beneficial species to increase. This helps to keep the predator-prey balance in check early in the season when it's most important. Importantly, since cyflumetofen is the only IRAC Group 25a miticide registered for crop use, it is very compatible with other IPM practices such as maintaining populations of beneficial insects and mites, while managing resistance.

Early season applications not only help to optimize yields in the current season, but also provide some protection for yields the following season (Beers et al. 1998). Only four of the currently recommended miticides control all mite life stages. Two of those four (fenpyroximate and pyridaben) share the same mode of action (METI Complex I). For this reason, cyflumetofen is expected to displace some of the other miticides (namely etoxazole) for early season control.

Unlike currently available spider mite control products, cyflumetofen is the only product that combines low mammalian toxicity, control of all life stages of the target pest, low toxicity to honeybees, low toxicity to key beneficial insects and arthropods, and provides these benefits while delivering a new mode of action for better integrated pest management (IPM) without cross-resistance with other miticides. The very selective activity against spider mites, with little or no effect on non-target arthropods, makes cyflumetofen an extremely effective tool in an integrated pest management program and satisfies **FIFRA 3c(1)(F)(ii) Criterion 4** guidelines: *The minor use pesticide plays or will play a significant part in an integrated pest management program.*

The following are examples of the benefits cyflumetofen provides in the minor use crops of citrus, pome fruit, tree nuts, and strawberry. Described in each minor use crop are the mite pests, MOA and IPM considerations, and efficacy and crop safety of cyflumetofen that have been documented in BASF studies.

I. Citrus Fruits

FIFRA 3c(1)(F)(ii) Criterion satisfied → 3 and 4
"The minor use pesticide plays or will play a significant part in managing pest resistance" **and** "*The minor use pesticide plays or will play a significant part in an integrated pest management program.*"

Minor Use Crop	Minor Use Acreage[1,3]	Description of Specific Labeled Use Pattern	Reason why Cyflumetofen satisfies Criterion 3 and 4
Calamondin	<300,000	Apply **Nealta® Miticide** at 13.7 fl oz/A (0.18 lb ai/A) as a foliar spray in at least 50 gallons/A. Make application at first sign of spider mites infestation. No applications back to back & no more than 2 apps/season.	**Nealta® Miticide** (cyflumetofen) is extremely efficacious against tetranychid mites in citrus. Cyflumetofen has a novel mode of action, mitochondrial complex II electron transport inhibitor.
Citrus citron	<300,000		
Citrus hybrids	<300,000		
Chironja	<300,000		
Grapefruit and pummelo	64,100		
Kumquat	<300,000		
Lemon	54,500		
Lime	400[2]		
Mandarin (tangerine)	65,300		
Satsuma mandarin	<300,000		
Tangelo	2,500		
Tangor	<300,000		

[1] http://usda.mannlib.cornell.edu/usda/current/CitrFrui/CitrFrui-09-12-2016.pdf.
[2] California acreage. http://time.com/66053/america-lime-industry-shortage. Note: Estimates discontinued after 2001-2002.
[3] The USDA currently has no production statistics for minor use crops listed with <300,000 acres.

Mite Pests of Citrus

Tetranychid mites such as sixspotted mite (*Eotetranychus sexmaculatus)*, citrus red mite (*Panonychus citri)* and Texas citrus mite (*E. banksi)* are difficult to manage in all citrus growing regions of the US. If not managed effectively, continued infestations *Panonychus citri* result in leaf drop and sometimes fruit drop and twig dieback (Reuther 1989).

Mode of Action and IPM Considerations

Cyflumetofen should be applied at first sign of mite infestation, growers can protect their crop while also managing resistance. Cyflumetofen is also very compatible with other IPM practices such as maintaining populations of beneficial insects and mites. Laboratory and field studies have shown that cyflumetofen is relatively safe on these beneficial arthropods including

pollinators. This provides growers with an extremely efficacious solution when applied according to the label.

Efficacy and Crop Safety

Field trials conducted in citrus in California, Texas and Florida show cyflumetofen provided, on average, 90% or better control of all life stages of target spider mite species (efficacy and crop selectivity data submitted in support of California registration – Appendix A). Use in these minor citrus crops is recommended since control with cyflumetofen was equal or superior to that provided by commercial standard miticides. The data also shows excellent crop safety with cyflumetofen at label rates and higher. The AI standards used for comparison included bifenazate, abamectin, spirodiclofen, hexythiazox, and etoxazole. Of these products, abamectin, spirodiclofen, and hexythiazox are labeled for use on these minor use crops in citrus. Field efficacy trials were conducted on orange, lemon, and citron for California submission data. Although trials were not conducted on all minor use crops, tetranychid mites are of economic importance in citrus (Baker et al. 1994).

Cyflumetofen has a 7-day preharvest interval (PHI) in citrus making it a preferable miticide for late season use during maturation. This can be a critical time for spider mite control if irrigation is limited. Some of the other frequently-used miticides, such as products containing etoxazole, abamectin, and fenpyroximate, have longer PHIs (28, 21, and 14 days, respectively). The combination of a shorter PHI and low impact on beneficials, allowing late season beneficial populations to flourish before over-wintering, makes late season use of cyflumetofen preferable to other miticides.

Residue Trials Performed in Support of Citrus Tolerance

Crop Group	No of Trials	MRID No.	BASF Reg. Doc. No.
Citrus Fruits (Group 10-10A)	**23**	**48849406**	**2012/7003656**
Orange	12		
Lemon	5		
Grape Fruit	6		

II. Pome Fruits

FIFRA 3c(1)(F)(ii) Criterion satisfied → 3 and 4
"The minor use pesticide plays or will play a significant part in managing pest resistance" **and** "*The minor use pesticide plays or will play a significant part in an integrated pest management program.*"

Minor Use Crop	Minor Use Acreage[1]	Description of Specific Labeled Use Pattern	Reason why Cyflumetofen satisfies Criterion 3 and 4
Azarole	<300,000	Apply **Nealta® Miticide** at 13.7 fl oz/A (0.18 lb ai/A) as a foliar spray in at least 50 gallons/A. Make application at first sign of spider mites infestation. No applications back to back & no more than 2 apps/season.	**Nealta® Miticide** (cyflumetofen) is extremely efficacious against tetranychid mites in pome fruit. Cyflumetofen has a novel mode of action, mitochondrial complex II electron transport inhibitor.
Crabapple	<300,000		
Loquat	<300,000		
Mayhaw	<300,000		
Asian pear	<300,000		
Pear	48,940[2]		
Quince (incl. Chinese, Japanese)	<300,000		
Tejocote	<300,000		

[1] The USDA currently has no production statistics for minor use crops listed with <300,000 acres.
[2] USDA National Agriculture Statistics Service. http://quickstats.nass.usda.gov.

Mite Pests of Pome Fruits

Tetranychid mites such as twospotted spider mite (*Tetranychus urticae*) and European red mite (*Panonychus ulmi*) are very difficult to manage in all pome growing regions of the US. Cyflumetofen provides growers with an extremely efficacious alternative which also has a unique mode of action.

Efficacy and Crop Safety

Field trials conducted on pome in California show cyflumetofen provided, on average, 90% or better control of all life stages of target spider mite species (efficacy and crop selectivity data submitted in support of California registration – Appendix A). Control with cyflumetofen was equal or superior to that provided by commercial standard miticides. The data also shows excellent crop safety with cyflumetofen at label rates and higher. The AI standards used for comparison included bifenazate, abamectin, spirodiclofen, hexythiazox, and etoxazole. These products are all labeled for use on these minor use crops in pome fruit. Field efficacy trials were conducted on apple and pear for California submission data. Although trials were not conducted on all minor use crops, tetranychid mites are of economic importance in pome fruits (Madsen et al. 1970).

Cyflumetofen has a 7-day PHI in pome fruits making it a preferable miticide for late season use during maturation. This can be a critical time for spider mite control if irrigation is limited. Some of the other frequently-used miticides, such as products containing etoxazole, abamectin, and fenpyroximate, have longer PHIs (14, 21, and 14 days, respectively). The combination of a shorter PHI and low impact on beneficials, allowing late season beneficial populations to flourish before over-wintering, makes late season use of cyflumetofen preferable to other miticides.

Residue Trials Performed in Support of Pome Fruit Tolerance

Crop Group	No of Trials	MRID No.	BASF Reg. Doc. No.
Pome Fruits (Group 11-10)	**18**	**48542735**	**2011/7000143**
Apple	12		
Pear	6		

III. Tree Nuts

FIFRA 3c(1)(F)(ii) Criterion satisfied → 3 and 4
"The minor use pesticide plays or will play a significant part in managing pest resistance" **and** "*The minor use pesticide plays or will play a significant part in an integrated pest management program.*"

Minor Use Crop	Minor Use Acreage[1]	Description of Specific Labeled Use Pattern	Reason why Cyflumetofen satisfies Criterion 3 and 4
Beech nut	<69,000	Apply **Nealta® Miticide** at 13.7 fl oz/A (0.18 lb ai/A) as a foliar spray in at least 50 gallons/A. Make application at first sign of spider mites infestation. No applications back to back & no more than 2 apps/season.	**Nealta® Miticide** (cyflumetofen) is extremely efficacious against tetranychid mites in tree nuts. Cyflumetofen has a novel mode of action, mitochondrial complex II electron transport inhibitor.
Brazil nut	<69,000		
Butternut	<69,000		
Cashew	<69,000		
Chestnut	4,000[2]		
Chinquapin	<69,000		
Filbert/Hazelnut	16,000[3]		
Hickory nut	<69,000		
Macadamia nut	<69,000		
Pecan	<69,000		
Pistachio	233,000[3]		
Walnuts, English	300,000[3]		
Walnuts, Black	<69,000		

[1] The USDA currently has no production statistics for minor use crops listed with <69,000 acres
[2] http://www.agmrc.org/commodities-products/nuts/chestnuts.
[3] http://usda.mannlib.cornell.edu/usda/current/NoncFruiNu/NoncFruiNu-07-06-2016.pdf

Mite Pests of Tree Nuts

Tetranychid mites, such as twospotted spider mite (*Tetranychus urticae*), Pacific spider mite (*T. pacificus*), European red mite (*Panonychus ulmi*), and strawberry spider mite (*T. turkestani*) are very difficult to manage in all tree nuts growing regions of the US. Both twospotted and Pacific spider mites can cause almost complete defoliation which exposes trees and nuts to sunburn, reduces nut size, and can interfere with harvest (UC ANR 2013). Both species are favored by hot, dry conditions and as the weather becomes warmer they increase in numbers and move throughout the tree. Severe defoliation early in the season can cause a 25% reduction in yield; defoliation late in the season will interfere with harvest (UC ANR 2013).

Walnuts

California produces 99% of the walnuts grown in the United States and 38% of the world's production (Ramos 1997). The Sacramento and San Joaquin Valleys of California are the largest production areas and over 40% of the crop is exported (USDA 1998). Walnuts are the ninth largest commodity in California with an estimated value of $980 million (CDFA 2016).

Mode of Action and IPM Considerations

Like almonds, cyflumetofen is an excellent option for spider mite management in tree nut crops. The overall safety profile of cyflumetofen is far superior to other products commonly used in California tree nut production. The only comparable product is hexythiazox, but California tree nut producers need more than one mode of action with this safety profile. Therefore, cyflumetofen is expected to displace a portion of the use of some of the leading miticides used on walnuts in California, specifically, products containing abamectin, propargite, and spirodiclofen. These products have inferior safety profiles to cyflumetofen.

Cyflumetofen is a valuable tool in a tree nut IPM program since it can be applied to all mite life stages. Only acequinocyl and bifenazate can be applied to all mite life stages, but again, their safety profiles are inferior to cyflumetofen (Table 3). Other miticides, like abamectin and propargite do not have ovicidal activity for early season mite control, and hexythiazox does not provide control of adult mites. Additionally, the low impact of cyflumetofen on beneficial mites (*Galendrous occidentalis*) compared to these miticides allows populations to flourish before overwintering. Therefore, cyflumetofen expected to be used in place of these miticides due to its safety profile and season long utility.

Efficacy and Crop Safety

Field trials conducted on walnuts in California show cyflumetofen provided, on average, 91% control of all life stages of target spider mite species on walnuts (efficacy and crop selectivity data submitted in support of California registration –Appendix A). Control with cyflumetofen on walnuts was superior to that provided by commercial standard miticides (81%). The data also shows excellent crop safety with cyflumetofen at label rates and higher. Some of the standards used for comparison included bifenazate, abamectin, spirodiclofen, hexythiazox, and etoxazole.

These products are all labeled for use on these minor use crops in pome fruit. Field efficacy trials were conducted on almond and walnut for California submission data. In almond, cyflumetofen also had excellent activity against twospotted spider mites. Activity in both tree nut crops is justification for use on all minor use crops since tetranychid mites are an economically important secondary pest in tree nuts (Akita 1971, Flechtmann 1979, Ozman et al. 2000).

Foliar damage from spider mites can interfere with harvest. Cyflumetofen has a 7-day PHI in tree nuts making it a great option for late season applications since other miticide products containing abamectin, propargite, and etoxazole have longer PHIs (21, 21, and 28 days, respectively).

Residue Trials Performed in Support of Tree Nut Tolerance

Crop Group	No of Trials	MRID No.	BASF Reg. Doc. No.
Tree Nuts (Group 14)	**10**	**48542737**	**2011/7003996**
Almond	5		
Peacon	5		

IV. Other Minor Crops

FIFRA 3c(1)(F)(ii) Criterion satisfied → 3 and 4
"The minor use pesticide plays or will play a significant part in managing pest resistance" **and** "*The minor use pesticide plays or will play a significant part in an integrated pest management program.*"

Minor Use Crop	Minor Use Acreage[1]	Description of Specific Labeled Use Pattern	Reason why Cyflumetofen satisfies Criterion 3 and 4….
Strawberry	**53,600**	Apply **Nealta® Miticide** at 13.7 fl oz/A (0.18 lb ai/A) as a foliar spray in at least 50 gallons/A. Make application at first sign of spider mites infestation. No applications back to back & no more than 2 apps/season.	**Nealta® Miticide** (cyflumetofen) is extremely efficacious against tetranychid mites in strawberry and tomato. Cyflumetofen has a novel mode of action, mitochondrial complex II electron transport inhibitor.

[1] USDA National Agriculture Statistics Service. http://quickstats.nass.usda.gov.

Mite Pests of Strawberry

Tetranychid mites, such as twospotted spider mite (*Tetranychus urticae)* and Carmine spider mite (*T. cinnabarinus*), are very difficult to manage in all strawberry and tomato growing regions of the United States. Both species cause damage that appears as stippling, scarring, and bronzing of the leaves and calyx. In strawberry, twospotted spider mites feed during the first 2 to 5 months

following transplanting in late summer or fall. Mite feeding during this critical period of plant growth substantially reduces berry number per plant and overall plantation yield (UC ANR 2013).

The twospotted spider mite is of more concern than the Carmine spider mite in California's strawberry industry (UC ANR 2013). Their rate of development (completing their life cycle in five days) and high reproductive capacity (50-100 eggs per female) enable them to reach damaging population levels very rapidly (Gianessi 2009). Reproduction is usually continuous from early spring until late fall; or, in warmer areas, they can reproduce year-round. Mating and egg laying typically occur year-round in all coastal strawberry-growing regions in California (UC ANR 2013).

Strawberries

The most of the strawberries acres in the US are found in California. Strawberries are the sixth largest commodity in California with an estimated value of $2.44 billion (CDFA 2016). Given the monetary value of strawberries, tetranychid mites are important for growers to manage to prevent significant economic losses.

Cyflumetofen is needed in California strawberries because it is effective on key mite species at critical times. Like the previously described crops, cyflumetofen has a low toxicity profile in strawberries and is expected to displace a portion of the use of some of the leading miticides. Products containing abamectin, bifenazate, spriomesifen, etoxazole, and hexythiazox, all have an inferior safety and / or biological profiles to cyflumetofen.

Mode of Action and IPM Considerations

With the increased adoption of the annual planting of strawberries, the twospotted spider mite has become the most serious pest of strawberries in California (Gianessi 2009). More than 80% of California strawberry acreage is fall-planted and mite control during the first 4-6 months is critical (USDA 1999). Twospotted spider mites attack new strawberry plantings in late summer or early fall, and controls are usually needed every year in all California growing regions to prevent yield losses (UC ANR 2013). Yield loss can be significant at mite infestation levels exceeding one mite per leaflet. A 7-year study concluded that yield loss from spider mite (unspecified species) averaged 25% (untreated versus insecticide-treated plots) (Walsh 1998).

It is estimated that all strawberry acres in California are treated with insecticides, and without it yield losses would exceed 60% (Sorensen 1997). However, nonchemical alternatives (i.e., predator / parasite releases, or vacuum machines) have demonstrated that early releases of predatory mites, *Phytoseiulus persimilis*, with 1 to 2 miticide applications have minimal detrimental effect on the mite predators (Trumble 1993). Therefore, approximately 90% of California strawberry acres receive predator mite releases, including *P. persimilis*, which multiplies rapidly and can reduce spider mite populations quickly (Gianessi 2009). The need for

cyflumetofen in strawberry production is important since it is soft on beneficial arthropods, particularly *P. persimilis* (Table 3).

As with the previous minor use crops, cyflumetofen is ideal for strawberry growers in an IPM program because of its activity on all mite life stages, low impact on beneficial arthropods, and it is the only registered Group 25a miticide for use on strawberries. It should be applied early season (first 4 to 6 months after transplanting) to delay population growth of target mites. Natural populations of beneficial species will increase allowing for augmentation with predatory mite releases. This helps to keep the predator-prey balance in check early in the season when it is most critical. As mentioned, other products are recommended for mite control. However, these products are inferior to cyflumetofen because of their safety profile and lack of activity on all mite life stages.

Efficacy and Crop Safety

Field trials conducted on strawberries show cyflumetofen provided equal or superior control of all life stages of target spider mite species compared to that provided by commercial standard miticides, on average 72% versus 65%, respectively (efficacy and crop selectivity data submitted in support of California registration – Appendix A). Spider mites tend to be harder to control in strawberries than other crops. This is because it is very difficult to achieve adequate spray coverage on the hard to reach undersides of strawberry leaves where most eggs and motiles are located. Some of the standards used for comparison included (Acramite®, bifenazate), (Agri-mek®, abamectin), (Envidor®, spirodiclofen), and (Brigade®, bifenthrin). The data also show excellent crop safety with cyflumetofen at label rates and higher.

Cyflumetofen has a 1-day PHI making it a preferable choice before the multiple harvests that occur throughout the season. Once harvesting commences, hand-harvesting continues for several months on a 3 to 5-day cycle and the harvested fruit can go from the receiving dock to the supermarket in as little as one day in some locations (USDA 1999). Other frequently-used miticide products (e.g., abamectin, spiromesifen, and hexythiazox) have a longer, 3-day PHI.

Residue Trials Performed in Support of Strawberry Tolerance

Crop Group	No of Trials	MRID No.	BASF Reg. Doc. No.
Strawberries (Group 13)	**8**	**48542738**	**2010/7014999**

Summary

Cyflumetofen should be considered for minor crop uses in citrus, pome fruit, tree nut, and strawberries because of the need to manage Tetranychid mites. In all minor use crops, multiple MOAs are needed in the application rotation to mitigate the potential for miticide resistance. This makes Cyflumetofen a fit in an IPM program because of its unique MOA (only registered Insecticide Resistance Action Committee (IRAC) Group 25a product in North America) and is

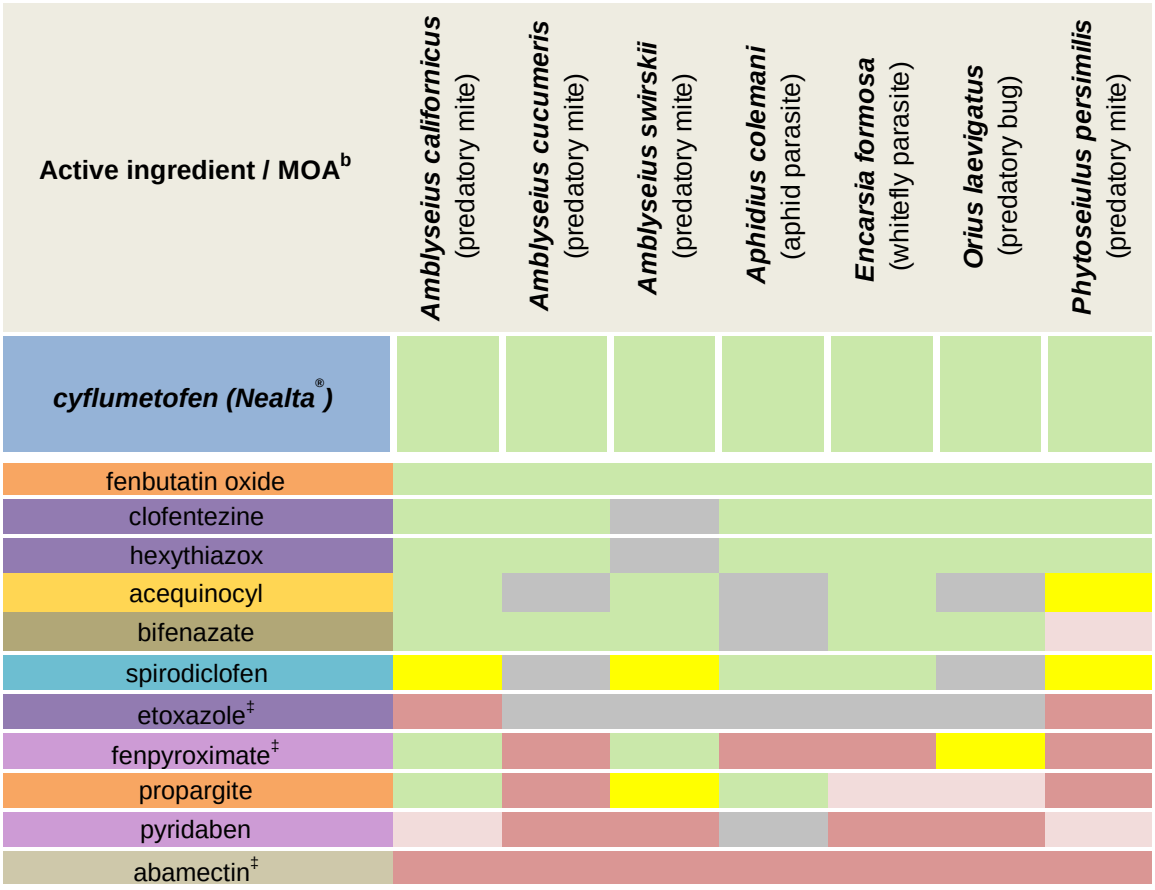
soft on beneficial arthropods. Cyflumetofen also combines excellent activity on Tetranychid mites with superior crop safety. Therefore, BASF believes that due to these positive qualities, cyflumetofen meets the **FIFRA 3(c)(1)(F)(ii) Criterion 3** and **Criterion 4** for extending the exclusive use period of this active ingredient.

Table 2 List of miticides and respective Mode of Action

Miticide Active	Mode of Action	Sub Group
Abamectin	Chloride channel activator	6
Clofentezine, hexythiazox	Mite growth inhibitor	10A
Etoxazole	Mite growth inhibitor	10B
Propargite	Mitochondrial ATP synthase inhibitor	12C
Fenazaquin, fenpyroximate, pyridaben	METI Complex I	21A
Acequinocyl	METI Complex III	20B
Spirodiclofen, spiromesifen, spirotetramat	Acetyl CoA carboxylase inhibitor	23
Cyflumetofen	METI Complex II	25a
Bifenazate	Unknown	

Table 3 Impact on Beneficial Insects, Predators, and Parasites[a]

Independent comparison of miticide activity on beneficials. Of the three alternatives classified as harmless across all beneficial species evaluated, two (clofentezine and hexythiazox) share the same mode of action (mite growth regulator).



[a]All data from Koppert Biological Systems - Side effects database. http://side effects.koppert.nl/
Koppert Rating scale: Green = harmless (< 25% reduction), **Yellow** = slightly harmful (25 - 50% reduction), **Pink** = moderately harmful (50 - 75% reduction), **Red** = very harmful (> 75% reduction), **Gray** = no information.

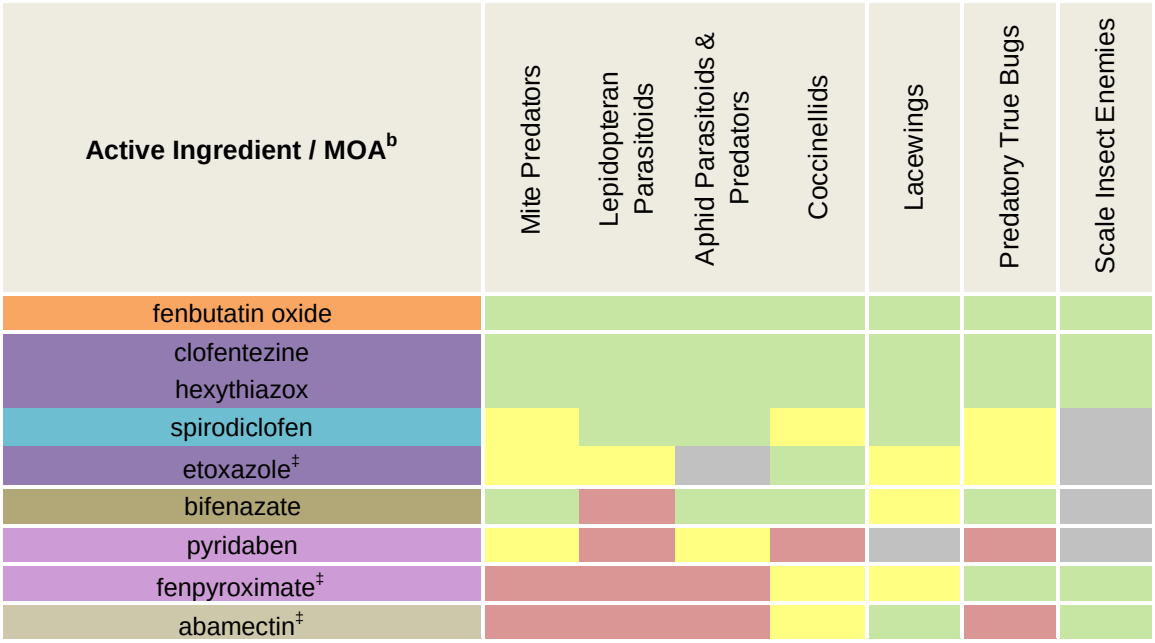
[b]**IRAC mode of action classification.**

- METI Complex II
- Mitochondrial ATP synthase inhibitor
- Mite growth regulator
- METI Complex III
- Unknown
- Lipid biosynthesis inhibitor
- METI Complex I
- Chloride channel activator

‡ = Competitive targets Nealta® CA is expected to partially displace.

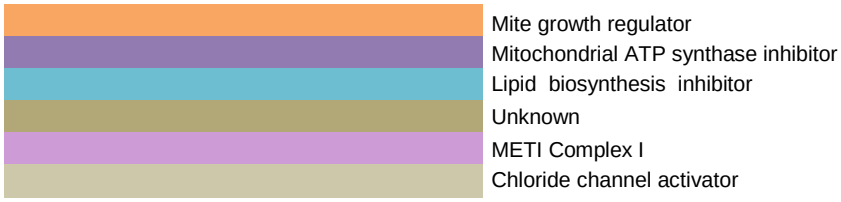
Table 4 Natural Enemy Relative Impact Guide 2014 – Washington State University (WSU) Crop Protection Guide[a].

Although WSU did not include cyflumetofen, acequinocyl, or propargite in the comparison, the information shows a similar pattern of miticide activity on beneficials.



[a]**Negative impact ratings: Green** = small impact, **Yellow** = moderate impact, **Red** = large impact, **Gray** = no data available.

[b]**IRAC mode of action classification.**



‡ = Competitive targets Nealta® CA is expected to partially displace.

Citations

1. Akita, Y. Biological studies of the common conifer spider mite, Oligonychus ununguis Jacobi (Acarina: Tetranychidae). Jap Forest Exp Sta Bull. 1971.

2. Baker, E. W. and D. M. Tuttle. A guide to the spider mites (Tetranychidae) of the United States. 347. 1994.

3. Beers, E.H., Riedl, H., and Dunley, J.E. Resistance to abamectin and reversion of susceptibility to fenbutin oxide in spider mite (Acari:Tetranychidae) populations in the Pacific Northwest. Journal of Economic Entomology 91: 352-360. 1998.

4. California Department of Food and Agriculture (CDFA) Agricultural Statistics Review. 1-126. 2015-2016.

5. Flechtmann, C. H. W. Phytophagous mites of economic importance in Brazil. In Proceedings of the 4th International Congress of Acarology, Saalfelden, Austria. 185-187. 1979.

6. Gianessi, L., The Benefits of Insecticide Use: Strawberries. Croplife Foundation. Crop Protection Research Institute. March 2009.

7. Hu, Jinfeng, Changfang Wang, Jun Wang, Yong You, and Feng Chen. "Monitoring of resistance to spirodiclofen and five other acaricides in Panonychus citri collected from Chinese citrus orchards." Pest management science 66(9): 1025-1030. 2010.

8. Madsen, Harold F., and C. V. G. Morgan. Pome fruit pests and their control. Annual Review of Entomology 15(1): 295-320. 1970.

9. Ozman, S. K., and S. Cobanoglu. Current status of hazelnut mites in Turkey. In V International Congress on Hazelnut 556. 479-488. 2000.

10. Ramos, D. D. Walnut Production Manual, University of California, Division of Agriculture and Natural Resources. Publication 3373. 1997.

11. Reuther, Walter. The Citrus Industry: Crop protection, postharvest technology, and early history of citrus research in California. Vol. 3326. UCANR Publications, 1989.

12. Sorensen, Kenneth A., et al., The Importance of Pesticides and Other Pest Management Practicies in U.S. Strawberry Production. USDA, National Agricultural Pesticide Impact Assessment Program. Document Number 1-CA-97. 1997.

13. Stavrinides, Menelaos C., Pieter Van Nieuwenhuyse, Thomas Van Leeuwen, and Nicholas J. Mills. "Development of acaricide resistance in Pacific spider mite (Tetranychus pacificus) from California vineyards." Experimental and Applied Acarology 50(3): 243-254. 2010.

14. Trumble, John T. and Joseph P. Morse, “Economics of Integrating the Predaceous Mite Phytoseiulus persimilis (Acari: Phytoseiidae) With Pesticides in Strawberries.” Journal of Economic Entomology 86(3): 879-885. 1993.

15. Walsh, Douglas B., Frank G. Zalom, and Douglas V. Shaw, “Interaction of the Two-Spotted Spider Mite (Acari: Tetranychidae) With Yield of Day-Neutral Strawberries in California.” Journal of Economic Entomology 91(3): 678-685. 1998.

16. University of California Agriculture and Natural Resources (UC ANR). Crop Profile for Walnuts in California. 1998.

17. University of California Agriculture and Natural Resources (UC ANR). UC Statewide Integrated Pest Management Program. UC IPM Pest Management Guidelines: Strawberry. Publication 3468. 1-51. March 2013.

18. University of California Agriculture and Natural Resources (UC ANR). UC Statewide Intregrated Pest Management Program. UC IPM Pest Management Guidelines: Walnut. Publication 3471. 1-78. August 2013.

19. USDA. Crop Profile for Strawberries in California. October 1999.

Appendix A

Efficacy and Phytotoxicity Data to Support Registration of Nealta™ Miticide on Citrus, Grapes, Pome Fruits, Strawberries, Tomatoes and Tree Nuts in California

BASF

The Chemical Company

Efficacy and Phytotoxicity Data to Support Registration of Nealta™ Miticide on Citrus, Grapes, Pome Fruits, Strawberries, Tomatoes and Tree Nuts in California

Author:

Dennis M. Dunbar, R3 Ag Consulting

Date:
June 2012

Efficacy and Phytotoxicity Data to Support Registration of Nealta™ Miticide on Citrus, Grapes, Pome Fruits, Strawberries, Tomatoes and Tree Nuts in California

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Efficacy and Phytotoxicity Data to Support Registration of Nealta™ Miticide on Citrus, Grapes, Pome Fruits, Strawberries, Tomatoes and Tree Nuts in California

SUMMARY

Nealta™ miticide is a new miticide from BASF Corporation under development in the United States for control of mites in citrus, grapes, pome fruits, strawberries, tomatoes and tree nuts. The active ingredient, cyflumetofen (BAS 9210 0I and BAS 9210 2I), belongs to the benzoyl acetonitrile class of chemistry which has been shown to be selective for and effective against the Tetranychidae family of mites. Cyflumetofen does not control non-Tetranychid mites. Because of its selectivity, many beneficial arthropods are tolerant to cyflumetofen making it an ideal candidate miticide for use in integrated pest management programs. In addition, ornamental and agricultural crops have shown complete tolerance to cyflumetofen indicating that it has excellent plant safety.

Cyflumetofen is highly active by contact on all Tetranychid mite life stages, including eggs, larvae, nymphs and adults. It has no systemic activity in plants. The primary target of cyflumetofen in Tetranychid mites is mitochondrial respiration. From a resistance management perspective, cyflumetofen is classified by IRAC (Insect Resistance Action Committee) under Group 25. This represents a new class of miticides and offers growers of crops infested with Tetranychid mites value in terms of having a new product for rotation with miticides from other classes of chemistries to help delay the development of resistance.

Two formulations of cyflumetofen were field tested in the United States (BAS 9210 0I and BAS 9210 2I). Up until 2011, field trials were carried out with the BAS 9210 0I SC formulation (212 g/l). In 2011, numerous field trials were conducted using the newer BAS 9210 2I SC (200 g/l). The only difference between the formulations is that the loading of BAS 9210 0I is 6% higher than BAS 9210 2I. Registration is being sought for the BAS 9210 2I SC formulation which is the formulation in Nealta™ miticide (suspension concentrate containing 18.7% cyflumetofen). Most, but not all, efficacy trials in the United States were conducted with BAS 9210 0I.

Table 1. Cyflumetofen Formulations Used in Field Efficacy and Phytotoxicity Trials in the United States During the Period 2008 - 2012.

Formulation	Type	Description	Rates Evaluated[1]	Amount of Active Ingredient
BAS 9210 0I	SC	212 g/l	6.85 - 27.4 fl oz/a	0.1 - 0.4 lb ai/a
BAS 9210 2I[2]	SC	200 g/l	13.7 - 27.4 fl oz/a	0.2 - 0.4 lb ai/a

1. The 27.4 fl oz/a rate was evaluated as a high rate in phytotoxicity trials.
2. BAS 9210 2I is the same formulation in Nealta™ miticide containing 1.67 lbs active cyflumetofen per gallon.

When applied at the label rate of 13.7 fl oz/a (0.2 lb ai/a) Nealta™ miticide will provide control of the following Tetranychid mites: carmine mite (*Tetranychus cinnabarinus*), citrus red mite (*Panonychus citri*), Banks grass mite (*Oligonychus pratensis*), brown almond mite (*Bryobia rubrioculus*), brown wheat mite (*Petrobia lateens*), European red mite (*P. ulmi*), McDaniel spider mite (*T. mcdanieli*), Pacific spider mite (*T. pacificus*), spruce spider mite (*O. ununguis*), strawberry spider mite (*T. turkestani*), Texas citrus mite (*Eutetranychus banksi*), two-spotted spider mite (*T. urticae*), Willamette spider mite (*E. willamettei*) and Yuma spider mite (*E. yumensis*). Of these mites, several are recurrent pests across many crops in California and include the two-spotted spider mite, Pacific spider mite, citrus red mite, European red mite, carmine spider mite and persea mite.

During 2011, BASF conducted seven bridging efficacy trials to show that the newer 200 g/l SC formulation of cyflumetofen (BAS 9210 2I = Nealta™ miticide) was equivalent to the older 212g/l SC formulation of cyflumetofen (BAS 9210 0I). The data show that both formulations of cyflumetofen provided equivalent control of two-spotted spider mite, Pacific spider mite, European spider mite and McDaniel spider mite when compared to an untreated control at 7 to 9 days after application. As discussed in more detail below, both formulations were safe to the tested crops of almond, grape, apple and pear. BASF maintains that the two formulations of cyflumetofen (BAS 9210 0I and BAS 9210 2I) are equivalent in terms of performance and safety. BASF requests that all data generated and summarized below using the older formulation be considered when evaluating the efficacy of the newer BAS 9210 2I formulation (= Nealta™ miticide).

Since 2008, BASF conducted or sponsored over 50 efficacy trials in the United States and Mexico (one trial) evaluating cyflumetofen formulations for control of Tetranychid mites on tree nuts, citrus, grape, pome fruit, strawberry, tomato and avocado. The results of these trials are provided below in summary tables and as field reports in the exhibits. The majority of the trials were conducted in California (n=40). Considering other trials that were conducted in Oregon and Washington, 45 of the trials were conducted in the western states. As a means to compare mite control provided by the cyflumetofen formulations and the commercial standards in the trials, a single trial evaluation time was selected for each trial and the level of motile mite control at that specific time was calculated. Percent control was calculated by using Abbott's formula [*Abbott, W.S. (1925). A method of computing the effectiveness of an insecticide. J. Econ. Entomol.; 18:265-267*]. An average percent control of motile mites was calculated for the trials in each crop and the summary of motile mite control by crop is presented in **Table 2**. The number of trials used to calculate each control value is shown in the table.

Table 2. Summary of Tetranychid Mite Control Across Crops with BAS 9210 0I and BAS 9210 2I in the United States (2008 - 2012)

Crops	Mite Species[1]	BAS 9210 0I[2] % Control Motiles (n)	BAS 9210 2I[2] % Control Motiles (n)	STD % Control Motiles (n)	Timing	Exhibit No.
Tree Nuts	TSSM, PSM	92.1 (11)	87.0 (4)	81.9 (12)	3-8DAT	1-13
Citrus	CRM, TSSM	95.9 (13)	-	87.4 (13)	3-14DAT	14-26
Grape	PSM	93.6 (6)	95.2 (4)	87.3 (5)	7-14DAT	27-33
Pome fruit	ERM, TSSM, CSM, McD	94.4 (14)	95.2 (4)	90.9 (16)	3-38DAT	34-48
Strawberry	TSSM	78.1 (6)	65.7 (2)	69.1 (8)	7-25DAT	49-56
Tomato	TSSM	96.2 (1)	-	95.2 (1)	7DAT	57
Avocado	Persea	-	95.3 (1)	67.0 (1)	8DAT	58

1. TSSM (two-spotted spider mite), PSM (Pacific spider mite), CRM (citrus red mite), ERM (European red mite), CSM (carmine spider mite), McD (McDaniel spider mite) and Persea (persea mite).
2. BAS 9210 0I applied at 12.9-13.7 fl oz/a; BAS 9210 2I applied at 13.7 fl oz/a.

As shown, control was good to excellent with both formulations of cyflumetofen and in all crops control was equal to or superior to the control provided by the commercial standards used for comparison. Overall control in strawberry with all products was lower than in other crops. This likely resulted from poor application coverage of the lower sides of strawberry leaves where most of the mites were located. Data supporting control of Tetranychid mites are provided for two-spotted spider mite, Pacific spider mite, citrus red mite, European red mite, carmine spider mite, McDaniel spider mite and Persea mite. Performance data are not provided for several lesser important Tetranychid mite species as described below.

Of the Tetranychid mites listed on the label as controlled by Nealta™ miticide, specific data are not provided for Banks grass mite, brown almond mite, brown wheat mite, spruce spider mite, strawberry spider mite, Texas citrus mite, Willamette spider mite and Yuma spider mite. BASF is confident that these mites will be controlled by Nealta™ miticide because the level of control on other species of Tetranychid mites has been consistently high. Some of these other mite species are not even pests on the crops of the proposed Nealta™ miticide label. The University of California IPM Program provides the following information for the mite species for which no data are provided in this support document:

Banks grass mite:	a pest of small grains in California
Brown wheat mite:	a pest of small grains in California
Spruce spider mite:	a pest of Christmas trees and ornamentals in California
Strawberry spider mite:	a pest of cotton in California
Brown almond mite:	generally not considered a major pest in California
Texas citrus mite:	sporadic pest of citrus in California
Yuma spider mite:	sporadic pest of citrus in California
Willamette spider mite:	a lesser pest of grape in cooler grape growing regions

Crop tolerance (phytotoxicity) ratings were taken from most, but not all efficacy trials. In addition, specific phytotoxicity tests were conducted with the new BAS 9210 2I SC formulation. Most phytotoxicity trials with BAS 9210 0I were carried out at the 13.7 fl oz/a rate. With BAS 9210 2I, crop tolerance was evaluated at 13.7 and 27.4 fl oz/a (the latter represents 2X the maximum label rate). Results on phytotoxicity are presented below from 59 trials on tree nuts, citrus, grape, pome fruit, strawberry/raspberry, tomato and avocado. Forty one (69%) of the trials were conducted in California and 49 (83%) of the trials were conducted in California, Oregon and Washington. There was no phytotoxicity observed in any of the trials conducted with the different formulations of cyflumetofen across all the crops and years of testing. These results provide overwhelming support for the safety of cyflumetofen and Nealta™ miticide on the crops proposed for registration.

In conclusion, cyflumetofen is a highly effective and selective miticide against Tetranychid mites. Its attributes of being fast acting, long residual, safe to beneficials, and safe to crops meets the requirements of producers seeking a product to add to their IPM programs for control of Tetranychid mites. The registration of Nealta™ miticide would be positive for California producers.

A similar efficacy and phytotoxicity support document is being submitted in support of registration of Sultan™ miticide (same formulation of cyflumetofen as Nealta™ miticide) for mite control on ornamentals in California. Efficacy data are presented that show very good to excellent control of two-spotted spider mite on ornamentals in the state. Plant safety was excellent across a wide variety of ornamental crops.

Efficacy and Phytotoxicity Data to Support Registration of Nealta™ Miticide on Citrus, Grapes, Pome Fruits, Strawberries, Tomatoes and Tree Nuts in California

INTRODUCTION

Nealta™ miticide is a new miticide from BASF Corporation under development in the United States for control of mites in citrus, grapes, pome fruits, strawberries, tomatoes and tree nuts. The active ingredient, cyflumetofen, belongs to the benzoyl acetonitrile class of chemistry which has been shown to be effective against the Tetranychidae family of mites. Cyflumetofen does not control non-Tetranychid mites. Many beneficial arthropods are tolerant to cyflumetofen which makes it an ideal candidate miticide for use in integrated pest management programs. In addition, ornamental and agricultural crops have shown complete tolerance to cyflumetofen indicating that it has excellent plant safety.

Cyflumetofen is highly active by contact on all Tetranychid mite life stages, including eggs, larvae, nymphs and adults. It has no systemic activity in plants. The primary target of cyflumetofen in Tetranychid mites is mitochondrial respiration. From a resistance management perspective, cyflumetofen is classified by IRAC (Insect Resistance Action Committee) under Group 25. This represents a new class of miticides and offers growers of crops infested with Tetranychid mites value in terms of having a new product for rotation of chemistries to help delay the development of resistance.

Although there are over ten thousand species of mites, only about 6,000 of these species are classified as phytophagous or plant feeding. There are five families of phytophagous mites: Eriophyidae, Tetranychidae, Tarsonemidae, Tenuipalpidae and Penthaleidae. Among these five families, mites belonging to Tetranychidae are economically the most important, attacking food crops, trees, and ornamentals. Cyflumetofen is highly active only on the Tetranychidae family of mites. The following section lists some of the most important plant-feeding Tetranychid mites, organized by genus.

Tetranychus: Globally, the most important plant pest in this genus is the two-spotted spider mite (*Tetranychus urticae*). The two spotted spider mite is the most abundant and widespread species of all plant feeding mites. However, in the United States, regionally there are other mites that are grouped within this genus that are important pests. They include the Pacific spider mite (*T. pacificus*), McDaniel spider mite (*T. McDanieli*) and carmine spider mite (*T. cinnabarinus*).

Panonychus: Mites in this genus are commonly referred to as red mites and the most common red mites are the European red mite (*Panonychus ulmi*) and citrus red mite (*P. citri*).

Oligonychus: Mites in this genus are regional and sporadic in occurrence in the United States. The common mites include persea mite (*Oligonychus persea*), spruce spider mite (*O. ununguis*), and Bank's grass mite (*O. pratensis*).

Eotetranychus and *Petrobia*: Some common mites in these lesser known genera within the family Tetranychidae include the Texas citrus mite (*Eutetranychus banksi*),

Willamette spider mite (*E. willamettei*), Yuma spider mite (*E. yumensis*) and brown wheat mite (*Petrobia latens*). Pest mites from these genera are sporadic in nature.

Cyflumetofen's positive attributes of novel mode of action, selectivity, rapid knockdown and long residual control, safety to a wide number of beneficial arthropods and safety to crops make it an excellent product for control of phytophagous Tetranychidae mite species on multiple crops in California. This support document provides efficacy and phytotoxicity data to support registration of Nealta™ miticide (BAS 9201 2I) as a foliar acaricide/miticide treatment for the control of the Tetranychidae mites on multiple food crops in the state. A similar efficacy and phytotoxicity support document will be submitted by BASF in support of the registration of Sultan™ miticide (same formulation of cyflumetofen) in California for mite control on ornamentals.

LABEL DISCUSSION

Nealta™ miticide is formulated as a suspension concentrate formulation containing 18.7% cyflumetofen (1.67 pounds active ingredient per gallon). When used as directed, Nealta™ miticide provides knockdown and residual control of Tetranychid mites on labeled crops. Nealta™ miticide is a highly active contact miticide on egg, nymph and adult stages of Tetranychid mites. Since it is not a systemic miticide, complete coverage of plant surfaces is necessary for effective control. Nealta™ miticide is not effective on non-Tetranychid mites such as rust mite, flat mite or broad mites.

For maximum effectiveness, apply Nealta™ miticide at the first sign of mites before the population increases. Application must be made as a preventive treatment or timed to coincide with locally recommended threshold levels in developing mite populations. Nealta™ miticide is not systemic, therefore optimum control of mites on plants require complete coverage of leaf surfaces. Ground application of Nealta™ miticide must be made in a minimum of 100 gallons per acre for listed crops except grapes. For grapes, use a minimum of 50 gallons per acre. Aerial application of Nealta™ miticide must be made in a minimum of 10 gallons per acre. Aerial applications made to dense canopies may not provide sufficient coverage of lower leaves to provide adequate pest control. Aerial application is only permitted on tomatoes. Do not apply by air to citrus, grapes, pome fruit, strawberries or tree nuts.

For knockdown and residual control of listed mites apply Nealta™ miticide at the rate 13.7 fl oz/a (0.2 lb ai/a) at the first sign of infestation to labeled crops. A second application at 13.7 fl oz/a may be applied as long as a minimum interval of 14 days has elapsed. No more than two (2) applications of Nealta™ miticide may be made per season per crop and no more than 27.4 fl oz/a (0.4 lb ai/a) may be applied per season per crop.

Beneficial arthropods: Nealta™ miticide does not have a negative impact on the field populations of common lacewing (*Chrysopa carnea*), insidious flower bug (*Orius insidiosus*), predatory mites including *Ambylseius fallacies*, *Phytoseiulus persimilis*, *Typhlodromus pyri*, *Zezellia mali*; seven-spotted lady beetle (*Coccinella septempunctata*), six-spotted thrips (*Scolothrips sexmaculatus*), spider mite destroyer (*Stethorus puncum*)

and western predatory mite (*Typhlodromus occidentalis*). Use of Nealta™ miticide in a mite control program that includes these beneficial arthropods is possible since these species are tolerant to Nealta™ miticide.

When used according to label directions, Nealta™ miticide is effective in controlling the following Tetranychid mite species: carmine mite, citrus red mite, Banks grass mite, brown almond mite, brown wheat mite, European red mite, McDaniel spider mite, Pacific spider mite, spruce spider mite, strawberry spider mite, Texas citrus mite, two-spotted spider mite, Willamette spider mite and Yuma spider mite.

EFFICACY AND PHYTOTOXICITY TESTING

Formulation

Cyflumetofen is developed as a suspension concentrate formulation. Two formulations were field tested in the United States as BAS 9210 0I and BAS 9210 2I. Up until 2011, field trials were carried out with the BAS 9210 0I formulation (212 g/l). In 2011, numerous field trials were conducted using BAS 9210 2I (200 g/l). The only difference between the formulations is that the loading of BAS 9210 0I is 6% higher than BAS 9210 2I. Registration is being sought for the BAS 9210 2I formulation which is the formulation in Nealta™ miticide. Most, but not all, efficacy trials in the United States were conducted with BAS 9210 0I. A summary of formulations and rates evaluated are presented above in Table 1.

Ovicidal Activity of Cyflumetofen

In order to better understand if cyflumetofen (BAS 9210 0I) has true ovicidal activity, a laboratory study was conducted. Two-spotted spider mite females were introduced onto bean leaf discs for oviposition. After 24 hours the females were removed and the number of eggs counted. The leaf discs with eggs were dipped into the treatment solutions and nymphal emergence was evaluated at 4 days after treatment (DAT). From these counts, the lethal concentration that controlled 50% of the test sample (LC50) and LC90 concentrations (ppm) were determined. As shown in **Table 3**, a concentration of 5.6 ppm of BAS 9210 0I resulted in 50% mortality of two-spotted spider mite eggs. BAS 9210 0I at 34.6 ppm resulted in 90% mortality of eggs. When BAS 9210 0I (212 g/l) is applied in the field at a rate of 12.9 fl oz/a in a high water volume spray such as 200 gpa the concentration of cyflumetofen in the spray solution is approximately 100 ppm. This concentration is considerably more than the amount needed to provide 90% mortality of two-spotted spider mite eggs. Application at lower spray volumes would increase the concentration of cyflumetofen (i.e., 100 gpa is approximately 200 ppm). These results show that cyflumetofen has ovicidal activity against eggs of two-spotted spider mite and likely other species of Tetranychid mites. While not conclusive, these data suggest that the reduction (or control) of Tetranychid mite eggs observed in the efficacy trials discussed below may have resulted from a combination of ovicidal activity and rapid control of female mites which also would reduce egg numbers soon after treatment.

Table 3. Laboratory Determination of Ovicidal Activity of BAS 9210 0I.[1]

	BAS 9210 0I (ppm)	95% C.I. (ppm of BAS 9210 0I)
LC 50	5.6	1.3-19.1
LC 90	34.6	11.8-1059.5

1. BASF, 2010 (**Exhibit 100**)

Field Efficacy Trials (2008 - 2012)

Since 2008, BASF conducted or sponsored over 50 efficacy trials in the United States and Mexico (one trial) for control of Tetranychid mites on tree nuts, citrus, grape, pome fruit, strawberry, tomato and avocado. The results of these trials are provided below in summary tables as well as in exhibits where field reports are provided. The majority of the trials were conducted in California (n=40). Considering other trials that were conducted in Oregon and Washington, 45 of the trials were conducted in the western states.

BAS 9210 0I was the formulation of cyflumetofen evaluated in the trials up to 2011. During 2011-12, both BAS 9210 0I and BAS 9210 2I were evaluated in trials. In some trials, as discussed below, the formulations were compared side-by-side. A discussion of the efficacy trial results are presented below by crop. All of the trials were conducted as small plot replicated trials set out in a random complete block design. Statistical analyses were performed on results of each trial. Unless otherwise stated, data were subjected to ANOVA and treatment differences were tested by the Student-Newman-Keuls test. In titles of the summary tables, the crop, test number, researcher name and company, year tested and location where the test was conducted are provided. Also provided are number of replicates, date(s) of application and spray volume. Unless otherwise stated in some tables, means followed by the same letter do not significantly differ (P=0.05, Student-Newman-Keuls test). Mean comparisons were performed only when the AOV treatment P (F) is significant at mean comparison OSL.

Percent Control Calculations: For summary purposes and as a means to compare mite control provided by each cyflumetofen formulation and the commercial standard, a single trial evaluation time was selected for each trial and the level of egg and motile mite control at that specific time period was calculated. Percent control was calculated by using Abbott's formula *[Abbott, W.S. (1925). A method of computing the effectiveness of an insecticide. J. Econ. Entomol.; 18:265-267].* Regarding the specific evaluation period selected for comparison, an attempt was made to select an evaluation early in the life of the trial (i.e., < 10 days after treatement [DAT]). That did not happen in all trials. BAS 9210 0I and BAS 9201 2I were applied with and without adjuvants in many trials and if that was the case, the treatments with these products applied alone were selected for comparison with the standards. If multiple standards were included in a trial and Agri-mek was among the group, it was generally selected for comparison because it is one of the oldest and most effective miticide standards still available. Finally, the specific treatments and data used to calculate percent control for each trial are highlighted in the summary tables.

Field Phytotoxicity Trials (2008 - 2011)

Crop tolerance ratings were taken from most, but not all efficacy trials. In some instances, a separate data column on phytotoxicity was maintained at each rating date in the trial. In other cases, phytotoxicity was included as a comment in the trial summary. In addition, specific phytotoxicity tests were conducted. Most phytotoxicity trials with BAS 9210 0I were carried out at the 13.7 fl oz/a rate. With BAS 9210 2I, crop tolerance was tested at 13.7 (1X) and 27.4 fl oz/a (2X rate). Results are presented from 59 trials on tree nuts, citrus, grape, pome fruit, strawberry/raspberry, tomato and avocado. Forty one (69%) of the trials were conducted in California and 49 (83%) of the trials were conducted in California, Oregon and Washington.

Field Bridging Efficacy Trials With BAS 9210 0I and BAS 9201 2I

Prior to 2011, efficacy trials in the United States were conducted with the BAS 9210 0I formulation. As stated above, BAS 9210 0I was formulated as a 212 g/l SC. In 2011, the new 200 g/l SC formulation of cyflumetofen (BAS 9210 2I) became available. As such, BASF initiated a number of research trials during the 2011 season to demonstrate the equivalency of the two formulations for control of Tetranychid mites species in several different crops.

Treatment applications generally occurred when phytophagous mite populations reached the established threshold number of mites for the particular crop. Motiles included any form of mite (larva, nymph and adult) moving or capable of movement. BAS 9210 2I was applied at 13 fl oz/a (200 g ai/ha) and was compared to several commercial standards that were registered for use on the specific crop being investigated. Most applications were made using an application volume of 100 to 200 gpa. Application equipment ranged from hand-held backpack sprayers to tractor pulled sprayers, depending on the researcher. Some applications were made by low pressure mist blower applicators and other applications used high pressure sprayers. Mite and predatory mite counts were conducted by removing 10-40 (usually 25) leaves/plot, placing them in plastic bags and refrigerating until counts were completed. Counts were carried out by using a leaf-brushing machine with a binocular microscope to determine the number of species specific motiles, eggs or adults per sample unit. Percent control was calculated by using Abbott's formula as described above and was used as a means to compare control of the cyflumetofen formulations in the bridging trials. A summary of the bridging mite control results is presented in **Tables 4 and 5**.

The results show that the two formulations provided equivalent egg and motile mite control in the seven trials across four crops (almond, grape, apple and pear) where they were compared. Control of eggs and motiles with BAS 9210 0I was 96.9% and 98.7%, respectively. Control of eggs and motiles with BAS 9210 2I was 96.8% and 98.1%, respectively. There was a commercial standard included in four of the trials and control of eggs and motiles with the commercial standards was 86.2% and 92.8%, respectively. The data shows that both formulations of cyflumetofen provided equivalent control of two-spotted spider mite, Pacific spider mite, European spider mite and McDaniel spider mite when compared to the untreated control at 7 to 9 days after application. As discussed in more detail below, both formulations were safe to the tested crops.

Table 4. Efficacy Summary for BAS 9210 0I and BAS 9210 2I Trials Conducted to Show Equivalency of the Formulations for Control of Tetranychid Mite Eggs on Different Crops.

Crop	Mite Species	Trial ID	Year	BAS 9210 0I[1] % Control Eggs (n=7)	BAS 9210 2I[1] % Control Eggs (n=7)	STD[2] % Control Eggs (n=4)	Timing	Table No. & (Exhibit No.)
Alm	TSSM	UCA-SB1	2011	96.2	94.0	97.9	8DAT	27 (1)
Alm	TSSM	UCA-SB2	2011	98.6	96.8	None	7DAT	28 (2)
Grape	PSM	UCA-SB1	2011	98.7	99.6	96.3	7DAT	53 (27)
Grape	PSM	UCA-SB1	2011	87.8	100.0	None	8DAT	54 (28)
Grape	PSM	UCA-SB2	2011	98.3	99.8	None	7DAT	55 (29)
Apple	ERM	UMI-JF1	2011	98.9	98.8	98.8	7DAT	63 (37)
Pear	McDM	UORSW1	2011	100.0	88.9	51.9	9DAT	71 (45)
			Avg.	**96.9**	**96.8**	**86.2**		

1. BAS 9210 0I applied at 12.9-13.7 fl oz/a; BAS 9210 2I applied at 13.7 fl oz/a.
2. Standards included Agri-mek and Envidor.

BASF maintains that the two formulations of cyflumetofen are equivalent in terms of performance and safety. BASF requests that all data generated using the older formulation be considered when evaluating efficacy of the newer BAS 9210 2I formulation (= Nealta™ miticide).

Table 5. Efficacy Summary for BAS 9210 0I and BAS 9210 2I Trials Conducted to Show Equivalency of the Formulations for Control of Tetranychid Mite Motiles on Different Crops.

Crop	Mite Species	Trial ID	Year	BAS 9210 0I[1] % Control Motiles[2] (n=7)	BAS 9210 2I[1] % Control Motiles[2] (n=7)	STD[3] % Control Motiles[2] (n=4)	Timing	Table No. & (Exhibit No.)
Alm	TSSM	UCA-SB1	2011	97.1	98.7	98.2	8DAT	27 (1)
Alm	TSSM	UCA-SB2	2011	99.3	92.6	None	7DAT	28 (2)
Grape	PSM	UCA-SB1	2011	99.3	100.0	95.3	7DAT	53 (27)
Grape	PSM	UCA-SB1	2011	100.0	100.0	None	8DAT	54 (28)
Grape	PSM	UCA-SB2	2011	97.3	99.8	None	7 DAT	55 (29)
Apple	ERM	UMI-JF1	2011	98.2	95.7	97.6	7DAT	63 (37)
Pear	McDM	UORSW1	2011	100.0	100.0	80.0	9DAT	71 (45)
			Avg.	**98.7**	**98.1**	**92.8**		

1. BAS 9210 0I applied at 12.9-13.7 fl oz/a; BAS 9210 2I applied at 13.7 fl oz/a.
2. Motiles = adults + immatures, females only, or all adults only.
3. See Table 4 for the standards included in the bridging trials.

Efficacy and Phytotoxicity Discussion by Crop

Tree Nut Efficacy

During the years 2008-2011, 13 efficacy trials were conducted in California to evaluate BAS 9210 0I and/or BAS 9210 2I for tetranychid mite control on almonds (n=9) and walnuts (n=4) (**Tables 6 and 7**). BAS 9210 0I was evaluated in 11 trials and BAS 9210 2I was evaluated in four trials. The two formulations were compared side-by-side in two trials. Two-spotted spider mite occurred in nine trials and Pacific spider mite occurred in four trials. Percent control was calculated by using Abbott's formula as described above. Commercial standards used in the tree nut efficacy trials included Acramite, Agri-mek, Envidor, Onager and Zeal. A complete summary of mite control for the nut crop trials is provided in the summary **Tables 27-39** and field reports are provided in **Exhibits 1-13**.

Control of two-spotted spider mite and Pacific spider mite eggs with BAS 9210 0I applied at 12.9-13.7 fl oz/a was 94.3 % (n=10) whereas with BAS 9210 2I applied at 13.7 fl oz/a control was 90.2 % (n=4) (**Table 6**). In the two trials where BAS 9210 0I and BAS 9210 2I were compared side-by-side, control of eggs was nearly equal at 97.4 % for BAS 9210 0I and 95.4 % for BAS9210 2I. Control provided by the commercial standards was 86.7 % (n=11).

Control of two-spotted spider mite and Pacific spider mite motiles in the almond and walnut trials with BAS 9210 0I applied at 12.9-13.7 fl oz/a was 92.1 % (n=11) whereas with BAS 9210 2I applied at 13.7 fl oz/a control was 87.0 % (n=4) (**Table 7**). In the two trials where BAS 9210 0I and BAS 9210 2I were compared, control was nearly equal with BAS 9210 0I and BAS 9210 2I providing 97.2% and 95.7% control, respectively. Control of motiles provided by the commercial standards was 81.9 % (n=12).

Tree Nut Phytotoxicity

BAS 9210 0I and/or BAS 9210 2I was evaluated for phytotoxicity in 14 trials on almonds (n=10) and walnuts (n=4) in California (**Table 8**). Both formulations were safe to commercial varieties of almonds and walnuts. BAS 9201 2I was evaluated in six trials at a high rate equal to 2X the maximum label rate. There was no phytotoxicity observed in any of the 14 trials conducted on almonds and walnuts showing that both BAS9210 0I and BAS 9210 2I are safe to these nut crops.

Tree Nut Summary

Efficacy of BAS 9210 0I and BAS 9210 2I against two-spotted spider mite and Pacific spider mite was excellent in California almond and walnut trials. Control was equal to if not superior to control provided by commercial standard miticides included for comparison. Efficacy of the two formulations was equal when compared side-by side at equivalent rates. Safety to almonds and walnuts was excellent at label rates and higher.

Table 6. Efficacy Summary for BAS 9210 0I and BAS 9210 2I Trials Conducted to Support Performance of Nealta® Miticide for Control of Tetranychid Mite Eggs on Tree Nuts.

Crop	Mite Species	Trial ID	Year	BAS 9210 0I[1] % Control Eggs (n=10)	BAS 9210 2I[1] % Control Eggs (n=4)	STD[2] % Control Eggs (n=11)	Timing	Table No. & (Exhibit No.)
Alm	TSSM	UCA-SB1	2011	96.2	94.0	97.9	8DAT	27 (1)
Alm	TSSM	UCA-SB2	2011	98.6	96.8	None	7DAT	28 (2)
Alm	TSSM	U21-066	2011	99.1	-	99.9	7DAT	29 (3)
Alm	PSM	UCA-SB2	2011	-	70.0	70.0	3DAT	30 (4)
Alm	TSSM	UCA-SB4	2011	-	100.0	100.0	6DAT	31 (5)
Alm	PSM	UCA-PM1	2010	84.7	-	95.5	7DAT	32 (6)
Alm	PSM	UCA-PM3	2010	100.0	-	100.0	8DAT	33 (7)
Wal	PSM	UCA-PM4	2010	89.6	-	58.3	7DAT	34 (8)
Alm	TSSM	UCA-PM5	2010	96.6	-	100.0	7DAT	35 (9)
Alm	TSSM	U21-114	2010	85.6	-	49.1	3DAT	36 (10)
Wal	TSSM	UCA-PM2	2009	92.4	-	83.5	6DAT	37 (11)
Wal	TSSM	UCA-PM4	2008	-	-	-	-	38 (12)
Wal	TSSM	UCA-PM5	2008	100.0	-	100.0	7DAT	39 (13)
			Avg.	**94.3**	**90.2**	**86.7**		

1. BAS 9210 0I applied at 12.9-13.7 fl oz/a; BAS 9210 2I applied at 13.7 fl oz/a.
2. Standards included Acramite, Agri-mek, Envidor, Onager and Zeal; if multiple standards were included in a trial and Agri-mek was among the group, it was usually selected for comparison purposes.

Table 7. Efficacy Trial Summary for BAS 9210 0I and BAS 9210 2I Trials Conducted to Support Performance of Nealta® Miticide for Control of Tetranychid Mite Motiles on Tree Nuts.

Crop	Mite Species	Trial ID	Year	BAS 9210 0I[1] % Control Motiles[2] (n=11)	BAS 9210 2I[1] % Control Motiles[2] (n=4)	STD[3] % Control Motiles[2] (n=12)	Timing	Table No. & (Exhibit No.)
Alm	TSSM	UCA-SB1	2011	97.1	98.7	98.2	8DAT	27 (1)
Alm	TSSM	UCA-SB2	2011	99.3	92.6	None	7DAT	28 (2)
Alm	TSSM	U21-066	2011	98.9	-	99.7	7 DAT	29 (3)
Alm	PSM	UCA-SB2	2011	-	56.5	13.0	3DAT	30 (4)
Alm	TSSM	UCA-SB4	2011	-	100.0	100.0	6DAT	31 (5)
Alm	PSM	UCA-PM1	2010	73.1	-	79.4	7DAT	32 (6)
Alm	PSM	UCA-PM3	2010	88.9	-	77.8	8DAT	33 (7)
Wal	PSM	UCA-PM4	2010	77.3	-	52.3	7DAT	34 (8)
Alm	TSSM	UCA-PM5	2010	97.7	-	100.0	7DAT	35 (9)
Alm	TSSM	U21-114	2010	99.0	-	90.9	3DAT	36 (10)
Wal	TSSM	UCA-PM2	2009	86.7	-	74.5	6DAT	37 (11)
Wal	TSSM	UCA-PM4	2008	100.0	-	99.4	7DAT	38 (12)
Wal	TSSM	UCA-PM5	2008	97.4	-	97.4	7DAT	39 (13)
			Avg.	**92.1**	**87.0**	**81.9**		

1. BAS 9210 0I applied at 12.9-13.7 fl oz/a; BAS 9210 2I applied 13.7 fl oz/a.
2. Motiles = adults + immatures, females only, or all adults only.
3. See Table 6 for a list of standards included in the nut crop trials.

Table 8. Phytotoxicity Trials Conducted in California with BAS 9210 0I and BAS 9210 2I to Support Safety of Nealta® Miticide on Tree Nuts.

State	Crop (Variety)	Year & Trial ID	Formulation	Max. Rate (fl oz/a)	% Phyto.	Exhibit No.
CA	Almond (Butte)	2010- UCA-PM3	BAS 9210 0I	13.7	0	7
CA	Walnut (Chandler)	2010- UCA-PM4	BAS 9210 0I	13.7	0	8
CA	Almond (Nonpareil)	2010-UCA-PM5	BAS 9210 0I	13.7	0	9
CA	Almond (Sonora)	2010- U21-114	BAS 9210 0I	13.7	0	10
CA	Walnut (Vina)	2009- UCA-PM2	BAS 9210 0I	13.7	0	11
CA	Walnut (Chandler)	2008- UCA-PM4	BAS 9210 0I	13.7	0	12
CA	Walnut (Vina)	2008- UCA-PM5	BAS 9210 0I	13.7	0	13
CA	Almond (N/A)	2011 - UCA-SB1	**BAS9201 2I**	**27.4**	**0**	59
CA	Almond (Butte)	2011 - UCA-SB2	**BAS9201 2I**	**27.4**	**0**	60
CA	Almond (N/A)	2011 - U21-066	BAS 9210 0I	13.7	0	61
CA	Almond (Sonora)	2011 - UCA-SB2	**BAS9201 2I**	**27.4**	**0**	62
CA	Almond (Nonpareil)	2011 - UCA-SB4	**BAS9201 2I**	**27.4**	**0**	63
CA	Almond (N/A)	2011 - UCA-SB9	**BAS9201 2I**	**27.4**	**0**	64
CA	Almond (Sonora)	2011 - U21-088	**BAS9201 2I**	**27.4**	**0**	65

Citrus Efficacy

During the years 2008-2011, 13 efficacy trials were conducted in California to evaluate BAS 9210 0I for Tetranychid mite control on citrus (orange [n=11], citron [n=1], and lemon [n=1]) (**Table 9 and 10**). BAS 9210 0I was evaluated in the different trials at 12.9 or 13.7 fl oz/a. Citrus red mite was the main mite pest in 12 trials while two-spotted spider mite was the key mite pest in one trial. Percent control was calculated by using Abbott's formula as described above. Commercial standards used in the citrus efficacy trials included Agri-mek, Envidor and Reaper. A complete summary of mite control for the citrus crop trials is provided in summary **Tables 40-52** and field reports are provided in **Exhibits 14-26**.

Control of citrus red mite and two-spotted spider mite eggs with BAS 9210 0I at 12.9-13.7 fl oz/a was 82.1 % (n=12) compared to 74.8 % control from the commercial standards (n=12) (**Table 9**). Control of motile mites in citrus with BAS 9210 0I at 12.9-13.7 fl oz/a was 95.9 % (n=13) compared to 87.4% control from the commercial standards (n=13) (**Table 10**).

Table 9. Efficacy Summary for BAS 9210 0I Trials Conducted to Support Performance of Nealta® Miticide for Control of Tetranychid Mite Eggs on Citrus.

Crop	Mite Species	Trial ID	Year	BAS 9210 0I[1] % Control Eggs (n=12)	STD[2] % Control Eggs (n=12)	Timing	Table No. & (Exhibit No.)
Citron	CRM	U21-046	2011	49.8	57.3	3DAT	40 (14)
Orange	CRM	U21-052	2011	51.5	41.6	7DAT	41 (15)
Orange	TSSM	UCA-PM1	2010	100.0	100.0	7DAT	42 (16)
Orange	CRM	U21-063	2010	87.5	78.2	14DAT	43 (17)
Orange	CRM	U21-065	2010	73.0	60.2	7DAT	44 (18)
Orange	CRM	UCA-PM1	2009	86.7	60.0	5DAT	45 (19)
Orange	CRM	UCA-PM2	2009	96.3	95.3	4DAT	46 (20)
Orange	CRM	U21-060	2009	-	-	3DAT	47 (21)
Lemon	CRM	U21-070	2009	88.0	40.6	7DAT	48 (22)
Orange	CRM	U21-066	2008	78.8	83.1	7DAT	49 (23)
Orange	CRM	U21-074	2008	86.1	82.1	4DAT	50 (24)
Orange	CRM	UCA-PM1	2008	96.8	95.8	6DAT	51 (25)
Orange	CRM	UCA-PM2	2008	90.9	100.0	7DAT	52 (26)
			Avg.	**82.1**	**74.8**		

1. BAS 9210 0I applied at 12.9-13.7 fl oz/a.
2. Standards included Agri-mek, Envidor and Reaper; if multiple standards were included in a trial and Agri-mek was among the group, it was usually selected for comparison purposes.

Table 10. Efficacy Summary for BAS 9210 0I Trials Conducted to Support Performance of Nealta® Miticide for Control of Tetranychid Mite Motiles on Citrus.

Crop	Mite Species	Trial ID	Year	BAS 9210 0I[1] % Control Motiles[2] (n=13)	STD[3] % Control Motiles[2] (n=13)	Timing	Table No. & (Exhibit No.)
Citron	CRM	U21-046	2011	95.9	94.9	3DAT	40 (14)
Orange	CRM	U21-052	2011	100.0	94.6	7DAT	41 (15)
Orange	TSSM	UCA-PM1	2010	93.8	100.0	7 DAT	42 (16)
Orange	CRM	U21-063	2010	85.5	80.3	14DAT	43 (17)
Orange	CRM	U21-065	2010	99.6	97.0	7DAT	44 (18)
Orange	CRM	UCA-PM1	2009	100.0	40.0	5DAT	45 (19)
Orange	CRM	UCA-PM2	2009	100.0	93.2	4DAT	46 (20)
Orange	CRM	U21-060	2009	99.2	94.9	3DAT	47 (21)
Lemon	CRM	U21-070	2009	95.4	85.5	7DAT	48 (22)
Orange	CRM	U21-066	2008	83.3	61.1	7DAT	49 (23)
Orange	CRM	U21-074	2008	100.0	95.2	4DAT	50 (24)
Orange	CRM	UCA-PM1	2008	100.0	98.9	6DAT	51 (25)
Orange	CRM	UCA-PM2	2008	93.8	100.0	7DAT	52 (26)
			Avg.	**95.9**	**87.4**		

1. BAS 9210 0I applied at 12.9-13.7 fl oz/a.
2. Motiles = adults + immatures, females only, or all adults only.
3. See Table 9 for a list of standards included in the citrus trials.

Citrus Phytotoxicity

BAS 9210 0I was evaluated for phytotoxicity in 12 citrus trials (orange [n=9], lemon [n=1], and citron [n=1]) in California whereas BAS 9210 2I was evaluated in one orange trial (**Table 11**). BAS 9210 0I was applied at 12.9-13.7 fl oz/a and BAS 9210 2I was applied at 13.7 fl oz/a. There was no phytotoxicity observed in any of the 12 trials conducted on citrus showing that BAS 9210 0I and BAS9210 02I were safe to commercial varieties of orange, lemon and citron in California.

Citrus Summary

Efficacy of BAS 9210 0I at 12.9-13.7 fl oz/a against citrus red mite and two-spotted spider mite was very good in California trials. Control of eggs with BAS 9210 0I averaged 82.1% compared to 74.8% control provided by commercial standards in the same trials. Control of motile mites was 95.9% with BAS 9210 0I compared to 87.4% by commercial standards in the same trials. Safety to orange, lemon and citron was very good at label rates.

Table 11. Phytotoxicity Trials Conducted in California with BAS 9210 0I and BAS 9210 2I to Support Safety of Nealta® Miticide on Citrus.

State	Crop (Variety)	Year & Trial ID	Formulation	Max. Rate (fl oz/a)	% Phyto.	Exhibit No.
CA	Citron (Fingered)	2011- U21-046	BAS 9210 0I	13.7	0	14
CA	Orange (Navel)	2011- U21-052	BAS 9210 0I	13.7	0	15
CA	Orange(Mandarin)	2010- UCA-PM1	BAS 9210 0I	13.7	0	16
CA	Orange (Navel)	2008- UCA-PM1	BAS 9210 0I	13.7	0	25
CA	Orange (Navel)	2008- UCA-PM2	BAS 9210 0I	13.7	0	26
CA	Orange (Navel)	2011- U21-089	**BAS9201 2I**	**13.7**	**0**	66
CA	Orange (Navel)	2010- UCA-PM1	BAS 9210 0I	12.9	0	67
CA	Orange (Navel)	2009- UCA-PM2	BAS 9210 0I	13.7	0	68
CA	Orange (Navel)	2009- U21-060	BAS 9210 0I	13.7	0	69
CA	Lemon (Lisbon)	2009- U21-070	BAS 9210 0I	13.7	0	70
CA	Orange (Valencia)	2008- U21-066	BAS 9210 0I	13.7	0	71
CA	Orange (Valencia)	2008- U21-074	BAS 9210 0I	13.7	0	72

Grapes Efficacy

During the years 2009-2011, seven efficacy trials were conducted in California to evaluate BAS 9210 0I and/or BAS 9210 2I for Tetranychid mite control on grapes (**Tables 12 and 13**). BAS 9210 0I was evaluated in six trials and BAS 9210 2I was evaluated in four trials. The two formulations were compared side-by-side in three trials. Pacific spider mite was the key mite pest in all the trials. Percent control was calculated by using Abbott's formula as described above. Commercial standards used in the grape trials included Acramite and Agri-mek. A complete summary of mite control for the grape trials is provided in the summary **Tables 53-59** and field reports are provided in **Exhibits 27-33**.

Control of Pacific spider mite eggs with BAS 9210 0I at 12.9-13.7 fl oz/a was 90.1 % (n=6) whereas with BAS 9210 2I at 13.7 fl oz/a control was 98.4 % (n=4) (**Table 12**). In the three trials where BAS 9210 0I and BAS 9210 2I were compared side-by-side, control of eggs was nearly equal at 94.9 % for BAS 9210 0I and 99.8 % for BAS9210 2I. Control provided by the commercial standards was 87.8 % (n=5).

Control of motile mites in the grape trials with BAS 9210 0I at 12.9-13.7 fl oz/a was 93.6 % (n=6) whereas with BAS 9210 2I at 13.7 fl oz/a control was 95.2 % (n=4) (**Table 13**). In the three trials where BAS 9210 0I and BAS 9210 2I were compared, control was very similar with BAS 9210 0I at 98.9% and BAS 9210 2I at 99.9%. Control provided by the commercial standards was 87.3 % (n=5).

Table 12. Efficacy Trial Summary for BAS 9210 0I and BAS 9210 2I Trials Conducted to Support Performance of Nealta® Miticide for Control of Tetranychid Mite Eggs on Grapes.

Crop	Mite Species	Trial ID	Year	BAS 9210 0I[1] % Control Eggs (n=6)	BAS 9210 2I[1] % Control Eggs (n=4)	STD[2] % Control Eggs (n=5)	Timing	Table No. & (Exhibit No.)
Grape	PSM	UCA-SB1	2011	98.7	99.6	96.3	7DAT	53 (27)
Grape	PSM	UCA-SB1	2011	87.8	100.0	None	8DAT	54 (28)
Grape	PSM	UCA-SB2	2011	98.3	99.8	None	7DAT	55 (29)
Grape	PSM	UCA-SB3	2011	-	94.3	100.0	13DAT	56 (30)
Grape	PSM	UCA-PM1	2010	71.5	-	55.3	7DAT	57 (31)
Grape	PSM	UCA-PM2	2010	100.0	-	100.0	7DAT	58 (32)
Grape	PSM	UCA-PM1	2009	84.1	-	87.3	14DAT	59 (33)
			Avg.	**90.1**	**98.4**	**87.8**		

1. BAS 9210 0I applied at 12.9-13.7 fl oz/a; BAS 9210 2I applied at 13.7 fl oz/a.
2. Standards included Acramite and Agri-mek; if multiple standards were included in a trial and Agri-mek was among the group, it was usually selected for comparison purposes.

Table 13. Efficacy Trial Summary for BAS 9210 0I and BAS 9210 2I Trials Conducted to Support Performance of Nealta® Miticide for Control of Tetranychid Mite Motiles on Grapes.

Crop	Mite Species	Trial ID	Year	BAS 9210 0I[1] % Control Motiles[2] (n=6)	BAS 9210 2I[1] % Control Motiles[2] (n=4)	STD[3] % Control Motiles[2] (n=5)	Timing	Table No. & (Exhibit No.)
Grape	PSM	UCA-SB1	2011	99.3	100.0	95.3	7DAT	53 (27)
Grape	PSM	UCA-SB1	2011	100.0	100.0	None	8DAT	54 (28)
Grape	PSM	UCA-SB2	2011	97.3	99.8	None	7 DAT	55 (29)
Grape	PSM	UCA-SB3	2011	-	81.1	84.9	13DAT	56 (30)
Grape	PSM	UCA-PM1	2010	80.0	-	67.9	7DAT	57 (31)
Grape	PSM	UCA-PM2	2010	100.0	-	98.4	7DAT	58 (32)
Grape	PSM	UCA-PM1	2009	84.7	-	89.8	14DAT	59 (33)
			Avg.	**93.6**	**95.2**	**87.3**		

1. BAS 9210 0I rates of 12.9-13.7 fl oz/a; BAS 9210 2I rates of 13.7 fl oz/a.
2. Motiles = adults + immatures, females only, or all adults only.
3. See Table 12 for a list of standards included in the grape trials.

Grape Phytotoxicity

BAS 9210 0I and/or BAS 9210 2I was evaluated for phytotoxicity in seven grape trials in California (**Table 14**). Both formulations were safe to different varieties of grape. There was no phytotoxicity observed in any of the trials. BAS 9210 2I was applied at 2X the maximum label rate in four trials and was safe to common varieties of grapes.

Table 14. Phytotoxicity Trials Conducted in California with BAS 9210 0I and BAS 9210 2I to Support Safety of Nealta® Miticide on Grapes.

State	Crop (Variety)	Year & Trial ID	Formulation	Max. Rate (fl oz/a)	% Phyto.	Exhibit No.
CA	Grape (Merlot)	2011- UCA-SB1	**BAS9201 2I**	**27.4**	**0**	73
CA	Grape (T. Seedless)	2011- UCA-SB2	**BAS9201 2I**	**27.4**	**0**	74
CA	Grape (Flame Seed.)	2011- UCA-SB1	**BAS9201 2I**	**27.4**	**0**	75
CA	Grape (Zinfandel)	2011- UCA-SB3	**BAS9201 2I**	**27.4**	**0**	76
CA	Grape (Zinfandel)	2010- UCA-PM1	BAS 9210 0I	13.7	0	77
CA	Grape (Flame Seed.)	2010- UCA-PM2	BAS 9210 0I	13.7	0	78
CA	Grape (Zinfandel)	2009- UCA-PM1	BAS 9210 0I	13.7	0	79

Grape Summary

Efficacy of BAS 9210 0I and BAS 9210 2I against Pacific spider mite was excellent in California grape trials. Efficacy of the two formulations was equal when compared side-by-side and used at equivalent rates. Safety to grapes was excellent even at high rates equal to 2X the maximum label rates.

Pome Fruit Efficacy

During the years 2008-2011, 16 efficacy trials were conducted in the United States to evaluate BAS 9210 0I and/or BAS 9210 2I for Tetranychid mite control on apples and pears (**Tables 15 and 16**). BAS 9210 0I was evaluated in nine trials and BAS 9210 2I was evaluated in four trials. The two formulations were compared side-by-side in two trials. European red mite was the key mite pest in nine trials whereas the following species were key pests in the other trials: two-spotted spider mite (n=4), carmine spider mite (n=1) and McDaniel spider mite (n=1). Percent control was calculated by using Abbott's formula as described above. Commercial standards used in the pome fruit trials included Agri-mek, Envidor, Fugi-mite and Portal. A complete summary of mite control for the pome fruit trials is provided in summary **Tables 60-74** and field reports are provided in **Exhibits 34-48.**

Control of spider mite eggs in the pome fruit trials with BAS 9210 0I at 12.9-14.5 fl oz/a was 88.6 % (n=9) whereas with BAS 9210 2I at 13.7 fl oz/a control was 87.6 % (n=3) (**Table 15**). In the two trials where BAS 9210 0I and BAS 9210 2I were compared side-by-side, control of eggs was similar at 99.5 % for BAS 9210 0I and 93.9 % for BAS9210 2I. Control provided by the commercial standards was 82.8 % (n=10).

Control of motile mites in the pome fruit trials with BAS 9210 0I at 12.9-14.5 fl oz/a was 94.4 % (n=14) whereas with BAS 9210 2I at 13.7 fl oz/a control was 95.2 % (n=4) (**Table 16**). In the two trials where BAS 9210 0I and BAS 9210 2I were compared, control was very similar with BAS 9210 0I at 99.1% and BAS 9210 2I at 97.9%. Control provided by the commercial standards was 90.9 % (n=16).

Pome Fruit Phytotoxicity

BAS 9210 0I and/or BAS 9210 2I were evaluated for phytotoxicity in 12 trials in apple (n=8) and pear (n=4) in the states of California (n=2), New York (n=2), Oregon (n=2), North Carolina (2), Georgia (2) and WA (2) (**Table 17**). Both formulations were safe to different varieties of apples and pears. There was no phytotoxicity observed in any of the trials. BAS 9210 2I was applied at 2X the maximum label rate in three trials (2 pear and 1 apple) and caused no phytotoxicity.

Pome Fruit Summary

Efficacy of BAS 9210 0I and BAS 9210 2I against European red mite, two-spotted spider mite, carmine spider mite and McDaniel spider was very good in apple and pear trials across the United States. Efficacy of the two formulations was equal when compared side-by-side and used at equivalent rates. Safety to apples and pears was excellent even at high rates equal to 2X the maximum label rates.

Table 15. Efficacy Summary for BAS 9210 0I and BAS 9210 2I Trials Conducted to Support Performance of Nealta® Miticide for Control of Tetranychid Mite Eggs on Pome Fruit.

Crop	Mite Species	Trial ID	Year	BAS 9210 0I[1] % Control Eggs (n=9)	BAS 9210 2I[1] % Control Eggs (n=3)	STD[2] % Control Eggs (n=10)	Timing	Table No. & (Exhibit No.)
Apple	ERM	UWA-SW1	2011	-	-	-	6DAT	60 (34)
Apple	TSSM	UGA-1LN	2011	-	-	-	8DAT1	61 (35)
Apple	ERM	UPA-JO1	2011	-	75.1	70.5	20DAT	62 (36)
Apple	ERM	UMI-JF1	2011	98.9	98.8	98.8	7DAT	63 (37)
Apple	ERM	UPA-1JO	2010	100.0	-	100.0	37DAT	64 (38)
Apple	CSM	UNY-1JO	2010	-	-	-	3DAT	65 (39)
Apple	ERM	UPA-JO2	2010	91.3	-	100.0	7DAT	66 (40)
Apple	ERM	UPA-1JO	2009	100.0	-	97.1	38DAT	67 (41)
Apple	ERM	UWA-SW3	2008	97.2	-	89.7	14DAT	68 (42)
Apple	ERM	UPA-1JO	2008	41.2	-	28.0	15DAT2	69 (43)
Apple	ERM	UWV-2JO	2008	-	-	-	6DAT	70 (44)
Pear	McDM	UOR-SW1	2011	100.0	88.9	51.9	9DAT	71 (45)
Pear	TSSM	UOR-PM1	2009	-	-	-	13DAT	72 (46)
Pear	TSSM	UOR-PM1	2008	76.2	-	93.1	6DAT	73 (47)
Pear	TSSM	UCA-PM1	2008	92.9	-	98.9	8DAT	74 (48)
			Avg.	**88.6**	**87.6**	**82.8**		

1. BAS 9210 0I applied at 12.9-14.5 fl oz/a; BAS 9210 2I applied at 13.7 fl oz/a.
2. Standards included Agri-mek, Envidor, Fugi-mite and Protal; if multiple standards were included in a trial and Agri-mek was among the group, it was usually selected for comparison purposes.

Table 16. Efficacy Summary for BAS 9210 0I and BAS 9210 2I Trials Conducted to Support Performance of Nealta® Miticide for Control of Tetranychid Mite Motiles on Pome Fruit.

Crop	Mite Species	Trial ID	Year	BAS 9210 0I[1] % Control Motiles[2] (n=14)	BAS 9210 2I[1] % Control Motiles[2] (n=4)	STD[3] % Control Motiles[2] (n=16)	Timing	Table No. & (Exhibit No.)
Apple	ERM	UWA-SW1	2011	-	95.7	95.7	6DAT	60 (34)
Apple	TSSM	UGA-1LN	2011	96.9	-	69.2	8DAT1	61a (35)
			2011	98.4	-	80.1	8DAT1	61b (35)
Apple	ERM	UPA-JO1	2011	-	89.4	74.8	20DAT	62 (36)
Apple	ERM	UMI-JF1	2011	98.2	95.7	97.6	7DAT	63 (37)
Apple	ERM	UPA-1JO	2010	100.0	-	100.0	37DAT	64 (38)
Apple	CSM	UNY-1JO	2010	98.3	-	94.3	3DAT	65 (39)
Apple	ERM	UPA-JO2	2010	90.0	-	100.0	7DAT	66 (40)
Apple	ERM	UPA-1JO	2009	100.0	-	100.0	38DAT	67 (41)
Apple	ERM	UWA-SW3	2008	90.9	-	81.8	14DAT	68 (42)
Apple	ERM	UPA-1JO	2008	83.8	-	93.6	15DAT2	69 (43)
Apple	ERM	UWV-2JO	2008	95.1	-	97.5	6DAT	70 (44)
Pear	McDM	UOR-SW1	2011	100.0	100.0	80.0	9DAT	71 (45)
Pear	TSSM	UOR-PM1	2009	98.0	-	99.3	13DAT	72 (46)
Pear	TSSM	UOR-PM1	2008	73.3	-	91.7	6DAT	73 (47)
Pear	TSSM	UCA-PM1	2008	99.1	-	99.5	8DAT	74 (48)
			Avg.	**94.4**	**95.2**	**90.9**		

1. BAS 9210 0I applied at 12.9-14.5 fl oz/a; BAS 9210 2I applied at 13.7 fl oz/a.
2. Motiles = adults + immatures, females only, or all adults only.
3. See Table 15 for a list of standards included in the pome fruit trials.

Table 17. Phytotoxicity Trials Conducted in the United States with BAS 9210 0I and BAS 9210 2I to Support Safety of Nealta® Miticide on Pome Fruit.

State	Crop (Variety)	Year & Trial ID	Formulation	Max. Rate (fl oz/a)	% Phyto.	Exhibit No.
NY	Apple (Gold. Del.)	2010- UNY-IJ0	BAS 9210 0I	13.7	0	39
OR	Pear (Forelle)	2009- UOR-PM1	BAS 9210 0I	13.7	0	47
NC	Apple (Yel. Del.)	2011 - U23-DM1	BAS 9210 0I	13.7	0	80
CA	Pear (Bartlett)	2011- UCA-SB5	**BAS9201 2I**	**27.4**	**0**	81
OR	Pear (N/A)	2011- UOR-SW1	**BAS9201 2I**	**27.4**	**0**	82
WA	Apple (Fugi)	2011- UWA-SW1	**BAS9201 2I**	**27.4**	**0**	83
GA	Apple (Hamp.Mac)	2011- UGA-1LN	BAS 9210 0I	13.7	0	84
	Apple (Honeycrisp	2011- UGA-1LN	BAS 9210 0I	13.7	0	84
NC	Apple (Red Del.)	2011 - U23-DM1	BAS 9210 0I	13.7	0	85
NY	Apple (Gol. Del.)	2010 - UNY-1JO	BAS 9210 0I	13.7	0	86
WA	Apple (N/A)	2008 - UWA-SW1	BAS 9210 0I	13.7	0	87
CA	Pear (Bartlett)	2008 - UCA - PM1	BAS 9210 0I	13.7	0	88

Strawberry Efficacy

During the years 2008-2012, 8 efficacy trials were conducted in the United States to evaluate BAS 9210 0I and/or BAS 9210 2I for Tetranychid mite control on strawberries (**Tables 18 and 19**). BAS 9210 0I was evaluated in six trials and BAS 9210 2I was evaluated in two trials. The two formulations were not compared side-by-side on strawberries. Two-spotted spider mite was the key mite pest in all the trials. Percent control was calculated by using Abbott's formula as described above. Commercial standards used in the strawberry trials included Acramite, Agri-mek and Bifenthrin. A complete summary of mite control for the strawberry trials is provided in the summary **Tables 75-82** and field reports are provided in **Exhibits 49-56**.

Control of two-spotted spider mite eggs in the strawberry trials with BAS 9210 0I at 13.7 fl oz/a was 65.9 % (n=6) whereas with BAS 9210 2I at 13.7 fl oz/a control was 75.5 % (n=1) (**Table 18**). Control provided by the commercial standards was 61.4 % (n=7). The lower control of two-spotted spider mite eggs in the strawberry trials likely reflects inadequate spray coverage on the hard to reach lower side of strawberry leaves where most mite eggs are located. Control with BAS 9210 0I and BAS 9210 2I was higher than the commercial standards.

Control of motile mites in the strawberry trials with BAS 9210 0I at 13.7 fl oz/a was 78.1 % (n=6) whereas with BAS 9210 2I at 13.7 fl oz/a control was 65.7 % (n=2) (**Table 19**). Control provided by the commercial standards was 69.1 % (n=8). As discussed above for control of eggs, the motile mite control is lower than usually seen with these products and likely reflects inadequate spray coverage of the undersides of strawberry leaves where most motile mites are located. Control provided by the cyflumetofen formulations was equal to, if not greater than, that provided by the commercial standards used for comparison.

Strawberry/Raspberry Phytotoxicity

BAS 9210 0I and BAS 9210 2I were evaluated for phytotoxicity in eight strawberry trials and one raspberry trial in California (n=5), Florida (n=2), Oregon (n=1) and Washington (n=1). (**Table 20**). Both formulations were safe to different varieties of strawberry and a single variety of raspberry. There was no phytotoxicity observed in any of the trials. BAS 9210 2I was applied at 2X the maximum label rate in two trials on strawberry and one trial on raspberry and did not cause any phytotoxicity.

Strawberry/Raspberry Summary

Efficacy of BAS 9210 0I and/or BAS 9210 2I against two-spotted spider mite was comparable to that provided by the commercial standards in trials conducted in California, Florida and Oregon. Overall mite control was generally lower on strawberries than that observed on other crops. Poor coverage of strawberry foliage, particularly the undersides of leaves, likely was a major factor in the lower levels of control observed with the cyflumetofen formulations. Safety to strawberry and raspberry was excellent with both formulations.

Table 18. Efficacy Summary for BAS 9210 0I and BAS 9210 2I Trials Conducted to Support Performance of Nealta® Miticide for Control Tetranychid Mite Eggs on Strawberry.

Crop	Mite Species	Trial ID	Year	BAS 9210 0I[1] % Control Eggs (n=6)	BAS 9210 2I[1] % Control Eggs (n=1)	STD[2] % Control Eggs (n=7)	Timing	Table No. & (Exhibit No.)
Sberry	TSSM	UFL-LN1	2012	-	77.5	79.4	11DAT	75 (49)
Sberry	TSSM	UFL-1LN	2011	96.0	-	94.9	25DAT1	76 (50)
Sberry	TSSM	UCA-S11	2011	-	-	-	8DAT	77 (51)
Sberry	TSSM	UCA-PM1	2009	53.8	-	34.1	7DAT	78 (52)
Sberry	TSSM	UCA-PM2	2009	78.6	-	57.1	7DAT	79 (53)
Sberry	TSSM	UCA-PM1	2008	17.4	-	29.4	14DAT	80 (54)
Sberry	TSSM	UCA-PM2	2008	52.2	-	35.2	7DAT	81 (55)
Sberry	TSSM	UOR-PM1	2008	97.2	-	100.0	7DAT	82 (56)
			Avg.	**65.9**	**77.5**	**61.4**		

1. BAS 9210 0I and BAS 9210 2I applied at13.7 fl oz/a.
2. Standards included Acramite, Agri-mek, Envidor and Bifenthrin; if multiple standards were included in a trial and Agri-mek was among the group, it was usually selected for comparison purposes.

Table 19. Efficacy Summary for BAS 9210 0I and BAS 9210 2I Trials Conducted to Support Performance of Nealta® Miticide for Control of Tetranychid Mite Motiles on Strawberry.

Crop	Mite Species	Trial ID	Year	BAS 9210 0I[1] % Control Motiles[2] (n=6)	BAS 9210 2I[1] % Control Motiles[2] (n=2)	STD[3] % Control Motiles[2] (n=8)	Timing	Table No. & (Exhibit No.)
Sberry	TSSM	UFL-LN1	2012	-	72.0	55.1	11DAT	75 (49)
Sberry	TSSM	UFL-1LN	2011	90.9	-	96.5	25DAT1	76 (50)
Sberry	TSSM	UCA-S11	2011	-	59.4	85.6	8DAT	77 (51)
Sberry	TSSM	UCA-PM1	2009	87.3	-	43.0	7DAT	78 (52)
Sberry	TSSM	UCA-PM2	2009	85.2	-	82.0	7DAT	79 (53)
Sberry	TSSM	UCA-PM1	2008	36.9	-	46.4	14DAT	80 (54)
Sberry	TSSM	UCA-PM2	2008	71.7	-	44.7	7DAT	81 (55)
Sberry	TSSM	UOR-PM1	2008	96.5	-	99.5	7DAT	82 (56)
			Avg.	**78.1**	**65.7**	**69.1**		

1. BAS 9210 0I and BAS 9210 2I applied at 13.7 fl oz/a.
2. Motiles = adults + immatures, females only, or all adults only.
3. See Table 18 for a list of standards included in the strawberry trials.

Table 20. Phytotoxicity Trials Conducted in the United States with BAS 9210 0I and BAS 9210 2I to Support Safety of Nealta® Miticide on Strawberry and Raspberry.

State	Crop (Variety)	Year & Trial ID	Formulation	Max. Rate (fl oz/a)	% Phyto.	Exhibit No.
CA	Sberry (Albion)	2008-UCA-PMI	BAS 9210 0I	13.7	0	54
OR	Sberry (Salea)	2008-UCA-PM1	BAS 9210 0I	13.7	0	55
CA	Sberry (Albion)	2011-UCA-SB7	**BAS9201 2I**	**27.4**	**0**	89
CA	Sberry (Albion)	2011-UCA-S11	**BAS9201 2I**	**27.4**	**0**	90
WA	Raspberry(Meeker)	2011-UWA-SW1	**BAS9201 2I**	**27.4**	**0**	91
FL	Sberry (Festival)	2011-UFL-1LN	BAS 9210 0I	13.7	0	92
CA	Sberry (SanAndreas)	2011-UCA-SB1	BAS 9210 0I	13.7	0	93
CA	Sberry (Albion)	2009-UCA-PM2	BAS 9210 0I	13.7	0	94
FL	Sberry (Festival)	2011-UFL-LN1	BAS 9210 0I	13.7	0	95

Tomato Efficacy

One efficacy trial was conducted in 2011 with BAS 9210 0I on tomatoes for control of two-spotted spider mite. The trial was conducted in southern Mexico. BAS 9210 0I was applied at the equivalent of 13.7 fl oz/a. Percent control for the different treatments was calculated using Abbott's formula as described previously. Control of two-spotted spider mite motiles was 96.2% compared to 95.2% provided by the commercial standard (Agri-mek) (**Table 21**). A complete summary of mite control for the tomato efficacy trial is provided in summary **Tables 83** and the field report is provided in **Exhibit 57**.

Table 21. Efficacy Summary for a BAS 9210 0I Trial Conducted to Support Performance of Nealta® Miticide for Control of Tetranychid Mite Motiles on Tomato.

Crop	Mite Species	Trial ID[1]	Year	BAS 9210 0I[2] % Control Motiles[3]	STD % Control Motiles[3]	Timing	Table No. & (Exhibit No.)
Tomato	TSSM	MX0-006	2011	96.2	95.2	7DAT	83 (57)

1. Trial conducted in Mexico.
2. BAS 9210 0I applied at 13.7 fl oz/a.
3. Motiles = adults + immatures, females only, or all adults only.

Tomato Phytotoxicity

Four trials were conducted during 2011 in Florida (3) and Georgia (1) to evaluate BAS 9201 2I for phytotoxicity on tomato (**Table 22**). There was no phytotoxicity in any of the trials even when BAS 9201 2I was applied in three of the trials at a high rate.

Table 22. Phytotoxicity Trials Conducted in the United States with BAS 9210 0I and BAS 9210 2I to Support Safety of Nealta® Miticide on Tomato.

State	Crop (Variety)	Year & Trial ID	Formulation	Max. Rate (fl oz/a)	% Phyto.	Exhibit No.
FL	Tomato (Solar set)	2011-UFL-LN1	**BAS9201 2I**	**27.4**	**0**	96
FL	Tomato (Solar set)	2011-UFL-LN2	**BAS9201 2I**	**27.4**	**0**	97
FL	Tomato (Solar set)	2011-UFL-LN3	**BAS9201 2I**	**27.4**	**0**	98
GA	Tomato (FL 47)	2011- UFL-LN2	**BAS9201 2I**	**13.7**	**0**	99

Tomato Summary

Only one efficacy trial was conducted in Mexico on tomatoes. The results showed excellent control of two-spotted spider mite motiles with BAS 9210 0I at the label rate. Since two-spotted spider mite is the main Tetranychid mite pest attacking tomatoes in California, these data along with the data from numerous other trials showing excellent control support the label claim for Nealta® miticide on tomatoes in California. Four phytotoxicity trials were conducted in Florida and Georgia and the results showed that both formulations were safe to tomatoes.

Avocado Efficacy

One efficacy trial was conducted in 2011 in California with BAS 9210 2I on avocado for control of persea mite. Percent control for the different treatments was calculated using Abbott's formula as described previously. Control of persea mite eggs and motiles was 92.9% and 95.3%, respectively, when BAS 9210 2I was applied at 13.7 fl oz/a (**Tables 23 and 24**). BAS 9210 2I provided better control of persea mite than Agri-mek. A complete summary of mite control for the avocado efficacy trial is provided in summary **Tables 84** and the field report is provided in **Exhibit 58**.

Table 23. Efficacy Summary for a BAS 9210 2I Trial Conducted to Support Performance of Nealta® Miticide for Control of Tetranychid Mite Eggs on Avocado.

Crop	Mite Species	Trial ID	Year	BAS 9210 2I[1] % Control Eggs	STD % Control Eggs	Timing	Table No. & (Exhibit No.)
Avocado	Persea	UCA-SB6	2011	92.9	81.0	8DAT	84 (58)

1. BAS 9210 2I applied at 13.7 fl oz/a.

Table 24. Efficacy Summary for a BAS 9210 2I Trial Conducted to Support Performance of Nealta® Miticide for Control of Tetranychid Mite Motiles on Avocado.

Crop	Mite Species	Trial ID	Year	BAS 9210 2I[1] % Control Motiles[2]	STD % Control Motiles[2]	Timing	Table No. & (Exhibit No.)
Avocado	Persea	UCA-SB6	2011	95.3	67.0	8DAT	84 (58)

1. BAS 9210 2I applied at 13.7 fl oz/a.
2. Motiles = adults + immatures, females only, or all adults only.

Avocado Phytotoxicity

BAS 9210 2I was applied at 27.4 fl oz/a (2X maximum label rate) in the avocado efficacy trial conducted in California during 2011. There was no phytotoxicity observed (**Table 25**).

Table 25. Phytotoxicity Trial Conducted in California with BAS 9210 2I to Support Safety of Nealta® Miticide on Avocado.

State	Crop (Variety)	Year & Trial ID	Formulation	Max. Rate (fl oz/a)	% Phyto.	Exhibit No.
CA	Avocado (Haas)	2011 - UCA- SB6	**BAS9201 2I**	**27.4**	**0**	58

Avocado Summary

Results from one efficacy trial and one phytotoxicity trial conducted with BAS 9210 2I in California avocadoes shows that the product provided very good control of persea mite while being safe to avocado trees.

Codes and Abbreviations Used in Field Trial Reports

Table 26. Codes and Abbreviations Used in Trial Reports for BAS 9210 0I and BAS 9210 2I.

APC	automatic percent control	NNNNN	useful plant
AV	larvae+adults, alive	NUMBER	number
CONTRO	control	OLIGSP	Persea mite, *Oligonychus persea*
CIDSI	sweet orange	P%CONT	estimation control in %
CIDSS	citrus sps.	P%EST	% disease of symptom
DAT	days after treatment	P%FREQ	% incidence of disease
DALT	days after last treatment	PHTOX	phytotoxicity
EL	eggs+larvae	PRNDU	almond Tree
EX	eggs	PYUCO	pear
FRASS	strawberry	RUBID	raspberry
IX	adults	TCOUNT	total insect count
LX	larvae	TETRMD	McDaniel spider mite, *Tetranychus mcdanieli*
MABSD	apple tree	TETRPA	pacific spider mite, *T. pacificus*
MABSS	apple tree	TETRUR	two-spotted spider mite, *T. urticae*
MCOUNT	counting attributes of the crop	TPLOT	total plot
MORTAL	mortality	TV	population alive
METTCI	citrus red mite, *Panonychus citri*	VITVI	grapes
METTUL	European red mite, *P. ulmi*	ZCOUNT	count insects after treatment
NF	nymphs		

Cyflumetofen Field Trial Data Summary Tables for Tree Nuts

Table 27 (Exhibit 1). Almond (DEV-I-2011-US-G62-E-01.0-US-UCA-SB1) - John Post, Ag Advisors, Live Oak, CA. Replicates 4; RCB design; Sprayed on 8/20/11 at 100 gpa. [1,2]

Table 27a. Mean number of two-spotted spider mite eggs/10 leaves.

Treatment	Rate (fl oz/a)	3DAT		8DAT		15DAT		21 DAT		28 DAT	
Control		645.3	a	235.0	a	74.0	a	84.0	a	253.3	a
BAS 9210 0I	12.9	56.5	c	**9.0**	b	18.0	b	6.0	b	0.0	b
BAS 9210 2I	13.7	203.5	bc	**14.0**	b	6.0	b	3.0	b	0.0	b
BAS 9210 2I + MSO	13.7	175.0	bc	9.0	b	3.0	b	4.0	b	0.0	b
BAS 9210 2I + Dynamic	13.7	393.5	b	13.0	b	5.0	b	1.0	b	0.0	b
BAS 9210 2I + NR 415	13.7	243.5	bc	5.0	b	8.0	b	1.0	b	0.0	b
Envidor	18.0	107.0	bc	**5.0**	b	2.0	b	1.0	b	0.0	b

Table 27b. Mean number of two-spotted spider mite motiles/10 leaves.

Treatment	Rate (fl oz/a)	3DAT		8DAT		15DAT		21 DAT		28 DAT	
Control		552.0	a	224.0	a	44.0	a	54.0	a	249.3	a
BAS 9210 0I	12.9	64.0	b	**6.5**	b	5.0	b	5.0	b	1.0	b
BAS 9210 2I	13.7	79.0	b	**3.0**	b	1.0	b	2.0	b	0.0	b
BAS 9210 2I+ MSO	13.7	70.0	b	4.0	b	0.0	b	3.0	b	0.0	b
BAS 9210 2I + Dynamic	13.7	36.0	b	6.0	b	2.0	b	2.0	b	1.0	b
BAS 9210 2I + NR 415	13.7	51.5	b	0.0	b	0.0	b	1.0	b	1.0	b
Envidor	18.0	54.0	b	**4.0**	b	1.0	b	2.0	b	1.0	b

1. BAS 9210 0I and BAS 9210 2I did not cause any phytotoxicity when applied alone or with adjuvants.
2. No phytotoxicity was observed when BAS 9210 2I was applied at a 2x rate of 27.4 fl oz/a.

Table 28 (Exhibit 2). Almond (DEV-I-2011-US/G62-E-01.0-US-UCA-SB2) – Scott Hicks, Bio Research, Fresno, CA. Replicates 4; RCB design; Sprayed on 8/30/11 at 100 gpa. [1,2]

Table 28a. Mean number of two-spotted spider mite eggs /20 leaves.

Treatment	Rate (fl oz/a)	-1DAT		3DAT		7DAT		14DAT	
Control		48.8	a	64.8	a	166.3	a	119.5	a
BAS 9210 0I	12.9	27.5	a	17.5	a	**2.3**	b	4.3	b
BAS 9210 2I	13.7	86.3	a	32.5	a	**5.3**	b	19.5	b
BAS 9210 2I + MSO	13.7	60.0	a	19.8	a	8.0	b	24.0	b
BAS 9210 2I + Dynamic	13.7	61.5	a	22.3	a	5.5	b	55.5	b
BAS 9210 2I + NR 415	13.7	55.8	a	14.5	a	0.0	b	6.5	b

Table 28b. Mean number of two-spotted spider mite females /20 leaves.

Treatment	Rate (fl oz/a)	-1DAT		3DAT		7DAT		14DAT	
Control		30.0	a	45.8	a	146.3	a	107.8	a
BAS 9210 0I	12.9	11.8	a	6.5	b	**1.0**	b	3.0	b
BAS 9210 2I	13.7	34.5	a	15.3	b	**10.8**	b	25.8	b
BAS 9210 2I + MSO	13.7	33.3	a	11.3	b	4.0	b	17.0	b
BAS 9210 2I + Dynamic	13.7	25.8	a	15.8	b	2.5	b	26.3	b
BAS 9210 2I + NR 415	13.7	21.5	a	10.5	b	0.5	b	9.8	b

1. BAS 9210 0I and BAS 9210 2I did not cause any phytotoxicity when applied alone or with adjuvants.
2. No phytotoxicity was observed when BAS 9210 2I was applied at a 2x rate of 27.4 fl oz/a.

Table 29 (Exhibit 3). Almond (DEV-I-2011-US-G63-C-11.0-US-U21-066) – Joseph Stout, BASF, Dinuba, CA. Replicates 4; RCB design; Sprayed on 6/7/11 at 100 gpa. [1]

Mean number of two-spotted spider mite eggs, nymphs and adults per unit.

		Eggs				Nymphs				Adults			
Treatment	**Rate (fl oz/a)**	**3DAT**		**7DAT**		**3DAT**		**7DAT**		**3DAT**		**7DAT**	
Control		833.0	a	1035.0	a	77.8	a	347.0	a	53.0	a	150.5	a
BAS 9210 0I	13.7	99.8	b	**9.0**	b	2.5	b	**4.8**	c	0.0	b	**0.5**	b
BAS 9210 0I+ NR 415	13.7	50.8	b	15.8	b	4.0	b	6.5	c	0.3	b	1.3	b
Envidor	18	42.5	b	13.3	b	0.8	b	4.8	c	0.0	b	1.5	b
Agri-mek + NR 415	20	60.5	b	**0.8**	b	7.8	b	**1.3**	c	0.0	b	**0.0**	b
Fujimite	41.1	71.8	b	12.5	b	1.8	b	6.8	c	1.8	b	2.5	b
NR 415 spray oil	1% v/v	145.0	b	302.0	b	28.5	b	133	b	5.5	b	64.5	b
Acramite + NR 415	16 oz wt/a	65.3	b	1.5	b	9.5	b	0.0	c	0.0	b	0.3	b

1. BAS 9210 0I did not cause any phytotoxicity when applied alone or with adjuvants.

Table 30 (Exhibit 4). Almond (DEV-I-2011-US-G65-D-02.0-US-UCA-SB2) – Dan Galt, Hulst Research Farm Services, Hickman, CA. Replicates 4; RCB design; Sprayed on 7/5/11 at 100 gpa.[1]

Table 30a. Mean number of Pacific spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	0DAT		3DAT		7DAT		14DAT		21DAT		28DAT	
Control		10.0	a	6.0	a	7.8	a	6.3	a	6.3	a	6.0	a
BAS 9210 2I	13.7	5.3	b	**1.8**	b	2.0	b	1.3	b	0.8	b	0.0	b
Onager	19.2	6.0	b	**1.8**	b	1.0	b	1.5	b	0.3	b	0.0	b

Table 30b. Mean number of Pacific spider mite females/leaf.

Treatment	Rate (fl oz/a)	0DAT		3DAT		7DAT		14DAT		21DAT		28DAT	
Control		3.5	a	2.3	a	3.5	a	0.5	a	0.5	a	1.0	a
BAS 9210 2I	13.7	2.3	a	**1.0**	a	2.5	a	0.5	a	0.3	a	0.0	a
Onager	19.2	2.5	a	**2.0**	a	1.5	a	0.3	a	0.3	a	0.5	a

1. BAS 9210 2I did not cause any phytotoxicity when applied at 13.7 or at the 2x rate of 27.4 fl oz/a.

Table 31 (Exhibit 5). Almond (DEV-I-2011-US-G65-D-02.0-US-UCA-SB4) – Jake Zaccaria, Zaccaria Ag Consulting, Wasco, CA. Replicates 4; RCB design; Sprayed on 7/30/11 at 100 gpa. [1]

Table 31a. Mean number of two-spotted spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	0DAT	2DAT	6DAT	14DAT	23DAT	32DAT
Control		2.5 a	1.8 a	5.1 a	6.5 a	3.0 a	2.4 a
BAS 9210 2I	13.7	2.5 a	0.0 b	**0.0** b	0.0 b	0.0 b	0.0 b
Zeal	3 oz wt/a	2.5 a	0.0 b	**0.0** b	0.0 b	0.0 b	0.0 b

Table 31b. Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	0DAT	2DAT	6DAT	14DAT	23DAT	32DAT
Control		3.9 a	2.1 a	9.2 a	10.9 a	5.3 a	5.3 a
BAS 9210 2I	13.7	3.9 a	0.0 b	**0.0** b	0.0 b	0.0 b	0.0 b
Zeal	3 oz wt/a	3.9 a	0.0 b	**0.0** b	0.0 b	0.0 b	0.0 b

1. BAS 9210 2I did not cause any phytotoxicity when applied at 13.7 or at the 2x rate of 27.4 fl oz/a.

Table 32 (Exhibit 6). Almond (DEV/I/2010/US/G65/A/01.0/US/UCA/PM1) – Bob Westbrook, Bio Research, Fresno, CA. Replicates 4; RCB design; Sprayed on 8/9/10 at 100 gpa. [1]

Mean number of Pacific spider mite eggs, nymphs and adults/20 leaves.

		Eggs		Nymphs		Adults	
Treatment	**Rate (fl oz/a)**	**0DAT**	**7DAT**	**0DAT**	**7DAT**	**0DAT**	**7DAT**
Control		49.5 a	44.0 a	18.5 a	18.0 a	50.5 a	53.5 a
BAS 9210 0I	13.7	23.23 a	**6.8** b	11.0 a	**10.0** a	8.0 b	**9.3** b
Acramite	16 oz wt/a	48.8 a	**2.0** b	15.3 a	**12.3** a	2.8 b	**2.0** b

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a.

Table 33 (Exhibit 7). Almonds (DEV/I/2010/US/G65/A/01.0/US/UCA/PM3) – Brooks Bauer, Two Bees Ag Research, Escalon, CA. Replicates 4; RCB design; Sprayed on 8/12/10 at 64 gpa.[1]

Table 33a. Mean number of Pacific spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	Precount		8DAT		14DAT		22DAT	
Control		6.0	a	0.6	a	0.6	a	3.6	a
BAS 9210 0I	13.7	6.0	a	**0.0**	a	0.0	a	0.0	a
Acramite	16 oz wt/a	6.0	a	**0.0**	a	0.0	a	0.0	a

Table 33b. Mean number of Pacific spider mites motiles/leaf.

Treatment	Rate (fl oz/a)	Precount		8DAT		14DAT		22DAT	
Control		3.7	a	5.4	a	3.6	a	3.3	a
BAS 9210 0I	13.7	3.7	a	**0.6**	b	0.0	a	0.6	a
Acramite	16 oz wt/a	3.7	a	**1.2**	b	1.2	a	0.0	a

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a.

Table 34 (Exhibit 8). Walnut (DEV/I/2010/US/G65/A/01.0/US/UCA/PM4) – Brooks Bauer, Two Bees Ag Research, Escalon, CA. Replicates 4; RCB design; Sprayed on 8/5/10 at 44 gpa. [1]

Table 34a. Mean number of Pacific spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	0DAT		4DAT		7DAT		14DAT		21DAT		28DAT	
Control		14.0	a	6.0	a	11.5	a	3.0	a	2.4	a	2.4	a
BAS 9210 0I	13.7	14.0	a	1.2	a	**1.2**	a	1.2	a	0.0	a	0.0	a
Acramite	16 oz wt/a	14.0	a	7.2	a	**4.8**	a	0.0	a	0.0	a	0.0	a

Table 34b. Mean number of Pacific spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	0DAT		4DAT		7DAT		14DAT		21DAT		28DAT	
Control		26.0	a	17.0	a	26.4	a	12.0	a	9.6	a	7.2	a
BAS 9210 0I	13.7	26.0	a	2.4	a	**6.0**	a	3.0	a	3.6	a	1.2	b
Acramite	16 oz wt/a	26.0	a	11.4	a	12.6	a	3.6	a	2.4	a	1.2	b

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a.

Table 35 (Exhibit 9). Almond (DEV/I/2010/US/G65/A/01.0/US/UCA/PM5) – Jake Zaccaria, Zaccaria Ag Consulting, Buttonwillow, CA. Replicates 4; RCB design; Sprayed on 7/12/10 at 135 gpa.[1]

Table 35a. Mean number of two-spotted spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	Precount		7 DAT		14 DAT		21 DAT	
Control		2.9	a	5.9	a	15.4	a	23.9	a
BAS 9210 0I	13.7	2.9	a	**0.2**	b	0.8	b	2.0	b
Agri-mek	18.0	2.9	a	**0.0**	b	0.2	b	0.2	b

Table 35b. Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	Precount		7DAT		14 DAT		21DAT	
Control		4.7	a	13.1	a	34.1	a	44.3	a
BAS 9210 0I	13.7	4.7	a	**0.3**	b	1.5	b	4.4	b
Agri-mek	18.0	4.7	a	**0.0**	b	0.8	b	0.7	b

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a.

Table 36 (Exhibit 10). Almond (DEV/I/2010/US/G62/A/51.0/US/U21/114) – Joseph Stout, BASF, Dinuba, CA. Replicates 3; RCB design; Sprayed on 8/9/10 at 107 gpa. [1]

Percent control of two-spotted spider mite.

		Eggs	Motiles	
Treatment	**Rate (fl oz/a)**	**3DAT**	**3DAT**	**7DAT**
BAS 9210 0I	13.7	**85.6**	99.0	**100.0**
BAS92100I+NR415	13.7	91.7	100.0	100.0
Agri-mek + MSO	16.0	-21.3	90.9	100.0
Acramite+NR415	16 oz wt	**49.1**	95.6	**100.0**

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a alone or with adjuvants.

Table 37 (Exhibit 11). Walnut (DEV/I/2009/US/G65/A/01.0/US/UCA/PM2) – Brooks Bauer, Two Bees Ag Research, Ripon, CA. Replicates 4; RCB design; Sprayed on 8/18/09 at 60.5 gpa.[1]

Table 37a. Mean number of two-spotted spider mite females/leaf.

Treatment	Rate (fl oz/a)	3DAT		6DAT		13DAT		21 DAT		27 DAT	
Control		8.5	a	9.8	a	8.4	a	6.8	a	6.1	a
BAS 9210 0I+NIS	6.85	2.5	b	3.1	b	1.3	b	4.4	ab	1.3	a
BAS 9210 0I	13.7	1.3	b	**1.3**	b	1.9	b	3.1	ab	1.3	a
BAS 9210 0I+ Penetrator Plus	13.7	0.6	b	2.5	b	0.6	b	1.3	ab	0.6	a
BAS 9210 0I+NIS	13.7	0.6	b	1.9	b	1.9	b	1.9	ab	1.3	a
BAS 9210 0I+ Org. Silicone	13.7	0.0	b	1.9	b	1.9	b	0.0	b	0.6	a
Agri-mek+MSO	10.0	7.5	a	**2.5**	b	3.8	b	1.9	ab	1.9	a

Table 37b. Mean number of two-spotted spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	3DAT		6DAT		13DAT		21 DAT		27 DAT	
Control		10.5	a	7.9	a	7.3	a	4.4	a	3.8	a
BAS 9210 0I+NIS	6.85	12.5	a	1.8	b	0.6	b	1.9	a	1.3	a
BAS 9210 0I	13.7	1.3	a	**0.6**	b	0.0	b	0.6	a	0.0	a
BAS 9210 0I+ Penetrator Plus	13.7	6.3	a	0.6	b	0.0	b	0.0	a	0.0	a
BAS 9210 01+NIS	13.7	0.0	a	0.6	b	0.0		0.6	a	1.3	
BAS 9210 0I+ Org. Silicone	13.7	0.6	a	0.6	b	0.6	b	0.0	a	0.0	a
Agri-mek+MSO	10.0	6.9	a	**1.3**	b	1.9	b	1.9	a	0.6	a

1. BAS 9210 0I did not cause any phytotoxicity when applied alone or with adjuvants.

Table 38 (Exhibit 12). Walnut (DEV/I/2008/US/GX1/A/03.0/US/UCA/PM4) – Tim Ksander, Agricultural Advisors Inc., Live Oak, CA. Replicates 4; RCB design; Sprayed on 7/2/08 at 100 gpa.[1]

Mean number of two-spotted spider mite motiles/leaf

Treatment	Rate (fl oz/a)	7DAT		14DAT		21DAT		28DAT		35DAT		42DAT	
Control		46.7	a	53.2	a	55.8	a	54.5	a	42.2	a	56.8	a
BAS 9210 0I	6.85	1.3	b	3.5	b	0.3	b	0.0	b	5.0	b	1.5	b
BAS 9210 0I	10.3	0.5	b	0.5	b	0.0	b	0.3	b	0.0	b	5.3	b
BAS 9210 0I	13.7	0.0	b	**0.0**	b	0.3	b	0.0	b	0.0	b	4.0	b
Envidor	18.0	0.3	b	**3.0**	b	2.0	b	2.3	b	10.5	b	13.0	b

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a.

Table 39 (Exhibit 13). Walnut (DEV/I/2008/US/GX1/A/03.0/US/UCA/PM5) – Brooks Bauer, Two Bees Ag Research, Ripon, CA. Replicates 4; RCB design; Sprayed on 7/25/08 at 75 gpa.[1]

Table 39a. Mean number of two-spotted spider mite eggs/10 leaves

Treatment	Rate (fl oz/a)	7DAT		14DAT		21DAT		28DAT		35DAT	
Control		19.2	a	34.4	a	19.2	a	13.5	a	60.0	a
BAS 9210 0I	13.7	**0.0**	a	0.0	a	2.4	a	0.0	a	0.0	a
Acramite	14 oz wt/a	**0.0**	a	0.0	a	0.0	a	0.0	a	0.0	a

Table 39b. Mean number of two-spotted spider mite females/10 leaves.

Treatment	Rate (fl oz/a)	7DAT		14DAT		21DAT		28DAT		35DAT	
Control		46.8	a	42.0	a	37.2	a	13.2	a	8.4	a
BAS 9210 0I	13.7	**1.2**	a	1.2	a	3.6	a	0.0	a	0.0	a
Acramite	14 oz wt/a	**1.2**	a	2.4	a	0.0	a	0.0	a	0.0	a

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a.

Cyflumetofen Field Trial Data Summary Tables for Citrus

Table 40 (Exhibit 14). Citrus (Citron) (DEV/I/2011/US/G61/A/01.0/US/U21/046) – Joseph Stout, BASF, Dinuba, CA. Replicates 3; RCB design; Sprayed on 4/18/11 at 50, 100 and 200 gpa [1,2].

Table 40a. Mean number of citrus red mite eggs/leaf.

Treatment	Rate (fl oz/a)	3 DAT		7 DAT		15 DAT		21DAT	
Control		89.0	a	87.3	a	82.3	a	166.3	a
BAS 9210 0I (50 GPA)	13.7	49.3	a	73.3	a	61.0	a	36.0	a
BAS 9210 0I (100 GPA)	13.7	**44.7**	a	67.3	a	53.7	a	40.7	a
BAS 9210 0I (150 GPA)	13.7	67.7	a	44.7	a	87.7	a	56.3	a
Agri-mek+ NR 415	15.2	**38.0**	a	43.3	a	36.0	a	40.7	a

Table 40b. Mean number of citrus red mite motiles/leaf.

Treatment	Rate (fl oz/a)	3 DAT		7 DAT		15 DAT		21DAT	
Control		72.3	a	57.0	a	62.3	a	35.7	a
BAS 9210 0I (50 GPA)	13.7	0.3	b	2.7	b	0.0	b	0.7	b
BAS 9210 0I (100 GPA)	13.7	**3.0**	b	4.3	b	1.7	b	1.7	b
BAS 9210 0I (150 GPA)	13.7	0.0	b	1.3	b	1.3	b	1.0	b
Agri-mek+ NR 415	15.2	**3.7**	b	12.7	b	12.3	b	4.7	b

1. Not all treatments in the trial are shown in Table 40.
2. BAS 9210 01 did not cause any phytotoxicity at 13.7 fl oz/a.

Table 41 (Exhibit 15). Citrus (Orange) (DEV/I/2011/US/G61/A/01.0/US/U21/052) – Joseph Stout, BASF, Dinuba, CA. Replicates 3; RCB design; Sprayed on 5/2/11 at 50, 100 and 200 gpa [1,2].

Table 41a. Mean number of citrus red mite eggs/leaf.

Treatment	Rate (fl oz/a)	3 DAT		7 DAT		14 DAT		21 DAT	
Control		295.0	a	254.0	a	149.7	a	97.3	a
BAS 9210 0I (50 GPA)	13.7	56.0	a	65.0	a	34.0	a	39.0	a
BAS 9210 0I (100 GPA)	13.7	100.7	a	**123.3**	a	90.0	a	77.7	a
BAS 9210 0I (150 GPA)	13.7	120.0	a	92.7	a	42.3	a	52.0	a
Agri-mek+ NR 415 (100 GPA)	15.2	208.7	a	**148.3**	a	36.0	a	19.7	a

Table 41b. Mean number of citrus red mite motiles/leaf.

Treatment	Rate (fl oz/a)	3 DAT		7 DAT		14 DAT		21 DAT	
Control		76.3	a	50.1	a	31.0	a	29.7	a
BAS 9210 0I (50 GPA)	13.7	0.0	b	0.6	b	0.0	b	0.0	b
BAS 9210 0I (100 GPA)	13.7	0.0	b	**0.0**	b	0.0	b	0.0	b
BAS 9210 0I (200 GPA)	13.7	0.0	b	0.0	b	0.3	b	0.0	b
Agri-mek+ NR 415 (100 GPA)	15.2	0.0	b	**2.7**	b	1.7	b	0.0	b

1. Not all treatments in the trial are shown in Table 41.
2. BAS 9210 01 did not cause any phytotoxicity at 13.7 fl oz/a.

Table 42 (Exhibit 16). Citrus (Orange) (DEV/I/2010/US/G61/A/01.0/US/UCA/PM1) – Jake Zaccaria, Zaccaria Ag Consulting, Edison, CA. Replicates 4; RCB design; Sprayed on 8/13/10 at 110 gpa. [1]

Table 42a. Mean number of two-spotted spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	Precount		7 DAT		17 DAT		31 DAT	
Control		2.1	a	2.7	a	2.3	a	0.2	a
BAS 9210 0I+ MSO	6.85	2.1	a	0.0	b	0.0	b	0.0	a
BAS 9210 0I+ MSO	10.3	2.1	a	0.0	b	0.0	b	0.0	a
BAS 9210 0I+ MSO	13.7	2.1	a	0.3	b	0.0	b	0.0	a
BAS 9210 0I	13.7	2.1	a	**0.0**	b	0.0	b	0.0	a
MSO	0.25% v/v	2.1	a	0.8	b	0.0	b	0.0	a
Agri-mek	16.0	2.1	a	**0.0**	b	0.0	b	0.0	a

Table 42b. Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	Precount		7 DAT		17 DAT		31 DAT	
Control		3.6	a	8.1	a	5.1	a	0.9	a
BAS 9210 0I+ MSO	6.85	3.6	a	0.0	b	0.0	b	0.0	b
BAS 9210 0I+ MSO	10.3	3.6	a	0.0	b	0.0	b	0.0	b
BAS 9210 0I+ MSO	13.7	3.6	a	2.0	b	0.0	b	0.0	b
BAS 9210 0I	13.7	3.6	a	**0.5**	b	0.0	b	0.0	b
MSO	0.25% v/v	3.6	a	2.0	b	0.0	b	0.0	b
Agri-mek	16.0	3.6	a	**0.0**	b	0.0	b	0.0	b

1. BAS 9210 01 did not cause any phytotoxicity at 13.7 fl oz/a when applied alone or with adjuvants.

Table 43 (Exhibit 17). Citrus (Orange) (DEV/I/2010/US/G61/A/11.0/US/U21/063) – Joseph Stout, BASF, Dinuba, CA. Replicates 3; RCB design; Sprayed on 4/19/10 at 100 gpa [1,2].

Table 43a. Percent control of citrus red mite eggs.

Treatment	Rate (fl oz/a)	7 DAT		14 DAT		21 DAT		28 DAT	
Control		0.0	a	0.0	b	0.0	b	0.0	c
BAS 9210 0I+ NR 415	13.7	42.4	a	**87.5**	a	90.1	a	83.0	ab
BAS 9210 0I	13.7	59.5	a	74.3	a	91.8	a	83.4	ab
NR 415	1.0% v/v	-94.7	a	34.3	ab	56.3	b	58.2	b
Agri-mek+ NR415	15.2	-51.4	a	**78.2**	a	93.6	a	93.9	a

Table 43b. Percent control of citrus red mite motiles.

Treatment	Rate (fl oz/a)	7 DAT		14 DAT		21 DAT		28 DAT	
Control		0.0	a	0.0	b	0.0	c	0.0	a
BAS 9210 0I+ NR 415	13.7	100.0	a	99.6	a	100.0	a	99.1	a
BAS 9210 0I	13.7	97.6	a	**85.5**	a	100.0	a	99.7	a
NR 415	1.0% v/v	-47.5	a	58.4	a	51.5	b	-8.8	a
Agri-mek+ NR415	15.2	87.4	a	**80.3**	a	91.9	a	97.0	a

1. Not all treatments in the trial are shown in Table 43.
2. BAS 9210 01 did not cause any phytotoxicity at 13.7 fl oz/a when applied alone or with adjuvants.

Table 44 (Exhibit 18). Citrus (Orange) (DEV/I/2010/US/G61/A/11.0/US/U21/065) – Joseph Stout, BASF, Dinuba, CA. Replicates 3; RCB design; Sprayed on 4/26/10 at 100 gpa[1,2].

Table 44a. Percent control of citrus red mite eggs.

Treatment	Rate (fl oz/A)	3 DAT		7 DAT		14 DAT		21 DAT	
Control		0.0	a	0.0	a	0.0	b	0.0	c
BAS 9210 0I+ NR 415	13.7	-91.5	a	23.6	a	86.7	a	83.6	a
BAS 9210 0I	13.7	43.3	a	**73.0**	a	74.3	a	93.5	a
NR 415	1.0% v/v	-73.2	a	11.5	a	9.0	b	35.8	b
Agri-mek+ NR415	15.2	15.9	a	**60.2**	a	95.1	a	93.2	a

Table 44b. Percent control of citrus red mite motiles.

Treatment	Rate (fl oz/A)	3 DAT		7 DAT		14 DAT		21DAT	
Control		0.0	b	0.0	b	0.0	b	0.0	b
BAS 9210 0I+ NR 415	13.7	99.7	a	100.0	a	100.0	a	94.9	a
BAS 9210 0I	13.7	100.0	a	**99.6**	a	100.0	a	81.2	a
NR 415	1.0% v/v	79.7	a	80.4	a	75.8	a	39.3	ab
Agri-mek+ NR415	15.2	97.1	a	**97.0**	a	87.9	a	90.3	a

1. Not all treatments in the trial are shown in Table 44.
2. BAS 9210 01 did not cause any phytotoxicity at 13.7 fl oz/a when applied alone or with adjuvants.

Table 45 (Exhibit 19). Citrus (Mandarin orange) (DEV/I/2009/US/G61/A/01.0/US/UCA/PM1) – Scott Hicks, Bio Research, Fresno, CA. Replicates 4; RCB design; Sprayed on 5/13/09 at 100 gpa. [1]

Table 45a. Mean number of citrus red mite eggs/unit.

Treatment	Rate (fl oz/a)	0 DAT		5 DAT		14DAT		21 DAT		28 DAT	
Control		12.0	a	22.5	a	85.8	a	144.3	a	225.3	a
BAS 9210 0I	13.7	19.8	a	**3.0**	b	3.3	b	8.3	c	19.5	b
BAS 9210 0I + Penetrator[2]	13.7	26.0	a	3.3	b	1.5	b	8.8	c	25.8	b
BAS 9210 0I + Induce	13.7	21.3	a	1.5	b	3.3	b	13.5	c	15.8	b
BAS 9210 0I+ Silwett	13.7	22.3	a	0.5	b	3.3	b	4.3	c	13.8	b
Reaper	2.00	10.8	a	**9.0**	b	93.5	a	83	b	158.3	a

Table 45b. Mean number of citrus red mite motiles/unit.

Treatment	Rate (fl oz/a)	0 DAT		5 DAT		14DAT		21 DAT		28 DAT	
Control		7.8	a	5.0	a	25.8	a	45.3	a	57.3	a
BAS 9210 0I	13.7	4.8	a	**0.0**	b	0.3	b	2.5	b	1.8	b
BAS 9210 0I + Penetrator[2]	13.7	8.5	a	0.3	b	0.0	b	1.8	b	1.8	b
BAS 9210 0I + Induce	13.7	8.3	a	0.3	b	1.3	b	2.5	b	2.0	b
BAS 9210 0I+ Silwett	13.7	6.3	a	0.0	b	0.3	b	1.3	b	3.5	b
Reaper	2.00	3.3	a	**3.0**	ab	22.3	a	34.8	a	41.0	a

1. BAS 9210 01 did not cause any phytotoxicity at 13.7 fl oz/a when applied alone or with adjuvants.
2. Penetrator Plus

Table 46 (Exhibit 20). Citrus (Navel Orange) (DEV/I/2009/US/G61/A/01.0/US/UCA/PM2) – Jake Zaccaria, Zaccaria Ag Consulting, Edison, CA. Replicates 4; RCB design; Sprayed on 5/21/09 at 130 gpa.[1]

Table 46a. Mean number of citrus red mite eggs/10 leaves.

Treatment	Rate (fl oz/a)	Precount		4 DAT		8 DAT		22 DAT		30 DAT	
Control		18.0	a	95.3	a	24.2	a	27.0	a	34.0	a
BAS 9210 0I	13.7	18.0	a	**3.5**	a	2.6	b	0.8	c	2.3	b
BAS 9210 0I + Penetrator[2]	13.7	18.0	a	2.3	a	1.5	b	1.1	c	4.1	b
BAS 9210 0I + Induce	13.7	18.0	a	3.8	a	4.1	b	2.4	c	4.1	b
BAS 9210 0I+ Silwett	13.7	18.0	a	4.1	a	1.8	b	2.0	c	4.1	b
Agri-mek	12.0	18.0	a	**4.5**	a	4.2	b	11.3	b	12.0	b

Table 46b. Mean number of citrus red mite motiles/10 leaves.

Treatment	Rate (fl oz/a)	Precount		4 DAT		8 DAT		22 DAT		30 DAT	
Control		15.6	a	14.6	a	18.6	a	19.7	a	43.1	a
BAS 9210 0I	13.7	15.6	a	**0.0**	b	0.3	b	0.0	c	1.1	c
BAS 9210 0I + Penetrator[2]	13.7	15.6	a	0.0	b	0.8	b	1.1	c	3.2	c
BAS 9210 0I + Induce	13.7	15.6	a	0.0	b	2.4	b	1.1	c	1.7	c
BAS 9210 0I+ Silwett	13.7	15.6	a	0.3	b	0.3	b	0.6	c	3.6	c
Agri-mek	12.0	15.6	a	**1.1**	b	7.4	b	10.8	b	22.4	b

1. BAS 9210 01 did not cause any phytotoxicity at 13.7 fl oz/a when applied alone or with adjuvants.
2. Penetrator Plus

Table 47 (Exhibit 21). Citrus (Navel Orange) (DEV/I/2009/US/G61/A/11.0/US/U21/060) – Joseph Stout, BASF, Dinuba, CA. Replicates 4; RCB design; Sprayed on 4/17/09 at 100 gpa.[1]

Percent control of citrus red mite adults.

Treatment	Rate (fl oz/a)	3 DAT		6 DAT		13 DAT	
Control		0.0	b	0.0	b	0.0	b
BAS 9210 0I	13.7	**99.2**	a	97.6	a	86.0	a
BAS 9210 0I + Penetrator Plus	13.7	98.0	a	99.9	a	89.9	a
BAS 9210 0I + Induce	13.7	99.5	a	98.5	a	77.8	a
BAS 9210 0I+ Silwett	13.7	99.8	a	99.7	a	83.1	a
BAS 9210 0I+ NR 415	13.7	96.8	a	97.1	a	92.4	a
Agri-mek+ NR 415	13.7	**94.9**	a	80.8	a	37.5	ab

1. BAS 9210 01 did not cause any phytotoxicity at 13.7 fl oz/a when applied alone or with adjuvants.

Table 48 (Exhibit 22). Citrus (Lemon) (DEV/I/2009/US/G61/A/11.0/US/U21/070) – Joseph Stout, BASF, Dinuba, CA. Replicates 3; RCB design; Sprayed on 5/12/09 at 100 gpa. [1]

Table 48a. Percent control of citrus red mite eggs.

Treatment	Rate (fl oz/a)	1 DAT		3 DAT		7 DAT		15 DAT		21 DAT	
Control		0.0	a	0.0	a	0.0	a	0.0	b	0.0	a
BAS 9210 0I	13.7	61.1	a	87.5	a	**88.0**	a	86.2	a	68.8	ab
BAS 9210 0I + Penetrator[2]	13.7	-8.5	a	40.3	a	75.1	a	95.6	a	68.0	ab
BAS 9210 0I + Induce	13.7	-13.0	a	8.6	a	67.2	a	85.2	a	57.8	ab
BAS 9210 0I+ Silwett	13.7	68.5	a	80.2	a	65.5	a	95.9	a	82.8	a
Agri-mek+ NR 415	13.7	3.8	a	55.5	a	**40.6**	a	95.7	a	89.0	a
BAS 9210 0I+ NR 415	13.7	43.7	a	54.0	a	83.8	a	83.8	a	47.8	ab

Table 48b. Percent control of citrus red mite motiles.

Treatment	Rate (fl oz/a)	1 DAT		3 DAT		7 DAT		15 DAT		21 DAT	
Control		0.0	b	0.0	b	0.0	b	0.0	b	0.0	b
BAS 9210 0I	13.7	95.7	a	85.9	a	**95.4**	a	95.6	a	88.8	a
BAS 9210 0I + Penetrator[2]	13.7	100.0	a	80.0	a	92.2	a	94.4	a	81.0	a
BAS 9210 0I + Induce	13.7	94.5	a	66.3	a	98.1	a	98.7	a	76.3	a
BAS 9210 0I+ Silwett	13.7	100.0	a	98.4	a	93.3	a	98.4	a	92.5	a
Agri-mek+ NR 415	13.7	93.3	a	74.6	a	**85.5**	a	100.0	a	92.1	a
BAS 9210 0I+ NR 415	13.7	93.3	a	91.7	a	100.0	a	94.0	a	72.5	a

1. BAS 9210 01 did not cause any phytotoxicity at 13.7 fl oz/a when applied alone or with adjuvants.
2. Penetrator Plus.

Table 49 (Exhibit 23). Citrus (Orange) (DEV/I/2008/US/ZX1/A/03.0/US/U21/066) – Joseph Stout, BASF, Dinuba, CA. Replicates 3; RCB design; Sprayed on 4/21/08 at 100 gpa.[1]

Table 49a. Percent control of citrus red mite eggs.

Treatment	Rate (fl oz/a)	3 DAT		7 DAT		21 DAT	
Control		0.0	a	0.0	a	0.0	a
BAS 9210 0I	13.7	-2.1	a	**78.8**	a	95.5	a
BAS 9210 0I + NR 415	13.7	46.8	a	83.1	a	75.8	a
Agri-mek+ NR415	15.0	36.2	a	**83.1**	a	76.8	a

Table 49b. Percent control of citrus red mite motiles.

Treatment	Rate (fl oz/a)	3 DAT		7 DAT		14 DAT		21 DAT	
Control		0.0	a	0.0	b	0.0	b	0.0	a
BAS 9210 0I	13.7	73.9	b	**83.3**	a	96.7	a	98.8	a
BAS 9210 0I + NR 415	13.7	95.7	b	94.4	a	96.3	a	83.3	a
Agri-mek+ NR415	15.0	87.0	b	**61.1**	a	54.1	ab	12.3	a

1. No phytotoxicity was observed when BAS9210 0I was applied alone or with NR 415 spray oil.

Table 50 (Exhibit 24). Citrus (Orange) (DEV/I/2008/US/ZX1/A/03.0/US/U21/074) – Joseph Stout, BASF, Dinuba, CA. Replicates 3; RCB design; Sprayed on 5/8/08 at 107 gpa.[1]

Table 50a. Percent control of citrus red mite eggs.

Treatment	Rate (fl oz/a)	4 DAT		7 DAT		14 DAT	
Control		0.0	a	0.0	a	0.0	a
BAS 9210 0I	13.7	**86.1**	a	63.3	a	88.2	a
BAS 9210 0I + NR 415	6.85	78.1	a	75.1	a	90.8	a
BAS 9210 0I + NR 415	13.7	64.9	a	84.0	a	82.4	a
Agri-mek+ NR 415	15.0	**82.1**	a	76.0	a	95.0	a

Table 50b. Percent control of citrus red mite motiles.

Treatment	Rate (fl oz/a)	4 DAT		7 DAT		14 DAT	
Control		0.0	b	0.0	b	0.0	b
BAS 9210 0I	13.7	**100.0**	a	100.0	a	100.0	a
BAS 9210 0I + NR 415	6.85	100.0	a	100.0	a	100.0	a
BAS 9210 0I + NR 415	13.7	99.1	a	100.0	a	100.0	a
Agri-mek+ NR 415	15.0	**95.2**	a	100.0	a	100.0	a

1. No phytotoxicity was observed when BAS9210 0I was applied alone or with NR 415 spray oil.

Table 51 (Exhibit 25). Citrus (Orange) (DEV/I/2008/US/ZX1/A/03.0/US/UCA/PM1) – Jake Zaccaria, Zaccaria Ag Consulting, Edison, CA. Replicates 4; RCB design; Sprayed on 5/7/08 at 150 gpa.[1]

Table 51a. Mean number of citrus red mite eggs/20 leaves.

Treatment	Rate (fl oz/a)	0 DAT	3 DAT	6 DAT	13 DAT	20DAT	34DAT
Control		9.5 a	10.1 a	19.0 a	9.5 a	2.9 a	0.5 a
BAS 9210 0I	13.7	9.0 a	1.6 b	**0.6** b	0.0 b	0.2 b	0.0 a
BAS 9210 0I+NR 415	13.7	11.2 a	1.7 b	0.9 b	0.2 b	0.2 b	0.1 a
Agri-mek	12.0	8.6 a	1.6 b	**0.8** b	0.5 b	0.0 b	0.0 a

Table 51b. Mean number of citrus red mite motiles/20 leaves.

Treatment	Rate (fl oz/a)	0 DAT	3 DAT	6 DAT	13 DAT	20DAT	34DAT
Control		9.0 a	16.3 a	17.7 a	7.1 a	0.7 a	1.7 a
BAS 9210 0I	13.7	8.7 a	0.1 b	**0.0** b	0.1 b	0.0 a	0.0 a
BAS 9210 0I+NR 415	13.7	9.3 a	0.5 b	0.7 b	0.4 b	0.0 a	0.5 a
Agri-mek	12.0	6.6 a	0.0 b	**0.2** b	0.0 b	0.0 a	0.1 a

1. No phytotoxicity was observed when BAS9210 0I was applied alone or with NR 415 spray oil.

Table 52 (Exhibit 26). Citrus (Orange) (DEV/I/2008/US/ZX1/A/03.0/US/UCA/PM2) – Dan Forey, Bio Research, Sanger, CA. Replicates 4; RCB design; Sprayed on 6/3/08 at 100 gpa. [1]

Table 52a. Mean number of citrus red mite eggs/20 leaves.

Treatment	Rate (fl oz/a)	0 DAT		3 DAT		7 DAT		14 DAT	
Control		19.5	a	8.5	a	5.5	a	9.5	a
BAS 9210 0I	6.85	27.0	a	7.8	a	1.3	b	0.0	b
BAS 9210 0I	10.3	17.5	a	10.3	a	0.5	b	0.5	b
BAS 9210 0I	13.7	32.5	a	8.3	a	**0.5**	b	0.0	b
BAS 9210 0I+ Supreme Oil	6.85	34.3	a	7.5	a	0.3	b	0.8	b
BAS 9210 0I+ Supreme Oil	13.7	28.3	a	7.3	a	1.3	b	0.0	b
Envidor+ Supreme Oil	20.0	27.3	a	4.3	a	**0.0**	b	0.0	b

Table 52b. Mean number of citrus red mites motiles/20 leaves.

Treatment	Rate (fl oz/a)	0 DAT		3 DAT		7 DAT		14 DAT	
Control		7.3	a	3.8	a	4.8	a	2.3	a
BAS 9210 0I	6.85	5.8	a	1.8	ab	0.0	b	0.3	b
BAS 9210 0I	10.3	8.5	a	0.5	b	0.0	b	0.0	b
BAS 9210 0I	13.7	9.5	a	1.8	ab	**0.3**	b	0.0	b
BAS 9210 0I+ Supreme Oil	6.85	13.0	a	0.5	b	0.5	b	0.3	b
BAS 9210 0I+ Supreme Oil	13.7	6.0	a	0.5	b	0.3	b	0.3	b
Envidor+ Supreme Oil	20.0	4.3	a	1.3	b	**0.0**	b	0.0	b

1. No phytotoxity was observed when BAS 9210 0I was applied alone or with spray oil.

Cyflumetofen Field Trial Data Summary Tables for Grapes

Table 53 (Exhibit 27). Grape (DEV/I/2011/US/G63/E/02.0/US/UCA/SB1) – John Attaway, Attaway Field Research, Ukiah, CA. Replicates 4; RCB design; Sprayed on 8/3/11 at 100 gpa. [1]

Table 53a. Mean number of Pacific spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	2 DAT		7 DAT		14 DAT		21 DAT	
Control		27.2	a	46.2	a	55.8	a	123.9	a
BAS 9210 0I	12.9	26.7	a	**0.6**	b	0.0	b	0.6	b
BAS 9210 2I	13.7	22.5	a	**0.2**	b	0.0	b	0.0	b
Envidor	18.0	29.3	a	2.6	b	2.3	b	6.0	b
Agri-mek + Latron	14.0	16.4	a	0.3	b	0.0	b	0.6	b
Zeal	3 oz wt/a	21.0	a	11.1	b	1.7	b	10.5	b
Fujimite	32.0	17.7	a	0.3	b	0.0	b	2.4	b
Acramite	16.0	15.3	a	**1.7**	b	0.0	b	2.3	b

Table 53b. Mean number of Pacific spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	2 DAT		7 DAT		14 DAT		21 DAT	
Control		15.6	a	44.7	a	66	a	158.6	a
BAS 9210 0I	12.9	9.6	a	**0.3**	b	0.0	b	0.3	b
BAS 9210 2I	13.7	7.2	a	**0.0**	b	0.0	b	0.0	b
Envidor	18.0	10.5	a	0.6	b	0.6	b	2.3	b
Agri-mek + Latron	14.0	11.0	a	8.0	b	0.3	b	0.2	b
Zeal	3 oz wt/a	12.8	a	1.2	b	0.0	b	2.1	b
Fujimite	32.0	3.6	a	0.5	b	0.0	b	0.9	b
Acramite	16.0	6.6	a	**2.1**	b	0.2	b	2.0	b

1. No phytotoxicity was observed with BAS 9210 0I or with BAS 92102I.

Table 54 (Exhibit 28). Grape (DEV/I/2011/US/G62/D/01.0/US/UCA/SB1) – Jake Zaccaria, Zaccaria Ag Consulting, Arvin, CA. Replicates 4; RCB design; Sprayed on 8/12/11 at 150 gpa. [1]

Table 54a. Mean number of Pacific spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	Precount		8 DAT		14 DAT		21 DAT	
Control		3.0	a	4.1	a	5.4	a	6.0	a
BAS 9210 0I	12.9	3.0	a	**0.5**	b	0.0	b	0.0	b
BAS 9210 2I	13.7	3.0	a	**0.0**	b	0.0	b	0.3	b
BAS 9210 2I + Li-700	13.7	3.0	a	0.0	b	0.0	b	0.0	b
BAS 9210 2I + R-11	13.7	3.0	a	0.0	b	0.0	b	0.0	b
BAS 9210 2I+Widespread max	13.7	3.0	a	0.0	b	0.0	b	0.0	b
BAS 9210 2I + Sylguard	13.7	3.0	a	0.0	b	0.0	b	0.0	b

Table 54b. Mean number of Pacific spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	Precount		8 DAT		14 DAT		21 DAT	
Control		5.5	a	9.2	a	9.1	a	12.0	a
BAS 9210 0I	12.9	5.5	a	**0.0**	b	0.0	b	0.0	b
BAS 9210 2I	13.7	5.5	a	**0.0**	b	0.0	b	0.0	b
BAS 9210 2I + Li-700	13.7	5.5	a	0.0	b	0.0	b	0.0	b
BAS 9210 2I + R-11	13.7	5.5	a	0.0	b	0.0	b	0.0	b
BAS 9210 2I+Widespread max	13.7	5.5	a	0.0	b	0.0	b	0.0	b
BAS 9210 2I + Sylguard	13.7	5.5	a	0.0	b	0.0	b	0.0	b

1. No phytotoxicity was observed when BAS9210 2I was applied alone or with adjuvants.

Table 55 (Exhibit 29). Grape (DEV/I/2011/US/G62/D/01.0/US/UCA/SB2) – Scott Hicks, Bio Research, Kerman, CA. Replicates 4; RCB design; Sprayed on 7/19/11 at 100 gpa. [1]

Table 55a. Mean number of Pacific spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	Precount		3DAT		7 DAT		18 DAT		21 DAT	
Control		55.8	b	98.0	a	133.0	a	29.0	a	55.5	a
BAS 9210 0I	12.9	70.0	b	39.5	b	**2.3**	b	0.3	b	1.0	b
BAS 9210 2I	13.7	112.0	a	36.8	b	**0.3**	b	0.3	b	0.8	b
BAS 9210 2I + Li-700	13.7	79.8	b	24.8	b	1.3	b	0.0	b	0.3	b
BAS 9210 2I + R-11	13.7	80.8	b	14.3	b	1.5	b	0.3	b	0.5	b
BAS 9210 2I + Widespread max	13.7	57.3	b	11.0	b	0.0	b	0.0	b	1.3	b
BAS 9210 2I + Syltac	13.7	59.3	b	17.5	b	0.8	b	0.0	b	0.0	b

Table 55b. Mean number of Pacific spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	Precount		3DAT		7 DAT		18 DAT		21 DAT	
Control		61.0	a	124.0	a	129.8	a	122.5	a	107.0	a
BAS 9210 0I	12.9	78.5	a	17.3	b	**3.5**	b	0.8	b	2.3	b
BAS 9210 2I	13.7	105.3	a	8.0	b	**0.3**	b	0.3	b	1.0	b
BAS 9210 2I + Li-700	13.7	77.5	a	2.8	b	0.5	b	0.0	b	0.0	b
BAS 9210 2I + R-11	13.7	71.5	a	7.0	b	3.5	b	0.0	b	1.3	b
BAS 9210 2I+ Widespread max	13.7	56.8	a	3.5	b	1.3	b	0.0	b	1.5	b
BAS 9210 2I + Syltac	13.7	59.0	a	5.3	b	0.8	b	0.8	b	0.8	b

1. No phytotoxicity observed was BAS 9210 2I was applied alone or with adjuvants.

Table 56 (Exhibit 30). Grape (DEV/I/2011/US/G65/D/02.0/US/UCA/SB3) – Brooks Bauer, Two Bees Ag Research, Lodi, CA. Replicates 4; RCB design; Sprayed on 7/29/11 at 100 gpa.[1]

Table 56a. Mean number of Pacific spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	Precount		3 DAT		7 DAT		13 DAT		20 DAT		27 DAT	
Control		2.4	a	3.4	a	3.3	a	5.3	a	3.0	a	4.0	a
BAS 9210 2I	13.7	0.6	a	0.6	b	0.0	b	**0.3**	b	0.0	b	0.0	b
Acramite	12 oz wt/a	4.8	a	0.0	b	0.6	b	**0.0**	b	0.0	b	1.0	a

Table 56b. Mean number of Pacific spider mite nymphs/leaf.

Treatment	Rate (fl oz/a)	Precount		3DAT		7DAT		13DAT		20DAT		27DAT	
Control		1.2	a	3.4	a	5.0	a	5.3	a	3.0	a	6.5	a
BAS 9210 2I	13.7	1.8	a	1.2	a	2.4	b	**1.0**	b	0.3	b	0.0	b
Acramite	12 oz wt/a	3.6	a	1.2	a	1.2	b	**0.8**	b	0.0	b	0.5	b

1. No phytotoxity was observed when BAS 9210 2I was applied at 13.7 fl oz/a.

Table 57 (Exhibit 31). Grape (DEV/I/2010/US/G62/A/01.0/US/UCA/PM1) - Brooks Bauer, Two Bees Ag Research, Lodi, CA. Replicates 4; RCB design; Sprayed on 7/27/10 at 150 gpa.[1]

Table 57a. Mean number of Pacific spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	7 DAT		14 DAT		21 DAT		28 DAT		35 DAT	
Control		12.3	a	19.8	a	30.3	a	7.2	a	10.8	a
BAS 9210 0I+ Break-Thru	13.7	**3.5**	a	7.2	a	3.6	a	0.6	b	0.6	b
Acramite+ Break-Thru	16 oz wt/a	**5.5**	a	6.6	a	3.6	a	0.0	b	0.0	b

Table 57b. Mean number of Pacific spider mite females/leaf.

Treatment	Rate (fl oz/a)	7 DAT		14 DAT		21 DAT		28 DAT		35 DAT	
Control		14.0	a	21.6	a	30.0	a	10.2	a	13.8	a
BAS 9210 0I+ Break-Thru	13.7	**2.8**	b	9.0	a	4.8	a	0.6	b	1.8	b
Acramite+ Break-Thru	16 oz wt/a	**4.5**	b	9.0	a	6.0	a	1.8	b	1.2	b

1. No phytotoxicity was observed when BAS 9210 0I was applied at 13.7 fl oz/a with an adjuvant.

Table 58 (Exhibit 32). Grape (DEV/I/2010/US/G62/A/01.0/US/UCA/PM2) – Jake Zaccaria, Zaccaria Ag Consulting, Mettler, CA. Replicates 4; RCB design; Sprayed on 8/9/10 at 140 gpa.[1]

Table 58a. Mean number of Pacific spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	7 DAT		14 DAT		21 DAT		28 DAT	
Control		7.4	a	4.8	a	1.1	a	0.0	a
BAS 9210 0I	13.7	**0.0**	b	0.0	b	0.0	b	0.0	a
Abamectin	16.0	**0.0**	b	0.0	b	0.0	b	0.0	a

Table 58b. Mean number of Pacific spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	7 DAT		14 DAT		21 DAT		28 DAT	
Control		18.5	a	12.4	a	4.1	a	0.0	a
BAS 9210 0I	13.7	**0.0**	b	0.0	b	0.0	b	0.0	a
Abamectin	16.0	**0.3**	b	0.0	b	0.0	b	0.0	a

1. No phytotoxity was observed when BAS 9210 0I was applied at 13 fl oz/a.

Table 59 (Exhibit 33). Grape (DEV/I/2009/US/G62/A/01.0/US/UCA/PM1) - Brooks Bauer, Two Bees Ag Research, Escalon, CA. Replicates 4; RCB design; Sprayed on 7/8/09 at 142 gpa. [1]

Mean number of Pacific spider mite – Eggs, Nymphs and Adults/leaf

		Eggs		Nymphs		Adults	
Treatment	**Rate (fl oz/a)**	**7 DAT**	**14 DAT**	**7 DAT**	**14 DAT**	**7 DAT**	**14 DAT**
Control		1.8 a	6.3 a	3.5 a	5.3 a	3.3 a	4.5 a
BAS 9210 0I	13.7	1.3 a	**1.0** b	2.0 a	**1.0** b	0.5 b	**0.5** b
BAS 9210 2I+ Penetrator Plus	13.7	1.0 a	0.8 b	1.0 a	1.5 b	1.0 b	0.8 b
BAS 9210 2I + NIS	13.7	0.5 a	1.0 b	2.3 a	1.3 b	1.0 b	0.5 b
BAS 9210 2I + Organosilicate	13.7	1.3 a	0.8 b	1.3 a	0.8 b	0.5 b	0.3 b
Agri-mek+ MSO	10.0	0.5 a	**0.8** b	1.5 a	**1.0** b	0.3 b	**0** b

1. No phytotoxicity was observed when BAS 9210 0I was applied alone or with adjuvants.

Table 60 (Exhibit 34). Apple (DEV/I/2011/US/G65/D/02.0/US/UWA/SW1) – Mitch Rohlfs, Rohlfs Ag Research, Grandview, WA. Replicates 4; RCB design; Sprayed on 7/31/11 at 150 gpa.[1]

Mean number of European red mite motiles/leaf.

Treatment	Rate (fl oz/a)	6 DAT	13 DAT	20 DAT	28 DAT
Control		4.7 a	7.8 a	8.4 a	3.6 a
BAS 9210 2I	13.7	**0.2** b	1.0 b	0.4 b	1.2 a
Fujimite	32.0	**0.2** b	2.7 b	2.9 b	6.2 a

1. BAS 9210 2I caused no phytotoxicity in this trial.

Table 61 (Exhibit 35). Apple (DEV/I/2011/US/G63/A/01.0/US/UGA/1LN) – Ron Oetting, University of Georgia, Blairsville, GA. Replicates 3; RCB design; Sprayed on 5/24/11 and 6/1/11 at 100 gpa. [1]

Table 61a. Hampshire Mac Apples - Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	Precount	3 DAT1	8 DAT1	6 DAT2	13 DAT2
Control		36.3 a	24.7 a	22.7 a	20.0 a	10.7 a
BAS 9210 0I	14.5	41.0 a	0.0 b	**0.7** b	0.0 b	0.0 b
Agri-mek	4.0	18.7 a	1.3 b	**7.0** b	1.3 b	2.3 b

1. No phyotoxicity was observed at 14.5 fl oz/a of BAS 9210 0I.

Table 61b. Honey Crisp Apples – Mean Number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	Precount	3 DAT1	8 DAT1	6 DAT2	13 DAT2
Control		98.0 a	80.7 a	269.7 a	106.3 a	56.3 a
BAS 9210 0I	14.5	138.7 a	0.0 b	**4.3** b	0.0 a	0.0 a
Agri-mek	4.0	103.7 a	0.7 b	**53.7** b	13.3 a	20.0 a

1. No phyotoxicity was observed when BAS 92100I was applied at 14.5 fl oz/a.

Table 62 (Exhibit 36). Apple (DEV/I/2011/US/G63/A/01.0/US/UPA/JO1) – Larry Hull, Pennsylvania State University, Biglerville, PA. Replicates 5; RCB design; Sprayed on 6/15/11 at 100 gpa. [1]

Table 62a. Mean number of European red mite eggs/25 leaves.

Treatment	Rate (fl oz/a)	5 DAT	12 DAT	20 DAT	26 DAT	33 DAT
Control		79.8 a	114.6 a	195.0 a	179.2 a	97.2 a
BAS 9210 2I	13.7	79.8 a	29.4 a	**48.6** b	39.6 a	46.4 a
Portal	32.0	73.4 a	53.8 a	**57.6** b	100.6 a	40.6 a
Envidor	18.0	73.8 a	77.2 a	93.4 b	144.0 a	43.2 a

Table 62b. Mean number of European red mite motiles/25 leaves.

Treatment	Rate (fl oz/a)	5 DAT	12 DAT	20 DAT	26 DAT	33 DAT
Control		63.8 a	67.6 a	139.8 a	138.4 a	73.2 a
BAS 9210 2I	13.7	60.0 a	22.4 b	**14.8** b	15.4 b	16.4 b
Portal	32.0	38.8 a	19.2 b	**35.2** b	32.4 b	23.8 b
Envidor	18.0	42.6 a	28.8 b	25.4 b	37.0 b	12.8 b

1. No phytotoxicity was observed when BAS 9210 2I was applied at 13.7 fl oz/a.

Table 63 (Exhibit 37). Apple (DEV/I/2011/US/G65/D/02.0/US/UMI/JF1) – John Frihauf, Michigan State Univeristy, Fennville, MI. Replicates 4; RCB design; Sprayed on 7/29/11 at 100 gpa . [1]

Mean number of European red mite eggs and motiles/50 leaves.

		Eggs	Eggs	Motiles	Motiles
Treatment	**Rate (fl oz/a)**	**3 DAT**	**7 DAT**	**3 DAT**	**7 DAT**
Control		503.3 a	366.3 a	201.0 a	191.8 a
BAS 9210 0I	12.9	4.0 a	**4.0** a	9.5 a	**3.5** a
BAS 9210 2I	13.7	6.3 a	**4.5** a	10.8 a	**8.3** a
Envidor	18.0	6.8 a	**4.3** a	8.3 a	**4.5** a

1. No phytotoxicity was observed in this trial with either BAS 9210 0I or BAS 9210 2I.

Table 64 (Exhibit 38). Apple (DEV/I/2010/US/G66/A/01.0/US/UPA/1JO) – Tim White, Crop Management Strategies, Germansville, PA. Replicates 4; RCB design; Sprayed on 5/5/10 at 170 gpa.[1]

Table 64a. Mean number of European red mite eggs/leaf.

Treatment	Rate (fl oz/a)	37 DAT	43 DAT	51 DAT	55 DAT
Control		7.5 a	11.0 a	22.8 a	11.6 a
BAS 9210 0I	13.7	**0.0** a	0.0 a	0.8 a	0.2 a
Agri-mek+Damoil	12.0	**0.0** a	0.0 a	0.0 a	0.0 a

Table 64b. Mean number of European red mite motiles/leaf.

Treatment	Rate (fl oz/a)	37 DAT	43 DAT	51 DAT	55 DAT
Control		12.0 a	15.2 a	13.4 a	11.6 a
BAS 9210 0I	13.7	**0.0** a	0.0 a	0.8 a	0.2 a
Agri-mek+Damoil	12.0	**0.0** a	0.0 a	0.0 a	0.2 a

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a.

Table 65 (Exhibit 39). Apple (DEV/I/2010/US/G63/A/01.0/US/UNY/1JO) – Harry Humphreys, A.C.D.S. Research Inc., North Rose, NY. Replicates 4; RCB design; Sprayed on 7/6/10 at 250 gpa.[1]

Mean number of carmine mite adults/leaf.

Treatment	Rate (fl oz/a)	3 DAT	7 DAT	14 DAT	24 DAT	24 DAT
Control		13.98 a	6.82 a	15.20 a	1.78 a	0.38 a
BAS 9210 0I	13.7	**0.24** b	0.00 b	0.08 b	0.10 b	0.04 a
Agri-mek	7.5	**0.80** b	1.07 b	1.26 b	0.20 b	0.34 a

1. No phyotoxicity was observed when BAS 9210 0I was applied at 13.7 fl oz/a.

Table 66 (Exhibit 40). Apple (DEV/I/2010/US/G66/A/01.0/US/UPA/JO2) – Jim Steffel, LAB Services, New Smithville, PA. Replicates 4; RCB design; Sprayed on 6/11/10 at 116.9 gpa. [1]

Table 66a. Mean number of European red mite eggs/leaf.

Treatment	Rate (fl oz/a)	7 DAT	14 DAT	21 DAT	28 DAT
Control		57.5 a	120.0 a	76.5 a	56.5 a
BAS 9210 0I	13.7	**5.0** b	95.0 a	41.8 a	38.0 a
Agri-mek	12	**0.0** b	105.0 a	38.8 a	16.0 a

Table 66b. Mean number of European red mite motiles/leaf.

Treatment	Rate (fl oz/a)	7 DAT	14 DAT	21 DAT	28 DAT
Control		10.0 a	11.8 a	25.5 a	2.8 a
BAS 9210 0I	13.7	**1.0** b	4.5 a	1.5 a	0.5 a
Agri-mek	12	**0.0** b	8.8 a	7.5 a	0.0 a

1. BAS 9210 0I did not cause any phytotoxicity in this trial when applied at 13.7 fl oz/a.

Table 67 (Exhibit 41). Apple (DEV/I/2009/US/G63/A/01.0/US/UPA/1JO) – Tim White, Crop Management Strategies, Germansville, PA. Replicates 4; RCB design; Sprayed on 5/15/09 at 170gpa.[1]

Table 67a. Mean number of European red mite eggs/leaf.

Treatment	Rate (fl oz/a)	38 DAT	46 DAT	53 DAT	62 DAT
Control		5.25 a	4.65 a	4.95 a	7.20 a
BAS 9210 0I+ Induce	6.85	0.90 b	2.10 b	2.10 b	2.40 b
BAS 9210 0I	13.7	**0.00** b	0.15 c	0.60 b	0.75 b
BAS 9210 0I+ COC	13.7	0.00 b	0.30 c	0.30 b	2.55 b
BAS 9210 0I+ Induce	13.7	0.15 b	0.60 c	1.65 b	0.90 b
BAS 9210 0I+ Silwet L-77	13.7	0.15 b	1.05 c	1.05 b	1.05 b
Agri-mek+Damoil	10.0	**0.15** b	0.45 c	1.05 b	0.15 b

Table 67b. Mean number of European red mite motiles/leaf.

Treatment	Rate (fl oz/a)	38 DAT	46 DAT	53 DAT	62 DAT
Control		12.45 a	4.95 a	7.50 a	10.65 a
BAS 9210 0I+ Induce	6.85	0.90 b	1.80 b	2.10 b	3.75 b
BAS 9210 0I	13.7	**0.00** b	0.00 b	0.60 b	0.90 b
BAS 9210 0I+ COC	13.7	0.00 b	0.45 b	0.30 b	2.55 b
BAS 9210 0I+ Induce	13.7	0.15 b	0.30 b	1.65 b	1.35 b
BAS 9210 0I+ Silwet L-77	13.7	0.30 b	0.60 b	1.05 b	1.65 b
Agri-mek+Damoil	10.0	**0.00** b	0.00 b	0.15 b	0.45 b

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a alone or with adjuvants.

Table 68 (Exhibit 42). Apple (DEV/I/2008/US/GX2/A/03.0/US/UWA/SW3) – Mick Qualls, Qualls Ag Labs, Ephrata, WA. Replicates 4; RCB design; Sprayed on 7/1/08 and 7/29/08 at 100gpa.[1]

Table 68a. Mean number of European red mite eggs/leaf.

Treatment	Rate (fl oz/a)	2 DAT	7 DAT	14 DAT	21 DAT
Control		16.3 a	26.3 a	34.0 a	30.8 a
BAS 9210 0I	13.7	11.5 a	8.3 b	**1.0** b	3.3 b
Envidor	18.0	17.3 a	8.5 b	**3.5** b	6.0 b

Table 68b. Mean number of European red mite adults/leaf.

Treatment	Rate (fl oz/a)	2 DAT	7 DAT	14 DAT	21 DAT
Control		4.5 a	10.3 a	5.5 a	10.5 a
BAS 9210 0I	13.7	0.0 a	1.8 b	**0.5** b	0.8 b
Envidor	18.0	2.8 a	1.3 b	**1.0** b	1.0 b

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a in this trial.

Table 69 (Exhibit 43). Apple (DEV/I/2008/US/GX2/A/03.0/US/UPA/1JO) – Larry Hull, Penn State University, Biglerville, PA. Replicates 5; RCB design; Sprayed on 6/17/08 and 6/25/08 at 100 gpa. [1]

Table 69a. Mean number of European red mite eggs/leaf.

Treatment	Rate (fl oz/a)	1 DAT2		7 DAT2		15 DAT2		22 DAT2		29 DAT2	
Control		27.7	a	94.6	a	31.1	a	80.6	a	0.0	a
BAS 9210 0I	13.7	24.9	a	29.6	a	**18.3**	a	47.1	a	0.0	a
Envidor	0.28 lb ai/a	23.8	a	82.0	a	**22.4**	a	59.7	a	0.0	a

Table 69b. Mean number of European red mite adults/leaf.

Treatment	Rate (fl oz/a)	2 DAT		1 DAT2		7 DAT2		15 DAT2		22 DAT2		29DAT2	
Control		15.0	a	7.2	a	10.4	a	42.5	a	20.0	a	13.0	a
BAS 9210 0I	13.7	17.6	a	6.5	a	9.1	a	**6.9**	b	6.8	b	9.6	a
Envidor	0.28 lb ai/a	12.7	a	8.4	a	5.4	a	**2.7**	b	5.6	b	1.4	a

1. No Phytotoxicity was observed when BAS 9210 0I was applied at 13.7 fl oz/a in this trial.

Table 70 (Exhibit 44). Apple (DEV/I/2008/US/GX2/A/03.0/US/UWV/2JO) – Henry W. Hogmire, West Virginia University, Kearneysville, WV. Replicates 4; RCB design; Sprayed on 5/5/08 and 6/3/08 at 100gpa.[1]

Mean number of European red mite adults/leaf.

Treatment	Rate (fl oz/a)	6 DAT		13 DAT		20 DAT		34 DAT		42 DAT	
Control		8.1	a	5.8	a	12.6	a	3.0	a	273.7	a
BAS 9210 0I	13.7	**0.4**	c	0.6	b	1.5	b	1.6	ab	63.3	b
Envidor	18.1	5.3	b	0.8	b	1.4	b	0.1	b	102.4	b
Agri-mek	11.1	**0.2**	c	0.2	b	1.3	b	0.8	ab	30.1	b
Nexter	4.4 oz wt/a	0.7	c	0.8	b	1.6	b	0.7	ab	47.4	b

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a in this trial.

Table 71 (Exhibit 45). Pear (DEV/I/2011/US/G63/A/01.0/US/UOR/SW1) – Rick Hilton, Oregon State University, Medford, OR. Replicates 4; RCB design; Sprayed on 7/30/11 at 100 gpa. [1]

Table 71a. Mean number of McDaniel spider mite - Eggs/leaf

Treatment	Rate (fl oz/a)	4 DAT		9 DAT		16 DAT		25 DAT		32 DAT	
Control		0.05	de	0.27	b	0.20	b	1.15	a	0.58	a
BAS 9210 2I	13.7	0.08	d	**0.03**	e	0.00	c	0.03	c	0.00	c
BAS 9210 0I	12.9	0.00	e	**0.00**	e	0.00	c	0.03	c	0.00	c
Envidor	18.0	0.15	c	0.18	c	0.05	c	0.00	c	0.00	c
Agri-mek+ NR 415	20.0	0.25	b	**0.13**	d	0.00	c	0.23	b	0.05	c
Zeal	3 oz wt/a	0.60	a	0.60	a	0.38	a	0.00	c	0.18	b
Fujimite	32.0	0.05	de	0.00	e	0.00	c	0.00	c	0.00	c
Acramite	16 oz wt/a	0.15	c	0.00	e	0.00	c	0.00	c	0.00	c

Table 71b. Mean number of McDaniel spider mite - Adults/leaf

Treatment	Rate (fl oz/a)	4 DAT		9 DAT		16 DAT		25 DAT		32 DAT	
Control		0.13	a	0.25	a	0.18	a	0.28	b	0.48	a
BAS 9210 2I	13.7	0.08	b	**0.00**	c	0.00	b	0.35	a	0.00	b
BAS 9210 0I	12.9	0.00	c	**0.00**	c	0.00	b	0.00	c	0.00	b
Envidor	18.0	0.00	c	0.05	b	0.00	b	0.00	c	0.03	b
Agri-mek+ NR 415	20.0	0.12	a	**0.05**	b	0.03	b	0.00	c	0.03	b
Zeal	3 oz wt/a	0.15	a	0.03	b	0.00	b	0.05	c	0.00	b
Fujimite	32.0	0.00	c	0.00	c	0.00	b	0.00	c	0.00	b
Acramite	16 oz wt/a	0.03	c	0.00	c	0.00	b	0.00	c	0.00	b

1. Neither BAS 9210 0I nor BAS 9210 2I caused any phytotoxicity in this trial.

Table 72 (Exhibit 46). Pear (DEV/I/2009/US/G63/A/01.0/US/UOR/PM1) – Vernon Fisher, Columbia Ag Research, Hood River, OR. Replicates 4; RCB design; Sprayed on 7/10/09 at 100gpa.[1]

Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	Precount		3 DAT		6 DAT		13 DAT	
Control		15.42	a	17.22	a	16.32	a	24.60	a
BAS 9210 0I	13.7	13.44	a	11.52	ab	2.16	b	**0.48**	b
BAS 9210 0I + Penetrator plus	13.7	15.06	a	2.23	b	2.70	b	0.48	b
BAS 9210 0I + Non-Ionic	13.7	13.68	a	5.34	b	1.74	b	0.18	b
BAS 9210 0I + Sylguard	13.7	13.02	a	2.88	b	2.52	b	1.74	b
Agri-mek + Penetrator plus	20.0	13.92	a	3.12	b	0.54	b	**0.18**	b

Treatment	Rate (fl oz/a)	21 DAT		33 DAT		42 DAT	
Control		32.10	a	33.06	a	29.82	a
BAS 9210 0I	13.7	3.78	b	7.56	b	7.86	b
BAS 9210 0I + Penetrator plus	13.7	0.96	b	15.30	b	9.54	b
BAS 9210 0I + Non-Ionic	13.7	0.18	b	5.22	b	8.70	b
BAS 9210 0I + Sylguard	13.7	0.36	b	2.82	b	5.94	b
Agri-mek + Penetrator plus	20.0	0.78	b	0.06	b	0.36	b

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a alone or with adjuvants.

Table 73 (Exhibit 47). Pear (DEV/I/2008/US/GX2/A/03.0/US/UOR/PM1) – Vernon Fisher, Columbia Ag Research, Mosier, OR. Replicates 4; RCB design; Sprayed on 7/26/08 at 75 gpa. [1]

Table 73a. Mean number of two-spotted spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	3 DAT		6 DAT		13 DAT		20 DAT		27 DAT		34 DAT	
Control		20.3	a	23.1	a	29.0	a	39.4	a	49.0	a	40.8	a
BAS 9210 0I	13.7	7.3	a	**5.5**	b	6.4	b	1.7	b	2.3	b	0.5	b
Acramite	16 oz wt/a	4.4	a	**1.6**	b	0.1	b	0.9	b	1.0	b	0.6	b

Table 73b. Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	3 DAT		6 DAT		13 DAT		20 DAT		27 DAT		34 DAT	
Control		11.4	a	12.0	a	13.2	a	34.6	a	43.5	a	35.2	a
BAS 9210 0I	13.7	3.7	b	**3.2**	b	5.3	a	1.5	b	1.6	b	0.7	b
Acramite	16 oz wt/a	1.3	b	**1.0**	b	0.0	a	1.2	b	0.6	b	0.0	b

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a in this trial.

Table 74 (Exhibit 48). Pear (DEV/I/2008/US/GX2/A/03.0/US/UCA/PM1) – John Attaway, Attaway Field Research, Ukiah, CA. Replicates 4; RCB design; Sprayed on 7/3/08 at 100 gpa.[1]

Table 74a. Mean number of two-spotted spider mite eggs/20 leaves.

Treatment	Rate (oz/a)	4 DAT		8 DAT		14 DAT		21 DAT		35 DAT	
Control		144.0	a	138.8	a	165.8	a	239.5	a	65.3	a
BAS 9210 0I	13.7	20.3	b	**9.8**	b	44.3	a	27.0	b	26.3	a
Fujimite	16	12.0	b	**1.5**	b	0.6	a	31.5	b	14.3	a

Table 74b. Mean number of two-spotted spider mite motiles/20 leaves.

Treatment	Rate (oz/a)	4 DAT		8 DAT		14 DAT		21 DAT		35 DAT	
Control		171.0	a	159.0	a	220.0	a	281.3	a	70.5	a
BAS 9210 0I	13.7	2.3	b	**1.5**	b	11.0	b	8.0	b	15.8	b
Fujimite	16	2.3	b	**0.8**	b	1.5	b	18.1	b	14.3	b

1. BAS 9210 0I did not cause any phytotoxicity when applied at 13.7 fl oz/a in this trial.

Cyflumetofen Field Trial Data Summary Tables for Strawberry

Table 75 (Exhibit 49). Strawberry (DEV/I/2012/US/G62/A/01.0/US/UFL/LN1) – Jim Price, University of Florida, Wimauna, FL. Replicates 4; RCB design; Sprayed on 1/6/12 (Savay) and 1/10/12 (other treatments) at 100 gpa. [1]

Table 75a. Mean number of two-spotted spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	Precount		7 DAT		11 DAT		18 DAT		24 DAT	
Control		31.3	a	45.8	a	53.3	a	106.3	a	224.0	a
Acramite	16 oz wt/a	9.8	a	4.0	a	3.5	b	1.5	b	1.8	c
Savay	6 oz wt/a	11.0	a	39.0	a	14.5	b	43.0	b	136.3	b
BAS 9210 2I	13.7	17.0	a	10.0	a	**12.0**	b	4.3	b	16.0	c
BAS 9210 2I + Cohere	13.7	22.3	a	9.0	a	8.5	b	7.0	b	9.5	c
BAS 9210 2I + Preference	13.7	11.3	a	9.0	a	6.0	b	3.5	b	8.8	c
BAS 9210 2I + Kinetic	13.7	10.5	a	10.3	a	8.5	b	8.5	b	11.3	c
BAS 9210 2I + LI-700	13.7	18.5	a	20.5	a	5.0	b	3.0	b	4.3	c
Oberon	12.0	16.8	a	25.0	a	9.8	b	23.0	b	36.8	c
Agri-mek + Induce	16.0	27.3	a	15.3	a	**11.0**	b	18.0	b	76.0	bc

Table 75b. Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	Precount		7 DAT		11 DAT		18 DAT		24 DAT	
Control		9.5	a	21.8	a	11.8	a	29.8	a	59.5	a
Acramite	16 oz wt/a	4.8	a	2.0	a	1.5	a	0.0	b	1.0	b
Savay	6 oz wt/a	3.5	a	17.5	a	14.0	a	12.5	b	28.5	b
BAS 9210 2I	13.7	3.5	a	4.8	a	**3.3**	a	2.8	b	4.0	b
BAS 9210 2I + Cohere	13.7	8.5	a	1.8	a	2.0	a	1.5	b	1.5	b
BAS 9210 2I + Preference	13.7	3.0	a	5.8	a	4.0	a	0.8	b	2.8	b
BAS 9210 2I + Kinetic	13.7	2.5	a	3.8	a	3.3	a	2.5	b	2.8	b
BAS 9210 2I + LI-700	13.7	4.5	a	3.5	a	1.5	a	1.5	b	0.8	b
Oberon	12.0	13.3	a	8.8	a	3.5	a	5.0	b	6.0	b
Agri- mek + Induce	16.0	10.3	a	8.8	a	**5.3**	a	12.0	b	14.5	b

1. No phytotoxicity was observed when BAS 9210 2I was applied at 13.7 fl oz/a alone or with adjuvants.

Table 76 (Exhibit 50). Strawberry (DEV/I/2011/US/P67/A/01.0/US/UFL/1LN) – Curtis Nagle, University of Florida, Wimauna, FL. Replicates 4; RCB design; Sprayed on 1/6 - 2/23/11 at 100 gpa. [1,2]

Table 76a. Mean number of two-spotted spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	Apps.	12DAT1		18DAT1		25DAT1		35DAT1		39DAT1	
Control			27.5	a	12.3	a	25.3	a	122.0	ab	181.5	a
BAS 9210 0I	13.7	2	29.8	a	7.5	a	4.0	a	2.5	c	5.5	c
BAS 9210 0I	13.7	1	18.8	a	8.3	a	**1.0**	a	2.0	c	2.5	c
BAS 9210 0I+ Cohere	13.7	1	31.0	a	18.3	a	15.0	a	31.0	bc	27.5	c
Cohere	0.125%	1	11.8	a	16.8	a	31.5	a	148.3	a	114	b
Savay	6 oz wt/a	1	15.0	a	17.0	a	22.0	a	71.5	bc	128.5	ab
Acramite+ Induce	16 oz wt/a	2	6.0	a	0.8	a	8.3	a	20.5	c	3.0	c
Agri-mek	16.0	4	26.5	a	12.0	a	**1.3**	a	2.3	c	6.5	c
Oberon+ Induce	12.0	2	7.3	a	5.0	a	1.5	a	2.3	c	2.8	c
Portal	32.0	2	12.3	a	12.5	a	1.0	a	34.5	bc	20.8	c

Table 76b. Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	Apps.	12DAT1		18DAT1		25DAT1		35DAT1		39DAT1	
Control			7.3	a	4.8	a	14.3	a	47.5	a	89.8	a
BAS 9210 0I	13.7	2	32.3	a	1.3	a	1.8	a	1.0	b	1.0	b
BAS 9210 0I	13.7	1	5.8	a	3.8	a	**1.3**	a	1.0	b	1.8	b
BAS 9210 0I+ Cohere	13.7	1	11.0	a	8.3	a	16.3	a	11.0	b	22.3	b
Cohere	0.125%	1	7.0	a	5.5	a	14.3	a	34.3	ab	72.5	ab
Savay	6 oz wt/a	1	2.8	a	6.0	a	13.8	a	23.0	ab	57.5	ab
Acramite+ Induce	16 oz wt/a	2	3.3	a	1.8	a	3.0	a	23.0	ab	18.3	b
Agri-mek	16.0	4	6.3	a	5.3	a	**0.5**	a	0.5	b	3.0	b
Oberon+ Induce	12.0	2	2.0	a	2.3	a	0.5	a	0.8	b	0.5	b
Portal	32.0	2	6.2	a	2.8	a	2.0	a	7.3	b	5.3	b

1. There was no phytotoxicity observed from any of the treatments in this trial.
2. Not all treatments in the trial are shown in Table 76.

Table 77 (Exhibit 51). Strawberry (DEV/I/2011/US/G65/D/02.0/US/UCA/S11) – Frank Sances, Pacific Ag Research, Guadalupe, CA. Replicates 4; RCB design; Sprayed on 9/29/11 at 75 gpa.[1]

Mean number of two-spotted spider mite females/10 leaves.

Treatment	Rate (fl oz/a)	Precount		5 DAT		8 DAT		14 DAT		21 DAT		28 DAT	
Control		17.3	a	16.5	a	16.0	a	15.8	a	21.0	a	6.0	a
Dicofol+ Break-Thru	64.0	5.5	a	0.3	b	0.5	b	0.5	b	0.3	a	1.3	a
Agri-mek+ Break-Thru	16.0	22.3	a	13.3	ab	**2.3**	b	1.8	b	3.3	a	6.3	a
BAS 9210 2I + Induce	13.7	18.5	a	6.0	ab	**6.5**	b	5.8	b	6.3	a	1.3	a

1. No phytotoxity was observed when BAS 9210 2I was applied at 13.7 fl oz/a with a surfactant.

Table 78 (Exhibit 52). Strawberry (DEV/I/2009/US/G64/A/01.0/US/UCA/PM1) – Frank Sances, Pacific Ag Research, Guadalupe, CA. Replicates 4; RCB design; Sprayed on 4/6/09 at 100 gpa.[1]

Table 78a. Mean number of two-spotted spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	0DAT		3DAT		7DAT		14DAT		28DAT		35DAT	
Control		174.5	a	144.0	a	324.8	a	282.5	a	89.5	ab	48.5	a
BAS 9210 0I + Kinetic	6.85	178.0	a	112.0	a	137.0	b	159.0	bc	158.5	a	69.5	ab
BAS 9210 0I	13.7	170.5	a	87.0	a	**150.0**	b	182.0	b	125.5	ab	57.0	ab
BAS 9210 0I + COC	13.7	76.0	a	93.0	a	152.0	b	140.0	bcd	76.0	ab	37.5	ab
BAS 9210 0I + Kinetic	13.7	76.5	a	67.5	a	127.0	b	129.0	bcd	83.0	ab	32.0	ab
BAS 9210 0I + Silwet	13.7	143.5	a	97.0	a	140.0	b	97.0	cd	58.0	b	34.0	b
Acramite	16 oz wt/a	104.5	a	117.5	a	168.5	b	82.5	d	51.5	b	30.5	b
Agri-mek	16.0	155.0	a	112.0	a	**214.0**	b	145.0	bcd	108.0	ab	54.0	ab
Fujimite	32.0	171.5	a	104.0	a	136.5	b	156.5	bc	116.0	ab	52.5	ab

Table 78b. Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	0DAT		3DAT		7DAT		14DAT		28DAT		35DAT	
Control		227.5	a	163.0	a	230.5	a	211.0	a	47.0	a	38.0	a
BAS 9210 0I + Kinetic	6.85	252.0	a	97.5	b	70.0	cd	73.5	c	42.0	ab	24.5	ab
BAS 9210 0I	13.7	229.0	a	77.5	b	**37.5**	cd	96.0	bc	30.0	a-d	25.0	ab
BAS 9210 0I + COC	13.7	186.5	a	69.0	b	38.5	cd	87.0	bc	28.0	bcd	19.5	ab
BAS 9210 0I + Kinetic	13.7	168.5	a	61.0	b	23.5	d	66.0	c	15.5	cd	18.5	ab
BAS 9210 0I + Silwet	13.7	217.5	a	48.0	b	64.0	cd	69.0	c	17.5	cd	13.0	b
Acramite	16 oz wt/a	255.5	a	76.0	b	42.5	cd	34.5	d	13.5	d	8.5	b
Agri-mek	16.0	217.0	a	87.0	b	**131.5**	b	119.0	b	38.5	ab	31.0	ab
Fujimite	32.0	214.5	a	65.5	b	78.5	c	118.5	b	32.5	abc	30.5	ab

1. No phytotoxicity was observed when BAS 9210 0I was applied at 13.7 fl oz/a alone or with adjuvants.

Table 79 (Exhibit 53). Strawberry (DEV/I/2009/US/G64/A/01.0/US/UCA/PM2) – Jake Zaccaria, Zaccaria Ag Consulting, Guadalupe, CA. Replicates 4; RCB design; Sprayed on 4/23/09 at 110 gpa [1]

Table 79a. Mean number of two-spotted spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	Precount		7 DAT		14 DAT		20 DAT	
Control		3.6	a	4.2	a	3.3	a	3.0	a
BAS 9210 0I+ Induce	6.85	3.6	a	2.0	a	0.9	b	1.1	b
BAS 9210 0I	13.7	3.6	a	**0.9**	a	0.2	b	0.2	b
BAS 9210 0I+ Penetrator plus	13.7	3.6	a	4.7	a	0.9	b	1.7	b
BAS 9210 0I+ Induce	13.7	3.6	a	1.1	a	0.5	b	0.3	b
BAS 9210 0I+ Silwet	13.7	3.6	a	1.2	a	0.0	b	0.2	b
Agri-mek	18.0	3.6	a	**1.8**	a	0.8	b	0.6	b

Table 79b. Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	Precount		7 DAT		14 DAT		20 DAT	
Control		3.2	a	6.1	a	11.1	a	6.9	a
BAS 9210 0I+ Induce	6.85	3.2	a	2.6	ab	1.7	b	1.8	b
BAS 9210 0I	13.7	3.2	a	**0.9**	b	0.8	b	0.6	b
BAS 9210 0I+ Penetrator plus	13.7	3.2	a	4.4	ab	2.1	b	4.4	ab
BAS 9210 0I+ Induce	13.7	3.2	a	1.5	b	0.9	b	1.2	b
BAS 9210 0I+ Silwet	13.7	3.2	a	0.6	b	0.2	b	0.6	b
Agri-mek	18.0	3.2	a	**1.1**	b	2.3	b	1.7	b

1. No phytotoxicity was observed when BAS 9210 0I was applied at 13.7 fl oz/a alone or with adjuvants.

Table 80 (Exhibit 54). Strawberry (DEV/I/2008/US/GX3/A/03.0/US/UCA/PM1) – Frank Sances, Pacific Ag Research, Santa Maria, CA. Replicates 4; RCB design; Sprayed on 4/25/08 and 5/30/08 at 100 gpa. [1]

Table 80a. Mean number of two-spotted spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	0DAT		3DAT		7DAT		14DAT		21DAT		28DAT	
Control		148.5	a	166.5	a	148.5	a	163.5	ab	115.5	a	166.5	a
BAS 9210 0I	6.85	163.5	a	173.5	a	172.5	a	183.0	a	117.0	a	147.0	ab
BAS 9210 0I	10.3	150.0	a	165.5	a	160.5	a	150.0	ab	138.0	a	117.0	bc
BAS 9210 0I+ Penetrator plus	13.7	162.0	a	169.5	a	151.5	a	**135.0**	ab	135.0	a	118.5	bc
Acramite	16 oz wt/a	160.5	a	145.5	a	114.0	a	**115.5**	b	148.5	a	79.5	c

Table 80b. Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	0DAT		3DAT		7DAT		14DAT		21DAT		28DAT	
Control		97.5	a	117.0	a	108.0	a	126.0	a	97.5	a	162.0	a
BAS 9210 0I	6.85	111.0	a	120.0	a	117.0	a	121.5	a	88.5	a	96.0	b
BAS 9210 0I	10.3	115.5	a	133.5	a	115.5	a	100.5	ab	118.5	a	97.5	b
BAS 9210 0I+ Penetrator plus	13.7	111.0	a	102.0	a	90.0	a	**79.5**	b	93.0	a	61.5	b
Acramite	16 oz wt/a	99.0	a	88.5	a	82.5	a	**67.5**	b	102.0	a	61.5	b

1. No phytotoxicity was observed when BAS 9210 0I was applied at 13.7 fl oz/a with an adjuvant.

Table 81 (Exhibit 55). Strawberry (DEV/I/2008/US/GX3/A/03.0/US/UCA/PM2) – Frank Sances, Pacific Ag Research, Arroyo Grande, CA. Replicates 4; RCB design; Sprayed on 4/24/08 and 5/15/08 at 100 gpa.[1]

Table 81a. Mean number of two-spotted spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	0 DAT		3 DAT		7 DAT		14 DAT		20 DAT		28DAT	
Control		337.5	a	369.0	a	345.0	a	373.5	a	400.5	a	166.5	a
BAS 9210 0I+ Induce	6.85	316.5	a	327.0	ab	294.0	ab	321.0	a	331.5	ab	147.0	ab
BAS 9210 0I	10.3	325.5	a	334.5	ab	283.5	ab	291.0	a	295.5	b	117.0	bc
BAS 9210 0I+ Penetrator plus	13.7	243.0	a	217.5	b	**165.0**	c	129.0	b	145.5	c	118.50	bc
Acramite	16 oz wt/a	331.5	a	280.5	ab	**223.5**	bc	153.0	b	178.5	c	79.50	c

Table 81b. Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	0 DAT		3 DAT		7 DAT		14 DAT		20 DAT		28DAT	
Control		193.5	a	253.5	a	228.0	a	259.5	a	286.5	a	162.0	a
BAS 9210 0I+ Induce	6.85	187.5	a	207.0	b	177.0	b	180.0	b	199.5	b	96.0	b
BAS 9210 0I	10.3	159.0	a	162.0	b	139.5	b	157.5	b	178.5	b	97.50	bc
BAS 9210 0I+ Penetrator plus	13.7	123.0	a	93.0	c	**64.5**	c	75.0	c	94.5	c	61.50	c
Acramite	16 oz wt/a	204.0	a	160.5	b	**126.0**	b	94.5	c	96.0	c	61.50	c

1. No phytotoxicity was observed when BAS 9210 0I was applied with an adjuvant.

Table 82 (Exhibit 56). Strawberry (DEV/I/2008/US/GX3/A/03.0/US/UOR/PM1) – Craig Collins, Collins Ag Research, Hillsboro, OR. Replicates 4; RCB design; Sprayed on 8/15/08 at 90 gpa.[1]

Table 82a. Mean number of two-spotted spider mite eggs/leaf.

Treatment	Rate (fl oz/a)	Precount		3 DAT		7 DAT		14 DAT		21 DAT		28 DAT	
Control		107.5	a	218.8	a	197.5	a	388.8	a	434.5	a	224.5	a
BAS 9210 0I+ Silwet	10.3	65.8	a	32.5	a	2.8	b	10.8	a	19.3	a	8.3	b
BAS 9210 0I+ Silwet	13.7	143.0	a	56.3	a	**5.5**	b	9.5	a	29.0	a	5.3	b
Bifenthrin+ Silwet	10.0	100.3	a	31.3	a	**0.0**	b	15.8	a	11.8	a	4.5	b

Table 82b. Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/a)	Precount		3 DAT		7 DAT		14 DAT		21 DAT		28 DAT	
Control		11.0	a	95.0	a	65.5	a	135.3	a	64.8	a	6.8	a
BAS 9210 0I+ Silwet	10.3	10.0	a	3.0	b	0.8	b	4.3	a	6.0	a	0.8	b
BAS 9210 0I+ Silwet	13.7	14.8	a	3.5	b	**2.3**	b	4.3	a	3.3	a	0.3	b
Bifenthrin+ Silwet	10.0	10.8	a	6.3	b	**0.3**	b	5.3	a	1.8	a	1.0	b

1. No phytotoxicity was observed when BS 9210 0I was applied at 13.7 fl oz/a with an adjuvant.

Cyflumetofen Field Trial Data Summary Table for Tomato

Table 83 (Exhibit 57). Tomato (DEV/I/2011/MX/316/A/01.0/MX/MX0/006) – Pedro Ponce, Conviviendo el Naturaleze, LaBarca, Jalicso State, MX. Replicates 4; RCB design; Sprayed on 10/21/10 and 10/28/10 at 54 gpa.

Mean number of two-spotted spider mite motiles/leaf.

Treatment	Rate (fl oz/A)	Precount		3 DAT		7 DAT		2 DAT2		7 DAT2	
Control		326.8	a	385.8	a	644.3	a	1258.3	a	1937.3	a
BAS 9210 0I	6.85	345.5	a	23.3	b	56.0	b	84.5	b	157.8	b
BAS 9210 0I	10.3	354.5	a	21.3	b	29.3	b	54.3	b	136.8	b
BAS 9210 2I	13.7	359.3	a	17.8	b	**24.8**	b	51.8	b	71.3	b
Agri-mek	10.3	385.8	a	31.3	b	**30.8**	b	62.0	b	142.8	b

Cyflumetofen Field Trial Data Summary Table for Avocado

Table 84 (Exhibit 58). Avocado (DEV/I/2011/US/W65/A/02.0/US/UCA/SB6) – David Holden, Holden Research, Oxnard, CA. Replicates 4; RCB design; Sprayed on 8/30/11 at 200 gpa.[1]

Table 84a. Mean number of persea mite eggs/leaf.

Treatment	Rate (fl oz/a)	Precount	3 DAT	8 DAT
Control		6.6 a	10.8 a	24.2 a
BAS 9210 2I	13.7	27.7 a	7.7 a	**1.7** b
Agri-mek	15.0	23.8 a	10.7 a	**4.6** b
Envidor	17.0	21.5 a	8.6 a	2.9 b

Table 84b. Mean number of persea mite nymphs and adults/leaf.

		Nymphs		Adults	
Treatment	Rate (fl oz/a)	3 DAT	8 DAT	3 DAT	8 DAT
Control		3.7 a	5.7 a	3.1 a	4.9 a
BAS 9210 2I	13.7	0.1 a	**0.5** a	0.1 a	**0.0** b
Agri-mek	15.0	0.4 a	**2.2** a	0.0 a	**1.3** b
Envidor	17.0	0.0 a	0.2 a	0.0 a	0.1 b

1. No phytotoxicity was observed when BAS 9210 2I was applied at 13.7 fl oz/a.

BASF Corporation

Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID: DEV/I/2011/US/G62/E/01.0/US/UCA/SB1 GEP:
Title: BAS 92100I/ALMONDS/MITE/EFFICACY/ADJUVANTS
GEP Guideline: PRIVATE COOPERATORS ONLY
Short Trial ID: I11G62E-UCASB1 Licensee: Phil Munger

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit	Mix Size	Unit
1	CHECK													
2	BAS 92100I -CYFLUMETOFEN	212.0 212.0	GA/L	SC	12.9 13.674	fl oz/a	200.0	g ai/ha	A	SE	100	GAL/AC	3	GALLONS
3	BAS 92102	200.0	GA/L	SC	13.7	fl oz/a	200.0	g ai/ha	A	SE	100	GAL/AC	3	GALLONS
4	BAS 92102 ADJUVANT-MSO -SUNFLOW. OIL METHYLESTER	200.0 100.0 100.0	GA/L % 	SC EC 	13.7 16.0 16	fl oz/a fl oz/100 gal 	200.0 16.0 	g ai/ha fl oz/100 gal 	A A 	SE SE 	100 100 	GAL/AC GAL/AC 	3 3 	GALLONS GALLONS
5	BAS 92102 DYNE-AMIC -ADJUVANT-SYSTEM	200.0 100.0 100.0	GA/L % 	SC SL 	13.7 48.0 48	fl oz/a fl oz/100 gal 	200.0 48.0 	g ai/ha fl oz/100 gal 	A A 	SE SE 	100 100 	GAL/AC GAL/AC 	3 3 	GALLONS GALLONS
6	BAS 92102 NR 415 SPRAY OIL	200.0 866.0	GA/L GA/L	SC AE	13.7 1.0	fl oz/a gal/100 gal	200.0 1.0	g ai/ha gal/100 gal	A A	SE SE	100 100	GAL/AC GAL/AC	3 3	GALLONS GALLONS
7	BAS 92102	200.0	GA/L	SC	27.4	fl oz/a	400.0	g ai/ha	A	SE	100	GAL/AC	3	GALLONS
8	ENVIDOR -SPIRODICLOFEN	240.0 240.0	GA/L	SC	18.0 18	fl oz/a	316.0	g ai/ha	A	SE	100	GAL/AC	3	GALLONS

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 20 feet, Treated plot size Length: 20 feet, Application volume: 100 gal/ac, Mix size: 3 gallons, Format definitions: BASF.DEF, BASF.FRM

Exhibit 1

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2011/US/G62/E/01.0/US/UCA/SB1	GEP:
Title:	BAS 92100I/ALMONDS/MITE/EFFICACY/ADJUVANTS	
GEP Guideline:	PRIVATE COOPERATORS ONLY	
Short Trial ID:	I11G62E-UCASB1	Licensee: Phil Munger

Trial Comments

TITLE: BAS 92100I/ALMONDS/MITE/EFFICACY/ADJUVANTS

RESULTS:
All of the treatments showed excellent control of TETRUR in this trial. They also significantly reduced numbers of predacious mites. There was no crop phytotoxicity with any of the treatments.

COOPERATOR COMMENTS

AS CAN BE SEEN IN THE DATA THE PRODUCT 92100 AND 92102 PRFORMED WELL WHEN COMPAIRED TO THE CHECK AND THE GROWERS STANDARD,ENVIDOR.

BOTH PRODUCTS HAD GOOD KNOCKDOWN OF ALL LIFE STAGES. THERE WAS A GOOD POPULATION OF PREDATORS BUT WITH THE FAST KNOCK DOWN THEY MOVED TO TREES THAT HAD A FOOD SOUCE.

IN ALL PRODUCTS WITH ALL ADJUVANTS THERE WAS NO PHYTOXICITY SYMPTOMS.

THIS WAS A HARD YEAR FOR EVALUATING MITES DUE TO THE COOL SPRING AND LACK OF HOT WEATHER DURING THE SUMMER MONTHS.

THE MITES DID SHOW UP LATE IN THE YEAR, THUS THE MITES WERE TRYING TO BUILD A POPULATION WHEN THE TEMPURATURES AT NIGHT WERE COOL AND THE DAY LENGTH WAS GETTING SHORTER. IN A MORE TYPICAL YEAR THE MITES MAY HAVE HAD A BETTER CHANCE TO BUILD A POPULATION EARLIER IN THE SUMMER IF WE HAD A MORE TYPICAL WEATHER PATTERN. IF WE HAD A NORMAL YEAR, WE COULD HAVE LOOKED AT A POPULATION THAT WAS BUILDING TO SEE IF THE RESIDUAL CONTROL LASTS FOR 35 + DAYS.

Trial Complete

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2011/US/G62/E/01.0/US/UCA/SB1          GEP:
Title:          BAS 92100I/ALMONDS/MITE/EFFICACY/ADJUVANTS
GEP Guideline: PRIVATE COOPERATORS ONLY
Short Trial ID: I11G62E-UCASB1              Licensee: Phil Munger
```

GENERAL TRIAL INFORMATION

Originator: PEDIBHOTLA VENKAT Trial Status: 7 FINAL
Researcher: BANGARWA SANJEEV Validated: 28/9/11
Cooperator Data (Y/N)?: Y

Name: JOHN POST
Org: AG ADVISORS, INC
Street1: 3995 E. BUTTE RD Phone No: 530 674-1255
Fax No: 530 674 1907
Town: LIVE OAK Email: agadvisors@succeed.net
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 95953
Location: AG ADVISORS, INC
Town: LIVE OAK Postal: 95953
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: ORC Trial Unit: U
Trt No: 8 Plot Width: 20 Unit: FT
Reps: 4 Plot Length: 20
Plot Size: 400.00 FT2
Factors: 1

ONum	Objectives
1. 12104001	Impact of adjuvants on efficacy of cyflumetofen on almonds

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From
A	SE	1	7 day interval, as required by infestation	20/8/11	9:00 AM

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Carrier Type	Vol	Unit	Mix Size	Unit
1	SP	SGT	H2O	100	GAL/AC	3	GALLONS

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT:				Plant Part	Pest Stage	Infestation				
App	Date	Insect	Description	Biotype	Fr	To	Min	Max	Mode	Deg	Meth
A 1	20/8/11	TETRUR	TETRANYCHUS URTICAE								
2		NEOUFA	NEOSEIULUS FALLACIS								

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:	DEV/I/2011/US/G62/E/01.0/US/UCA/SB1 GEP:
Title:	BAS 92100I/ALMONDS/MITE/EFFICACY/ADJUVANTS
GEP Guideline:	PRIVATE COOPERATORS ONLY
Short Trial ID:	I11G62E-UCASB1 Licensee: Phil Munger

Evaluation: No / Date	002 23/8/11	002 23/8/11	003 28/8/11	003 28/8/11	004 4/9/11	004 4/9/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
DAT / DALT / DAP	3 3 599	3 3 599	8 8 604	8 8 604	15 15 611	15 15 611
SE: File / Group	1	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	MOTILES#/10LEAF	EGGS #/10LEAF	MOTILES#/10LEAF	EGGS #/10LEAF	MOTILES#/10LEAF	EGGS #/10LEAF
Pest GS: From / To / Method	NF IX B	EX EX B	NF IX B	EX EX B	NF IX B	EX EX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT
ARM Action Codes	APC	APC	APC	APC	APC	APC
Decimals Print	1	1	1	1	1	1
Trt Product Name	5	6	9	10	13	14
1 CHECK	552.0 a (0.0%)	645.3 a (0.0%)	224.0 a (0.0%)	235.0 a (0.0%)	44.0 a (0.0%)	74.0 a (0.0%)
2 BAS 92100I	64.0 b (88.4%)	56.5 c (91.2%)	6.5 b (97.1%)	9.0 b (96.2%)	5.0 b (88.6%)	18.0 b (75.7%)
3 BAS 92102	79.0 b (85.7%)	203.5 bc (68.5%)	3.0 b (98.7%)	14.0 b (94.0%)	1.0 b (97.7%)	6.0 b (91.9%)
4 BAS 92102 ADJUVANT-MSO	70.0 b (87.3%)	175.0 bc (72.9%)	4.0 b (98.2%)	9.0 b (96.2%)	0.0 b (100.0%)	3.0 b (95.9%)
5 BAS 92102 DYNE-AMIC	36.0 b (93.5%)	393.5 b (39.0%)	6.0 b (97.3%)	13.0 b (94.5%)	2.0 b (95.5%)	5.0 b (93.2%)
6 BAS 92102 NR 415 SPRAY OIL	51.5 b (90.7%)	243.5 bc (62.3%)	0.0 b (100.0%)	5.0 b (97.9%)	0.0 b (100.0%)	8.0 b (89.2%)
7 BAS 92102						
8 ENVIDOR	54.0 b (90.2%)	107.0 bc (83.4%)	4.0 b (98.2%)	5.0 b (97.9%)	1.0 b (97.7%)	2.0 b (97.3%)
LSD (P=.05)	109.32	215.22	43.08	65.13	10.61	18.96
Standard Deviation	73.58	144.87	29.00	43.84	7.14	12.76
CV	56.82	55.59	82.02	105.83	94.36	77.01
Bartlett's X2	27.113	17.318	49.446	64.814	26.943	34.437
P(Bartlett's X2)	0.001*	0.008*	0.001*	0.001*	0.001*	0.001*
Replicate F	0.427	0.250	0.953	1.218	0.817	0.795
Replicate Prob(F)	0.7364	0.8606	0.4360	0.3319	0.5011	0.5124
Treatment F	25.784	7.679	32.933	15.186	20.448	16.439
Treatment Prob(F)	0.0001	0.0003	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	005 10/9/11	005 10/9/11	006 17/9/11	006 17/9/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
DAT / DALT / DAP	21 21 617	21 21 617	28 28 624	28 28 624
SE: File / Group	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	MOTILES#/10LEAF	EGGS #/10LEAF	MOTILES#/10LEAF	EGGS #/10LEAF
Pest GS: From / To / Method	NF IX B	EX EX B	NF IX B	EX EX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT
ARM Action Codes	APC	APC	APC	APC
Decimals Print	1	1	1	1
Trt Product Name	17	18	21	22
1 CHECK	54.0 a (0.0%)	84.0 a (0.0%)	249.3 a (0.0%)	253.3 a (0.0%)
2 BAS 92100I	5.0 b (90.7%)	6.0 b (92.9%)	1.0 b (99.6%)	0.0 b (100.0%)
3 BAS 92102	2.0 b (96.3%)	3.0 b (96.4%)	0.0 b (100.0%)	0.0 b (100.0%)
4 BAS 92102 ADJUVANT-MSO	3.0 b (94.4%)	4.0 b (95.2%)	0.0 b (100.0%)	0.0 b (100.0%)
5 BAS 92102 DYNE-AMIC	2.0 b (96.3%)	1.0 b (98.8%)	1.0 b (99.6%)	0.0 b (100.0%)
6 BAS 92102 NR 415 SPRAY OIL	1.0 b (98.1%)	1.0 b (98.8%)	1.0 b (99.6%)	0.0 b (100.0%)
7 BAS 92102				
8 ENVIDOR	2.0 b (96.3%)	1.0 b (98.8%)	1.0 b (99.6%)	0.0 b (100.0%)
LSD (P=.05)	13.17	14.11	29.40	31.32
Standard Deviation	8.87	9.50	19.79	21.08
CV	89.94	66.47	54.69	58.26
Bartlett's X2	36.766	35.051	50.706	0.0
P(Bartlett's X2)	0.001*	0.001*	0.001*	.
Replicate F	0.531	0.862	0.915	1.000
Replicate Prob(F)	0.6670	0.4787	0.4535	0.4155
Treatment F	19.362	42.085	90.182	82.483
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2011/US/G62/E/01.0/US/UCA/SB2	GEP:
Title:	BAS 92100I/ALMONDS/MITE/EFFICACY/ADJUVANTS	
GEP Guideline:	PRIVATE COOPERATORS ONLY	
Short Trial ID:	I11G62E-UCASB2	Licensee: Phil Munger

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit	Mix Size	Unit
1	CHECK													
2	BAS 92100I	212.0	GA/L	SC	12.9	fl oz/a	200.0	g ai/ha	A	SE	100	GAL/AC	13	L
	-CYFLUMETOFEN	212.0			13.674									
3	BAS 92102	200.0	GA/L	SC	13.7	fl oz/a	200.0	g ai/ha	A	SE	100	GAL/AC	13	L
4	BAS 92102	200.0	GA/L	SC	13.7	fl oz/a	200.0	g ai/ha	A	SE	100	GAL/AC	13	L
	ADJUVANT-MSO	100.0	%	EC	24.0	fl oz/100 gal	24.0	fl oz/100 gal	A	SE	100	GAL/AC	13	L
	-SUNFLOW. OIL METHYLESTER	100.0			24									
5	BAS 92102	200.0	GA/L	SC	13.7	fl oz/a	200.0	g ai/ha	A	SE	100	GAL/AC	13	L
	DYNE-AMIC	100.0	%	SL	64.0	fl oz/100 gal	64.0	fl oz/100 gal	A	SE	100	GAL/AC	13	L
	-ADJUVANT-SYSTEM	100.0			64									
6	BAS 92102	200.0	GA/L	SC	13.7	fl oz/a	200.0	g ai/ha	A	SE	100	GAL/AC	13	L
	NR 415 SPRAY OIL	866.0	GA/L	AE	4.0	gal/a	4.0	gal/a	A	SE	100	GAL/AC	13	L
7	BAS 92102	200.0	GA/L	SC	27.4	fl oz/a	400.0	g ai/ha	A	SE	100	GAL/AC	13	L

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 21 feet, Treated plot size Length: 19 feet, Application volume: 100 gal/ac, Mix size: 13 liters, Format definitions: BASF.DEF, BASF.FRM

Exhibit 2

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2011/US/G62/E/01.0/US/UCA/SB2          GEP:
Title:          BAS 92100I/ALMONDS/MITE/EFFICACY/ADJUVANTS
GEP Guideline: PRIVATE COOPERATORS ONLY
Short Trial ID: I11G62E-UCASB2              Licensee: Phil Munger
```

GENERAL TRIAL INFORMATION

Originator: PEDIBHOTLA VENKAT Trial Status: 5 ACTIVE
Researcher: BANGARWA SANJEEV Validated: 22/9/11
Cooperator Data (Y/N)?: Y

Name: SCOTT HICKS
Org: BIO RESEARCH
Street1: 1738 N FOWLER Phone No: 559-455-5660
Fax No: 559-455-5661
Town: FRESNO Email: dan.forey@bio-research.net
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 93727
Location: BIORESEARCH FARM
Town: FRESNO Postal: 93727
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date
A	SE	1	7 day interval, as required by infestation	30/8/11

SPRAYER SETUPS

Set No	App Met	Carrier Type	Vol	Unit	Mix Size	Unit
1	SP	H2O	100	GAL/AC	13	L

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT:

App		Date	Insect	Description	Plant Part	Pest Stage Biotype	Fr	To	Infestation Min	Max	Mode	Deg	Meth
A	1	30/8/11	TETRUR	TETRANYCHUS URTICAE									

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:	DEV/I/2011/US/G62/E/01.0/US/UCA/SB2 GEP:
Title:	BAS 92100I/ALMONDS/MITE/EFFICACY/ADJUVANTS
GEP Guideline:	PRIVATE COOPERATORS ONLY
Short Trial ID:	I11G62E-UCASB2 Licensee: Phil Munger

Evaluation: No / Date	001 29/8/11	001 29/8/11	001 29/8/11	002 2/9/11	002 2/9/11	002 2/9/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE
DAT / DALT / DAP	-1 -1	-1 -1	-1 -1	3 3	3 3	3 3
SE: File / Group	1	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	INFEST.#/20leaf	INFEST.#/20leaf	INFEST.#/20leaf	INFEST.#/20leaf	INFEST.#/20leaf	INFEST.#/20leaf
Pest GS: From / To / Method	EX EX B	NF NF B	IX IX B	EX EX B	NF NF B	IX IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT
ARM Action Codes	L05	L05	L05	APC	APC	APC
Decimals Print	1	1	1	1	1	1
Trt Product Name	1	2	3	4	5	6
1 CHECK	48.8 a	30.0 a	30.3 a	64.8 a (0.0%)	45.8 a (0.0%)	25.3 a (0.0%)
2 BAS 92100I	27.5 a	11.8 a	6.5 a	17.5 a (73.0%)	6.5 b (85.8%)	3.3 b (87.1%)
3 BAS 92102	86.3 a	34.5 a	41.5 a	32.5 a (49.8%)	15.3 b (66.7%)	8.8 b (65.3%)
4 BAS 92102 ADJUVANT-MSO	60.0 a	33.3 a	33.3 a	19.8 a (69.5%)	11.3 b (75.4%)	7.0 b (72.3%)
5 BAS 92102 DYNE-AMIC	61.5 a	25.8 a	24.5 a	22.3 a (65.6%)	15.8 b (65.6%)	8.8 b (65.3%)
6 BAS 92102 NR 415 SPRAY OIL	55.8 a	21.5 a	21.3 a	14.5 a (77.6%)	10.5 b (77.0%)	6.5 b (74.3%)
7 BAS 92102						
LSD (P=.05)	76.89	37.30	43.06	35.23	19.29	11.74
Standard Deviation	51.03	24.75	28.58	23.38	12.80	7.79
CV	90.11	94.74	109.04	81.93	73.14	78.56
Bartlett's X2	4.477	7.267	9.827	14.012	7.302	9.051
P(Bartlett's X2)	0.483	0.202	0.08	0.016*	0.199	0.107
Replicate F	0.771	0.690	0.503	1.394	0.744	0.426
Replicate Prob(F)	0.5283	0.5719	0.6860	0.2833	0.5424	0.7375
Treatment F	0.560	0.475	0.701	2.579	4.958	3.986
Treatment Prob(F)	0.7288	0.7890	0.6312	0.0709	0.0071	0.0168

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	002 2/9/11	003 6/9/11	003 6/9/11	003 6/9/11	003 6/9/11	004 13/9/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE
DAT / DALT / DAP	3 3	7 7	7 7	7 7	7 7	14 14
SE: File / Group	1	1	1	1	1	1
Organism / Biotype	NNNNN	TETRUR	TETRUR	TETRUR	NNNNN	TETRUR
Rating Type	PHYTOX	INFECT	INFECT	INFECT	PHYTOX	INFECT
Clarifier	CROP INJURY	INFEST.#/20leaf	INFEST.#/20leaf	INFEST.#/20leaf	CROP INJURY	INFEST.#/20leaf
Pest GS: From / To / Method		EX EX B	NF NF B	IX IX B		EX EX B
CALC Method	U0C10	TCOUNT	TCOUNT	TCOUNT	U0C10	TCOUNT
Rating Unit	#	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT
ARM Action Codes	L05	APC	APC	APC	L05	APC
Decimals Print	1	1	1	1	1	1
Trt Product Name	7	8	9	10	11	12
1 CHECK	0.0 a	166.3 a (0.0%)	146.3 a (0.0%)	68.3 a (0.0%)	0.0 a	119.5 a (0.0%)
2 BAS 92100I	0.0 a	2.3 b (98.6%)	1.0 b (99.3%)	1.0 b (98.5%)	0.0 a	4.3 b (96.4%)
3 BAS 92102	0.0 a	5.3 b (96.8%)	10.8 b (92.6%)	9.5 b (86.1%)	0.0 a	19.5 b (83.7%)
4 BAS 92102 ADJUVANT-MSO	0.0 a	8.0 b (95.2%)	4.0 b (97.3%)	3.5 b (94.9%)	0.0 a	24.0 b (79.9%)
5 BAS 92102 DYNE-AMIC	0.0 a	5.5 b (96.7%)	2.5 b (98.3%)	3.0 b (95.6%)	0.0 a	55.5 b (53.6%)
6 BAS 92102 NR 415 SPRAY OIL	0.0 a	0.0 b (100.0%)	0.5 b (99.7%)	0.8 b (98.9%)	0.0 a	6.5 b (94.6%)
7 BAS 92102	0.0 a				0.0 a	
LSD (P=.05)	0.00	24.81	18.59	9.70	0.00	61.09
Standard Deviation	0.00	16.46	12.34	6.44	0.00	40.54
CV	0.0	52.75	44.87	44.92	0.0	106.11
Bartlett's X2	0.0	31.75	36.155	33.323	0.0	32.874
P(Bartlett's X2)	.	0.001*	0.001*	0.001*	.	0.001*
Replicate F	0.000	1.080	1.422	2.377	0.000	0.957
Replicate Prob(F)	1.0000	0.3874	0.2754	0.1108	1.0000	0.4384
Treatment F	0.000	64.713	89.274	68.284	0.000	4.681
Treatment Prob(F)	1.0000	0.0001	0.0001	0.0001	1.0000	0.0090

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	004 13/9/11	004 13/9/11	004 13/9/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE
DAT / DALT / DAP	14 14	14 14	14 14
SE: File / Group	1	1	1
Organism / Biotype	TETRUR	TETRUR	NNNNN
Rating Type	INFECT	INFECT	PHYTOX
Clarifier	INFEST.#/20leaf	INFEST.#/20leaf	CROP INJURY
Pest GS: From / To / Method	NF NF B	IX IX B	
CALC Method	TCOUNT	TCOUNT	U0C10
Rating Unit	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1
Sample Size / Unit	1 TPLOT	1 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	L05
Decimals Print	1	1	1
Trt Product Name	13	14	15
1 CHECK	107.8 a (0.0%)	27.5 a (0.0%)	0.0 a
2 BAS 92100I	3.0 b (97.2%)	2.5 b (90.9%)	0.0 a
3 BAS 92102	25.8 b (76.1%)	11.8 b (57.3%)	0.0 a
4 BAS 92102 ADJUVANT-MSO	17.0 b (84.2%)	8.0 b (70.9%)	0.0 a
5 BAS 92102 DYNE-AMIC	26.3 b (75.6%)	8.3 b (70.0%)	0.0 a
6 BAS 92102 NR 415 SPRAY OIL	9.8 b (91.0%)	3.5 b (87.3%)	0.0 a
7 BAS 92102			0.0 a
LSD (P=.05)	38.41	10.44	0.00
Standard Deviation	25.49	6.93	0.00
CV	80.71	67.58	0.0
Bartlett's X2	20.045	13.563	0.0
P(Bartlett's X2)	0.001*	0.019*	.
Replicate F	1.060	0.214	0.000
Replicate Prob(F)	0.3955	0.8850	1.0000
Treatment F	9.073	6.912	0.000
Treatment Prob(F)	0.0004	0.0016	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2011/US/G63/C/11.0/US/U21/066	GEP:
Title:	BAS 92100I/EFFICACY/ALMONDS/COMPARE WITH COMMER. STANDARDS	
GEP Guideline:	UNIVERSITY COOPERATORS	
Short Trial ID:	I11G63C-U21066	Licensee: Joseph Stout

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit	Mix Size	Unit
1	CHECK								AB	SE	100	GAL/AC	0.5	L
2	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	AB	SE	100	GAL/AC	0.5	L
	-CYFLUMETOFEN	212.0			14.522									
3	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	AB	SE	100	GAL/AC	0.5	L
	-CYFLUMETOFEN	212.0			14.522									
	NR 415 SPRAY OIL	866.0	GA/L	AE	1.0	% v/v	1.0	% v/v	AB	SE	100	GAL/AC	0.5	L
4	ENVIDOR	240.0	GA/L	SC	18.0	fl oz/a	316.0	g ai/ha	AB	SE	100	GAL/AC	0.5	L
	-SPIRODICLOFEN	240.0			18									
	NR 415 SPRAY OIL	866.0	GA/L	AE	1.0	% v/v	1.0	% v/v	AB	SE	100	GAL/AC	0.5	L
5	AGRI-MEK	18.0	GA/L	EC	20.0	fl oz/a	26.3	g ai/ha	AB	SE	100	GAL/AC	0.5	L
	-ABAMECTIN	18.0			20									
	NR 415 SPRAY OIL	866.0	GA/L	AE	1.0	% v/v	1.0	% v/v	AB	SE	100	GAL/AC	0.5	L
6	FUJIMITE	50.0	GA/L	SC	41.1	fl oz/a	150.0	g ai/ha	AB	SE	100	GAL/AC	0.5	L
	-FENPYROXIMATE	50.0			41.1									
7	NR 415 SPRAY OIL	866.0	GA/L	AE	1.0	% v/v	1.0	% v/v	AB	SE	100	GAL/AC	0.5	L
8	ACRAMITE 50 WS	50.0	%	WP	1.0	lb/a	555.0	g ai/ha	AB	SE	100	GAL/AC	0.5	L
	-BIFENAZATE	50.0			1									
	NR 415 SPRAY OIL	866.0	GA/L	AE	1.0	% v/v	1.0	% v/v	AB	SE	100	GAL/AC	0.5	L

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 2 meters, Treated plot size Length: 2 meters, Application volume: 100 gal/ac, Mix size: 1 liters, Mix overage: 10%, Format definitions: BASF.DEF, BASF.FRM

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2011/US/G63/C/11.0/US/U21/066	GEP:
Title:	BAS 92100I/EFFICACY/ALMONDS/COMPARE WITH COMMER. STANDARDS	
GEP Guideline:	UNIVERSITY COOPERATORS	
Short Trial ID:	I11G63C-U21066	Licensee: Joseph Stout

Trial Comments

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2011/US/G63/C/11.0/US/U21/066          GEP:
Title:          BAS 92100I/EFFICACY/ALMONDS/COMPARE WITH COMMER. STANDARDS
GEP Guideline: UNIVERSITY COOPERATORS
Short Trial ID: I11G63C-U21066              Licensee: Joseph Stout
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GENERAL TRIAL INFORMATION

Originator: PEDIBHOTLA VENKAT Trial Status: 7 FINAL
Researcher: STOUT JOSEPH Validated: 20/7/11
Cooperator Data (Y/N)?: N
Name: BASF CORPORATION
Street1: 10181 AVENUE 416 Phone No: (559)591-2548
Fax No: (559)591-8730
Town: DINUBA Email: joseph.stout@basf.com
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 93618
Location: Ag Research Station
Town: DINUBA Postal: 93618
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: GGX Trial Unit: U
Trt No: 8 Plot Width: 2 Unit: M
Reps: 4 Plot Length: 2
Plot Size: 4.00 M2
Factors: 1

ONum	Objectives
1. 12104001	Comparision of BAS 9210I with competitive standards

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To
A	SE	1	7 day interval, as required by infestation	7/6/11	8:30 AM	9:00 AM
B	11	1		15/6/11	7:00 AM	7:30 AM

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Nozzles Type	Pres Amt	Unit	Carrier Type	Vol	Unit	Mix Size	Unit
1	SP	SPT	TX-12	3	BAR	H2O	100	GAL/AC	0.5	L

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT:

App		Date	Insect	Description	Plant Part	Pest Stage Biotype	Fr	To	Infestation Min	Max	Mode	Deg	Meth
A	1	7/6/11	TETRUR	TETRANYCHUS URTICAE									
B	1	15/6/11	TETRUR	TETRANYCHUS URTICAE									

BASF Corporation

Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID: DEV/I/2011/US/G63/C/11.0/US/U21/066 GEP:
Title: BAS 92100I/EFFICACY/ALMONDS/COMPARE WITH COMMER. STANDARDS
GEP Guideline: UNIVERSITY COOPERATORS
Short Trial ID: I11G63C-U21066 Licensee: Joseph Stout

Evaluation: No / Date	A03 10/6/11	A03 10/6/11	A03 10/6/11	A03 10/6/11	A07 14/6/11	A07 14/6/11	A07 14/6/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop GS: From / To / Method	79	79	79	79	79	79	79
DAT / DALT / DAP	3 3 333	3 3 333	3 3 333	3 3 333	7 7 337	7 7 337	7 7 337
SE: File / Group	1	1	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
Clarifier	EGGS	LARVAE	ADULTS	MIXED MOTILES	EGGS	LARVAE	ADULTS
Pest GS: From / To / Method	EX EX	LX LX	IV IV	LX IV	EX EX	LX LX	IV IV
CALC Method	ZCOUNT	ZCOUNT	ZCOUNT	ZCOUNT	ZCOUNT	ZCOUNT	ZCOUNT
Rating Unit	#	#	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	5 PLANT	5 PLANT	5 PLANT	5 PLANT	5 PLANT	5 PLANT	5 PLANT
ARM Action Codes	APC	APC	APC	APC	APC	APC	APC
Decimals Print							
Trt Product Name	1	3	5	7	10	12	14
1 CHECK	832.5 a (0.0%)	77.8 a (0.0%)	53.0 a (0.0%)	130.8 a (0.0%)	1034.8 a (0.0%)	347.3 a (0.0%)	150.5 a (0.0%)
2 BAS 92100I	99.8 b (88.0%)	2.5 b (96.8%)	0.0 b (100.0%)	2.5 b (98.1%)	9.0 b (99.1%)	4.8 c (98.6%)	0.5 b (99.7%)
3 BAS 92100I NR 415 SPRAY OIL	50.8 b (93.9%)	4.0 b (94.9%)	0.3 b (99.5%)	4.3 b (96.7%)	15.8 b (98.5%)	6.5 c (98.1%)	1.3 b (99.2%)
4 ENVIDOR NR 415 SPRAY OIL	42.5 b (94.9%)	0.8 b (99.0%)	0.0 b (100.0%)	0.8 b (99.4%)	13.3 b (98.7%)	4.8 c (98.6%)	1.5 b (99.0%)
5 AGRI-MEK NR 415 SPRAY OIL	60.5 b (92.7%)	7.8 b (90.0%)	0.0 b (100.0%)	7.8 b (94.1%)	0.8 b (99.9%)	1.3 c (99.6%)	0.0 b (100.0%)
6 FUJIMITE	71.8 b (91.4%)	1.8 b (97.7%)	1.8 b (96.7%)	3.5 b (97.3%)	12.5 b (98.8%)	6.8 c (98.1%)	2.5 b (98.3%)
7 NR 415 SPRAY OIL	144.5 b (82.6%)	28.5 b (63.3%)	5.5 b (89.6%)	34.0 b (74.0%)	302.3 b (70.8%)	133.3 b (61.6%)	64.5 b (57.1%)
8 ACRAMITE 50 WS NR 415 SPRAY OIL	65.3 b (92.2%)	9.5 b (87.8%)	0.0 b (100.0%)	9.5 b (92.7%)	1.5 b (99.9%)	0.0 c (100.0%)	0.3 b (99.8%)
LSD (P=.05)	190.32	19.91	14.40	25.67	264.35	69.19	45.39
Standard Deviation	129.40	13.54	9.79	17.46	179.74	47.04	30.86
CV	75.7	81.74	129.44	72.36	103.46	74.6	111.71
Bartlett's X2	43.536	37.244	26.796	45.076	100.814	58.473	79.891
P(Bartlett's X2)	0.001*	0.001*	0.001*	0.001*	0.001*	0.001*	0.001*
Replicate F	1.654	1.126	0.711	1.611	1.311	1.860	0.897
Replicate Prob(F)	0.2073	0.3611	0.5563	0.2168	0.2971	0.1673	0.4590
Treatment F	17.321	15.087	14.223	25.846	16.296	27.540	12.430
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	A07 14/6/11	A07 14/6/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU
Crop GS: From / To / Method	79	79
DAT / DALT / DAP	7 7 337	7 7 337
SE: File / Group	1	PHYTOX 2
Organism / Biotype	TETRUR	NNNNN
Rating Type	NUMBER	PHYTOX
Clarifier	MIXED MOTILES	CROP INJURY
Pest GS: From / To / Method	IV IV	
CALC Method	ZCOUNT	P%EST
Rating Unit	#	%
Part Rated	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1
Sample Size / Unit	5 PLANT	1 TPLOT
ARM Action Codes	APC	P
Decimals Print		
Trt Product Name	16	18
1 CHECK	497.8 a (0.0%)	0.0 a
2 BAS 92100I	5.3 c (98.9%)	0.0 a
3 BAS 92100I NR 415 SPRAY OIL	7.8 c (98.4%)	0.0 a
4 ENVIDOR NR 415 SPRAY OIL	6.3 c (98.7%)	0.0 a
5 AGRI-MEK NR 415 SPRAY OIL	1.3 c (99.7%)	0.0 a
6 FUJIMITE	9.3 c (98.1%)	0.0 a
7 NR 415 SPRAY OIL	197.8 b (60.3%)	0.0 a
8 ACRAMITE 50 WS NR 415 SPRAY OIL	0.3 c (99.9%)	0.0 a
LSD (P=.05)	70.71	0.00
Standard Deviation	48.07	0.00
CV	53.01	0.0
Bartlett's X2	75.775	0.0
P(Bartlett's X2)	0.001*	.
Replicate F	1.615	0.000
Replicate Prob(F)	0.2160	1.0000
Treatment F	54.714	0.000
Treatment Prob(F)	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID: DEV/I/2011/US/G65/D/02.0/US/UCA/SB2 GEP:
Title: BAS 92100I/EFFICACY & PHYTO-TOXICITY/(NEW FORMULATION)
GEP Guideline:
Short Trial ID: I11G65D-UCASB2 Licensee: Phil Munger

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit	Mix Size	Unit
1	CHECK													
2	BAS 92102I	200.0	GA/L	SC	13.7	fl oz/a	200.0	g ai/ha	A	SE	100	GAL/AC	5	GALLONS
3	ONAGER -HEXYTHIAZOX	120.0 120.0	GA/L	EC	19.2 19.2	fl oz/a	168.0	g ai/ha	A	SE	100	GAL/AC	5	GALLONS
4	BAS 92102I	200.0	GA/L	SC	27.4	fl oz/a	400.0	g ai/ha	A	SE	100	GAL/AC	5	GALLONS

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 20 feet, Treated plot size Length: 20 feet, Application volume: 100 gal/ac, Mix size: 5 gallons, Format definitions: BASF.DEF, BASF.FRM

(4)

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:	DEV/I/2011/US/G65/D/02.0/US/UCA/SB2 GEP:
Title:	BAS 92100I/EFFICACY & PHYTO-TOXICITY/(NEW FORMULATION)
GEP Guideline:	
Short Trial ID:	I11G65D-UCASB2 Licensee: Phil Munger

Trial Comments

TITLE: BAS 92100I/EFFICACY & PHYTO-TOXICITY/(NEW FORMULATION)

RESULTS:
Pacific Mite Evaluations

The first evaluation 0-DAT on 07/05/11 showed low numbers of Pacific mite adults, averaging.about 1.08 per six leaves at this time (column 1). There were more mite immatures, averaging 4.92 per six leaves (column 2), and eggs, averaging 7.08 per six leaves (column 3). The numbers of predator mites averaged 2.75 per six leaves across the three treatments, with no significant differences between treatments at this time (column 4).

The second evaluation 3-DAT on 07/08/11 showed that both treatments provided statistically significant and equal control of all three stages of Pacific mites when compared to those in the untreated control (UTC) plots, with both treatments eliminating all adults (columns 5-7). Predator mite numbers were statistically the same across all treatments, with the average number in any given treatment lower than at the 0-DAT evaluation, and the overall average down to 1.75 mites per six leaves (column 8).

The third evaluation 7-DAT on 07/12/11 again showed that both treatments provided statistically significant and equal control of all three stages of Pacific mites when compared to those in the UTC plots, with both treatments once again eliminating all adults (columns 9-11). Predator mites were statistically less numerous in the Onager treatment than they were in the UTC plots, while the BAS 92102I treatment resulted in intermediate predator numbers which were not significantly less than those in the UTC plots (column 12).

The fourth evaluation 14-DAT on 07/19/11 again showed that both treatments provided statistically significant and equal control of all three stages of Pacific mites when compared to those in the UTC plots (columns 13-15). Neither treatment reduced the number of predator mites when compared to those in the UTC plots (column 16).

The fifth evaluation 21-DAT on 07/26/11 again showed that both treatments provided statistically significant and equal control of all three stages of Pacific mites when compared to those in the UTC plots, with both treatments once again eliminating all adults (columns 17-19). Neither treatment reduced the number of predator mites when compared to those in the UTC plots (column 20).

The sixth evaluation 28-DAT on 08/02/11 showed again that both treatments provided statistically significant and equal control of all three stages of Pacific mites when compared to those in the UTC plots, with both treatments eliminating all adults, immatures and eggs (columns 21-23). Neither treatment reduced the number of predator mites when compared to those in the UTC plots (column 24).

The seventh and final evaluation 35-DAT on 08/09/11 showed again that both treatments provided statistically significant and equal control of all three stages of Pacific mites when compared to those in the UTC plots, with both treatments eliminating all adults and immatures (columns 25-27). Neither treatment reduced the number of predator mites when compared to those in the UTC plots (column 28).

Phytotoxicity Evaluations

There was no phytotoxicity in any of the treatment plots, including those of the 2x rate of BAS 92102I, at 3-DAT on 07/08/11, 7-DAT on 07/12/11, 14-DAT on 07/19/11, 21-DAT on 07/26/11, 28-DAT on 08/02/11, and 35-DAT on 08/09/11 (columns 29-34).

Trial Complete

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2011/US/G65/D/02.0/US/UCA/SB2          GEP:
Title:          BAS 92100I/EFFICACY & PHYTO-TOXICITY/(NEW FORMULATION)
GEP Guideline:
Short Trial ID: I11G65D-UCASB2              Licensee: Phil Munger
```

GENERAL TRIAL INFORMATION

Originator: PEDIBHOTLA VENKAT Trial Status: 7 FINAL
Researcher: BANGARWA SANJEEV Validated: 14/9/11
Cooperator Data (Y/N)?: Y
Name: DANIEL GALT
Org: HULST RESEARCH FARM SERV.
Street1: 4449 TULLY RD Phone No: 209-883-0464
Fax No: 209-883-0466
Town: HUGHSON
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 95326
Town: HICKMAN Postal: 95323
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA
Latitude, Longitude of Trial Corners:
Coordinate System, Unit: GPS DDD
Lower Left: 37.623834 -120.750196

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: ORC Trial Unit: U
Trt No: 4 Plot Width: 20 Unit: FT
Reps: 4 Plot Length: 20
Plot Size: 400.00 FT2
Factors: 1

ONum	Objectives
1. 12104001	Efficacy and phyto-toxicity data

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To
A	SE	1	As required by infestation	5/7/11	8:30 AM	9:30 AM

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Nozzles Type	Pres Amt	Unit	Carrier Type	Vol	Unit	Mix Size	Unit
1	SP	FPG	HCD-5	100	PSI	H2O	100	GAL/AC	5	GALLONS

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT:				Plant Part	Pest Stage		Infestation			
App	Date	Insect	Description	Biotype	Fr	To	Min	Max	Mode	Deg	Meth
A	1 5/7/11	TETRPA	TETRANYCHUS PACIFICUS								
	2	TYPLOC	METASEIULUS OCCIDENTALIS								

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:	DEV/I/2011/US/G65/D/02.0/US/UCA/SB2 GEP:
Title:	BAS 92100I/EFFICACY & PHYTO-TOXICITY/(NEW FORMULATION)
GEP Guideline:	
Short Trial ID:	I11G65D-UCASB2 Licensee: Phil Munger

Evaluation: No / Date	001 5/7/11	001 5/7/11	001 5/7/11	001 5/7/11	002 8/7/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	SONORA	SONORA	SONORA	SONORA	SONORA
DAT / DALT / DAP	0 0 2011	0 0 2011	0 0 2011	0 0 2011	3 3 2014
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRPA	TETRPA	TETRPA	TYPLOC	TETRPA
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF	PREDATOR #/LEAF	INFEST #/LEAF
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	NF IX B	IX IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	24 TPLOT	24 TPLOT	24 TPLOT	24 TPLOT	24 TPLOT
ARM Action Codes	L05	L05	L05	L05	APC
Decimals Print	1	1	1	1	1
Trt Product Name	1	2	3	4	5
1 CHECK	1.5 a	5.5 a	10.0 a	3.5 a	1.0 a (0.0%)
2 BAS 92102I	0.8 a	4.3 a	5.3 b	2.3 a	0.0 a (100.0%)
3 ONAGER	1.0 a	5.0 a	6.0 b	2.5 a	0.0 a (100.0%)
4 BAS 92102I					
LSD (P=.05)	1.55	1.85	3.64	3.04	0.82
Standard Deviation	0.90	1.07	2.10	1.76	0.47
CV	82.85	21.71	29.67	63.85	141.42
Bartlett's X2	2.276	1.35	1.114	2.448	0.0
P(Bartlett's X2)	0.131	0.509	0.573	0.294	.
Replicate F	0.379	4.951	4.547	0.676	1.000
Replicate Prob(F)	0.7718	0.0461	0.0547	0.5979	0.4547
Treatment F	0.724	1.390	5.906	0.568	6.000
Treatment Prob(F)	0.5227	0.3191	0.0382	0.5946	0.0370

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	002 8/7/11	002 8/7/11	002 8/7/11	003 12/7/11	003 12/7/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	SONORA	SONORA	SONORA	SONORA	SONORA
DAT / DALT / DAP	3 3 2014	3 3 2014	3 3 2014	7 7 2018	7 7 2018
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRPA	TETRPA	TYPLOC	TETRPA	TETRPA
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	INFEST #/LEAF	INFEST #/LEAF	PREDATOR #/LEAF	INFEST #/LEAF	INFEST #/LEAF
Pest GS: From / To / Method	NF NF B	EX EX B	NF IX B	IX IX B	NF NF B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	24 TPLOT	24 TPLOT	24 TPLOT	24 TPLOT	24 TPLOT
ARM Action Codes	APC	APC	L05	APC	APC
Decimals Print	1	1	1	1	1
Trt Product Name	6	7	8	9	10
1 CHECK	4.8 a (0.0%)	6.0 a (0.0%)	2.3 a	2.3 a (0.0%)	6.3 a (0.0%)
2 BAS 92102I	0.3 b (94.7%)	1.8 b (70.8%)	1.0 a	0.0 b (100.0%)	0.3 b (96.0%)
3 ONAGER	0.3 b (94.7%)	1.8 b (70.8%)	2.0 a	0.0 b (100.0%)	0.8 b (88.0%)
4 BAS 92102I					
LSD (P=.05)	1.73	1.71	2.29	0.96	1.41
Standard Deviation	1.00	0.99	1.32	0.55	0.82
CV	57.14	31.14	75.59	73.7	33.79
Bartlett's X2	4.75	1.784	0.105	0.0	1.303
P(Bartlett's X2)	0.093	0.41	0.949	.	0.521
Replicate F	0.750	0.571	2.333	1.000	1.125
Replicate Prob(F)	0.5609	0.6542	0.1735	0.4547	0.4108
Treatment F	27.000	24.771	1.000	22.091	66.500
Treatment Prob(F)	0.0010	0.0013	0.4219	0.0017	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	003 12/7/11	003 12/7/11	004 19/7/11	004 19/7/11	004 19/7/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	SONORA	SONORA	SONORA	SONORA	SONORA
DAT / DALT / DAP	7 7 2018	7 7 2018	14 14 2025	14 14 2025	14 14 2025
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRPA	TYPLOC	TETRPA	TETRPA	TETRPA
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	INFEST #/LEAF	PREDATOR #/LEAF	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF
Pest GS: From / To / Method	EX EX B	NF IX B	IX IX B	NF NF B	EX EX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	24 TPLOT	24 TPLOT	24 TPLOT	24 TPLOT	24 TPLOT
ARM Action Codes	APC	L05	APC	APC	APC
Decimals Print	1	1	1	1	1
Trt Product Name	11	12	13	14	15
1 CHECK	7.8 a (0.0%)	3.5 a	1.8 a (0.0%)	4.8 a (0.0%)	6.3 a (0.0%)
2 BAS 92102I	2.0 b (74.2%)	2.5 a	0.3 b (85.7%)	1.0 b (78.9%)	1.3 b (80.0%)
3 ONAGER	1.0 b (87.1%)	1.5 a	0.0 b (100.0%)	0.3 b (94.7%)	1.5 b (76.0%)
4 BAS 92102I					
LSD (P=.05)	3.40	1.63	0.64	1.55	3.45
Standard Deviation	1.96	0.94	0.37	0.90	1.99
CV	54.84	37.71	55.9	44.88	66.43
Bartlett's X2	4.405	0.834	0.0	3.476	7.016
P(Bartlett's X2)	0.111	0.659	.	0.176	0.03*
Replicate F	1.000	4.375	1.600	3.586	1.063
Replicate Prob(F)	0.4547	0.0590	0.2853	0.0858	0.4319
Treatment F	13.748	4.500	25.800	28.862	7.993
Treatment Prob(F)	0.0057	0.0640	0.0011	0.0008	0.0203

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	004 19/7/11	005 26/7/11	005 26/7/11	005 26/7/11	005 26/7/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	SONORA	SONORA	SONORA	SONORA	SONORA
DAT / DALT / DAP	14 14 2025	21 21 2032	21 21 2032	21 21 2032	21 21 2032
SE: File / Group	1	1	1	1	1
Organism / Biotype	TYPLOC	TETRPA	TETRPA	TETRPA	TYPLOC
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	PREDATOR #/LEAF	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF	PREDATOR #/LEAF
Pest GS: From / To / Method	NF IX B	IX IX B	NF NF B	EX EX B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	24 TPLOT	24 TPLOT	24 TPLOT	24 TPLOT	24 TPLOT
ARM Action Codes	L05	APC	APC	APC	L05
Decimals Print	1	1	1	1	1
Trt Product Name	16	17	18	19	20
1 CHECK	0.5 a	1.3 a (0.0%)	7.0 a (0.0%)	6.3 a (0.0%)	0.5 a
2 BAS 92102I	0.5 a	0.0 b (100.0%)	0.3 b (96.4%)	0.8 b (88.0%)	0.3 a
3 ONAGER	0.3 a	0.0 b (100.0%)	0.3 b (96.4%)	0.3 b (96.0%)	0.3 a
4 BAS 92102I					
LSD (P=.05)	1.12	0.50	2.93	1.91	0.50
Standard Deviation	0.65	0.29	1.69	1.11	0.29
CV	154.92	69.28	67.66	45.75	86.6
Bartlett's X2	0.074	0.0	9.742	2.102	1.936
P(Bartlett's X2)	0.963	.	0.008*	0.35	0.38
Replicate F	0.200	1.000	0.505	0.250	16.000
Replicate Prob(F)	0.8927	0.4547	0.6930	0.8587	0.0029
Treatment F	0.200	25.000	21.233	36.273	1.000
Treatment Prob(F)	0.8240	0.0012	0.0019	0.0004	0.4219

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	006 2/8/11	006 2/8/11	006 2/8/11	006 2/8/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	SONORA	SONORA	SONORA	SONORA
DAT / DALT / DAP	28 28 2039	28 28 2039	28 28 2039	28 28 2039
SE: File / Group	1	1	1	1
Organism / Biotype	TETRPA	TETRPA	TETRPA	TYPLOC
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF	PREDATOR #/LEAF
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	24 TPLOT	24 TPLOT	24 TPLOT	24 TPLOT
ARM Action Codes	APC	APC	APC	L05
Decimals Print	1	1	1	1
Trt Product Name	21	22	23	24
1 CHECK	1.5 a (0.0%)	5.3 a (0.0%)	6.0 a (0.0%)	1.0 a
2 BAS 92102I	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 a
3 ONAGER	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.5 a
4 BAS 92102I				
LSD (P=.05)	0.58	1.26	2.58	1.29
Standard Deviation	0.33	0.73	1.49	0.75
CV	66.67	41.51	74.54	149.07
Bartlett's X2	0.0	0.0	0.0	0.118
P(Bartlett's X2)	.	.	.	0.732
Replicate F	1.000	1.000	1.000	1.000
Replicate Prob(F)	0.4547	0.4547	0.4547	0.4547
Treatment F	27.000	69.632	21.600	1.800
Treatment Prob(F)	0.0010	0.0001	0.0018	0.2441

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:	DEV/I/2011/US/G65/D/02.0/US/UCA/SB4 GEP:
Title:	BAS 92100I/EFFICACY & PHYTO-TOXICITY/(NEW FORMULATION)
GEP Guideline:	
Short Trial ID:	I11G65D-UCASB4 Licensee: Phil Munger

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit
1	CHECK											
2	BAS 92102I	200.0	GA/L	SC	13.7	fl oz/a	200.0	g ai/ha	A	SE	100	GAL/AC
3	ZEAL -ETOXAZOLE	72.0 72.0	%	WP	3.0 3	oz wt/a	151.0	g ai/ha	A	SE	100	GAL/AC
4	BAS 92102I	200.0	GA/L	SC	27.4	fl oz/a	400.0	g ai/ha	A	SE	100	GAL/AC

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 23 feet, Treated plot size Length: 18 feet, Application volume: 100 gal/ac, Mix size: 10 liters, Format definitions: BASF.DEF, BASF.FRM

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2011/US/G65/D/02.0/US/UCA/SB4	GEP:
Title:	BAS 92100I/EFFICACY & PHYTO-TOXICITY/(NEW FORMULATION)	
GEP Guideline:		
Short Trial ID: I11G65D-UCASB4	Licensee: Phil Munger	

Trial Comments

TITLE: BAS 92100I/EFFICACY & PHYTO-TOXICITY/(NEW FORMULATION)

RESULTS: (COOPERATOR COMMENTS)
The data from the evaluations show that the twospotted mite infestation level that occurred at the initiation of the trial within the trial area was at an acceptable low level. The population within the trial untreated plots increased throughout the trial period. The data from the evaluations made throughout the trial show that the BAS92102I treatment provided statistical initial and long term mite efficacy. The trial has been evaluated out to 41 days after application. The BAS92102I treatments, even at the 2X application rate, did not cause any visual crop phytotoxicity.

Trial Complete

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2011/US/G65/D/02.0/US/UCA/SB4          GEP:
Title:          BAS 92100I/EFFICACY & PHYTO-TOXICITY/(NEW FORMULATION)
GEP Guideline:
Short Trial ID: I11G65D-UCASB4              Licensee: Phil Munger
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GENERAL TRIAL INFORMATION

Originator: PEDIBHOTLA VENKAT Trial Status: 7 FINAL
Researcher: BANGARWA SANJEEV Validated: 14/9/11
Cooperator Data (Y/N)?: Y

Name: JAKE J. ZACCARIA
Org: ZACCARIA AG CONSULTING
Street1: 5408 SUMMERWING WAY Phone No: 661-393-4981
Town: BAKERSFIELD
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 93308
Town: WASCO Postal: 93280
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: ORC Trial Unit: U
Trt No: 4 Plot Width: 23 Unit: FT
Reps: 4 Plot Length: 18
Plot Size: 414.00 FT2
Factors: 1

ONum	Objectives
1. 12104001	Efficacy and phyto-toxicity data

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To
A	SE	1	As required by infestation	30/7/11	7:00 AM	8:00 AM

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Carrier Type	Vol	Unit
1	SP	SGZ	H2O	100	GAL/AC

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT: App		Date	Insect	Description	Plant Part Biotype	Pest Stage Fr	To	Infestation Min	Max	Mode	Deg	Meth
A	1	30/7/11	TETRUR	TETRANYCHUS URTICAE								
	2		SCLTSE	SCOLOTHRIPS SEXMACULATUS								
	3		GALNSP	GALENDROMUS SP.								

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:	DEV/I/2011/US/G65/D/02.0/US/UCA/SB4 GEP:
Title:	BAS 92100I/EFFICACY & PHYTO-TOXICITY/(NEW FORMULATION)
GEP Guideline:	
Short Trial ID:	I11G65D-UCASB4 Licensee: Phil Munger

Evaluation: No / Date	001 30/7/11	001 30/7/11	001 30/7/11	001 30/7/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	0 0 939	0 0 939	0 0 939	0 0 939
SE: File / Group	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	EGGS/leaf	ADULT/leaf	NYMPH/leaf	MOTILE/leaf
Pest GS: From / To / Method	EX EX	IX IX	NF IX	NF IX
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	L05	L05	L05	L05
Decimals Print	1	1	1	1
Trt Product Name	1	2	3	4
1 CHECK	2.5 a	2.1 a	1.8 a	3.9 a
2 BAS 92102I	2.5 a	2.1 a	1.8 a	3.9 a
3 ZEAL	2.5 a	2.1 a	1.8 a	3.9 a
4 BAS 92102I	2.5 a	2.1 a	1.8 a	3.9 a
LSD (P=.05)	0.00	0.00	0.00	0.00
Standard Deviation	0.00	0.00	0.00	0.00
CV	0.08	0.06	0.05	0.0
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	1.00	1.00	1.00
Replicate F	2137662.964	1617801.412	7235172.224	0.000
Replicate Prob(F)	0.0001	0.0001	0.0001	1.0000
Treatment F	0.000	0.000	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	001 30/7/11	001 30/7/11	001 30/7/11	002 1/8/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	0 0 939	0 0 939	0 0 939	2 2 941
SE: File / Group	1	1	1	1
Organism / Biotype	SCLTSE	SCLTSE	GALNSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	PHYTOX
Clarifier	BENEFICIALS/LF	BENEFICIALS/LF	BENEFICIALS/LF	CROP INJURY
Pest GS: From / To / Method	IX IX	NF NF	NF IX	
CALC Method	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	1 TPLOT
ARM Action Codes	L05	L05	L05	P
Decimals Print	1	1	1	1
Trt Product Name	5	6	7	8
1 CHECK	0.0 a	0.0 a	0.7 a	0.0 a
2 BAS 92102I	0.0 a	0.0 a	0.7 a	0.0 a
3 ZEAL	0.0 a	0.0 a	0.7 a	0.0 a
4 BAS 92102I	0.0 a	0.0 a	0.7 a	0.0 a
LSD (P=.05)	0.00	0.00	0.00	0.00
Standard Deviation	0.00	0.00	0.00	0.00
CV	0.0	0.0	0.0	0.0
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.
Replicate F	0.000	0.000	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	1.0000	1.0000
Treatment F	0.000	0.000	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	002 1/8/11	002 1/8/11	002 1/8/11	002 1/8/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	2 2 941	2 2 941	2 2 941	2 2 941
SE: File / Group	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	EGGS/leaf	ADULT/leaf	NYMPH/leaf	MOTILE/leaf
Pest GS: From / To / Method	EX EX	IX IX	NF IX	NF IX
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	APC	APC	APC	APC
Decimals Print	1	1	1	1
Trt Product Name	9	10	11	12
1 CHECK	1.8 a (0.0%)	1.3 a (0.0%)	0.8 a (0.0%)	2.1 a (0.0%)
2 BAS 92102I	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
3 ZEAL	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
4 BAS 92102I	0.0 b (100.0%)	0.2 b (82.4%)	0.0 b (100.0%)	0.2 b (89.3%)
LSD (P=.05)	0.20	0.23	0.23	0.38
Standard Deviation	0.12	0.14	0.14	0.24
CV	27.22	37.71	69.63	40.58
Bartlett's X2	0.0	1.139	0.0	3.341
P(Bartlett's X2)	.	0.286	.	0.068
Replicate F	1.000	2.250	1.000	1.719
Replicate Prob(F)	0.4363	0.1517	0.4363	0.2323
Treatment F	216.000	74.250	33.000	74.528
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	002 1/8/11	002 1/8/11	002 1/8/11	003 5/8/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	2 2 941	2 2 941	2 2 941	6 6 945
SE: File / Group	1	1	1	1
Organism / Biotype	SCLTSE	SCLTSE	GALNSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	PHYTOX
Clarifier	BENEFICIALS/LF	BENEFICIALS/LF	BENEFICIALS/LF	CROP INJURY
Pest GS: From / To / Method	IX IX	NF NF	NF IX	
CALC Method	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	1 TPLOT
ARM Action Codes	L05	L05	L05	P
Decimals Print	1	1	1	1
Trt Product Name	13	14	15	16
1 CHECK	0.0 a	0.1 a	0.5 a	0.0 a
2 BAS 92102I	0.0 a	0.0 a	0.0 b	0.0 a
3 ZEAL	0.0 a	0.0 a	0.0 b	0.0 a
4 BAS 92102I	0.0 a	0.0 a	0.0 b	0.0 a
LSD (P=.05)	0.00	0.12	0.31	0.00
Standard Deviation	0.00	0.08	0.19	0.00
CV	0.0	400.0	172.13	0.0
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.
Replicate F	0.000	1.000	1.000	0.000
Replicate Prob(F)	1.0000	0.4363	0.4363	1.0000
Treatment F	0.000	1.000	5.400	0.000
Treatment Prob(F)	1.0000	0.4363	0.0211	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	003 5/8/11	003 5/8/11	003 5/8/11	003 5/8/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	6 6 945	6 6 945	6 6 945	6 6 945
SE: File / Group	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	EGGS/leaf	ADULT/leaf	NYMPH/leaf	MOTILE/leaf
Pest GS: From / To / Method	EX EX	IX IX	NF IX	NF IX
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	APC	APC	APC	APC
Decimals Print	1	1	1	1
Trt Product Name	17	18	19	20
1 CHECK	5.1 a (0.0%)	5.0 a (0.0%)	4.1 a (0.0%)	9.2 a (0.0%)
2 BAS 92102I	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
3 ZEAL	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
4 BAS 92102I	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
LSD (P=.05)	1.44	1.64	1.95	3.33
Standard Deviation	0.90	1.03	1.22	2.08
CV	70.59	81.79	118.39	91.1
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.
Replicate F	1.000	1.000	1.000	1.000
Replicate Prob(F)	0.4363	0.4363	0.4363	0.4363
Treatment F	32.111	23.920	11.415	19.280
Treatment Prob(F)	0.0001	0.0001	0.0020	0.0003

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	003 5/8/11	003 5/8/11	003 5/8/11	004 13/8/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	6 6 945	6 6 945	6 6 945	14 14 953
SE: File / Group	1	1	1	1
Organism / Biotype	SCLTSE	SCLTSE	GALNSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	PHYTOX
Clarifier	BENEFICIALS/LF	BENEFICIALS/LF	BENEFICIALS/LF	CROP INJURY
Pest GS: From / To / Method	IX IX	NF NF	NF IX	
CALC Method	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	1 TPLOT
ARM Action Codes	L05	L05	L05	P
Decimals Print	1	1	1	1
Trt Product Name	21	22	23	24
1 CHECK	0.0 a	0.0 a	0.2 a	0.0 a
2 BAS 92102I	0.0 a	0.0 a	0.0 a	0.0 a
3 ZEAL	0.0 a	0.0 a	0.0 a	0.0 a
4 BAS 92102I	0.0 a	0.0 a	0.0 a	0.0 a
LSD (P=.05)	0.00	0.00	0.23	0.00
Standard Deviation	0.00	0.00	0.14	0.00
CV	0.0	0.0	255.31	0.0
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.
Replicate F	0.000	0.000	1.000	0.000
Replicate Prob(F)	1.0000	1.0000	0.4363	1.0000
Treatment F	0.000	0.000	2.455	0.000
Treatment Prob(F)	1.0000	1.0000	0.1298	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	004 13/8/11	004 13/8/11	004 13/8/11	004 13/8/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	14 14 953	14 14 953	14 14 953	14 14 953
SE: File / Group	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	EGGS/leaf	ADULT/leaf	NYMPH/leaf	MOTILE/leaf
Pest GS: From / To / Method	EX EX	IX IX	NF IX	NF IX
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	APC	APC	APC	APC
Decimals Print	1	1	1	1
Trt Product Name	25	26	27	28
1 CHECK	6.5 a (0.0%)	4.7 a (0.0%)	6.2 a (0.0%)	10.9 a (0.0%)
2 BAS 92102I	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
3 ZEAL	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
4 BAS 92102I	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
LSD (P=.05)	1.69	0.80	0.72	1.39
Standard Deviation	1.06	0.50	0.45	0.87
CV	64.75	42.8	28.78	31.97
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.
Replicate F	1.000	1.000	1.000	1.000
Replicate Prob(F)	0.4363	0.4363	0.4363	0.4363
Treatment F	38.163	87.364	193.150	156.514
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	004 13/8/11	004 13/8/11	004 13/8/11	005 22/8/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	14 14 953	14 14 953	14 14 953	23 23 962
SE: File / Group	1	1	1	1
Organism / Biotype	SCLTSE	SCLTSE	GALNSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	PHYTOX
Clarifier	BENEFICIALS/LF	BENEFICIALS/LF	BENEFICIALS/LF	CROP INJURY
Pest GS: From / To / Method	IX IX	NF NF	NF IX	
CALC Method	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	1 TPLOT
ARM Action Codes	L05	L05	L05	P
Decimals Print	1	1	1	1
Trt Product Name	29	30	31	32
1 CHECK	0.5 a	0.2 a	0.2 a	0.0 a
2 BAS 92102I	0.0 a	0.0 a	0.0 a	0.0 a
3 ZEAL	0.0 a	0.0 a	0.0 a	0.0 a
4 BAS 92102I	0.0 a	0.0 a	0.0 a	0.0 a
LSD (P=.05)	0.46	0.24	0.23	0.00
Standard Deviation	0.29	0.15	0.14	0.00
CV	255.31	400.0	255.31	0.0
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.
Replicate F	1.000	1.000	1.000	0.000
Replicate Prob(F)	0.4363	0.4363	0.4363	1.0000
Treatment F	2.455	1.000	2.455	0.000
Treatment Prob(F)	0.1298	0.4363	0.1298	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	005 22/8/11	005 22/8/11	005 22/8/11	005 22/8/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	23 23 962	23 23 962	23 23 962	23 23 962
SE: File / Group	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	EGGS/leaf	ADULT/leaf	NYMPH/leaf	MOTILE/leaf
Pest GS: From / To / Method	EX EX	IX IX	NF IX	NF IX
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	APC	APC	APC	APC
Decimals Print	1	1	1	1
Trt Product Name	33	34	35	36
1 CHECK	3.0 a (0.0%)	3.9 a (0.0%)	3.8 a (0.0%)	5.3 a (0.0%)
2 BAS 92102I	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
3 ZEAL	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
4 BAS 92102I	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
LSD (P=.05)	1.04	0.48	1.11	2.39
Standard Deviation	0.65	0.30	0.70	1.49
CV	86.41	30.77	72.88	112.06
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.
Replicate F	1.000	1.000	1.000	1.000
Replicate Prob(F)	0.4363	0.4363	0.4363	0.4363
Treatment F	21.429	169.001	30.127	12.741
Treatment Prob(F)	0.0002	0.0001	0.0001	0.0014

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	005 22/8/11	005 22/8/11	005 22/8/11	006 31/8/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	23 23 962	23 23 962	23 23 962	32 32 971
SE: File / Group	1	1	1	1
Organism / Biotype	SCLTSE	SCLTSE	GALNSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	PHYTOX
Clarifier	BENEFICIALS/LF	BENEFICIALS/LF	BENEFICIALS/LF	CROP INJURY
Pest GS: From / To / Method	IX IX	NF NF	NF IX	
CALC Method	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	1 TPLOT
ARM Action Codes	L05	L05	L05	P
Decimals Print	1	1	1	1
Trt Product Name	37	38	39	40
1 CHECK	0.0 a	0.0 a	0.2 a	0.0 a
2 BAS 92102I	0.0 a	0.0 a	0.0 a	0.0 a
3 ZEAL	0.0 a	0.0 a	0.0 a	0.0 a
4 BAS 92102I	0.0 a	0.0 a	0.0 a	0.0 a
LSD (P=.05)	0.00	0.00	0.14	0.00
Standard Deviation	0.00	0.00	0.09	0.00
CV	0.0	0.0	230.94	0.0
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.
Replicate F	0.000	0.000	1.000	0.000
Replicate Prob(F)	1.0000	1.0000	0.4363	1.0000
Treatment F	0.000	0.000	3.000	0.000
Treatment Prob(F)	1.0000	1.0000	0.0877	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	006 31/8/11	006 31/8/11	006 31/8/11	006 31/8/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	32 32 971	32 32 971	32 32 971	32 32 971
SE: File / Group	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	EGGS/leaf	ADULT/leaf	NYMPH/leaf	MOTILE/leaf
Pest GS: From / To / Method	EX EX	IX IX	NF IX	NF IX
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	APC	APC	APC	APC
Decimals Print	1	1	1	1
Trt Product Name	41	42	43	44
1 CHECK	2.4 a (0.0%)	2.5 a (0.0%)	2.9 a (0.0%)	5.3 a (0.0%)
2 BAS 92102I	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
3 ZEAL	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
4 BAS 92102I	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
LSD (P=.05)	0.34	1.28	1.20	2.39
Standard Deviation	0.21	0.80	0.75	1.49
CV	35.36	128.85	105.26	112.06
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.
Replicate F	1.000	1.000	1.000	1.000
Replicate Prob(F)	0.4363	0.4363	0.4363	0.4363
Treatment F	128.000	9.637	14.440	12.741
Treatment Prob(F)	0.0001	0.0036	0.0009	0.0014

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	006 31/8/11	006 31/8/11	006 31/8/11	007 9/9/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	32 32 971	32 32 971	32 32 971	41 41 980
SE: File / Group	1	1	1	1
Organism / Biotype	SCLTSE	SCLTSE	GALNSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	PHYTOX
Clarifier	BENEFICIALS/LF	BENEFICIALS/LF	BENEFICIALS/LF	CROP INJURY
Pest GS: From / To / Method	IX IX	NF NF	NF IX	
CALC Method	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	1 TPLOT
ARM Action Codes	L05	L05	L05	P
Decimals Print	1	1	1	1
Trt Product Name	45	46	47	48
1 CHECK	0.0 a	0.2 a	0.0 a	0.0 a
2 BAS 92102I	0.0 a	0.0 b	0.0 a	0.0 a
3 ZEAL	0.0 a	0.0 b	0.0 a	0.0 a
4 BAS 92102I	0.0 a	0.0 b	0.0 a	0.0 a
LSD (P=.05)	0.00	0.12	0.00	0.00
Standard Deviation	0.00	0.08	0.00	0.00
CV	0.0	133.33	0.0	0.0
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.
Replicate F	0.000	1.000	0.000	0.000
Replicate Prob(F)	1.0000	0.4363	1.0000	1.0000
Treatment F	0.000	9.000	0.000	0.000
Treatment Prob(F)	1.0000	0.0045	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	007 9/9/11	007 9/9/11	007 9/9/11	007 9/9/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	41 41 980	41 41 980	41 41 980	41 41 980
SE: File / Group	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	EGGS/leaf	ADULT/leaf	NYMPH/leaf	MOTILE/leaf
Pest GS: From / To / Method	EX EX	IX IX	NF IX	NF IX
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	APC	APC	APC	APC
Decimals Print	1	1	1	1
Trt Product Name	49	50	51	52
1 CHECK	1.0 a (0.0%)	1.1 a (0.0%)	2.9 a (0.0%)	4.0 a (0.0%)
2 BAS 92102I	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
3 ZEAL	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
4 BAS 92102I	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)	0.0 b (100.0%)
LSD (P=.05)	0.60	0.41	0.93	0.99
Standard Deviation	0.37	0.26	0.58	0.62
CV	153.85	91.08	81.54	62.08
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.
Replicate F	1.000	1.000	1.000	1.000
Replicate Prob(F)	0.4363	0.4363	0.4363	0.4363
Treatment F	6.760	19.286	24.067	41.512
Treatment Prob(F)	0.0111	0.0003	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	007 9/9/11	007 9/9/11	007 9/9/11
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	41 41 980	41 41 980	41 41 980
SE: File / Group	1	1	1
Organism / Biotype	SCLTSE	SCLTSE	GALNSP
Rating Type	INFECT	INFECT	INFECT
Clarifier	BENEFICIALS/LF	BENEFICIALS/LF	BENEFICIALS/LF
Pest GS: From / To / Method	IX IX	NF NF	NF IX
CALC Method	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	L05	L05	L05
Decimals Print	1	1	1
Trt Product Name	53	54	55
1 CHECK	0.0 a	0.3 a	0.0 a
2 BAS 92102I	0.0 a	0.0 b	0.0 a
3 ZEAL	0.0 a	0.0 b	0.0 a
4 BAS 92102I	0.0 a	0.0 b	0.0 a
LSD (P=.05)	0.00	0.20	0.00
Standard Deviation	0.00	0.12	0.00
CV	0.0	163.3	0.0
Bartlett's X2	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.
Replicate F	0.000	1.000	0.000
Replicate Prob(F)	1.0000	0.4363	1.0000
Treatment F	0.000	6.000	0.000
Treatment Prob(F)	1.0000	0.0157	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2010/US/G65/A/01.0/US/UCA/PM1          GEP:
Title:          BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES
GEP Guideline: CONFIDENTIAL
Short Trial ID: I10G65A-UCAPM1              Licensee: Phil Munger
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Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit
1	CHECK											
3	BAS 92100I -CYFLUMETOFEN	212.0 212.0	GA/L	SC	13.7 14.522	fl oz/a	212.0	g ai/ha	AB	01	100	GAL/AC
4	ACRAMITE 50 WS -BIFENAZATE	50.0 50.0	%	WP	16.0 16	oz wt/a	560.0	g ai/ha	AB	01	100	GAL/AC

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 20 feet, Treated plot size Length: 20 feet, Application volume: 100 gal/ac, Format definitions: BASF.DEF, BASF.FRM

E6

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:	DEV/I/2010/US/G65/A/01.0/US/UCA/PM1 GEP:
Title:	BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES
GEP Guideline:	CONFIDENTIAL
Short Trial ID:	I10G65A-UCAPM1 Licensee: Phil Munger

Trial Comments

TITLE: BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES

RESULTS:BAS 9210I at 13.7 Oz provided excellent control of Pacific Spider Mite

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2010/US/G65/A/01.0/US/UCA/PM1          GEP:
Title:          BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES
GEP Guideline: CONFIDENTIAL
Short Trial ID: I10G65A-UCAPM1              Licensee: Phil Munger
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GENERAL TRIAL INFORMATION

Originator: MENON ANIL Trial Status: 5 ACTIVE
Researcher: MUNGER PHILIP Validated: 17/10/11
Cooperator Data (Y/N)?: Y
Name: BOB WESTBROOK
Org: BIO RESEARCH
Street1: 1738 N FOWLER Phone No: 559-455-5660
Fax No: 559-455-5661
Town: FRESNO Email: dan.forey@bio-research.net
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 93727
Location: BIORESEARCH FARM
Town: FRESNO Postal: 93727
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: ORC Trial Unit: U
Trt No: 4 Plot Width: 20 Unit: FT
Reps: 4 Plot Length: 20
Plot Size: 400.00 FT2
Factors: 1

	ONum	Objectives
1.	12104001	Efficacy trials on Mite species on Almonds and Walnuts

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date
A	01	1	1st appl when pest reaches locally recommended threshold	9/8/10
B	SE	1	If required by infestation	

SPRAYER SETUPS

Set No	App Met	Carrier Type	Vol	Unit
1	SP	H2O	100	GAL/AC

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT: Plant Part Pest Stage Infestation

App		Date	Insect	Description	Biotype	Fr	To	Min	Max	Mode	Deg	Meth
A	1	9/8/10	TETRPA	TETRANYCHUS PACIFICUS								
B	1		TETRPA	TETRANYCHUS PACIFICUS								

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2010/US/G65/A/01.0/US/UCA/PM1	GEP:
Title:	BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I10G65A-UCAPM1	Licensee: Phil Munger

Evaluation: No / Date	001 9/8/10	001 9/8/10	001 9/8/10	002 16/8/10	002 16/8/10	002 16/8/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
DAT / DALT / DAP	0 0	0 0	0 0	7 7	7 7	7 7
SE: File / Group	1	1	1	1	1	1
Organism / Biotype	TETRPA	TETRPA	TETRPA	TETRPA	TETRPA	TETRPA
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	# of eggs	# of immatures	# adults	# of eggs	# of immatures	# adults
Pest GS: From / To / Method	EX EX B	NF NF B	IX IX B	EX EX B	NF NF B	IX IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	L05	L05	L05	L05	L05	L05
Decimals Print	2	2	2	2	2	2
Trt Product Name	1	2	3	4	5	6
1 CHECK	49.50 a	18.50 a	18.00 a	44.00 a	50.50 a	53.50 a
3 BAS 92100I	23.25 a	11.00 a	10.00 a	6.75 b	8.00 b	9.25 b
4 ACRAMITE 50 WS	48.75 a	15.25 a	12.75 a	2.00 b	2.75 b	2.00 b
LSD (P=.05)	33.751	22.928	21.532	22.683	25.653	21.949
Standard Deviation	19.506	13.251	12.444	13.110	14.826	12.685
CV	48.16	88.83	91.61	74.56	72.62	58.77
Bartlett's X2	6.116	4.508	2.567	18.024	13.228	15.352
P(Bartlett's X2)	0.047*	0.105	0.277	0.001*	0.001*	0.001*
Replicate F	3.618	1.086	1.855	0.798	0.387	0.539
Replicate Prob(F)	0.0844	0.4238	0.2381	0.5383	0.7670	0.6728
Treatment F	2.348	0.322	0.427	12.313	12.477	19.318
Treatment Prob(F)	0.1765	0.7363	0.6710	0.0075	0.0073	0.0024

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2010/US/G65/A/01.0/US/UCA/PM3          GEP:
Title:          BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES
GEP Guideline: CONFIDENTIAL
Short Trial ID: I10G65A-UCAPM3                Licensee: Phil Munger
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Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit	Mix Size	Unit
1	CHECK													
4	BAS 92100I -CYFLUMETOFEN	212.0 212.0	GA/L	SC	13.7 14.522	fl oz/a	212.0	g ai/ha	A	01	64	GAL/AC	8	L
6	ACRAMITE 50 WS -BIFENAZATE	50.0 50.0	%	WP	1.0 1	lb/a	560.0	g ai/ha	A	01	64	GAL/AC	8	L

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 20 feet, Treated plot size Length: 18 feet, Application volume: 64 gal/ac, Mix size: 8 liters, Format definitions: BASF.DEF, BASF.FRM

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2010/US/G65/A/01.0/US/UCA/PM3	GEP:
Title:	BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I10G65A-UCAPM3	Licensee: Phil Munger

Trial Comments

TITLE: BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES

RESULTS: (COOPERATOR COMMENTS)

This trial was conducted at the Rivara almond orchard between Escalon and Stockton, CA on Butte/Padre variety of almonds. The application and evaluations were performed following the protocol provided. No phytotoxicity was observed at anytime during the trial.

The application was made at the initial stages of the mite population when motile Two Spotted Mites averaged between 3 and 4 mites per leaf and 6 eggs per leaf. One week after application the population had increased to 5.4 motile mites per leaf in the untreated and all treatments significantly controlled the population and were statistically equal to each other. The lowest rate of BAS 921 had more motile Two Spot Mites than the higher rates.

Two weeks after application the average motile mites per leaf had decreased somewhat and all treatments were providing excellent control. The number of eggs per leaf also decreased at this evaluation.

Three weeks after application the mite counts in the untreated control remained constant and predator mite activity increased significantly. All treatments provided statistically significant control compared to the untreated on this date.

Four weeks after application the untreated control population had decreased to the point that further mite evaluations were discontinued.

Trial Complete.

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2010/US/G65/A/01.0/US/UCA/PM3          GEP:
Title:          BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES
GEP Guideline: CONFIDENTIAL
Short Trial ID: I10G65A-UCAPM3              Licensee: Phil Munger
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GENERAL TRIAL INFORMATION

Originator: MENON ANIL Trial Status: 7 FINAL
Researcher: MUNGER PHILIP Validated: 7/10/10
Cooperator Data (Y/N)?: Y
Name: BROOKS BAUER
Org: TWO BEES AG RESEARCH
Street1: 20592 AYERS AVE. Phone No: (209) 838-0606
Fax No: (209) 838-3639
Town: ESCALON Email: BBAUER@TWOBEESAG.COM
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 95320
Location: RIVARA FARMS
Town: ESCALON Postal: 95320
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: ORC Trial Unit: U
Trt No: 6 Plot Width: 20 Unit: FT
Reps: 4 Plot Length: 18
Plot Size: 360.00 FT2
Factors: 1

ONum	Objectives
1. 12104001	Efficacy trials on Mite species on Almonds and Walnuts

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To
A	01	1	1st appl when pest reaches locally recommended threshold	12/8/10	7:10 AM	8:10 AM

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Speed	Unit	Pres Amt	Unit	Carrier Type	Vol	Unit	Mix Size	Unit
1	SP	SGZ	1	MILE/H	10	PSI	H2O	64	GAL/AC	8	L

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT: App		Date	Insect	Description	Plant Part Biotype	Pest Stage Fr	To	Infestation Min	Max	Mode	Deg	Meth
A	1	12/8/10	TETRPA	TETRANYCHUS PACIFICUS						EX	IX	NF
	2		METSSP	METASEIULUS SP.				NF	IX	NF		

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:	DEV/I/2010/US/G65/A/01.0/US/UCA/PM3 GEP:
Title:	BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES
GEP Guideline:	CONFIDENTIAL
Short Trial ID:	I10G65A-UCAPM3 Licensee: Phil Munger

Evaluation: No / Date	001 9/8/10	001 9/8/10	001 9/8/10	001 9/8/10	001 9/8/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE
DAT / DALT / DAP	-3 -3 951	-3 -3 951	-3 -3 951	-3 -3 951	-3 -3 951
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRPA	TETRPA	TETRPA	TETRPA	METSSP
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	INFES ADULTS/LF	INFESNYMPHS/LF	INFES MOTILE/LF	INFES EGGS/LF	INFES MOTILE/LF
Pest GS: From / To / Method	IX IX B	NF NF B	NF IX B	EX EX B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	25 TPLOT	25 TPLOT	25 TPLOT	25 TPLOT	25 TPLOT
ARM Action Codes	L05	L05	L05	L05	L05
Decimals Print	1	1	1	1	1
Trt Product Name	1	2	3	4	5
1 CHECK	0.2 a	3.5 a	3.7 a	6.0 a	0.0 a
4 BAS 92100I	0.2 a	3.5 a	3.7 a	6.0 a	0.0 a
6 ACRAMITE 50 WS	0.2 a	3.5 a	3.7 a	6.0 a	0.0 a
LSD (P=.05)	0.00	0.00	0.00	0.00	0.00
Standard Deviation	0.00	0.00	0.00	0.00	0.00
CV	0.06	0.0	0.06	0.0	0.0
Bartlett's X2	0.0	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.	.
Replicate F	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	001 9/8/10	002 20/8/10	002 20/8/10	002 20/8/10	002 20/8/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE
DAT / DALT / DAP	-3 -3 951	8 8 962	8 8 962	8 8 962	8 8 962
SE: File / Group	1	1	1	1	1
Organism / Biotype	NNNNN	TETRPA	TETRPA	TETRPA	TETRPA
Rating Type	PHYTOX	INFECT	INFECT	INFECT	INFECT
Clarifier	CROP INJURY	INFES ADULTS/LF	INFESNYMPHS/LF	INFES MOTILE/LF	INFES EGGS/LF
Pest GS: From / To / Method		IX IX B	NF NF B	NF IX B	EX EX B
CALC Method	P%EST	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	%	#	#	#	#
Part Rated	PX TOTAL PLANT	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	1 TPLOT	25 TPLOT	25 TPLOT	25 TPLOT	25 TPLOT
ARM Action Codes	P	APC	APC	APC	APC
Decimals Print	1	1	1	1	1
Trt Product Name	6	7	8	9	10
1 CHECK	0.0 a	2.4 a (0.0%)	3.0 a (0.0%)	5.4 a (0.0%)	0.6 a (0.0%)
4 BAS 92100I	0.0 a	0.0 b (100.0%)	0.6 b (80.0%)	0.6 b (88.9%)	0.0 a (100.0%)
6 ACRAMITE 50 WS	0.0 a	0.0 b (100.0%)	1.2 ab (60.0%)	1.2 b (77.8%)	0.0 a (100.0%)
LSD (P=.05)	0.00	0.00	1.83	1.83	1.20
Standard Deviation	0.00	0.00	1.06	1.06	0.69
CV	0.0	0.0	66.14	44.1	346.41
Bartlett's X2	0.0	0.0	0.078	0.078	0.0
P(Bartlett's X2)	.	.	0.962	0.962	.
Replicate F	0.000	0.000	2.286	2.286	1.000
Replicate Prob(F)	1.0000	1.0000	0.1788	0.1788	0.4547
Treatment F	0.000	0.000	5.571	24.429	1.000
Treatment Prob(F)	1.0000	1.0000	0.0429	0.0013	0.4219

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	002 20/8/10	002 20/8/10	003 26/8/10	003 26/8/10	003 26/8/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE
DAT / DALT / DAP	8 8 962	8 8 962	14 14 968	14 14 968	14 14 968
SE: File / Group	1	1	1	1	1
Organism / Biotype	METSSP	NNNNN	TETRPA	TETRPA	TETRPA
Rating Type	INFECT	PHYTOX	INFECT	INFECT	INFECT
Clarifier	INFES MOTILE/LF	CROP INJURY	INFES ADULTS/LF	INFESNYMPHS/LF	INFES MOTILE/LF
Pest GS: From / To / Method	NF IX B		IX IX B	NF NF B	NF IX B
CALC Method	TCOUNT	P%EST	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	%	#	#	#
Part Rated	BX LEAF	PX TOTAL PLANT	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	25 TPLOT	1 TPLOT	25 TPLOT	25 TPLOT	25 TPLOT
ARM Action Codes	L05	P	APC	APC	APC
Decimals Print	1	1	1	1	1
Trt Product Name	11	12	13	14	15
1 CHECK	2.4 a	0.0 a	1.8 a (0.0%)	1.8 a (0.0%)	3.6 a (0.0%)
4 BAS 92100I	0.6 a	0.0 a	0.0 a (100.0%)	0.0 a (100.0%)	0.0 a (100.0%)
6 ACRAMITE 50 WS	0.0 a	0.0 a	0.6 a (66.7%)	0.6 a (66.7%)	1.2 a (66.7%)
LSD (P=.05)	2.30	0.00	2.08	2.08	4.15
Standard Deviation	1.33	0.00	1.20	1.20	2.40
CV	132.67	0.0	150.0	150.0	150.0
Bartlett's X2	0.658	0.0	0.0	0.0	0.0
P(Bartlett's X2)	0.417	.	1.00	1.00	1.00
Replicate F	1.000	0.000	0.000	0.000	0.000
Replicate Prob(F)	0.4547	1.0000	1.0000	1.0000	1.0000
Treatment F	3.545	0.000	2.333	2.333	2.333
Treatment Prob(F)	0.0963	1.0000	0.1780	0.1780	0.1780

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	003 26/8/10	003 26/8/10	003 26/8/10	004 3/9/10	004 3/9/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE
DAT / DALT / DAP	14 14 968	14 14 968	14 14 968	22 22 976	22 22 976
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRPA	METSSP	NNNNN	TETRPA	TETRPA
Rating Type	INFECT	INFECT	PHYTOX	INFECT	INFECT
Clarifier	INFES EGGS/LF	INFES MOTILE/LF	CROP INJURY	INFES ADULTS/LF	INFESNYMPHS/LF
Pest GS: From / To / Method	EX EX B	NF IX B		IX IX B	NF NF B
CALC Method	TCOUNT	TCOUNT	P%EST	TCOUNT	TCOUNT
Rating Unit	#	#	%	#	#
Part Rated	BX LEAF	BX LEAF	PX TOTAL PLANT	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	25 TPLOT	25 TPLOT	1 TPLOT	25 TPLOT	25 TPLOT
ARM Action Codes	APC	L05	P	APC	APC
Decimals Print	1	1	1	1	1
Trt Product Name	16	17	18	19	20
1 CHECK	0.6 a (0.0%)	0.0 a	1.5 a	2.1 a (0.0%)	1.2 a (0.0%)
4 BAS 92100I	0.0 a (100.0%)	0.0 a	0.6 a	0.0 a (100.0%)	0.6 a (50.0%)
6 ACRAMITE 50 WS	0.0 a (100.0%)	0.0 a	0.0 a	0.0 a (100.0%)	0.0 a (100.0%)
LSD (P=.05)	1.20	0.00	1.73	2.05	2.08
Standard Deviation	0.69	0.00	1.00	1.18	1.20
CV	346.41	0.0	142.86	169.03	200.0
Bartlett's X2	0.0	0.0	0.005	0.0	0.059
P(Bartlett's X2)	.	.	0.942	.	0.809
Replicate F	1.000	0.000	0.760	1.000	0.333
Replicate Prob(F)	0.4547	1.0000	0.5562	0.4547	0.8022
Treatment F	1.000	0.000	2.280	4.200	1.000
Treatment Prob(F)	0.4219	1.0000	0.1834	0.0723	0.4219

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	004 3/9/10	004 3/9/10	004 3/9/10	004 3/9/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE	BUTTE/PADRE
DAT / DALT / DAP	22 22 976	22 22 976	22 22 976	22 22 976
SE: File / Group	1	1	1	1
Organism / Biotype	TETRPA	TETRPA	METSSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFES MOTILE/LF	INFES EGGS/LF	INFES MOTILE/LF	CROP INJURY
Pest GS: From / To / Method	NF IX B	EX EX B	NF IX B	
CALC Method	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	25 TPLOT	25 TPLOT	25 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	L05	P
Decimals Print	1	1	1	1
Trt Product Name	21	22	23	24
1 CHECK	3.3 a (0.0%)	3.6 a (0.0%)	2.3 a	0.0 a
4 BAS 92100I	0.6 a (81.8%)	0.0 a (100.0%)	0.6 a	0.0 a
6 ACRAMITE 50 WS	0.0 a (100.0%)	0.0 a (100.0%)	0.6 a	0.0 a
LSD (P=.05)	3.34	4.15	1.77	0.00
Standard Deviation	1.93	2.40	1.02	0.00
CV	148.36	200.0	89.1	0.0
Bartlett's X2	2.112	0.0	2.699	0.0
P(Bartlett's X2)	0.146	.	0.259	.
Replicate F	0.806	1.000	3.514	0.000
Replicate Prob(F)	0.5346	0.4547	0.0889	1.0000
Treatment F	3.323	3.000	3.457	0.000
Treatment Prob(F)	0.1068	0.1250	0.1003	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2010/US/G65/A/01.0/US/UCA/PM4          GEP:
Title:          BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES
GEP Guideline: CONFIDENTIAL
Short Trial ID: I10G65A-UCAPM4                Licensee: Phil Munger
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Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit	Mix Size	Unit
1	CHECK													
4	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	44	GAL/AC	6	L
	-CYFLUMETOFEN	212.0			14.522									
6	ACRAMITE 50 WS	50.0	%	WP	1.0	lb/a	560.0	g ai/ha	A	01	44	GAL/AC	6	L
	-BIFENAZATE	50.0			1									
	BREAK-THRU	100.0	%	TK	4.0	fl oz/100 gal	4.0	fl oz/100 gal	A	01	44	GAL/AC	6	L
	-BREAK-THRU	100.0			4									

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 20 feet, Treated plot size Length: 20 feet, Application volume: 44 gal/ac, Mix size: 6 liters, Format definitions: BASF.DEF, BASF.FRM

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2010/US/G65/A/01.0/US/UCA/PM4	GEP:
Title:	BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I10G65A-UCAPM4	Licensee: Phil Munger

Trial Comments

TITLE: BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES

RESULTS: (COOPERATOR COMMENTS)

This trial was conducted at the Davis walnut orchard near Escalon, CA on 2nd leaf Chandler variety of walnuts. The application and evaluations were performed following the protocol provided. No phytotoxicity was observed at any time during the trial.

The trial was initiated on a rapidly building population of Two Spotted Mites on August 3rd. Beginning at four days after application BAS 921 treatment substantially reduced the Two Spot motile mite counts. Acramite hadfewer mites than the untreated at this date but considerably more than any of the BAS 921 treatments.

Seven days after application BAS 921 treatment had significantly fewer motile mites than the untreated and the Acramite treatments. The Acramite treatment at this date did not separate from the untreated.

Fourteen days after application all treatments separated significantly from the untreated and were equal to each other. The Acramite treatment had more motile mites than any of the BAS 921 treatments.

Twenty one days after application the untreated population began to become less consistent but still had more motile mites than any of the treatments. The same result was recorded for the twenty eight post application evaluation.

Thirty five days after application the untreated counts had become erratic as the untreated population began to "crash". Still, all treatments had fewer mites than the untreated. Further evaluations were discontinued after this final rating.

Trial Complete.

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2010/US/G65/A/01.0/US/UCA/PM4          GEP:
Title:          BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES
GEP Guideline: CONFIDENTIAL
Short Trial ID: I10G65A-UCAPM4              Licensee: Phil Munger
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GENERAL TRIAL INFORMATION

Originator: MENON ANIL Trial Status: 7 FINAL
Researcher: MUNGER PHILIP Validated: 9/10/10
Cooperator Data (Y/N)?: Y
Name: BROOKS BAUER
Org: TWO BEES AG RESEARCH
Street1: 20592 AYERS AVE. Phone No: (209) 838-0606
Fax No: (209) 838-3639
Town: ESCALON Email: BBAUER@TWOBEESAG.COM
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 95320
Location: DAVIS WALNUTS
Town: ESCALON Postal: 95320
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: ORC Trial Unit: U
Trt No: 6 Plot Width: 20 Unit: FT
Reps: 4 Plot Length: 20
Plot Size: 400.00 FT2
Factors: 1

ONum	Objectives
1. 12104001	Efficacy trials on Mite species on Almonds and Walnuts

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To
A	01	1	1st appl when pest reaches locally recommended threshold	5/8/10	6:45 AM	8:00 AM

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Speed	Unit	Pres Amt	Unit	Carrier Type	Vol	Unit	Mix Size	Unit
1	SP	SGZ	1	MILE/H	10	PSI	H2O	44	GAL/AC	6	L

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT: App		Date	Insect	Description	Plant Part Biotype	Pest Stage Fr	To	Infestation Min	Max	Mode	Deg	Meth
A	1	5/8/10	TETRPA	TETRANYCHUS PACIFICUS						EX	IX	NF
	2		METSSP	METASEIULUS SP.						NF	IX	NF

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2010/US/G65/A/01.0/US/UCA/PM4	GEP:
Title:	BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I10G65A-UCAPM4	Licensee: Phil Munger

Evaluation: No / Date	001 3/8/10	001 3/8/10	001 3/8/10	001 3/8/10	001 3/8/10
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	CHANDLER	CHANDLER	CHANDLER	CHANDLER	CHANDLER
DAT / DALT / DAP	-2 -2 579	-2 -2 579	-2 -2 579	-2 -2 579	-2 -2 579
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRPA	TETRPA	TETRPA	TETRPA	METSSP
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	INFES ADULTS/LF	INFESNYMPHS/LF	INFES MOTILE/LF	INFES EGGS/LF	INFES MOTILE/LF
Pest GS: From / To / Method	IX IX B	NF NF B	NF IX B	EX EX B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	25 TPLOT	25 TPLOT	25 TPLOT	25 TPLOT	25 TPLOT
ARM Action Codes	L05	L05	L05	L05	L05
Decimals Print	1	1	1	1	1
Trt Product Name	1	2	3	4	5
1 CHECK	7.0 a	19.0 a	26.0 a	14.0 a	0.0 a
4 BAS 92100I	7.0 a	19.0 a	26.0 a	14.0 a	0.0 a
6 ACRAMITE 50 WS BREAK-THRU	7.0 a	19.0 a	26.0 a	14.0 a	0.0 a
LSD (P=.05)	0.00	0.00	0.00	0.00	0.00
Standard Deviation	0.00	0.00	0.00	0.00	0.00
CV	0.0	0.0	0.0	0.0	0.0
Bartlett's X2	0.0	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.	.
Replicate F	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	001 3/8/10	002 9/8/10	002 9/8/10	002 9/8/10	002 9/8/10
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	CHANDLER	CHANDLER	CHANDLER	CHANDLER	CHANDLER
DAT / DALT / DAP	-2 -2 579	4 4 585	4 4 585	4 4 585	4 4 585
SE: File / Group	1	1	1	1	1
Organism / Biotype	NNNNN	TETRPA	TETRPA	TETRPA	TETRPA
Rating Type	PHYTOX	INFECT	INFECT	INFECT	INFECT
Clarifier	CROP INJURY	INFES ADULTS/LF	INFESNYMPHS/LF	INFES MOTILE/LF	INFES EGGS/LF
Pest GS: From / To / Method		IX IX B	NF NF B	NF IX B	EX EX B
CALC Method	P%EST	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	%	#	#	#	#
Part Rated	PX TOTAL PLANT	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	1 TPLOT	25 TPLOT	25 TPLOT	25 TPLOT	25 TPLOT
ARM Action Codes	P	PAC	APC	APC	APC
Decimals Print	1	1	1	1	1
Trt Product Name	6	7	8	9	10
1 CHECK	0.0 a	11.0 a	6.0 a (0.0%)	17.0 a (0.0%)	6.0 a (0.0%)
4 BAS 92100I	0.0 a	1.2 b	1.2 a (80.0%)	2.4 a (85.9%)	1.2 a (80.0%)
6 ACRAMITE 50 WS BREAK-THRU	0.0 a	2.4 b	9.0 a (-50.0%)	11.4 a (32.9%)	7.2 a (-20.0%)
LSD (P=.05)	0.00	5.06	11.48	16.01	15.84
Standard Deviation	0.00	2.92	6.63	9.25	9.16
CV	0.0	60.09	122.84	90.1	190.76
Bartlett's X2	0.0	6.648	11.85	14.497	7.225
P(Bartlett's X2)	.	0.036*	0.003*	0.001*	0.027*
Replicate F	0.000	1.075	1.349	1.294	0.931
Replicate Prob(F)	1.0000	0.4277	0.3444	0.3595	0.4813
Treatment F	0.000	13.366	1.407	2.536	0.481
Treatment Prob(F)	1.0000	0.0062	0.3154	0.1591	0.6402

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	002 9/8/10	002 9/8/10	003 12/8/10	003 12/8/10	003 12/8/10
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	CHANDLER	CHANDLER	CHANDLER	CHANDLER	CHANDLER
DAT / DALT / DAP	4 4 585	4 4 585	7 7 588	7 7 588	7 7 588
SE: File / Group	1	1	1	1	1
Organism / Biotype	METSSP	NNNNN	TETRPA	TETRPA	TETRPA
Rating Type	INFECT	PHYTOX	INFECT	INFECT	INFECT
Clarifier	INFES MOTILE/LF	CROP INJURY	INFES ADULTS/LF	INFESNYMPHS/LF	INFES MOTILE/LF
Pest GS: From / To / Method	NF IX B		IX IX B	NF NF B	NF IX B
CALC Method	TCOUNT	P%EST	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	%	#	#	#
Part Rated	BX LEAF	PX TOTAL PLANT	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	25 TPLOT	1 TPLOT	25 TPLOT	25 TPLOT	25 TPLOT
ARM Action Codes	L05	P	APC	APC	APC
Decimals Print	1	1	1	1	1
Trt Product Name	11	12	13	14	15
1 CHECK	0.0 a	0.0 a	12.6 a (0.0%)	13.8 a (0.0%)	26.4 a (0.0%)
4 BAS 92100I	0.0 a	0.0 a	3.6 a (71.4%)	2.4 a (82.5%)	6.0 a (77.2%)
6 ACRAMITE 50 WS BREAK-THRU	0.0 a	0.0 a	5.4 a (57.1%)	7.2 a (47.6%)	12.6 a (52.2%)
LSD (P=.05)	0.00	0.00	7.29	10.93	17.82
Standard Deviation	0.00	0.00	4.21	6.32	10.30
CV	0.0	0.0	58.53	81.18	68.75
Bartlett's X2	0.0	0.0	3.713	7.092	7.031
P(Bartlett's X2)	.	.	0.156	0.029*	0.03*
Replicate F	0.000	0.000	0.811	1.681	1.310
Replicate Prob(F)	1.0000	1.0000	0.5326	0.2690	0.3548
Treatment F	0.000	0.000	5.108	3.252	4.064
Treatment Prob(F)	1.0000	1.0000	0.0507	0.1105	0.0766

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	003 12/8/10	003 12/8/10	003 12/8/10	004 19/8/10	004 19/8/10
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	CHANDLER	CHANDLER	CHANDLER	CHANDLER	CHANDLER
DAT / DALT / DAP	7 7 588	7 7 588	7 7 588	14 14 595	14 14 595
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRPA	METSSP	NNNNN	TETRPA	TETRPA
Rating Type	INFECT	INFECT	PHYTOX	INFECT	INFECT
Clarifier	INFES EGGS/LF	INFES MOTILE/LF	CROP INJURY	INFES ADULTS/LF	INFESNYMPHS/LF
Pest GS: From / To / Method	EX EX B	NF IX B		IX IX B	NF NF B
CALC Method	TCOUNT	TCOUNT	P%EST	TCOUNT	TCOUNT
Rating Unit	#	#	%	#	#
Part Rated	BX LEAF	BX LEAF	PX TOTAL PLANT	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	25 TPLOT	25 TPLOT	1 TPLOT	25 TPLOT	25 TPLOT
ARM Action Codes	APC	L05	P	APC	APC
Decimals Print	1	1	1	1	1
Trt Product Name	16	17	18	19	20
1 CHECK	11.5 a (0.0%)	0.0 a	0.0 a	4.8 a (0.0%)	7.2 a (0.0%)
4 BAS 92100I	1.2 a (89.6%)	0.0 a	0.0 a	1.2 a (75.0%)	1.8 a (75.0%)
6 ACRAMITE 50 WS BREAK-THRU	4.8 a (58.3%)	1.2 a	0.0 a	0.0 a (100.0%)	3.6 a (50.0%)
LSD (P=.05)	9.60	2.40	0.00	4.59	6.38
Standard Deviation	5.55	1.39	0.00	2.65	3.69
CV	95.12	346.41	0.0	132.67	87.81
Bartlett's X2	4.669	0.0	0.0	0.335	1.468
P(Bartlett's X2)	0.097	.	.	0.563	0.48
Replicate F	1.878	1.000	0.000	0.455	0.506
Replicate Prob(F)	0.2342	0.4547	1.0000	0.7237	0.6924
Treatment F	3.550	1.000	0.000	3.545	2.224
Treatment Prob(F)	0.0961	0.4219	1.0000	0.0963	0.1894

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	004 19/8/10	004 19/8/10	004 19/8/10	004 19/8/10	005 26/8/10
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	CHANDLER	CHANDLER	CHANDLER	CHANDLER	CHANDLER
DAT / DALT / DAP	14 14 595	14 14 595	14 14 595	14 14 595	21 21 602
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRPA	TETRPA	METSSP	NNNNN	TETRPA
Rating Type	INFECT	INFECT	INFECT	PHYTOX	INFECT
Clarifier	INFES MOTILE/LF	INFES EGGS/LF	INFES MOTILE/LF	CROP INJURY	INFES ADULTS/LF
Pest GS: From / To / Method	NF IX B	EX EX B	NF IX B		IX IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	P%EST	TCOUNT
Rating Unit	#	#	#	%	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	25 TPLOT	25 TPLOT	25 TPLOT	1 TPLOT	25 TPLOT
ARM Action Codes	APC	APC	L05	P	APC
Decimals Print	1	1	1	1	1
Trt Product Name	21	22	23	24	25
1 CHECK	12.0 a (0.0%)	3.0 a (0.0%)	3.0 a	0.0 a	4.8 a (0.0%)
4 BAS 92100I	3.0 a (75.0%)	1.2 a (60.0%)	2.4 a	0.0 a	1.2 a (75.0%)
6 ACRAMITE 50 WS BREAK-THRU	3.6 a (70.0%)	0.0 a (100.0%)	0.0 a	0.0 a	1.2 a (75.0%)
LSD (P=.05)	7.36	2.68	5.13	0.00	3.66
Standard Deviation	4.25	1.55	2.97	0.00	2.12
CV	68.58	110.66	164.8	0.0	88.19
Bartlett's X2	1.707	0.059	4.285	0.0	0.0
P(Bartlett's X2)	0.426	0.809	0.038*	.	1.00
Replicate F	0.947	2.200	0.782	0.000	0.571
Replicate Prob(F)	0.4751	0.1889	0.5459	1.0000	0.6542
Treatment F	5.602	3.800	1.145	0.000	3.857
Treatment Prob(F)	0.0424	0.0859	0.3790	1.0000	0.0837

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	005 26/8/10	005 26/8/10	005 26/8/10	005 26/8/10	005 26/8/10
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	CHANDLER	CHANDLER	CHANDLER	CHANDLER	CHANDLER
DAT / DALT / DAP	21 21 602	21 21 602	21 21 602	21 21 602	21 21 602
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRPA	TETRPA	TETRPA	METSSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFESNYMPHS/LF	INFES MOTILE/LF	INFES EGGS/LF	INFES MOTILE/LF	CROP INJURY
Pest GS: From / To / Method	NF NF B	NF IX B	EX EX B	NF IX B	
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	25 TPLOT	25 TPLOT	25 TPLOT	25 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	APC	L05	P
Decimals Print	1	1	1	1	1
Trt Product Name	26	27	28	29	30
1 CHECK	4.8 a (0.0%)	9.6 a (0.0%)	2.4 a (0.0%)	3.6 a	0.0 a
4 BAS 92100I	2.4 a (50.0%)	3.6 a (62.5%)	0.0 a (100.0%)	0.0 b	0.0 a
6 ACRAMITE 50 WS BREAK-THRU	1.2 a (75.0%)	2.4 a (75.0%)	0.0 a (100.0%)	0.0 b	0.0 a
LSD (P=.05)	4.15	7.45	2.77	2.40	0.00
Standard Deviation	2.40	4.31	1.60	1.39	0.00
CV	85.71	82.85	200.0	115.47	0.0
Bartlett's X2	0.059	0.005	0.0	0.0	0.0
P(Bartlett's X2)	0.809	0.942	.	.	.
Replicate F	0.333	0.379	1.000	1.000	0.000
Replicate Prob(F)	0.8022	0.7718	0.4547	0.4547	1.0000
Treatment F	2.333	3.207	3.000	9.000	0.000
Treatment Prob(F)	0.1780	0.1129	0.1250	0.0156	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	006 2/9/10	006 2/9/10	006 2/9/10	006 2/9/10	006 2/9/10
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	CHANDLER	CHANDLER	CHANDLER	CHANDLER	CHANDLER
DAT / DALT / DAP	28 28 609	28 28 609	28 28 609	28 28 609	28 28 609
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRPA	TETRPA	TETRPA	TETRPA	METSSP
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	INFES ADULTS/LF	INFESNYMPHS/LF	INFES MOTILE/LF	INFES EGGS/LF	INFES MOTILE/LF
Pest GS: From / To / Method	IX IX B	NF NF B	NF IX B	EX EX B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	25 TPLOT	25 TPLOT	25 TPLOT	25 TPLOT	25 TPLOT
ARM Action Codes	APC	APC	APC	APC	L05
Decimals Print	1	1	1	1	1
Trt Product Name	31	32	33	34	35
1 CHECK	2.4 a (0.0%)	4.8 a (0.0%)	7.2 a (0.0%)	2.4 a (0.0%)	4.8 a
4 BAS 92100I	0.0 a (100.0%)	1.2 b (75.0%)	1.2 b (83.3%)	0.0 a (100.0%)	0.9 b
6 ACRAMITE 50 WS BREAK-THRU	1.2 a (50.0%)	0.0 b (100.0%)	1.2 b (83.3%)	0.0 a (100.0%)	0.3 b
LSD (P=.05)	4.15	2.40	4.59	2.77	1.04
Standard Deviation	2.40	1.39	2.65	1.60	0.60
CV	200.0	69.28	82.92	200.0	30.0
Bartlett's X2	0.059	0.0	0.078	0.0	1.124
P(Bartlett's X2)	0.809	.	0.962	.	0.289
Replicate F	0.333	1.000	0.727	1.000	2.667
Replicate Prob(F)	0.8022	0.4547	0.5720	0.4547	0.1416
Treatment F	1.000	13.000	6.818	3.000	66.333
Treatment Prob(F)	0.4219	0.0066	0.0285	0.1250	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	006 2/9/10
Crop: ID / Code / Resistance	1 IUGRE
Crop: Variety	CHANDLER
DAT / DALT / DAP	28 28 609
SE: File / Group	1
Organism / Biotype	NNNNN
Rating Type	PHYTOX
Clarifier	CROP INJURY
Pest GS: From / To / Method	
CALC Method	P%EST
Rating Unit	%
Part Rated	PX TOTAL PLANT
# Subsamples / Class	1 1
Sample Size / Unit	1 TPLOT
ARM Action Codes	P
Decimals Print	1

Trt	Product Name	36
1	CHECK	0.0 a
4	BAS 92100I	0.0 a
6	ACRAMITE 50 WS BREAK-THRU	0.0 a

LSD (P=.05)	0.00
Standard Deviation	0.00
CV	0.0
Bartlett's X2	0.0
P(Bartlett's X2)	.
Replicate F	0.000
Replicate Prob(F)	1.0000
Treatment F	0.000
Treatment Prob(F)	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2010/US/G65/A/01.0/US/UCA/PM5	GEP:
Title:	BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I10G65A-UCAPM5	Licensee: Phil Munger

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit	Mix Size	Unit
1	CHECK													
4	BAS 92100I -CYFLUMETOFEN	212.0 212.0	GA/L	SC	13.7 14.522	fl oz/a	212.0	g ai/ha	A	01	135	GAL/AC	2.75	GALLONS
6	AGRI-MEK -ABAMECTIN	18.0 18.0	GA/L	EC	18.0 18	fl oz/a	0.0211	lb ai/a	A	01	135	GAL/AC	2.75	GALLONS

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 15 feet, Treated plot size Length: 15 feet, Application volume: 135 gal/ac, Mix size: 2.75 gallons, Format definitions: BASF.DEF, BASF.FRM

E9

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2010/US/G65/A/01.0/US/UCA/PM5	GEP:
Title:	BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I10G65A-UCAPM5	Licensee: Phil Munger

Trial Comments

TITLE: BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES

RESULTS: (COOPERATOR COMMENTS)

The data from the evaluations show that the twospotted mite infestation level that occurred at the initiation of the trial within the trial area was at an acceptable low level. The population within the trial untreated plots increased dramatically shortly after the initiation of the trial. Because of the rapid increase of the populations in the untreated plots a maintenance treatment was applied to all of the untreated plots. The evaluation data made throughout the trial show that BAS92100I treatment appeared to provide statistically comparable initial and long term mite efficacy - out to about 32 days after application. The evaluation data from the 9Aug08-49 DAA, and 29Aug08-69 DAA show a slight general increase in the mite population. The trial was evaluated out to 47 days after application. The BAS92100I treatment, at the rate applied, did not cause any visual crop phytotoxicity

Trial Complete

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2010/US/G65/A/01.0/US/UCA/PM5          GEP:
Title:          BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES
GEP Guideline: CONFIDENTIAL
Short Trial ID: I10G65A-UCAPM5              Licensee: Phil Munger
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GENERAL TRIAL INFORMATION

Originator: MENON ANIL Trial Status: 7 FINAL
Researcher: MUNGER PHILIP Validated: 4/3/11
Cooperator Data (Y/N)?: Y
Name: JAKE J. ZACCARIA
Org: ZACCARIA AG CONSULTING
Street1: 5408 SUMMERWING WAY Phone No: 661-393-4981
Town: BAKERSFIELD
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 93308
Town: BUTTONWILLOW Postal: 93466
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: ORC Trial Unit: U
Trt No: 6 Plot Width: 15 Unit: FT
Reps: 4 Plot Length: 15
Plot Size: 225.00 FT2
Factors: 1

ONum	Objectives
1. 12104001	Efficacy trials on Mite species on Almonds and Walnuts

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To
A	01	1	1st appl when pest reaches locally recommended threshold	12/7/10	6:00 AM	7:00 AM

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Carrier Type	Vol	Unit	Mix Size	Unit
1	SP	SGT	H2O	135	GAL/AC	2.75	GALLONS

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT:				Plant Part	Pest Stage		Infestation			
App	Date	Insect	Description	Biotype	Fr	To	Min	Max	Mode	Deg	Meth
A 1	12/7/10	TETRUR	TETRANYCHUS URTICAE								
2		SCLTSE	SCOLOTHRIPS SEXMACULATUS								
3		GALNSP	GALENDROMUS SP.								

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:	DEV/I/2010/US/G65/A/01.0/US/UCA/PM5 GEP:
Title:	BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES
GEP Guideline:	CONFIDENTIAL
Short Trial ID:	I10G65A-UCAPM5 Licensee: Phil Munger

Evaluation: No / Date	001 10/7/10	001 10/7/10	001 10/7/10	001 10/7/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	-2 -2 1646	-2 -2 1646	-2 -2 1646	-2 -2 1646
SE: File / Group	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF	INFEST #MOTILES
Pest GS: From / To / Method	EX EX B	IX IX B	NF NF B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	L05	L05	L05	L05
Decimals Print	1	1	2	2
Trt Product Name	1	2	3	4
1 CHECK	2.9 a	2.1 a	2.63 a	4.70 a
4 BAS 92100I	2.9 a	2.1 a	2.63 a	4.70 a
6 AGRI-MEK	2.9 a	2.1 a	2.63 a	4.70 a
LSD (P=.05)	0.00	0.00	0.000	0.004
Standard Deviation	0.00	0.00	0.000	0.003
CV	0.08	0.04	0.0	0.05
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	1.00	.	.	1.00
Replicate F	463792.203	2563339.506	0.000	2372776.987
Replicate Prob(F)	0.0001	0.0001	1.0000	0.0001
Treatment F	0.000	0.000	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	001 10/7/10	001 10/7/10	001 10/7/10	002 19/7/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	-2 -2 1646	-2 -2 1646	-2 -2 1646	7 7 1655
SE: File / Group	1	1	1	1
Organism / Biotype	SCLTSE	SCLTSE	GALNSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	
CALC Method	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	1 TPLOT
ARM Action Codes	L05	L05	L05	P
Decimals Print	2	1	2	2
Trt Product Name	5	6	7	8
1 CHECK	0.08 a	0.0 a	0.08 a	0.00 a
4 BAS 92100I	0.08 a	0.0 a	0.08 a	0.00 a
6 AGRI-MEK	0.08 a	0.0 a	0.08 a	0.00 a
LSD (P=.05)	0.000	0.00	0.000	0.000
Standard Deviation	0.000	0.00	0.000	0.000
CV	0.0	0.0	0.0	0.0
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	1.00	.	1.00	.
Replicate F	0.000	0.000	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	1.0000	1.0000
Treatment F	0.000	0.000	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	002 19/7/10	002 19/7/10	002 19/7/10	002 19/7/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	7 7 1655	7 7 1655	7 7 1655	7 7 1655
SE: File / Group	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF	INFEST #MOTILES
Pest GS: From / To / Method	EX EX B	IX IX B	NF NF B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	APC	APC	APC	APC
Decimals Print	1	1	2	2
Trt Product Name	9	10	11	12
1 CHECK	5.9 a (0.0%)	6.0 a (0.0%)	7.05 a (0.0%)	13.05 a (0.0%)
4 BAS 92100I	0.2 b (97.5%)	0.2 b (96.3%)	0.08 b (98.9%)	0.30 b (97.7%)
6 AGRI-MEK	0.0 b (100.0%)	0.0 b (100.0%)	0.00 b (100.0%)	0.00 b (100.0%)
LSD (P=.05)	0.53	4.21	2.881	6.374
Standard Deviation	0.30	2.43	1.665	3.684
CV	15.02	117.13	70.11	82.78
Bartlett's X2	3.315	11.277	12.918	11.485
P(Bartlett's X2)	0.069	0.001*	0.001*	0.001*
Replicate F	1.811	0.939	1.049	1.004
Replicate Prob(F)	0.2454	0.4782	0.4369	0.4531
Treatment F	493.551	7.832	23.651	16.357
Treatment Prob(F)	0.0001	0.0212	0.0014	0.0037

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
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BASF Corporation

Evaluation: No / Date	002 19/7/10	002 19/7/10	002 19/7/10	003 26/7/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	7 7 1655	7 7 1655	7 7 1655	14 14 1662
SE: File / Group	1	1	1	1
Organism / Biotype	SCLTSE	SCLTSE	GALNSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	
CALC Method	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	1 TPLOT
ARM Action Codes	L05	L05	L05	P
Decimals Print	2	1	2	2
Trt Product Name	13	14	15	16
1 CHECK	0.00 a	0.0 a	0.00 b	0.00 a
4 BAS 92100I	0.00 a	0.0 a	0.45 a	0.00 a
6 AGRI-MEK	0.00 a	0.0 a	0.00 b	0.00 a
LSD (P=.05)	0.000	0.00	0.173	0.000
Standard Deviation	0.000	0.00	0.100	0.000
CV	0.0	0.0	66.67	0.0
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.
Replicate F	0.000	0.000	1.000	0.000
Replicate Prob(F)	1.0000	1.0000	0.4547	1.0000
Treatment F	0.000	0.000	27.000	0.000
Treatment Prob(F)	1.0000	1.0000	0.0010	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
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BASF Corporation

Evaluation: No / Date	003 26/7/10	003 26/7/10	003 26/7/10	003 26/7/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	14 14 1662	14 14 1662	14 14 1662	14 14 1662
SE: File / Group	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF	INFEST #MOTILES
Pest GS: From / To / Method	EX EX B	IX IX B	NF NF B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	APC	APC	APC	APC
Decimals Print	1	1	2	2
Trt Product Name	17	18	19	20
1 CHECK	15.4 a (0.0%)	17.8 a (0.0%)	16.35 a (0.0%)	34.13 a (0.0%)
4 BAS 92100I	0.8 b (95.1%)	0.6 b (96.6%)	0.90 b (94.5%)	1.50 b (95.6%)
6 AGRI-MEK	0.2 b (99.0%)	0.6 b (96.6%)	0.23 b (98.6%)	0.83 b (97.6%)
LSD (P=.05)	8.05	9.97	11.356	20.559
Standard Deviation	4.65	5.76	6.563	11.882
CV	85.78	91.07	112.67	97.79
Bartlett's X2	32.942	27.901	26.249	27.808
P(Bartlett's X2)	0.001*	0.001*	0.001*	0.001*
Replicate F	0.999	1.108	0.931	1.001
Replicate Prob(F)	0.4552	0.4165	0.4816	0.4544
Treatment F	13.730	11.855	7.726	10.265
Treatment Prob(F)	0.0058	0.0082	0.0219	0.0116

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
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BASF Corporation

Evaluation: No / Date	003 26/7/10	003 26/7/10	003 26/7/10	004 5/8/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	14 14 1662	14 14 1662	14 14 1662	24 24 1672
SE: File / Group	1	1	1	1
Organism / Biotype	SCLTSE	SCLTSE	GALNSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	
CALC Method	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	1 TPLOT
ARM Action Codes		L05	L05	P
Decimals Print	2	1	2	2
Trt Product Name	21	22	23	24
1 CHECK	0.00 a	0.0 a	0.00 b	0.00 a
4 BAS 92100I	0.15 a	0.0 a	0.53 a	0.00 a
6 AGRI-MEK	0.00 a	0.0 a	0.08 b	0.00 a
LSD (P=.05)	0.173	0.00	0.260	0.000
Standard Deviation	0.100	0.00	0.150	0.000
CV	200.0	0.0	75.0	0.0
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	1.00	.
Replicate F	1.000	0.000	0.000	0.000
Replicate Prob(F)	0.4547	1.0000	1.0000	1.0000
Treatment F	3.000	0.000	14.333	0.000
Treatment Prob(F)	0.1250	1.0000	0.0052	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
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BASF Corporation

Evaluation: No / Date	004 5/8/10	004 5/8/10	004 5/8/10	004 5/8/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	24 24 1672	24 24 1672	24 24 1672	24 24 1672
SE: File / Group	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF	INFEST #MOTILES
Pest GS: From / To / Method	EX EX B	IX IX B	NF NF B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	APC	APC	APC	APC
Decimals Print	1	1	2	2
Trt Product Name	25	26	27	28
1 CHECK	23.9 a (0.0%)	20.3 a (0.0%)	24.00 a (0.0%)	44.25 a (0.0%)
4 BAS 92100I	2.0 b (91.8%)	2.6 b (87.4%)	1.80 b (92.5%)	4.35 b (90.2%)
6 AGRI-MEK	0.2 b (99.4%)	0.4 b (98.1%)	0.30 b (98.8%)	0.68 b (98.5%)
LSD (P=.05)	3.95	4.54	12.312	14.146
Standard Deviation	2.28	2.63	7.115	8.175
CV	26.39	34.0	81.79	49.77
Bartlett's X2	18.739	8.882	25.253	16.24
P(Bartlett's X2)	0.001*	0.012*	0.001*	0.001*
Replicate F	0.747	1.570	1.069	1.478
Replicate Prob(F)	0.5626	0.2917	0.4297	0.3123
Treatment F	133.657	68.917	13.915	34.953
Treatment Prob(F)	0.0001	0.0001	0.0056	0.0005

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
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BASF Corporation

Evaluation: No / Date	004 5/8/10	004 5/8/10	004 5/8/10	005 13/8/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	24 24 1672	24 24 1672	24 24 1672	32 32 1680
SE: File / Group	1	1	1	1
Organism / Biotype	SCLTSE	SCLTSE	GALNSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	
CALC Method	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	1 TPLOT
ARM Action Codes	L05	L05	L05	P
Decimals Print	2	1	2	2
Trt Product Name	29	30	31	32
1 CHECK	0.00 a	0.0 a	0.00 a	0.00 a
4 BAS 92100I	0.00 a	0.0 a	0.00 a	0.00 a
6 AGRI-MEK	0.00 a	0.0 a	0.00 a	0.00 a
LSD (P=.05)	0.000	0.00	0.000	0.000
Standard Deviation	0.000	0.00	0.000	0.000
CV	0.0	0.0	0.0	0.0
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.
Replicate F	0.000	0.000	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	1.0000	1.0000
Treatment F	0.000	0.000	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
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BASF Corporation

Evaluation: No / Date	005 13/8/10	005 13/8/10	005 13/8/10	005 13/8/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	32 32 1680	32 32 1680	32 32 1680	32 32 1680
SE: File / Group	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT
Clarifier	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF	INFEST #MOTILES
Pest GS: From / To / Method	EX EX B	IX IX B	NF NF B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	APC	APC	APC	APC
Decimals Print	1	1	2	2
Trt Product Name	33	34	35	36
1 CHECK	0.0 a	0.3 b (0.0%)	0.00 a	0.30 b (0.0%)
4 BAS 92100I	2.1 a	0.9 b (-200.0%)	1.80 a	2.70 ab (-800.0%)
6 AGRI-MEK	2.3 a	3.9 a (-1200.0%)	2.48 a	6.38 a (-2025.0%)
LSD (P=.05)	2.03	1.45	2.634	3.899
Standard Deviation	1.17	0.84	1.522	2.253
CV	80.72	49.22	106.83	72.11
Bartlett's X2	6.306	3.609	7.586	10.573
P(Bartlett's X2)	0.012*	0.165	0.006*	0.005*
Replicate F	1.131	1.857	0.935	1.183
Replicate Prob(F)	0.4086	0.2376	0.4797	0.3921
Treatment F	4.620	21.257	2.825	7.375
Treatment Prob(F)	0.0610	0.0019	0.1366	0.0242

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
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BASF Corporation

Evaluation: No / Date	005 13/8/10	005 13/8/10	005 13/8/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	NONPAR/MONTEREY	NONPAR/MONTEREY	NONPAR/MONTEREY
DAT / DALT / DAP	32 32 1680	32 32 1680	32 32 1680
SE: File / Group	1	1	1
Organism / Biotype	TETRUR	SCLTSE	SCLTSE
Rating Type	INFECT	INFECT	INFECT
Clarifier	INFEST #/LEAF	INFEST #/LEAF	INFEST #/LEAF
Pest GS: From / To / Method	EX EX B	IX IX B	NF NF B
CALC Method	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT	20 TPLOT
ARM Action Codes	APC	L05	L05
Decimals Print	2	2	1
Trt Product Name	37	38	39
1 CHECK	0.00 a	0.00 a	0.0 a
4 BAS 92100I	0.00 a	0.00 a	0.3 a
6 AGRI-MEK	0.00 a	0.00 a	0.0 a
LSD (P=.05)	0.000	0.000	0.24
Standard Deviation	0.000	0.000	0.14
CV	0.0	0.0	141.42
Bartlett's X2	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.
Replicate F	0.000	0.000	1.000
Replicate Prob(F)	1.0000	1.0000	0.4547
Treatment F	0.000	0.000	6.000
Treatment Prob(F)	1.0000	1.0000	0.0370

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID: DEV/I/2010/US/G62/A/51.0/US/U21/114 GEP:
Title: BAS 92100I/EFFICACY/MITES/TETRUR/ALMONDS
GEP Guideline: CONFIDENTIAL
Short Trial ID: I10G62A-U21114 Licensee: Joseph Stout

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit	Mix Size	Unit
1	CHECK													
4	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	1000	L/HA	0.6	L
	-CYFLUMETOFEN	212.0			14.522									
5	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	1000	L/HA	0.6	L
	-CYFLUMETOFEN	212.0			14.522									
	NR 415 SPRAY OIL	98.0	%	AE	0.5	% v/v	0.5	% v/v	A	01	1000	L/HA	0.6	L
6	AGRI-MEK	18.0	GA/L	EC	16.0	fl oz/a	21.0	g ai/ha	A	01	1000	L/HA	0.6	L
	-ABAMECTIN	18.0			16									
	METH-OIL	100.0	%	OL	0.5	% v/v	0.5	% v/v	A	01	1000	L/HA	0.6	L
	-METH-OIL	100.0			5000	g AI								
7	ACRAMITE 50 WS	50.0	%	WP	1.0	lb/a	560.0	g ai/ha	A	01	1000	L/HA	0.6	L
	-BIFENAZATE	50.0			1									
	NR 415 SPRAY OIL	98.0	%	AE	0.5	% v/v	0.5	% v/v	A	01	1000	L/HA	0.6	L

Replications: 3, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 1 meters, Treated plot size Length: 1 meters, Application volume: 1000 l/ha, Mix size: .6 liters, Mix overage: 15%, Format definitions: BASF.DEF, BASF.FRM

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2010/US/G62/A/51.0/US/U21/114	GEP:
Title:	BAS 92100I/EFFICACY/MITES/TETRUR/ALMONDS	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I10G62A-U21114	Licensee: Joseph Stout

Trial Comments

BAS 9210I (13.7 oz/A) with and without an adjuvant provided excellent control of two-spotted spider mite populations.

No phyto-toxicity was found with BAS 9210I treatments at 13.7 oz rate.

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2010/US/G62/A/51.0/US/U21/114          GEP:
Title:          BAS 92100I/EFFICACY/MITES/TETRUR/ALMONDS
GEP Guideline: CONFIDENTIAL
Short Trial ID: I10G62A-U21114              Licensee: Joseph Stout
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GENERAL TRIAL INFORMATION

Originator: MENON ANIL Trial Status: 7 FINAL
Researcher: STOUT JOSEPH Validated: 3/9/10
Cooperator Data (Y/N)?: N
Name: BASF CORPORATION
Street1: 10181 AVENUE 416 Phone No: (559)591-2548
Fax No: (559)591-8730
Town: DINUBA
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 93618
Town: DINUBA Postal: 93618
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: FFX Trial Unit: U
Trt No: 7 Plot Width: 1 Unit: M
Reps: 3 Plot Length: 1
Plot Size: 1.00 M2
Factors: 1

	ONum	Objectives
1.	12104001	Efficacy trials on Mite species on almonds

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To
A	01	1	1st appl when pest reaches locally recommended threshold	9/8/10	11:10 AM	11:35 AM

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Nozzles Type	Pres Amt	Unit	Carrier Type	Vol	Unit	Mix Size	Unit
1	SP	SPT	tx8	3	BAR	H2O	1000	L/HA	0.6	L

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT:				Plant Part	Pest Stage		Infestation			
App	Date	Insect	Description	Biotype	Fr	To	Min	Max	Mode	Deg	Meth
A	1 9/8/10	TETRUR	TETRANYCHUS URTICAE								

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2010/US/G62/A/51.0/US/U21/114	GEP:
Title:	BAS 92100I/EFFICACY/MITES/TETRUR/ALMONDS	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I10G62A-U21114	Licensee: Joseph Stout

Evaluation: No / Date	A03 12/8/10	A03 12/8/10	A07 16/8/10
Crop: ID / Code / Resistance	1 PRNDU	1 PRNDU	1 PRNDU
Crop: Variety	SONORA	SONORA	SONORA
DAT / DALT / DAP	3 3 2345	3 3 2345	7 7 2349
SE: File / Group	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR
Rating Type	CONTRO	CONTRO	CONTRO
Clarifier	CONTROL	CONTROL	CONTROL
Pest GS: From / To / Method	EX EX	NF IV	NF IV
CALC Method	P%CONT	P%CONT	P%CONT
Rating Unit	%REL	%REL	%REL
Part Rated	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1
Sample Size / Unit	1 TPLOT	1 TPLOT	1 TPLOT
ARM Action Codes	TAB[1]	TAB[4]	TAB[7]
Decimals Print	1	1	1
Trt Product Name	2	5	8
1 CHECK	0.0 a	0.0 b	0.0 b
4 BAS 92100I	85.6 a	99.0 a	100.0 a
5 BAS 92100I NR 415 SPRAY OIL	91.7 a	100.0 a	100.0 a
6 AGRI-MEK METH-OIL	-21.3 a	90.9 a	100.0 a
7 ACRAMITE 50 WS NR 415 SPRAY OIL	49.1 a	95.6 a	100.0 a
LSD (P=.05)	153.90	15.75	0.00
Standard Deviation	81.74	8.37	0.00
CV	199.2	10.85	0.0
Bartlett's X2	18.925	6.092	0.0
P(Bartlett's X2)	0.001*	0.048*	.
Replicate F	1.713	0.429	0.000
Replicate Prob(F)	0.2404	0.6654	1.0000
Treatment F	1.144	80.189	0.000
Treatment Prob(F)	0.4021	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

ARM Action Codes
TAB[1] = Abbott (% of Untreated)[1]
TAB[4] = Abbott (% of Untreated)[4]
TAB[7] = Abbott (% of Untreated)[7]

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2009/US/G65/A/01.0/US/UCA/PM2	GEP:
Title:	BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I09G65A-UCAPM2	Licensee: Phil Munger

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit	Mix Size	Unit
1	CHECK													
2	BAS 92100I	212.0	GA/L	SC	6.85	fl oz/a	106.0	g ai/ha	A	01	60.5	GAL/AC	7.6	L
	-CYFLUMETOFEN	212.0			7.261									
	SURFACTANT-NONIONIC	100.0	%	SL	16.0	fl oz/100 gal	16.0	fl oz/100 gal	A	01	60.5	GAL/AC	7.6	L
	-KEINE ANGABEN	100.0			16									
3	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	60.5	GAL/AC	7.6	L
	-CYFLUMETOFEN	212.0			14.522									
4	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	60.5	GAL/AC	7.6	L
	-CYFLUMETOFEN	212.0			14.522									
	PENETRATOR PLUS	100.0	%	EC	0.25	% v/v	0.25	% v/v	A	01	60.5	GAL/AC	7.6	L
5	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	60.5	GAL/AC	7.6	L
	-CYFLUMETOFEN	212.0			14.522									
	SURFACTANT-NONIONIC	100.0	%	SL	16.0	fl oz/100 gal	16.0	fl oz/100 gal	A	01	60.5	GAL/AC	7.6	L
	-KEINE ANGABEN	100.0			16									
6	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	60.5	GAL/AC	7.6	L
	-CYFLUMETOFEN	212.0			14.522									
	SURFACTANT-ORG.SILICATE	100.0	%	SL	0.05	% v/v	0.05	% v/v	A	01	60.5	GAL/AC	7.6	L
	-ADJUVANT-SYSTEM	100.0			0.05									
7	AGRI-MEK	18.0	GA/L	EC	10.0	fl oz/a	13.15	g ai/ha	A	01	60.5	GAL/AC	7.6	L
	-ABAMECTIN	18.0			10									
	METH-OIL	100.0	%	OL	16.0	fl oz/100 gal	16.0	fl oz/100 gal	A	01	60.5	GAL/AC	7.6	L
	-METH-OIL	100.0			16									

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 20 feet, Treated plot size Length: 18 feet, Application volume: 60.5 gal/ac, Mix size: 7.6 liters, Format definitions: BASF.DEF, BASF.FRM

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2009/US/G65/A/01.0/US/UCA/PM2	GEP:
Title:	BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I09G65A-UCAPM2	Licensee: Phil Munger

Trial Comments

TITLE: BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES

COOPERATOR COMMENTS:
Conclusions:
This trial was conducted at the Villanueva walnut orchard located between Escalon and Ripon, CA, on Vina variety of walnut. The application and evaluations were performed following the protocol provided. No phytotoxicity was observed at any time during the trial.

Statistical separation occurred between all treatments and the untreated control. Separation between treatment also occurred as can be seen from the data tables. The trial was terminated 34 days after application when the untreated population declined.

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2009/US/G65/A/01.0/US/UCA/PM2          GEP:
Title:          BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES
GEP Guideline: CONFIDENTIAL
Short Trial ID: I09G65A-UCAPM2              Licensee: Phil Munger
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GENERAL TRIAL INFORMATION

Originator: WOFFORD JAMES Trial Status: 7 FINAL
Researcher: MUNGER PHILIP Validated: 23/9/09
Cooperator Data (Y/N)?: Y
Name: BROOKS BAUER
Org: TWO BEES AG RESEARCH
Street1: 20592 AYERS AVE. Phone No: (209) 838-0606
Fax No: (209) 838-3639
Town: ESCALON Email: BBAUER@TWOBEESAG.COM
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 95320
Town: RIPON Postal: STANISLAUS
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: ORC Trial Unit: U
Trt No: 7 Plot Width: 20 Unit: FT
Reps: 4 Plot Length: 18
Plot Size: 360.00 FT2
Factors: 1

ONum	Objectives
1. 12104001	Efficacy trials on Mite species on Almonds and Walnuts

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To
A	01	1	1st appl when pest reaches locally recommended threshold	18/8/09	2:40 PM	3:40 PM

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Nozzles Type	Pres Amt	Unit	Carrier Type	Vol	Unit	Mix Size	Unit
1	SP	SGZ	#2STIHL	10	PSI	H2O	60.5	GAL/AC	7.6	L

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT: App		Date	Insect	Description	Plant Part	Pest Stage Biotype	Fr	To	Infestation Min	Max	Mode	Deg	Meth
A	1	18/8/09	TETRUR	TETRANYCHUS URTICAE							NF	IX NF	12 TCOUNT
	2		METSSP	METASEIULUS SP.									

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:	DEV/I/2009/US/G65/A/01.0/US/UCA/PM2 GEP:
Title:	BAS 92100I/EFFICACY/TNV/ALMONDS&WALNUTS/MITES
GEP Guideline:	CONFIDENTIAL
Short Trial ID:	I09G65A-UCAPM2 Licensee: Phil Munger

Evaluation: No / Date	001 18/8/09	001 18/8/09	001 18/8/09	001 18/8/09	001 18/8/09
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	VINA	VINA	VINA	VINA	VINA
DAT / DALT / DAP	0 0 960	0 0 960	0 0 960	0 0 960	0 0 960
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	METSSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST. #/LEAF	INFEST. #/LEAF	INFEST. #/LEAF	INFEST.#/MOTILE	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	NF IX B	
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	1 TPLOT
ARM Action Codes	L05	L05	L05	L05	P
Decimals Print	1	1	1	1	1

Trt	Product Name	1	2	3	4	5
1	CHECK	7.0 a	5.0 a	5.0 a	0.2 a	0.0 a
2	BAS 92100I SURFACTANT-NONIONIC	7.0 a	5.0 a	5.0 a	0.2 a	0.0 a
3	BAS 92100I	7.0 a	5.0 a	5.0 a	0.2 a	0.0 a
4	BAS 92100I PENETRATOR PLUS	7.0 a	5.0 a	5.0 a	0.2 a	0.0 a
5	BAS 92100I SURFACTANT-NONIONIC	7.0 a	5.0 a	5.0 a	0.2 a	0.0 a
6	BAS 92100I SURFACTANT-ORG.SILICATE	7.0 a	5.0 a	5.0 a	0.2 a	0.0 a
7	AGRI-MEK METH-OIL	7.0 a	5.0 a	5.0 a	0.2 a	0.0 a

LSD (P=.05)	0.00	0.00	0.00	0.00	0.00
Standard Deviation	0.00	0.00	0.00	0.00	0.00
CV	0.0	0.0	0.0	0.0	0.0
Bartlett's X2	0.0	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.	.
Replicate F	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	002 21/8/09	002 21/8/09	002 21/8/09	002 21/8/09	002 21/8/09
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	VINA	VINA	VINA	VINA	VINA
DAT / DALT / DAP	3 3 963	3 3 963	3 3 963	3 3 963	3 3 963
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	METSSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST. #/LEAF	INFEST. #/LEAF	INFEST. #/LEAF	INFEST.#/MOTILE	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	NF IX B	
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	APC	L05	P
Decimals Print	1	1	1	1	1
Trt Product Name	6	7	8	9	10
1 CHECK	11.0 a (0.0%)	8.5 a (0.0%)	10.5 a (0.0%)	1.9 a	0.0 a
2 BAS 92100I SURFACTANT-NONIONIC	1.9 b (83.0%)	2.5 b (70.6%)	12.5 a (-19.0%)	0.0 a	0.0 a
3 BAS 92100I	0.6 b (94.3%)	1.3 b (85.3%)	1.3 a (88.1%)	0.0 a	0.0 a
4 BAS 92100I PENETRATOR PLUS	2.4 b (78.4%)	0.6 b (92.6%)	6.3 a (40.5%)	0.0 a	0.0 a
5 BAS 92100I SURFACTANT-NONIONIC	1.3 b (88.6%)	0.6 b (92.6%)	0.0 a (100.0%)	0.6 a	0.0 a
6 BAS 92100I SURFACTANT-ORG.SILICATE	0.0 b (100.0%)	0.0 b (100.0%)	0.6 a (94.0%)	0.0 a	0.0 a
7 AGRI-MEK METH-OIL	5.5 b (50.0%)	7.5 a (11.8%)	6.9 a (34.5%)	1.3 a	0.0 a
LSD (P=.05)	3.98	3.70	10.08	1.34	0.00
Standard Deviation	2.68	2.49	6.79	0.90	0.00
CV	82.9	82.98	125.05	168.87	0.0
Bartlett's X2	10.775	12.643	15.517	0.082	0.0
P(Bartlett's X2)	0.056	0.013*	0.008*	0.96	.
Replicate F	3.766	4.199	4.506	0.364	0.000
Replicate Prob(F)	0.0293	0.0204	0.0159	0.7800	1.0000
Treatment F	8.287	7.970	2.148	2.818	0.000
Treatment Prob(F)	0.0002	0.0003	0.0975	0.0410	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	003 24/8/09	003 24/8/09	003 24/8/09	003 24/8/09	003 24/8/09
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	VINA	VINA	VINA	VINA	VINA
DAT / DALT / DAP	6 6 966	6 6 966	6 6 966	6 6 966	6 6 966
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	METSSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST. #/LEAF	INFEST. #/LEAF	INFEST. #/LEAF	INFEST.#/MOTILE	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	NF IX B	
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	APC	L05	P
Decimals Print	1	1	1	1	1
Trt Product Name	11	12	13	14	15
1 CHECK	8.6 a (0.0%)	9.8 a (0.0%)	7.9 a (0.0%)	2.5 a	0.0 a
2 BAS 92100I SURFACTANT-NONIONIC	1.8 b (79.1%)	3.1 b (68.7%)	1.8 b (77.1%)	0.0 b	0.0 a
3 BAS 92100I	1.9 b (78.3%)	1.3 b (87.2%)	0.6 b (92.1%)	0.0 b	0.0 a
4 BAS 92100I PENETRATOR PLUS	1.3 b (85.5%)	2.5 b (74.4%)	0.6 b (92.1%)	0.0 b	0.0 a
5 BAS 92100I SURFACTANT-NONIONIC	2.4 b (71.9%)	1.9 b (80.8%)	0.6 b (92.1%)	0.0 b	0.0 a
6 BAS 92100I SURFACTANT-ORG.SILICATE	2.4 b (72.2%)	1.9 b (80.8%)	0.6 b (92.1%)	0.6 b	0.0 a
7 AGRI-MEK METH-OIL	1.9 b (78.3%)	2.5 b (74.4%)	1.3 b (84.1%)	0.6 b	0.0 a
LSD (P=.05)	4.33	3.93	3.49	1.02	0.00
Standard Deviation	2.91	2.65	2.35	0.69	0.00
CV	100.68	81.29	122.64	128.14	0.0
Bartlett's X2	6.428	6.88	12.935	0.0	0.0
P(Bartlett's X2)	0.377	0.332	0.044*	1.00	.
Replicate F	5.233	3.891	2.139	0.632	0.000
Replicate Prob(F)	0.0090	0.0264	0.1309	0.6041	1.0000
Treatment F	3.087	4.869	5.138	7.105	0.000
Treatment Prob(F)	0.0294	0.0040	0.0031	0.0005	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	004 31/8/09	004 31/8/09	004 31/8/09	004 31/8/09	004 31/8/09
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	VINA	VINA	VINA	VINA	VINA
DAT / DALT / DAP	13 13 973	13 13 973	13 13 973	13 13 973	13 13 973
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	METSSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST. #/LEAF	INFEST. #/LEAF	INFEST. #/LEAF	INFEST.#/MOTILE	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	NF IX B	
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	APC	L05	P
Decimals Print	1	1	1	1	1
Trt Product Name	16	17	18	19	20
1 CHECK	6.1 a (0.0%)	8.4 a (0.0%)	7.3 a (0.0%)	1.3 a	0.0 a
2 BAS 92100I SURFACTANT-NONIONIC	1.3 a (79.3%)	1.3 b (85.1%)	0.6 b (91.4%)	0.0 a	0.0 a
3 BAS 92100I	1.3 a (79.3%)	1.9 b (77.6%)	0.0 b (100.0%)	0.0 a	0.0 a
4 BAS 92100I PENETRATOR PLUS	0.6 a (89.7%)	0.6 b (92.5%)	0.0 b (100.0%)	0.0 a	0.0 a
5 BAS 92100I SURFACTANT-NONIONIC	1.3 a (79.3%)	1.9 b (77.6%)	0.0 b (100.0%)	0.0 a	0.0 a
6 BAS 92100I SURFACTANT-ORG.SILICATE	0.0 a (100.0%)	1.9 b (77.6%)	0.6 b (91.4%)	0.0 a	0.0 a
7 AGRI-MEK METH-OIL	2.5 a (58.7%)	3.8 b (55.2%)	1.9 b (74.1%)	0.6 a	0.0 a
LSD (P=.05)	3.92	4.40	4.06	1.02	0.00
Standard Deviation	2.64	2.96	2.73	0.69	0.00
CV	142.78	105.53	184.19	256.28	0.0
Bartlett's X2	14.41	15.71	11.453	0.06	0.0
P(Bartlett's X2)	0.013*	0.015*	0.01*	0.806	.
Replicate F	1.572	2.738	1.461	1.737	0.000
Replicate Prob(F)	0.2309	0.0737	0.2585	0.1953	1.0000
Treatment F	2.308	3.175	3.711	2.053	0.000
Treatment Prob(F)	0.0789	0.0264	0.0141	0.1108	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	005 8/9/09	005 8/9/09	005 8/9/09	005 8/9/09	005 8/9/09
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	VINA	VINA	VINA	VINA	VINA
DAT / DALT / DAP	21 21 981	21 21 981	21 21 981	21 21 981	21 21 981
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	METSSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST. #/LEAF	INFEST. #/LEAF	INFEST. #/LEAF	INFEST.#/MOTILE	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	NF IX B	
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	APC	L05	P
Decimals Print	1	1	1	1	1
Trt Product Name	21	22	23	24	25
1 CHECK	6.0 a (0.0%)	6.8 a (0.0%)	4.4 a (0.0%)	1.3 a	0.0 a
2 BAS 92100I SURFACTANT-NONIONIC	3.8 a (37.5%)	4.4 ab (35.2%)	1.9 a (57.1%)	1.9 a	0.0 a
3 BAS 92100I	2.5 a (58.3%)	3.1 ab (53.7%)	0.6 a (85.7%)	1.3 a	0.0 a
4 BAS 92100I PENETRATOR PLUS	0.6 a (89.6%)	1.3 ab (81.5%)	0.0 a (100.0%)	0.6 a	0.0 a
5 BAS 92100I SURFACTANT-NONIONIC	1.3 a (79.2%)	1.9 ab (72.2%)	0.6 a (85.7%)	1.3 a	0.0 a
6 BAS 92100I SURFACTANT-ORG.SILICATE	0.0 a (100.0%)	0.0 b (100.0%)	0.0 a (100.0%)	0.0 a	0.0 a
7 AGRI-MEK METH-OIL	1.9 a (68.8%)	1.9 ab (72.2%)	1.9 a (57.1%)	2.5 a	0.0 a
LSD (P=.05)	4.44	4.02	3.30	3.25	0.00
Standard Deviation	2.99	2.70	2.22	2.19	0.00
CV	130.85	98.29	165.88	175.03	0.0
Bartlett's X2	6.379	12.375	5.91	2.71	0.0
P(Bartlett's X2)	0.271	0.03*	0.206	0.745	.
Replicate F	0.833	0.810	0.648	0.311	0.000
Replicate Prob(F)	0.4930	0.5048	0.5942	0.8172	1.0000
Treatment F	1.879	2.749	1.945	0.544	0.000
Treatment Prob(F)	0.1400	0.0447	0.1281	0.7681	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	006 14/9/09	006 14/9/09	006 14/9/09	006 14/9/09	006 14/9/09
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	VINA	VINA	VINA	VINA	VINA
DAT / DALT / DAP	27 27 987	27 27 987	27 27 987	27 27 987	27 27 987
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	METSSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST. #/LEAF	INFEST. #/LEAF	INFEST. #/LEAF	INFEST.#/MOTILE	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	NF IX B	
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	APC	L05	P
Decimals Print	1	1	1	1	1
Trt Product Name	26	27	28	29	30
1 CHECK	5.6 a (0.0%)	6.1 a (0.0%)	3.8 a (0.0%)	1.3 a	0.0 a
2 BAS 92100I SURFACTANT-NONIONIC	1.3 a (77.5%)	1.3 a (79.6%)	1.3 a (66.7%)	1.3 a	0.0 a
3 BAS 92100I	0.6 a (88.7%)	1.3 a (79.6%)	0.0 a (100.0%)	0.0 a	0.0 a
4 BAS 92100I PENETRATOR PLUS	0.6 a (88.7%)	0.6 a (89.8%)	0.0 a (100.0%)	0.0 a	0.0 a
5 BAS 92100I SURFACTANT-NONIONIC	1.8 a (67.6%)	1.3 a (79.6%)	1.3 a (66.7%)	0.6 a	0.0 a
6 BAS 92100I SURFACTANT-ORG.SILICATE	0.0 a (100.0%)	0.6 a (89.8%)	0.0 a (100.0%)	0.0 a	0.0 a
7 AGRI-MEK METH-OIL	0.6 a (88.7%)	1.9 a (69.4%)	0.6 a (83.3%)	0.6 a	0.0 a
LSD (P=.05)	3.54	3.51	3.10	1.80	0.00
Standard Deviation	2.38	2.36	2.08	1.21	0.00
CV	159.05	127.19	212.12	225.8	0.0
Bartlett's X2	8.31	7.868	3.894	2.125	0.0
P(Bartlett's X2)	0.14	0.248	0.273	0.547	.
Replicate F	1.375	0.452	1.560	1.831	0.000
Replicate Prob(F)	0.2824	0.7188	0.2337	0.1777	1.0000
Treatment F	2.484	2.671	1.663	0.864	0.000
Treatment Prob(F)	0.0628	0.0494	0.1876	0.5392	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	007 21/9/09	007 21/9/09	007 21/9/09	007 21/9/09	007 21/9/09
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	VINA	VINA	VINA	VINA	VINA
DAT / DALT / DAP	34 34 994	34 34 994	34 34 994	34 34 994	34 34 994
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	METSSP	NNNNN
Rating Type	INFECT	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST. #/LEAF	INFEST. #/LEAF	INFEST. #/LEAF	INFEST.#/MOTILE	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	NF IX B	
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	P%EST
Rating Unit	#	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	APC	L05	P
Decimals Print	1	1	1	1	1
Trt Product Name	31	32	33	34	35
1 CHECK	1.9 a (0.0%)	4.3 a (0.0%)	3.1 a (0.0%)	0.0 a	0.0 a
2 BAS 92100I SURFACTANT-NONIONIC	1.3 a (33.3%)	0.6 b (85.5%)	0.0 a (100.0%)	0.0 a	0.0 a
3 BAS 92100I	0.6 a (66.7%)	0.6 b (85.5%)	0.0 a (100.0%)	0.0 a	0.0 a
4 BAS 92100I PENETRATOR PLUS	0.0 a (100.0%)	0.0 b (100.0%)	0.6 a (80.0%)	0.0 a	0.0 a
5 BAS 92100I SURFACTANT-NONIONIC	0.6 a (66.7%)	0.6 b (85.5%)	0.0 a (100.0%)	0.0 a	0.0 a
6 BAS 92100I SURFACTANT-ORG.SILICATE	0.0 a (100.0%)	0.0 b (100.0%)	0.0 a (100.0%)	0.0 a	0.0 a
7 AGRI-MEK METH-OIL	2.5 a (-33.3%)	0.6 b (85.5%)	0.0 a (100.0%)	0.0 a	0.0 a
LSD (P=.05)	2.19	1.92	2.76	0.00	0.00
Standard Deviation	1.48	1.29	1.86	0.00	0.00
CV	150.42	132.75	346.59	0.0	0.0
Bartlett's X2	2.39	1.926	4.135	0.0	0.0
P(Bartlett's X2)	0.496	0.749	0.042*	.	.
Replicate F	0.920	0.841	0.950	0.000	0.000
Replicate Prob(F)	0.4509	0.4889	0.4376	1.0000	1.0000
Treatment F	1.636	5.391	1.576	0.000	0.000
Treatment Prob(F)	0.1945	0.0024	0.2113	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:	DEV/I/2008/US/GX1/A/03.0/US/UCA/PM4 GEP:
Title:	BAS 92100I/TNV/ALMONDS/MITE EFFICACY
GEP Guideline:	ALMONDS & WALNUTS
Short Trial ID:	I08GX1A-UCAPM4 Licensee: Phil Munger

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit
1	CHECK											
2	BAS 92100I -CYFLUMETOFEN	212.0 212.0	GA/L	SC	6.85 7.261	fl oz/a	106.0	g ai/ha	A	01	100	GAL/AC
3	BAS 92100I -CYFLUMETOFEN	212.0 212.0	GA/L	SC	10.3 10.918	fl oz/a	159.6	g ai/ha	A	01	100	GAL/AC
4	BAS 92100I -CYFLUMETOFEN	212.0 212.0	GA/L	SC	13.7 14.522	fl oz/a	212.0	g ai/ha	A	01	100	GAL/AC
5	ENVIDOR -SPIRODICLOFEN	240.0 240.0	GA/L	SC	18.0 18	fl oz/a	316.0	g ai/ha	A	01	100	GAL/AC

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 20 feet, Treated plot size Length: 20 feet, Application volume: 100 gal/ac, Mix size: 2 gallons, Format definitions: BASF.DEF, BASF.FRM

E12

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2008/US/GX1/A/03.0/US/UCA/PM4	GEP:
Title:	BAS 92100I/TNV/ALMONDS/MITE EFFICACY	
GEP Guideline:	ALMONDS & WALNUTS	
Short Trial ID:	I08GX1A-UCAPM4	Licensee: Phil Munger

Trial Comments

TITLE:BAS 92100I/TNV/ALMONDS/MITE EFFICACY

RESULTS:

All treatments demonstrated excellent knockdown and control of spider mite motiles through 35 DAT. No dose response was noted until 42 and 49 DAT; at which time, the 200 g ai/ha rate of BAS 9210 I provided better (numerical) residual control of spider mite than 150 or 100 g ai/ha. At 200 g ai/ha, BAS 9210 I was superior to Envidor.

None of the treatments caused crop injury

Trial complete.

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2008/US/GX1/A/03.0/US/UCA/PM4          GEP:
Title:          BAS 92100I/TNV/ALMONDS/MITE EFFICACY
GEP Guideline: ALMONDS & WALNUTS
Short Trial ID: I08GX1A-UCAPM4              Licensee: Phil Munger
```

GENERAL TRIAL INFORMATION

Originator: PEDIBHOTLA VENKAT Trial Status: 7 FINAL
Researcher: MUNGER PHILIP Validated: 1/9/08
Cooperator Data (Y/N)?: Y
Name: TIM KSANDER
Org: AGRICULTURAL ADVISORS INC
Street1: 3995 E. BUTTE RD. Phone No: 530-674-1255
Town: LIVE OAK Email: agadvisors@succeed.net
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 95953
Location: WALNUT ORCHARD
Town: LIVE OAK
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: ORC Trial Unit: U
Trt No: 5 Plot Width: 20 Unit: FT
Reps: 4 Plot Length: 20
Plot Size: 400.00 FT2
Factors: 1

ONum	Objectives
1. 12104001	Efficacy data on stages (egg, nymphs, and adults) on almonds and walnuts

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To
A	01	1	1st appl when pest reaches locally recommended threshold	2/7/08	2:30 AM	3:30 AM

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Carrier Type	Vol	Unit
1	SP	SGT	H2O	100	GAL/AC

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT:

App		Date	Insect	Description	Biotype	Fr	To	Min	Max	Mode	Deg	Meth
A	1	2/7/08	TETRUR	TETRANYCHUS URTICAE		BX	BX	NF	IX	NF	19	TCOUNT

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.		
Trial ID:	DEV/I/2008/US/GX1/A/03.0/US/UCA/PM4	GEP:	
Title:	BAS 92100I/TNV/ALMONDS/MITE EFFICACY		
GEP Guideline:	ALMONDS & WALNUTS		
Short Trial ID:	I08GX1A-UCAPM4	Licensee:	Phil Munger

Evaluation: No / Date	001 2/7/08	002 9/7/08	003 16/7/08	004 23/7/08	005 30/7/08	006 6/8/08
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	CHANDLER	CHANDLER	CHANDLER	CHANDLER	CHANDLER	CHANDLER
DAT / DALT / DAP	0 0 1278	7 7 1285	14 14 1292	21 21 1299	28 28 1306	35 35 1313
SE: File / Group	1	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	IINFEST./LEAF	IINFEST./LEAF	IINFEST./LEAF	IINFEST./LEAF	IINFEST./LEAF	IINFEST./LEAF
Pest GS: From / To / Method	NF IX B	NF IX B	NF IX B	NF IX B	NF IX B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT
ARM Action Codes	L05	APC	APC	APC	APC	APC
Decimals Print	1	1	1	1	1	1

Trt	Product Name	1	2	3	4	5	6
1	CHECK	19.1 a	46.7 a (0.0%)	53.2 a (0.0%)	55.8 a (0.0%)	54.5 a (0.0%)	42.2 a (0.0%)
2	BAS 92100I	16.5 a	1.3 b (97.3%)	3.5 b (93.4%)	0.3 b (99.6%)	0.0 b (100.0%)	5.0 b (88.2%)
3	BAS 92100I	15.3 a	0.5 b (98.9%)	0.5 b (99.1%)	0.0 b (100.0%)	0.3 b (99.5%)	0.0 b (100.0%)
4	BAS 92100I	25.8 a	0.0 b (100.0%)	0.0 b (100.0%)	0.3 b (99.6%)	0.0 b (100.0%)	0.0 b (100.0%)
5	ENVIDOR	30.0 a	0.3 b (99.5%)	3.0 b (94.4%)	2.0 b (96.4%)	2.3 b (95.9%)	10.5 b (75.1%)

LSD (P=.05)	30.47	18.11	16.73	19.82	20.18	21.01
Standard Deviation	19.58	11.64	10.75	12.73	12.96	13.50
CV	91.81	119.58	89.31	109.23	113.63	116.98
Bartlett's X2	2.489	46.137	30.844	43.826	25.392	4.353
P(Bartlett's X2)	0.647	0.001*	0.001*	0.001*	0.001*	0.113
Replicate F	2.018	0.903	1.329	0.835	0.797	0.321
Replicate Prob(F)	0.1698	0.4707	0.3147	0.5021	0.5208	0.8104
Treatment F	0.417	12.592	18.391	15.031	13.860	6.861
Treatment Prob(F)	0.7931	0.0004	0.0001	0.0002	0.0003	0.0051

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	007 13/8/08	008 20/8/08
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE
Crop: Variety	CHANDLER	CHANDLER
DAT / DALT / DAP	42 42 1320	49 49 1327
SE: File / Group	1	1
Organism / Biotype	TETRUR	TETRUR
Rating Type	INFECT	INFECT
Clarifier	IINFEST./LEAF	IINFEST./LEAF
Pest GS: From / To / Method	NF IX B	NF IX B
CALC Method	TCOUNT	TCOUNT
Rating Unit	#	#
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	1 TPLOT	1 TPLOT
ARM Action Codes	APC	APC
Decimals Print	1	1
Trt Product Name	7	8
1 CHECK	56.8 a (0.0%)	20.1 a (0.0%)
2 BAS 92100I	1.5 a (97.4%)	8.8 a (56.6%)
3 BAS 92100I	5.3 a (90.8%)	3.0 a (85.1%)
4 BAS 92100I	4.0 a (93.0%)	0.5 a (97.5%)
5 ENVIDOR	13.0 a (77.1%)	5.0 a (75.2%)
LSD (P=.05)	40.10	16.73
Standard Deviation	25.76	10.75
CV	159.98	143.7
Bartlett's X2	32.91	18.892
P(Bartlett's X2)	0.001*	0.001*
Replicate F	1.035	1.711
Replicate Prob(F)	0.4150	0.2223
Treatment F	3.226	2.052
Treatment Prob(F)	0.0556	0.1562

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2008/US/GX1/A/03.0/US/UCA/PM5	GEP:
Title:	BAS 92100I/TNV/ALMONDS/MITE EFFICACY	
GEP Guideline:	ALMONDS & WALNUTS	
Short Trial ID:	I08GX1A-UCAPM5	Licensee: Phil Munger

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit
1	CHECK											
4	BAS 92100I -CYFLUMETOFEN	212.0 212.0	GA/L	SC	13.7 14.522	fl oz/a	212.0	g ai/ha	A	01	75	GAL/AC
5	ACRAMITE 50 WS -BIFENAZATE	50.0 50.0	%	WP	0.875 0.875	lb/a	490.0	g ai/ha	A	01	75	GAL/AC

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 20 feet, Treated plot size Length: 18 feet, Application volume: 75 gal/ac, Mix size: 7 liters, Format definitions: BASF.DEF, BASF.FRM

E13

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2008/US/GX1/A/03.0/US/UCA/PM5	GEP:
Title:	BAS 92100I/TNV/ALMONDS/MITE EFFICACY	
GEP Guideline:	ALMONDS & WALNUTS	
Short Trial ID:	I08GX1A-UCAPM5	Licensee: Phil Munger

Trial Comments

TITLE: BAS 92100I/TNV/ALMONDS/WALNUTS/MITE EFFICACY

RESULTS:

This trial was conducted in 1st leaf walnuts in the northern San Joaquin Valley. Mite pressure (2-spotted spider mite) was high at this location.

At 7 DAT (1st rating), all treatments statistically reduced the number of spider mite adults and nymphs compared with populations in the untreated trees. Numerical differences in spider mite numbers showed that at 7 DAT.

At 28 days, mite numbers began to decrease and differences in efficacy could not be determined.

At rate of 212 gai/ha, BAS 9210 I was equal to, or slightly superior in efficacy vs. Acramite.

None of the treatments in this trial caused phytotoxicity in young, 1st leaf walnuts.

Trial Complete.

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2008/US/GX1/A/03.0/US/UCA/PM5          GEP:
Title:          BAS 92100I/TNV/ALMONDS/MITE EFFICACY
GEP Guideline: ALMONDS & WALNUTS
Short Trial ID: I08GX1A-UCAPM5              Licensee: Phil Munger
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GENERAL TRIAL INFORMATION

Originator: PEDIBHOTLA VENKAT Trial Status: 7 FINAL
Researcher: MUNGER PHILIP Validated: 17/10/11
Cooperator Data (Y/N)?: Y
Name: BROOKS BAUER
Org: TWO BEES AG RESEARCH
Street1: 20592 AYERS AVE. Phone No: (209) 599-7806
Fax No: (209) 838-3639
Town: ESCALON Email: BBAUER@TWOBEESAG.COM
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 95320
Location: COMMERCIAL WALNUTS
Town: RIPON Postal: STANISLAUS
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: ORC Trial Unit: U
Trt No: 5 Plot Width: 20 Unit: FT
Reps: 4 Plot Length: 18
Plot Size: 360.00 FT2
Factors: 1

ONum	Objectives
1. 12104001	Efficacy data on stages (egg, nymphs, and adults) on almonds and walnuts

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To
A	01	1	1st appl when pest reaches locally recommended threshold	25/7/08	6:40 AM	8:00 AM

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Nozzles Type	Pres Amt	Unit	Carrier Type	Vol	Unit
1	SP	SGZ	#2STIHL	10	PSI	H2O	75	GAL/AC

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT:					Plant Part	Pest Stage		Infestation		
App	Date	Insect	Description	Biotype	Fr	To	Min	Max	Mode	Deg	Meth
A	1 25/7/08	TETRUR	TETRANYCHUS URTICAE						EX	IX	NF
	2	METSVA	TYPHLODROMUS VALIDUS						IX	IX	IX

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:	DEV/I/2008/US/GX1/A/03.0/US/UCA/PM5 GEP:
Title:	BAS 92100I/TNV/ALMONDS/MITE EFFICACY
GEP Guideline:	ALMONDS & WALNUTS
Short Trial ID:	I08GX1A-UCAPM5 Licensee: Phil Munger

Evaluation: No / Date	001 1/8/08	001 1/8/08	001 1/8/08	001 1/8/08	001 1/8/08
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	VINA	VINA	VINA	VINA	VINA
DAT / DALT / DAP	7 7 213	7 7 213	7 7 213	7 7 213	7 7 213
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	METSVA	NNNNN
Rating Type	INFECT	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST.#/10LEAF	INFEST.#/10LEAF	INFEST.#/10LEAF	INFEST.#/10LEAF	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	IX IX B	
CALC Method	ZCOUNT	ZCOUNT	ZCOUNT	ZCOUNT	P%EST
Rating Unit	#	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	APC	L05	L05
Decimals Print	1	1	1	1	1
Trt Product Name	1	2	3	4	5
1 CHECK	44.4 a (0.0%)	46.8 a (0.0%)	19.2 a (0.0%)	0.0 a	0.0 a
4 BAS 92100I	0.0 a (100.0%)	1.2 a (97.4%)	0.0 a (100.0%)	0.0 a	0.0 a
5 ACRAMITE 50 WS	0.0 a (100.0%)	1.2 a (97.4%)	0.0 a (100.0%)	0.0 a	0.0 a
LSD (P=.05)	43.13	45.74	25.97	0.00	0.00
Standard Deviation	24.93	26.44	15.01	0.00	0.00
CV	168.44	161.2	234.52	0.0	0.0
Bartlett's X2	0.0	23.664	0.0	0.0	0.0
P(Bartlett's X2)	.	0.001*	.	.	.
Replicate F	1.000	1.255	1.000	0.000	0.000
Replicate Prob(F)	0.4547	0.3703	0.4547	1.0000	1.0000
Treatment F	4.230	3.967	2.182	0.000	0.000
Treatment Prob(F)	0.0715	0.0798	0.1941	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	002 8/8/08	002 8/8/08	002 8/8/08	002 8/8/08	002 8/8/08
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	VINA	VINA	VINA	VINA	VINA
DAT / DALT / DAP	14 14 220	14 14 220	14 14 220	14 14 220	14 14 220
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	METSVA	NNNNN
Rating Type	INFECT	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST.#/10LEAF	INFEST.#/10LEAF	INFEST.#/10LEAF	INFEST.#/10LEAF	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	IX IX B	
CALC Method	ZCOUNT	ZCOUNT	ZCOUNT	ZCOUNT	P%EST
Rating Unit	#	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	APC	L05	L05
Decimals Print	1	1	1	1	1
Trt Product Name	6	7	8	9	10
1 CHECK	31.7 a (0.0%)	42.0 a (0.0%)	34.4 a (0.0%)	2.4 a	0.0 a
4 BAS 92100I	0.0 a (100.0%)	1.2 a (97.1%)	0.0 a (100.0%)	0.0 a	0.0 a
5 ACRAMITE 50 WS	1.2 a (96.2%)	2.4 a (94.3%)	0.0 a (100.0%)	0.0 a	0.0 a
LSD (P=.05)	31.56	37.27	32.02	2.77	0.00
Standard Deviation	18.24	21.54	18.51	1.60	0.00
CV	166.57	141.71	161.63	200.0	0.0
Bartlett's X2	10.7	19.876	0.0	0.0	0.0
P(Bartlett's X2)	0.001*	0.001*	.	.	.
Replicate F	0.972	0.822	1.000	1.000	0.000
Replicate Prob(F)	0.4654	0.5276	0.4547	0.4547	1.0000
Treatment F	3.868	4.647	4.593	3.000	0.000
Treatment Prob(F)	0.0833	0.0604	0.0617	0.1250	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	003 15/8/08	003 15/8/08	003 15/8/08	003 15/8/08	003 15/8/08
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	VINA	VINA	VINA	VINA	VINA
DAT / DALT / DAP	21 21 227	21 21 227	21 21 227	21 21 227	21 21 227
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	METSVA	NNNNN
Rating Type	INFECT	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST.#/10LEAF	INFEST.#/10LEAF	INFEST.#/10LEAF	INFEST.#/10LEAF	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	IX IX B	
CALC Method	ZCOUNT	ZCOUNT	ZCOUNT	ZCOUNT	P%EST
Rating Unit	#	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	APC	L05	L05
Decimals Print	1	1	1	1	1
Trt Product Name	11	12	13	14	15
1 CHECK	43.2 a (0.0%)	37.2 a (0.0%)	19.2 a (0.0%)	2.4 a	0.0 a
4 BAS 92100I	2.4 b (94.4%)	3.6 a (90.3%)	2.4 a (87.5%)	0.0 a	0.0 a
5 ACRAMITE 50 WS	0.0 b (100.0%)	0.0 a (100.0%)	0.0 a (100.0%)	0.0 a	0.0 a
LSD (P=.05)	30.61	30.04	18.78	2.77	0.00
Standard Deviation	17.69	17.36	10.85	1.60	0.00
CV	116.32	127.66	150.72	200.0	0.0
Bartlett's X2	9.766	10.345	7.291	0.0	0.0
P(Bartlett's X2)	0.002*	0.001*	0.007*	.	.
Replicate F	1.025	0.892	1.326	1.000	0.000
Replicate Prob(F)	0.4456	0.4975	0.3505	0.4547	1.0000
Treatment F	7.543	5.586	3.717	3.000	0.000
Treatment Prob(F)	0.0230	0.0427	0.0891	0.1250	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	004 22/8/08	004 22/8/08	004 22/8/08	004 22/8/08	004 22/8/08
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	VINA	VINA	VINA	VINA	VINA
DAT / DALT / DAP	28 28 234	28 28 234	28 28 234	28 28 234	28 28 234
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	METSVA	NNNNN
Rating Type	INFECT	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST.#/10LEAF	INFEST.#/10LEAF	INFEST.#/10LEAF	INFEST.#/10LEAF	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	IX IX B	
CALC Method	ZCOUNT	ZCOUNT	ZCOUNT	ZCOUNT	P%EST
Rating Unit	#	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	APC	L05	L05
Decimals Print	1	1	1	1	1
Trt Product Name	16	17	18	19	20
1 CHECK	15.0 a (0.0%)	13.2 a (0.0%)	13.5 a (0.0%)	2.4 a	0.0 a
4 BAS 92100I	0.0 a (100.0%)	0.0 a (100.0%)	0.0 a (100.0%)	0.0 a	0.0 a
5 ACRAMITE 50 WS	0.0 a (100.0%)	0.0 a (100.0%)	0.0 a (100.0%)	0.0 a	0.0 a
LSD (P=.05)	15.95	13.77	12.42	2.77	0.00
Standard Deviation	9.22	7.96	7.18	1.60	0.00
CV	184.35	180.91	160.14	200.0	0.0
Bartlett's X2	0.0	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.	.
Replicate F	1.000	1.000	1.000	1.000	0.000
Replicate Prob(F)	0.4547	0.4547	0.4547	0.4547	1.0000
Treatment F	3.531	3.667	4.679	3.000	0.000
Treatment Prob(F)	0.0969	0.0911	0.0596	0.1250	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	005 29/8/08	005 29/8/08	005 29/8/08	005 29/8/08	005 29/8/08
Crop: ID / Code / Resistance	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE	1 IUGRE
Crop: Variety	VINA	VINA	VINA	VINA	VINA
DAT / DALT / DAP	35 35 241	35 35 241	35 35 241	35 35 241	35 35 241
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	METSVA	NNNNN
Rating Type	INFECT	INFECT	INFECT	INFECT	PHYTOX
Clarifier	INFEST.#/10LEAF	INFEST.#/10LEAF	INFEST.#/10LEAF	INFEST.#/10LEAF	CROP INJURY
Pest GS: From / To / Method	IX IX B	NF NF B	EX EX B	IX IX B	
CALC Method	ZCOUNT	ZCOUNT	ZCOUNT	ZCOUNT	P%EST
Rating Unit	#	#	#	#	%
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	1 TPLOT
ARM Action Codes	APC	APC	APC	L05	L05
Decimals Print	1	1	1	1	1
Trt Product Name	21	22	23	24	25
1 CHECK	9.6 a (0.0%)	8.4 a (0.0%)	6.0 a (0.0%)	2.4 a	0.0 a
4 BAS 92100I	0.0 a (100.0%)	0.0 a (100.0%)	0.0 a (100.0%)	0.0 a	0.0 a
5 ACRAMITE 50 WS	0.0 a (100.0%)	0.0 a (100.0%)	0.0 a (100.0%)	1.2 a	0.0 a
LSD (P=.05)	12.99	11.33	9.08	3.10	0.00
Standard Deviation	7.50	6.55	5.25	1.79	0.00
CV	234.52	233.87	262.3	149.07	0.0
Bartlett's X2	0.0	0.0	0.0	0.059	0.0
P(Bartlett's X2)	.	.	.	0.809	.
Replicate F	1.000	1.000	1.000	2.200	0.000
Replicate Prob(F)	0.4547	0.4547	0.4547	0.1889	1.0000
Treatment F	2.182	2.194	1.744	1.800	0.000
Treatment Prob(F)	0.1941	0.1927	0.2529	0.2441	1.0000

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID: DEV/I/2011/US/G61/A/01.0/US/U21/046 GEP:
Title: BAS 92100I/EFFICACY/TNV/WATER VOLUMES
GEP Guideline: DINUBA- CITRUS; FTS-APPLE & PEACH
Short Trial ID: I11G61A-U21046 Licensee: Joseph Stout

Trt	Typ	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit
1	C	CHECK								ABC	SE	50	GAL/AC
2	I	BAS 92100I	200.0	GA/L	SC	6.85	fl oz/a	100.0	g ai/ha	A	SE	50	GAL/AC
3	I	BAS 92100I	200.0	GA/L	SC	13.7	fl oz/a	200.0	g ai/ha	A	SE	50	GAL/AC
4	I	BAS 92100I	200.0	GA/L	SC	6.85	fl oz/a	100.0	g ai/ha	B	SE	100	GAL/AC
5	I	BAS 92100I	200.0	GA/L	SC	13.7	fl oz/a	200.0	g ai/ha	B	SE	100	GAL/AC
6	I	BAS 92100I	200.0	GA/L	SC	6.85	fl oz/a	100.0	g ai/ha	C	SE	200	GAL/AC
7	I	BAS 92100I	200.0	GA/L	SC	13.7	fl oz/a	200.0	g ai/ha	C	SE	200	GAL/AC
8	I	AGRI-MEK	18.0	GA/L	EC	15.2	fl oz/a	20.0	g ai/ha	B	SE	100	GAL/AC
		-ABAMECTIN	18.0			15.2							
	S	NR 415 SPRAY OIL	866.0	GA/L	AE	0.5	% v/v	0.5	% v/v	B	SE	100	GAL/AC

Replications: 3, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 1 meters, Treated plot size Length: 1 meters, Application volume: 200 gal/ac, Mix size: .75 liters, Mix overage: 10%, Format definitions: BASF.DEF, BASF.FRM

E14

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2011/US/G61/A/01.0/US/U21/046	GEP:
Title:	BAS 92100I/EFFICACY/TNV/WATER VOLUMES	
GEP Guideline:	DINUBA- CITRUS; FTS-APPLE & PEACH	
Short Trial ID:	I11G61A-U21046	Licensee: Joseph Stout

Trial Comments

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2011/US/G61/A/01.0/US/U21/046          GEP:
Title:          BAS 92100I/EFFICACY/TNV/WATER VOLUMES
GEP Guideline: DINUBA- CITRUS; FTS-APPLE & PEACH
Short Trial ID: I11G61A-U21046              Licensee: Joseph Stout
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GENERAL TRIAL INFORMATION

Originator: PEDIBHOTLA VENKAT Trial Status: 7 FINAL
Researcher: STOUT JOSEPH Validated: 16/5/11
Cooperator Data (Y/N)?: N
Name: BASF CORPORATION
Street1: 10181 AVENUE 416 Phone No: (559)591-2548
Fax No: (559)591-8730
Town: DINUBA Email: joseph.stout@basf.com
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 93618
Location: Ag Research Station
Town: DINUBA Postal: 93618
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: FFX Trial Unit: U
Trt No: 8 Plot Width: 1 Unit: M
Reps: 3 Plot Length: 1
Plot Size: 1.00 M2
Factors: 1

ONum	Objectives
1. 12104001	Effect of water volumes on efficacy

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To
A	SE	1	7 day interval, as required by infestation	18/4/11	11:00 AM	11:30 AM
B	SE	2		18/4/11	11:00 AM	11:30 AM
C	SE	3		18/4/11	11:00 AM	11:30 AM

SPRAYER SETUPS

Set No	App Met	Carrier Type	Vol	Unit
1	SP	H2O	50	GAL/AC
2	SP	H2O	100	GAL/AC
3	SP	H2O	200	GAL/AC

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT:				Plant Part	Pest Stage		Infestation			
App	Date	Insect	Description	Biotype	Fr	To	Min	Max	Mode	Deg	Meth
A	1 18/4/11	METTCI	METATETRANYCHUS CITRI								
B	1 18/4/11	METTCI	METATETRANYCHUS CITRI								
C	1 18/4/11	METTCI	METATETRANYCHUS CITRI								

COMMENTS

Date	Type	Comment
9/5/11	COM	Counts for adults and larvae were combined at 21 DAT. Laval counts were too low to justify separate evaluation.
16/5/11	COM	Red mite populations declined in all replication of untreated control. Trial terminated and finalized 21 DAT.

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2011/US/G61/A/01.0/US/U21/046          GEP:
Title:          BAS 92100I/EFFICACY/TNV/WATER VOLUMES
GEP Guideline: DINUBA- CITRUS; FTS-APPLE & PEACH
Short Trial ID: I11G61A-U21046              Licensee: Joseph Stout
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Evaluation: No / Date	A03 21/4/11	A03 21/4/11	A03 21/4/11	A03 21/4/11	A07 25/4/11	A07 25/4/11
Crop: ID / Code / Resistance	1 CIDME	1 CIDME	1 CIDME	1 CIDME	1 CIDME	1 CIDME
Crop: Variety	FINGERED	FINGERED	FINGERED	FINGERED	FINGERED	FINGERED
Crop GS: From / To / Method	56	56	56	56	59	56
DAT / DALT / DAP	3 3 1533	3 3 1533	3 3 1533	3 3 1533	7 7 1537	7 7 1537
SE: File / Group	1	1	1	1	1	1
Organism / Biotype	METTCI	METTCI	METTCI	METTCI	METTCI	METTCI
Rating Type	NUMBER	NUMBER	NUMBER	CONTRO	NUMBER	NUMBER
Clarifier	EGGS	EGGS	MIXED MOTILES	CONTROL	EGGS	LARVAE
Pest GS: From / To / Method	EX EX	EX EX	LX IV	LX IV	EX EX	LX LX
CALC Method	ZCOUNT	ZCOUNT	ZCOUNT	P%CONT	ZCOUNT	ZCOUNT
Rating Unit	#	#	#	%REL	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	3 PLANT	3 PLANT	3 PLANT	1 TPLOT	3 PLANT	3 PLANT
ARM Action Codes		TL[1]		TAB[3]		
Decimals Print		1		1		
Trt Product Name	1	2	3	4	5	6
1 CHECK	89.0 a	81.5 a	72.3 a	0.0 b	87.3 a	13.7 a
2 BAS 92100I	40.7 a	39.2 a	1.7 b	98.3 a	34.7 a	1.3 c
3 BAS 92100I	49.3 a	46.4 a	0.3 b	99.7 a	73.3 a	1.0 c
4 BAS 92100I	38.3 a	30.4 a	0.7 b	99.4 a	66.3 a	2.3 c
5 BAS 92100I	44.7 a	44.0 a	3.0 b	94.9 a	67.3 a	1.0 c
6 BAS 92100I	29.3 a	27.5 a	1.0 b	98.1 a	47.7 a	1.0 c
7 BAS 92100I	67.7 a	55.4 a	0.0 b	100.0 a	44.7 a	1.0 c
8 AGRI-MEK NR 415 SPRAY OIL	38.0 a	35.7 a	3.7 b	88.7 a	43.3 a	7.3 b
LSD (P=.05)	43.03	0.38t	25.75	10.64	64.87	3.87
Standard Deviation	24.57	0.21t	14.70	6.08	37.04	2.21
CV	49.51	13.11	142.26	7.16	63.77	61.65
Bartlett's X2	7.757	4.534	46.713	25.033	8.824	12.852
P(Bartlett's X2)	0.354	0.717	0.001*	0.001*	0.266	0.045*
Replicate F	2.587	2.762	0.981	1.156	0.902	2.698
Replicate Prob(F)	0.1106	0.0975	0.3992	0.3431	0.4282	0.1021
Treatment F	1.885	1.407	8.736	96.729	0.717	13.088
Treatment Prob(F)	0.1481	0.2772	0.0003	0.0001	0.6597	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
t=Mean descriptions are reported in transformed data units, and are not de-transformed.
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	A07 25/4/11	A07 25/4/11	A07 25/4/11	A07 25/4/11	A07 25/4/11	A07 25/4/11
Crop: ID / Code / Resistance	1 CIDME	1 CIDME	1 CIDME	1 CIDME	1 CIDME	1 CIDME
Crop: Variety	FINGERED	FINGERED	FINGERED	FINGERED	FINGERED	FINGERED
Crop GS: From / To / Method	56	56	56	56	56	56
DAT / DALT / DAP	7 7 1537	7 7 1537	7 7 1537	7 7 1537	7 7 1537	7 7 1537
SE: File / Group	1	1	1	1	1	1
Organism / Biotype	METTCI	METTCI	METTCI	METTCI	METTCI	METTCI
Rating Type	NUMBER	NUMBER	NUMBER	NUMBER	CONTRO	NUMBER
Clarifier	LARVAE	ADULTS	ADULTS	MIXED MOTILES	CONTROL	MIXED MOTILES
Pest GS: From / To / Method	LX LX	IV IV	IV IV	LX IV	LX IV	LX IV
CALC Method	ZCOUNT	ZCOUNT	ZCOUNT	ZCOUNT	P%CONT	ZCOUNT
Rating Unit	#	#	#	#	%REL	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	3 PLANT	3 PLANT	3 PLANT	3 PLANT	1 TPLOT	3 PLANT
ARM Action Codes	TS[6]		TL[8]	T1	TAB[10]	TL[10]
Decimals Print	1		1		1	1
Trt Product Name	7	8	9	10	11	12
1 CHECK	13.3 a	43.3 a	31.2 a	57.0 a	0.0 c	46.6 a
2 BAS 92100I	1.3 c	0.7 a	0.4 b	2.0 b	94.6 a	1.9 c
3 BAS 92100I	1.0 c	1.7 a	1.3 b	2.7 b	94.0 a	2.4 c
4 BAS 92100I	1.7 c	1.7 a	1.3 b	4.0 b	93.8 a	2.9 c
5 BAS 92100I	0.7 c	3.3 a	2.6 b	4.3 b	88.6 a	3.6 c
6 BAS 92100I	0.9 c	1.0 a	0.8 b	2.0 b	95.9 a	1.9 c
7 BAS 92100I	0.9 c	0.3 a	0.3 b	1.3 b	95.5 a	1.1 c
8 AGRI-MEK NR 415 SPRAY OIL	7.3 b	5.3 a	4.8 b	12.7 b	65.3 b	12.3 b
LSD (P=.05)	0.89t	26.35	0.48t	28.53	17.22	0.42t
Standard Deviation	0.51t	15.04	0.27t	16.29	9.83	0.24t
CV	29.1	209.9	53.71	151.55	12.53	32.64
Bartlett's X2	6.158	51.972	1.843	48.461	19.223	3.884
P(Bartlett's X2)	0.406	0.001*	0.968	0.001*	0.004*	0.793
Replicate F	2.234	0.903	2.203	1.196	3.901	2.128
Replicate Prob(F)	0.1439	0.4278	0.1473	0.3316	0.0450	0.1560
Treatment F	10.811	2.867	8.388	4.096	34.417	10.852
Treatment Prob(F)	0.0001	0.0444	0.0004	0.0119	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
t=Mean descriptions are reported in transformed data units, and are not de-transformed.
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	A07 25/4/11	A14 3/5/11	A14 3/5/11	A14 3/5/11	A14 3/5/11	A14 3/5/11
Crop: ID / Code / Resistance	1 CIDME	1 CIDME	1 CIDME	1 CIDME	1 CIDME	1 CIDME
Crop: Variety	FINGERED	FINGERED	FINGERED	FINGERED	FINGERED	FINGERED
Crop GS: From / To / Method	56	67	67	67	67	67
DAT / DALT / DAP	7 7 1537	15 15 1545	15 15 1545	15 15 1545	15 15 1545	15 15 1545
SE: File / Group	PHYTOX 2	2	2	2	2	2
Organism / Biotype	NNNNN	METTCI	METTCI	METTCI	METTCI	METTCI
Rating Type	PHYTOX	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
Clarifier	CROP INJURY	EGGS	LARVAE	LARVAE	ADULTS	ADULTS
Pest GS: From / To / Method		EX EX	LX LX	LX LX	IV IV	IV IV
CALC Method	P%EST	ZCOUNT	ZCOUNT	ZCOUNT	ZCOUNT	ZCOUNT
Rating Unit	%	#	#	#	#	#
Part Rated	PX TOTAL PLANT	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	1 TPLOT	3 PLANT	3 PLANT	3 PLANT	3 PLANT	3 PLANT
ARM Action Codes	P			TS[15]		TL[17]
Decimals Print				1		1
Trt Product Name	13	14	15	16	17	18
1 CHECK	0.0 a	82.3 a	20.0 a	18.7 a	42.3 a	27.6 a
2 BAS 92100I	0.0 a	44.0 a	0.0 b	0.0 b	2.3 a	1.0 bc
3 BAS 92100I	0.0 a	61.0 a	0.0 b	0.0 b	0.0 a	0.0 c
4 BAS 92100I	0.0 a	41.7 a	0.3 b	0.3 b	2.0 a	0.9 bc
5 BAS 92100I	0.0 a	53.7 a	0.0 b	0.0 b	1.7 a	1.3 bc
6 BAS 92100I	0.0 a	31.3 a	1.0 b	0.9 b	3.7 a	1.8 bc
7 BAS 92100I	0.0 a	87.7 a	0.3 b	0.3 b	1.0 a	0.6 bc
8 AGRI-MEK NR 415 SPRAY OIL	0.0 a	36.0 a	2.0 b	1.5 b	10.3 a	9.6 ab
LSD (P=.05)	0.00	78.32	8.03	1.04t	27.95	0.56t
Standard Deviation	0.00	44.72	4.58	0.60t	15.96	0.32t
CV	0.0	81.74	154.97	43.91	201.59	63.26
Bartlett's X2	0.0	7.616	23.342	6.686	33.426	2.006
P(Bartlett's X2)	.	0.368	0.001*	0.153	0.001*	0.919
Replicate F	0.000	1.966	1.168	1.589	1.935	5.520
Replicate Prob(F)	1.0000	0.1768	0.3396	0.2388	0.1812	0.0171
Treatment F	0.000	0.658	6.835	13.154	2.396	6.776
Treatment Prob(F)	1.0000	0.7032	0.0012	0.0001	0.0777	0.0012

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
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Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	A14 3/5/11	A14 3/5/11	A14 3/5/11	A14 3/5/11	A21 9/5/11
Crop: ID / Code / Resistance	1 CIDME	1 CIDME	1 CIDME	1 CIDME	1 CIDME
Crop: Variety	FINGERED	FINGERED	FINGERED	FINGERED	FINGERED
Crop GS: From / To / Method	67	67	67	67	69
DAT / DALT / DAP	15 15 1545	15 15 1545	15 15 1545	15 15 1545	21 21 1551
SE: File / Group	2	2	2	PHYTOX 2	2
Organism / Biotype	METTCI	METTCI	METTCI	NNNNN	METTCI
Rating Type	NUMBER	CONTRO	NUMBER	PHYTOX	NUMBER
Clarifier	MIXED MOTILES	CONTROL	MIXED MOTILES	CROP INJURY	EGGS
Pest GS: From / To / Method	LX IV	LX IV	LX IV		EX EX
CALC Method	ZCOUNT	P%CONT	ZCOUNT	P%EST	ZCOUNT
Rating Unit	#	%REL	#	%	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	PX TOTAL PLANT	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	3 PLANT	1 TPLOT	3 PLANT	1 TPLOT	3 PLANT
ARM Action Codes	T2	TAB[19]	TL[19]	P	
Decimals Print		1	1		
Trt Product Name	19	20	21	22	23
1 CHECK	62.3 a	0.0 c	45.8 a	0.0 a	166.3 a
2 BAS 92100I	2.3 b	98.2 a	1.0 bc	0.0 a	33.3 a
3 BAS 92100I	0.0 b	100.0 a	0.0 c	0.0 a	36.0 a
4 BAS 92100I	2.3 b	98.2 a	1.0 bc	0.0 a	61.7 a
5 BAS 92100I	1.7 b	95.7 a	1.3 bc	0.0 a	40.7 a
6 BAS 92100I	4.7 b	94.3 a	2.7 bc	0.0 a	58.0 a
7 BAS 92100I	1.3 b	95.6 a	1.0 bc	0.0 a	56.3 a
8 AGRI-MEK NR 415 SPRAY OIL	12.3 b	71.8 b	11.0 b	0.0 a	40.7 a
LSD (P=.05)	35.78	13.16	0.56t	0.00	98.84
Standard Deviation	20.43	7.51	0.32t	0.00	56.43
CV	187.84	9.19	55.89	0.0	91.58
Bartlett's X2	36.49	11.501	1.528	0.0	11.825
P(Bartlett's X2)	0.001*	0.042*	0.958	.	0.106
Replicate F	1.738	0.344	4.678	0.000	1.092
Replicate Prob(F)	0.2117	0.7148	0.0278	1.0000	0.3625
Treatment F	3.213	62.262	8.588	0.000	1.795
Treatment Prob(F)	0.0300	0.0001	0.0004	1.0000	0.1664

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
t=Mean descriptions are reported in transformed data units, and are not de-transformed.
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	A21 9/5/11	A21 9/5/11
Crop: ID / Code / Resistance	1 CIDME	1 CIDME
Crop: Variety	FINGERED	FINGERED
Crop GS: From / To / Method	69	69
DAT / DALT / DAP	21 21 1551	21 21 1551
SE: File / Group	2	2
Organism / Biotype	METTCI	METTCI
Rating Type	NUMBER	CONTRO
Clarifier	MIXED MOTILES	CONTROL
Pest GS: From / To / Method	LX IV	LX IV
CALC Method	ZCOUNT	P%CONT
Rating Unit	#	%REL
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	3 PLANT	1 TPLOT
ARM Action Codes		TAB[24]
Decimals Print		1
Trt Product Name	24	25
1 CHECK	35.7 a	0.0 b
2 BAS 92100I	2.3 b	89.3 a
3 BAS 92100I	0.7 b	95.7 a
4 BAS 92100I	3.3 b	81.4 a
5 BAS 92100I	1.7 b	93.6 a
6 BAS 92100I	2.7 b	88.7 a
7 BAS 92100I	1.0 b	94.8 a
8 AGRI-MEK NR 415 SPRAY OIL	4.7 b	75.4 a
LSD (P=.05)	14.58	16.93
Standard Deviation	8.33	9.67
CV	128.09	12.5
Bartlett's X2	45.585	10.155
P(Bartlett's X2)	0.001*	0.118
Replicate F	1.185	9.518
Replicate Prob(F)	0.3347	0.0025
Treatment F	6.083	32.917
Treatment Prob(F)	0.0021	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
t=Mean descriptions are reported in transformed data units, and are not de-transformed.
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

ARM Action Codes
TL[1] = LOG([1]+ 1)
TAB[3] = Abbott (% of Untreated)[3]
TS[6] = SQR([6] + .5)
TL[8] = LOG([8]+ 1)
TAB[10] = Abbott (% of Untreated)[10]
TL[10] = LOG([10]+ 1)
TS[15] = SQR([15] + .5)
TL[17] = LOG([17]+ 1)
TAB[19] = Abbott (% of Untreated)[19]
TL[19] = LOG([19]+ 1)
TAB[24] = Abbott (% of Untreated)[24]

BASF Corporation

Type PG Year Cty Pl.No. Ver. Rev. Cty Reg No.
Trial ID: DEV I 2011 US G61 A 01.0 US U21 052 GEP:
Title: BAS 92100I/EFFICACY/TNV/WATER VOLUMES
GEP Guideline: DINUBA- CITRUS; FTS-APPLE & PEACH Crop Destruct: N
Short Trial ID: I11G61A-U21052 Licensee: Joseph Stout

Trt	Product Name	Code Com	Number	P	Form Conc	Conc Unit	FO	AI Rate	AI Rate Unit	Appl Date	Appl Meth
1	CHECK		UNBEHA							5/2/2011	SP
2	BAS 92100I	BAS	92100	I	212.0	GA/L	SC	106.0	G AI/HA	5/2/2011	SP
3	BAS 92100I	BAS	92100	I	212.0	GA/L	SC	212.0	G AI/HA	5/2/2011	SP
4	BAS 92100I	BAS	92100	I	212.0	GA/L	SC	106.0	G AI/HA	5/2/2011	SP
5	BAS 92100I	BAS	92100	I	212.0	GA/L	SC	212.0	G AI/HA	5/2/2011	SP
6	BAS 92100I	BAS	92100	I	212.0	GA/L	SC	106.0	G AI/HA	5/2/2011	SP
7	BAS 92100I	BAS	92100	I	212.0	GA/L	SC	212.0	G AI/HA	5/2/2011	SP
8	AGRI-MEK	BAS	90920	I	18.0	GA/L	EC	20.0	G AI/HA	5/2/2011	SP
	NR 415 SPRAY OIL	BAS	91114	S	866.0	GA/L	AE	0.5	% V/V	5/2/2011	SP

E15

BASF Corporation

	Type	PG	Year	Cty	Pl.No.	Ver.	Rev.	Cty	Reg No.	
Trial ID:	DEV	I	2011	US	G61	A	01.0	US	U21 052	GEP:

Title: BAS 92100I/EFFICACY/TNV/WATER VOLUMES

GEP Guideline: DINUBA- CITRUS; FTS-APPLE & PEACH Crop Destruct: N

Short Trial ID: I11G61A-U21052 Licensee: Joseph Stout

Trial Comments

BASF Corporation

Type PG Year Cty Pl.No. Ver. Rev. Cty Reg No.
Trial ID: DEV I 2011 US G61 A 01.0 US U21 052 GEP:
Title: BAS 92100I/EFFICACY/TNV/WATER VOLUMES
GEP Guideline: DINUBA- CITRUS; FTS-APPLE & PEACH Crop Destruct: N
Short Trial ID: I11G61A-U21052 Licensee: Joseph Stout

GENERAL TRIAL INFORMATION

Originator: PEDIBHOTLA VENKAT Trial Status: 7 FINAL
Researcher: STOUT JOSEPH
Cooperator Data (Y/N)?: N
Name: BASF CORPORATION
Street1: 10181 AVENUE 416 Phone No: (559)591-2548
Fax No: (559)591-8730
Town: DINUBA Email: joseph.stout@basf.com
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 93618
Location: Ag Research Station
Town: DINUBA Postal: 93618
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

TRIAL DESIGN

Trial Design: RB RANDOMIZED BLOC DESIGN Trial Type: FFX FIELD
Trial Unit: U
Trt No: 8 Plot Width: 1 Unit: M
Reps: 3 Plot Length: 1
Plot Size: 1.00 M2
Factors: 1

No. ONum Objectives
1. 1210400Effect of water volumes on efficacy

SEEDING

Code: CIDSI
Description: ORANGE, SWEET Variety: FISHER NAVEL
Trial Planting Date: 2/16/2001

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To
A	SE	1	7 day interval, as required by infestation	5/2/2011	10:30 AM	11:00 AM
B	SE	2		5/2/2011	10:30 AM	11:00 AM
C	SE	3		5/2/2011	10:30 AM	11:00 AM

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Carrier Type	Vol	Unit
1	SP	SGZ	H2O	50	GAL/AC
2	SP	SGZ	H2O	100	GAL/AC
3	SP	SGZ	H2O	200	GAL/AC

CROP STAGE AT APPLICATION

	A	B	C
Application Date:	5/2/2011	5/2/2011	5/2/2011
Crop 1 / Res	CIDSI	CIDSI	CIDSI
Variety	FISHER NAVEL	FISHER NAVEL	FISHER NAVEL
Gr Stage: From / To	69	69	69
B	B	B	

WEATHER

App	Date	Soil Cond	Moisture Surf	Sub	Temp Soil	Temp Air	Temp Unit	RH	Wind Speed	Unit	Dir	Cloud Cover	Light Int	Unit
A	5/2/2011	CU	S	H	16.9	27.5	C	23	2	KM/H	SS	0	95000	LUX
B	5/2/2011	CU	S	H	16.9	27.5	C	23	2	KM/H	SS	0	95000	LUX
C	5/2/2011	CU	S	H	16.9	27.5	C	23	2	KM/H	SS	0	95000	LUX

BASF Corporation

IRRIGATION AND PRECIPITATION

App	Date
A	5/2/2011
B	5/2/2011
C	5/2/2011

App	Date
A	5/2/2011
B	5/2/2011
C	5/2/2011

INSECT DESCRIPTION

App	No	Date	Insect	Description	Biotype	Plant Part Fr	Plant Part To	Pest Stage Min	Pest Stage Max	Infestation Mode	Infestation Deg	Infestation Method
A	1	5/2/2011	METTCI	Metatetranychus citri								
B	1	5/2/2011	METTCI	Metatetranychus citri								
C	1	5/2/2011	METTCI	Metatetranychus citri								

COMMENTS

Date	Type	Comment
5/2/2011	APP	Application was made to large citrus trees (12' X 10') in a defined area (~1/4 tree) where two branches had been marked. The application method was motorized backpack mist blower.
5/9/2011	ASM	Assessments were separated into three columns: eggs, larvae (less than eight legs), and adults (eight legs). Mixed motiles = larvae + adults After A07 larvae numbers were too low to justify a separate evaluation, therefore adults and larvae were totaled into one category (mixed motiles).
5/25/2011	COM	Mite populations declined in untreated control before 28 DAT. Trial terminated and finalized A21.

BASF Corporation

Type	PG	Year	Cty	Pl.No.	Ver.	Rev.	Cty	Reg No.	
Trial ID: DEV	I	2011	US	G61	A	01.0	US	U21 052	GEP:
Title:	BAS 92100I/EFFICACY/TNV/WATER VOLUMES								
GEP Guideline:	DINUBA- CITRUS; FTS-APPLE & PEACH							Crop Destruct:	N
Short Trial ID:	I11G61A-U21052	Licensee:	Joseph Stout						

Additional Information (Validation List Comments)
7, FINAL = 50
STOUT JOSEPH = STOUTJ
N = NO
CA, CALIFORNIA = US
US, UNITED STATES OF AMERICA = Y
RB = RANDOMIZED BLOC DESIGN
FFX, FIELD = FIELD
12104001 = Efficacy profile
CIDSI, ORANGE, SWEET = CITRUS SINENSIS
SE = OTHER (DESCRIBE IN COMMENTS)
SP = SPRAY
SGZ = MIST BLOWER (MOBILE)
H2O = WATER
GAL/AC = Gallon / Acre
69 = END OF FLOWERING;FRUIT SET VIS
B = BBCH SCALE
CU = CULTIVATED
S = DRY
H = MOIST (NORMAL)
C = Degree Celsius
KM/H = Kilometer / Hour
SS = FROM SOUTH
0 = CLEAR
LUX = Lux
METTCI, Metatetranychus citri = MITE, CITRUS RED
APP = APPLICATION INFORMATION
ASM = ASSESSMENTS (EVALUATIONS)
COM = GENERAL COMMENTS

BASF Corporation

Type PG Year Cty Pl.No. Ver. Rev. Cty Reg No.
Trial ID: DEV I 2011 US G61 A 01.0 US U21 052 GEP:
Title: BAS 92100I/EFFICACY/TNV/WATER VOLUMES
GEP Guideline: DINUBA- CITRUS; FTS-APPLE & PEACH Crop Destruct: N
Short Trial ID: I11G61A-U21052 Licensee: Joseph Stout

Evaluation: No / Date	A03 5/5/2011	A03 5/5/2011	A03 5/5/2011
Crop: ID / Code / Resistance	1 CIDSI -	1 CIDSI -	1 CIDSI -
Crop: Variety	FISHER NAVEL	FISHER NAVEL	FISHER NAVEL
Crop GS: From / To / Method	69 - B	69 - B	69 - B
DAT / DALT / DAP	3 3 3730	3 3 3730	3 3 3730
SE: File / Group	- 1	- 1	- 1
Organism / Biotype	METTCI -	METTCI -	METTCI -
Rating Type	NUMBER	NUMBER	NUMBER
Clarifier	NUMBER	LARVAE	ADULTS
Pest GS: From / To / Method	EX EX -	LX LX -	IV IV -
CALC Method	ZCOUNT	ZCOUNT	ZCOUNT
Rating Unit	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1
Sample Size / Unit	5 TPLOT	5 TPLOT	5 TPLOT
Assessed by			
ARM Action Codes			
Decimals Print			

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	FO	AI Rate	AI Unit	Appl Code	1	2	3
1	CHECK		UNBEHA						ABC	295.0 a	24.0 a	52.3 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	125.3 a	0.0 b	0.0 b
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	56.0 a	0.0 b	0.0 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	B	154.3 a	0.0 b	0.0 b
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	B	100.7 a	0.0 b	0.0 b
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	C	173.7 a	0.0 b	0.0 b
7	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	C	120.0 a	0.0 b	0.0 b
8	AGRI-MEK	BAS	90920	18.0	GA/L	EC	20.0	G AI/HA	B	208.7 a	0.0 b	0.0 b
	NR 415 SPRAY OIL	BAS	91114	866.0	GA/L	AE	0.5	% V/V	B			
LSD (P=.01)										318.18	11.94	29.55
Standard Deviation										130.90	4.91	12.16
CV										84.88	163.72	185.84
Replicate F										1.396	1.000	1.000
Replicate Prob(F)										0.2801	0.3927	0.3927
Treatment F										0.943	8.953	6.949
Treatment Prob(F)										0.5057	0.0003	0.0011

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)
t=Mean descriptions are reported in transformed data units, and are not de-transformed.

BASF Corporation

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	FO	AI Rate	AI Unit	Appl Code	4	5	6
	Evaluation: No / Date									A03 5/5/2011	A03 5/5/2011	A07 5/9/2011
	Crop: ID / Code / Resistance									1 CIDSI -	1 CIDSI -	1 CIDSI -
	Crop: Variety									FISHER NAVEL	FISHER NAVEL	FISHER NAVEL
	Crop GS: From / To / Method									69 - B	69 - B	69 - B
	DAT / DALT / DAP									3 3 3730	3 3 3730	7 7 3734
	SE: File / Group									- 1	- 1	- 1
	Organism / Biotype									METTCI -	METTCI -	METTCI -
	Rating Type									NUMBER	CONTRO	NUMBER
	Clarifier									MIXED MOTILES	CONTROL	NUMBER
	Pest GS: From / To / Method									LX IV -	LX IV -	EX EX -
	CALC Method									ZCOUNT	P%CONT	ZCOUNT
	Rating Unit									#	%REL	#
	Part Rated									BX LEAF	BX LEAF	BX LEAF
	# Subsamples / Class									1 1	1 1	1 1
	Sample Size / Unit									5 TPLOT	1 TPLOT	5 TPLOT
	Assessed by											
	ARM Action Codes									T1	TAB[4]	
	Decimals Print										1	
1	CHECK		UNBEHA						ABC	76.3 a	0.0 b	254.0 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	0.0 b	100.0 a	144.7 a
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 b	100.0 a	65.0 a
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	B	0.0 b	100.0 a	159.7 a
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	B	0.0 b	100.0 a	123.3 a
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	C	0.0 b	100.0 a	112.0 a
7	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	C	0.0 b	100.0 a	92.7 a
8	AGRI-MEK	BAS	90920	18.0	GA/L	EC	20.0	G AI/HA	B	0.0 b	100.0 a	148.3 a
	NR 415 SPRAY OIL	BAS	91114	866.0	GA/L	AE	0.5	% V/V	B			
	LSD (P=.01)									41.43	0.00	200.08
	Standard Deviation									17.05	0.00	82.32
	CV									178.64	0.0	59.88
	Replicate F									1.000	0.000	0.318
	Replicate Prob(F)									0.3927	1.0000	0.7325
	Treatment F									7.521	0.000	1.414
	Treatment Prob(F)									0.0007	1.0000	0.2749

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)
t=Mean descriptions are reported in transformed data units, and are not de-transformed.

BASF Corporation

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	AI FO	AI Rate	AI Rate Unit	Appl Code	7	8	9
	Evaluation: No / Date									A07 5/9/2011	A07 5/9/2011	A07 5/9/2011
	Crop: ID / Code / Resistance									1 CIDSI -	1 CIDSI -	1 CIDSI -
	Crop: Variety									FISHER NAVEL	FISHER NAVEL	FISHER NAVEL
	Crop GS: From / To / Method									69 - B	69 - B	69 - B
	DAT / DALT / DAP									7 7 3734	7 7 3734	7 7 3734
	SE: File / Group									- 1	- 1	- 1
	Organism / Biotype									METTCI -	METTCI -	METTCI -
	Rating Type									NUMBER	CONTRO	NUMBER
	Clarifier									MIXED MOTILES	CONTROL	MIXED MOTILES
	Pest GS: From / To / Method									LX IV -	LX IV -	LX IV -
	CALC Method									ZCOUNT	P%CONT	ZCOUNT
	Rating Unit									#	%REL	#
	Part Rated									BX LEAF	BX LEAF	BX LEAF
	# Subsamples / Class									1 1	1 1	1 1
	Sample Size / Unit									5 TPLOT	1 TPLOT	5 TPLOT
	Assessed by											
	ARM Action Codes										TAB[7]	TS[7]
	Decimals Print										1	1
1	CHECK		UNBEHA						ABC	50.3 a	0.0 b	50.1 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	1.3 b	96.9 a	0.9 b
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.7 b	98.7 a	0.6 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	B	1.3 b	97.2 a	1.3 b
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	B	0.0 b	100.0 a	0.0 b
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	C	0.7 b	98.8 a	0.6 b
7	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	C	0.0 b	100.0 a	0.0 b
8	AGRI-MEK	BAS	90920	18.0	GA/L	EC	20.0	G AI/HA	B	3.3 b	93.3 a	2.7 b
	NR 415 SPRAY OIL	BAS	91114	866.0	GA/L	AE	0.5	% V/V	B			
	LSD (P=.01)									8.23	6.63	1.22t
	Standard Deviation									3.39	2.73	0.50t
	CV									46.96	3.19	26.92
	Replicate F									0.942	2.411	1.487
	Replicate Prob(F)									0.4133	0.1260	0.2597
	Treatment F									79.792	484.266	54.664
	Treatment Prob(F)									0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)
t=Mean descriptions are reported in transformed data units, and are not de-transformed.

BASF Corporation

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	FO	AI Rate	AI Unit	Appl Code	A07 5/9/2011 10	A14 5/16/2011 11	A14 5/16/2011 12
	Evaluation: No / Date									A07 5/9/2011	A14 5/16/2011	A14 5/16/2011
	Crop: ID / Code / Resistance									1 CIDSI -	1 CIDSI -	1 CIDSI -
	Crop: Variety									FISHER NAVEL	FISHER NAVEL	FISHER NAVEL
	Crop GS: From / To / Method									69 - B	69 - B	69 - B
	DAT / DALT / DAP									7 7 3734	14 14 3741	14 14 3741
	SE: File / Group									PHYTOX 2	- 1	- 1
	Organism / Biotype									NNNNN -	METTCI -	METTCI -
	Rating Type									PHYTOX	NUMBER	NUMBER
	Clarifier									CROP INJURY	NUMBER	MIXED MOTILES
	Pest GS: From / To / Method										EX EX -	LX IV -
	CALC Method									P%EST	ZCOUNT	ZCOUNT
	Rating Unit									%	#	#
	Part Rated									PX TOTAL PLANT	BX LEAF	BX LEAF
	# Subsamples / Class									1 1	1 1	1 1
	Sample Size / Unit									1 TPLOT	5 TPLOT	5 TPLOT
	Assessed by											
	ARM Action Codes									P		
	Decimals Print											
1	CHECK		UNBEHA						ABC	0.0 a	149.7 a	31.0 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	0.0 a	47.0 a	0.7 b
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	34.0 a	0.0 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	B	0.0 a	62.0 a	0.0 b
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	B	0.0 a	90.0 a	0.0 b
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	C	0.0 a	51.7 a	0.3 b
7	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	C	0.0 a	42.3 a	0.3 b
8	AGRI-MEK	BAS	90920	18.0	GA/L	EC	20.0	G AI/HA	B	0.0 a	36.0 a	1.7 b
	NR 415 SPRAY OIL	BAS	91114	866.0	GA/L	AE	0.5	% V/V	B			
	LSD (P=.01)									0.00	114.86	7.32
	Standard Deviation									0.00	47.25	3.01
	CV									0.0	73.74	70.84
	Replicate F									0.000	2.304	0.869
	Replicate Prob(F)									1.0000	0.1365	0.4409
	Treatment F									0.000	2.037	38.763
	Treatment Prob(F)									1.0000	0.1218	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)
t=Mean descriptions are reported in transformed data units, and are not de-transformed.

BASF Corporation

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	FO	AI Rate	AI Unit	Appl Code	13	14	15
	Evaluation: No / Date									A14 5/16/2011	A14 5/16/2011	A14 5/16/2011
	Crop: ID / Code / Resistance									1 CIDSI -	1 CIDSI -	1 CIDSI -
	Crop: Variety									FISHER NAVEL	FISHER NAVEL	FISHER NAVEL
	Crop GS: From / To / Method									69 - B	69 - B	69 - B
	DAT / DALT / DAP									14 14 3741	14 14 3741	14 14 3741
	SE: File / Group									- 1	- 1	PHYTOX 1
	Organism / Biotype									METTCI -	METTCI -	NNNNN -
	Rating Type									CONTRO	NUMBER	PHYTOX
	Clarifier									CONTROL	MIXED MOTILES	CROP INJURY
	Pest GS: From / To / Method									LX IV -	LX IV -	
	CALC Method									P%CONT	ZCOUNT	P%EST
	Rating Unit									%REL	#	%
	Part Rated									BX LEAF	BX LEAF	PX TOTAL PLANT
	# Subsamples / Class									1 1	1 1	1 1
	Sample Size / Unit									1 TPLOT	5 TPLOT	1 TPLOT
	Assessed by											
	ARM Action Codes									TAB[12]	TS[12]	P
	Decimals Print									1	1	
1	CHECK		UNBEHA						ABC	0.0 b	30.7 a	0.0 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	97.7 a	0.5 b	0.0 a
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	100.0 a	0.0 b	0.0 a
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	B	100.0 a	0.0 b	0.0 a
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	B	100.0 a	0.0 b	0.0 a
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	C	98.6 a	0.3 b	0.0 a
7	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	C	99.2 a	0.3 b	0.0 a
8	AGRI-MEK	BAS	90920	18.0	GA/L	EC	20.0	G AI/HA	B	94.2 a	1.4 b	0.0 a
	NR 415 SPRAY OIL	BAS	91114	866.0	GA/L	AE	0.5	% V/V	B			
	LSD (P=.01)									7.09	1.03t	0.00
	Standard Deviation									2.92	0.42t	0.00
	CV									3.38	28.48	0.0
	Replicate F									0.438	0.407	0.000
	Replicate Prob(F)									0.6539	0.6734	1.0000
	Treatment F									428.985	47.179	0.000
	Treatment Prob(F)									0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)
t=Mean descriptions are reported in transformed data units, and are not de-transformed.

BASF Corporation

Evaluation: No / Date	A21 5/23/2011	A21 5/23/2011	A21 5/23/2011
Crop: ID / Code / Resistance	1 CIDSI -	1 CIDSI -	1 CIDSI -
Crop: Variety	FISHER NAVEL	FISHER NAVEL	FISHER NAVEL
Crop GS: From / To / Method	70 - B	70 - B	70 - B
DAT / DALT / DAP	21 21 3748	21 21 3748	21 21 3748
SE: File / Group	- 1	- 1	- 1
Organism / Biotype	METTCI -	METTCI -	METTCI -
Rating Type	NUMBER	NUMBER	CONTRO
Clarifier	NUMBER	MIXED MOTILES	CONTROL
Pest GS: From / To / Method	EX EX -	LX IV -	LX IV -
CALC Method	ZCOUNT	ZCOUNT	P%CONT
Rating Unit	#	#	%REL
Part Rated	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1
Sample Size / Unit	5 TPLOT	5 TPLOT	1 TPLOT
Assessed by			
ARM Action Codes			TAB[17]
Decimals Print			1

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	Form	AI Rate	AI Rate Unit	Appl Code	16	17	18
1	CHECK		UNBEHA						ABC	97.3 a	29.7 a	0.0 b
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	73.3 a	0.7 b	96.9 a
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	39.0 a	0.0 b	100.0 a
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	B	82.7 a	0.0 b	100.0 a
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	B	77.7 a	0.0 b	100.0 a
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	C	58.3 a	0.0 b	100.0 a
7	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	C	52.0 a	0.0 b	100.0 a
8	AGRI-MEK	BAS	90920	18.0	GA/L	EC	20.0	G AI/HA	B	19.7 a	0.0 b	100.0 a
	NR 415 SPRAY OIL	BAS	91114	866.0	GA/L	AE	0.5	% V/V	B			

	16	17	18
LSD (P=.01)	98.40	14.74	3.16
Standard Deviation	40.48	6.07	1.30
CV	64.77	159.96	1.49
Replicate F	0.828	1.010	0.992
Replicate Prob(F)	0.4574	0.3892	0.3953
Treatment F	1.172	8.919	2203.790
Treatment Prob(F)	0.3774	0.0003	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)
t=Mean descriptions are reported in transformed data units, and are not de-transformed.

BASF Corporation

```
          Type PG Year Cty Pl.No. Ver. Rev. Cty Reg No.
Trial ID: DEV  I  2011 US  G61    A    01.0 US  U21 052          GEP:
Title:          BAS 92100I/EFFICACY/TNV/WATER VOLUMES
GEP Guideline:  DINUBA- CITRUS; FTS-APPLE & PEACH         Crop Destruct: N
Short Trial ID: I11G61A-U21052  Licensee: Joseph Stout
 Crop: ID / Code / Resistance
 1, CIDSI, , FISHER NAVEL = ORANGE, SWEET
Crop GS: From / To / Method
 69 = END OF FLOWERING;FRUIT SET VIS
 B = BBCH SCALE

 3730 = 1 2/16/2001
 3734 = 1 2/16/2001
 3741 = 1 2/16/2001
 3748 = 1 2/16/2001
Organism / Biotype
 METTCI = METATETRANYCHUS CITRI
 NNNNN = USEFUL PLANTS
Rating Type
 NUMBER,  = NUMBER
 CONTRO,  = CONTROL
 PHYTOX,  = CROP INJURY
Pest GS: From / To / Method
 EX = EGGS
 LX = LARVAE
 IV = ADULTS, ALIVE
CALC Method
 ZCOUNT = COUNT WEEDS OR INSECTS AFT.T
 P%CONT = ESTIMATION CONTROL IN %
 P%EST = ESTIMATION ATTRIBUTE IN %
Rating Unit
 # = NUMBER
 %REL = % RELATIVE
 % = PERCENT
Part Rated
 BX,  = LEAF
 PX,  = PLANT,TOTAL

 TPLOT = TOTAL PLOT
ARM Action Codes
 P = Rating scale of 0 to 100 (e.g. % control or injury)
 TAB[12] = *** Following Identify Non-Analyzable Data for Summary Reports ***
 TAB[17] = *** Following Identify Non-Analyzable Data for Summary Reports ***
```

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:	DEV/I/2010/US/G61/A/01.0/US/UCA/PM1 GEP:
Title:	BAS 92100I/EFFICACY/CITRUS/MITES
GEP Guideline:	CONFIDENTIAL
Short Trial ID:	I10G61A-UCAPM1 Licensee: Phil Munger

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit	Mix Size	Unit
1	CHECK													
2	BAS 92100I	212.0	GA/L	SC	6.85	fl oz/a	106.0	g ai/ha	A	01	110	GAL/AC	2.25	GALLONS
	-CYFLUMETOFEN	212.0			7.261									
	METH-OIL	100.0	%	OL	0.25	% v/v	0.25	% v/v	A	01	110	GAL/AC	2.25	GALLONS
	-METH-OIL	100.0			0.25									
3	BAS 92100I	212.0	GA/L	SC	10.3	fl oz/a	159.6	g ai/ha	A	01	110	GAL/AC	2.25	GALLONS
	-CYFLUMETOFEN	212.0			10.918									
	METH-OIL	100.0	%	OL	0.25	% v/v	0.25	% v/v	A	01	110	GAL/AC	2.25	GALLONS
	-METH-OIL	100.0			0.25									
4	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	110	GAL/AC	2.25	GALLONS
	-CYFLUMETOFEN	212.0			14.522									
	METH-OIL	100.0	%	OL	0.25	% v/v	0.25	% v/v	A	01	110	GAL/AC	2.25	GALLONS
	-METH-OIL	100.0			0.25									
5	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	110	GAL/AC	2.25	GALLONS
	-CYFLUMETOFEN	212.0			14.522									
6	METH-OIL	100.0	%	OL	0.25	% v/v	0.25	% v/v	A	01	110	GAL/AC	2.25	GALLONS
	-METH-OIL	100.0			0.25									
7	AGRI-MEK	18.0	GA/L	EC	16.0	fl oz/a	21.0	g ai/ha	A	01	110	GAL/AC	2.25	GALLONS
	-ABAMECTIN	18.0			16									

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 15 feet, Treated plot size Length: 15 feet, Application volume: 110 gal/ac, Mix size: 2.25 gallons, Format definitions: BASF.DEF, BASF.FRM

E16

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2010/US/G61/A/01.0/US/UCA/PM1	GEP:
Title:	BAS 92100I/EFFICACY/CITRUS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I10G61A-UCAPM1	Licensee: Phil Munger

Trial Comments

TITLE: BAS 92100I/EFFICACY/CITRUS/MITES

RESULTS: (C00PERATOR COMMENTS)

RESULTS

EVALUATION PARAMETERS

The treatments in the trial were evaluated as detailed in the trial protocol. A pre-evaluation of the two spotted spider mite, and beneficial population within the trial site was made prior to the application of the treatments. The beneficial present was the predaceous mite, Euseius tularensis. The treatments were evaluated based upon the presence of the following live categories/leaf: 1) mites - eggs, nymphs, and adults, 2) predaceous mites. Ten (10) leaves were randomly collected from each replication for the pre-application, and from each plot on all the subsequent evaluation dates. The method used for the evaluation of the categories/leaf was the brushing machine/glass plate/binocular microscope method. The data from the evaluations are represented as numerical means, and statistically.

EVALUATION SUMMARY

The data from the evaluations show that the twospotted spider mite infestation level that occurred at the initiation of the trial within the trial area was at an acceptable level. The data from the evaluations show that the population within the trial untreated plots show an increase after the initiation of the trial. The evaluation data from throughout the trial show that all of the treatments, at the rates applied appeared to provide statistically comparable mite efficacy - out to about 17 days after application. The evaluation data from the 13Sep10-31DAA show a general natural decline in the mite population. The treatments, at the rates applied, did not cause any visual crop phytotoxicity. The trial was conducted over a 31 day period.

Trial Complete

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2010/US/G61/A/01.0/US/UCA/PM1          GEP:
Title:          BAS 92100I/EFFICACY/CITRUS/MITES
GEP Guideline: CONFIDENTIAL
Short Trial ID: I10G61A-UCAPM1              Licensee: Phil Munger
```

GENERAL TRIAL INFORMATION

Originator: MENON ANIL Trial Status: 7 FINAL
Researcher: MUNGER PHILIP Validated: 28/2/11
Cooperator Data (Y/N)?: Y
Name: JAKE J. ZACCARIA
Org: ZACCARIA AG CONSULTING
Street1: 5408 SUMMERWING WAY Phone No: 661-393-4981
Town: BAKERSFIELD
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 93308
Town: EDISON Postal: 93220
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: ORC Trial Unit: U
Trt No: 7 Plot Width: 15 Unit: FT
Reps: 4 Plot Length: 15
Plot Size: 225.00 FT2
Factors: 1

ONum	Objectives
1. 12104001	Efficacy trials on Mite species on citrus

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To	Spqu Code
A	01	1	1st appl when pest reaches locally recommended threshold	13/8/10	6:00 AM	7:00 AM	N1

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Carrier Type	Vol	Unit	Mix Size	Unit
1	SP	SGT	H2O	110	GAL/AC	2.25	GALLONS

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT:				Plant Part	Pest Stage		Infestation			
App	Date	Insect	Description	Biotype	Fr	To	Min	Max	Mode	Deg	Meth
A 1	13/8/10	TETRUR	TETRANYCHUS URTICAE								
2		EUSISP	EUSEIUS SP.								

COMMENTS

Date	Type	Comment
15/11/10	OFF	INTRODUCTION

The twospotted spider mite, Tetranychus urticae, can cause damage to citrus trees. The mite can cause citrus tree defoliation, and a reduction in the yield of bearing trees if the pest is not controlled, and the population increases. A field trial was conducted to evaluate the efficacy of the BASF material BAS92100 applied alone for the control of the pest. Agri-Mek, Horticultural Oil and an untreated control were included for comparison. The trial was located in a commercial production grove in the Kern County citrus-growing region near Edison, California. The twospotted spider mite occurs throughout the Kern County citrus production area. The mite population developed late-season within the trial area. The weather and environmental conditions during the trial period were generally conducive for the development of the pest. The 2010 season was considered a light twospotted mite year in citrus.

MATERIALS AND METHODS

The trial was located in the citrus production region near Edison, California. The citrus trees, Fukumoto variety, in the trial area were planted in January of 2005. The treatment plots were arranged within the commercial grove in a randomized complete block design and were replicated 4 times. Treatments in the trial were as detailed in the trial protocol, and were applied as specified. Application of the treatments was made with Solo backpack mistblower equipment at a volume of 110gpa.

28/2/11 WEA Date	Sol Rad (Ly/day)	Max Temp (°F)	Min Temp (°F)	Precip (in)
8/2/2010	733	97.3	63.1	0

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8/3/2010	742	99.4	62.8	0
8/4/2010	732	98.8	62.7	0
8/5/2010	740	97.8	63.7	0
8/6/2010	729	95.6	63.4	0
8/7/2010	720	97	63	0
8/8/2010	673	92.7	60.8	0
8/9/2010	718	94.4	59	0
8/10/2010	670	95	61.4	0
8/11/2010	569	89.9	71.1	0
8/12/2010	728	89.3	61	0
8/13/2010	722	93.5	61.3	0
8/14/2010	721	95.4	62.5	0
8/15/2010	715	94	64.4	0
8/16/2010	700	96	64.4	0
8/17/2010	672	100	66.9	0
8/18/2010	660	97.9	68.5	0
8/19/2010	687	95.7	66.7	0
8/20/2010	700	99.8	61.8	0
8/21/2010	672	99.4	63.1	0
8/22/2010	705	88.7	62.2	0
8/23/2010	690	95.1	57.8	0
8/24/2010	649	100.2	61.3	0
8/25/2010	656	111.4	70.1	0
8/26/2010	634	108.4	73.6	0
8/27/2010	662	97.4	63.2	0
8/28/2010	698	82.8	55.9	0
8/29/2010	684	78	54.9	0
8/30/2010	667	83.1	53.6	0
8/31/2010	651	83.7	54.6	0

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2010/US/G61/A/01.0/US/UCA/PM1	GEP:
Title:	BAS 92100I/EFFICACY/CITRUS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I10G61A-UCAPM1	Licensee: Phil Munger

Evaluation: No / Date	001 7/8/10	001 7/8/10	001 7/8/10	001 7/8/10	001 7/8/10
Crop: ID / Code / Resistance	1 CIDSI	1 CIDSI	1 CIDSI	1 CIDSI	1 CIDSI
Crop: Variety	FUKUMOTO	FUKUMOTO	FUKUMOTO	FUKUMOTO	FUKUMOTO
DAT / DALT / DAP	-6 -6 2042	-6 -6 2042	-6 -6 2042	-6 -6 2042	-6 -6 2042
SE: File / Group	1	1	1	1	1
Organism / Biotype	TETRUR	TETRUR	TETRUR	TETRUR	EUSISP
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	INFEST. #/LEAF	INFEST. #/LEAF	INFEST. #/LEAF	INFEST#/MOTILES	INFEST#/MOTILES
Pest GS: From / To / Method	EX EX B	IX IX B	NF NF B	NF IX B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT
ARM Action Codes	L05	L05	L05	L05	L05
Decimals Print	1	1	1	1	1
Trt Product Name	1	2	3	4	5
1 CHECK	2.1 a	2.1 a	1.5 a	3.6 a	0.2 a
2 BAS 92100I METH-OIL	2.1 a	2.1 a	1.5 a	3.6 a	0.2 a
3 BAS 92100I METH-OIL	2.1 a	2.1 a	1.5 a	3.6 a	0.2 a
4 BAS 92100I METH-OIL	2.1 a	2.1 a	1.5 a	3.6 a	0.2 a
5 BAS 92100I	2.1 a	2.1 a	1.5 a	3.6 a	0.2 a
6 METH-OIL	2.1 a	2.1 a	1.5 a	3.6 a	0.2 a
7 AGRI-MEK	2.1 a	2.1 a	1.5 a	3.6 a	0.2 a
LSD (P=.05)	0.00	0.00	0.00	0.00	0.00
Standard Deviation	0.00	0.00	0.00	0.00	0.00
CV	0.07	0.06	0.0	0.0	0.09
Bartlett's X2	0.0	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	1.00	.	1.00	1.00
Replicate F	4152356.915	2516579.502	0.000	0.000	35232155.523
Replicate Prob(F)	0.0001	0.0001	1.0000	1.0000	0.0001
Treatment F	0.000	0.000	0.000	0.000	1.000
Treatment Prob(F)	1.0000	1.0000	1.0000	1.0000	0.4552

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	002 20/8/10	002 20/8/10	002 20/8/10	002 20/8/10	002 20/8/10
Crop: ID / Code / Resistance	1 CIDSI	1 CIDSI	1 CIDSI	1 CIDSI	1 CIDSI
Crop: Variety	FUKUMOTO	FUKUMOTO	FUKUMOTO	FUKUMOTO	FUKUMOTO
DAT / DALT / DAP	7 7 2055	7 7 2055	7 7 2055	7 7 2055	7 7 2055
SE: File / Group	1	2	2	2	2
Organism / Biotype	NNNNN	TETRUR	TETRUR	TETRUR	TETRUR
Rating Type	PHYTOX	INFECT	INFECT	INFECT	INFECT
Clarifier	CROP INJURY	INFEST. #/LEAF	INFEST. #/LEAF	INFEST. #/LEAF	INFEST#/MOTILES
Pest GS: From / To / Method		EX EX B	IX IX B	NF NF B	NF IX B
CALC Method	P%EST	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	%	#	#	#	#
Part Rated	PX TOTAL PLANT	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT
ARM Action Codes	P	L05	L05	L05	L05
Decimals Print	1	1	1	1	1
Trt Product Name	6	7	8	9	10
1 CHECK	0.0 a	2.7 a	3.0 a	5.1 a	8.1 a
2 BAS 92100I METH-OIL	0.0 a	0.0 b	0.0 b	0.0 b	0.0 b
3 BAS 92100I METH-OIL	0.0 a	0.0 b	0.0 b	0.0 b	0.0 b
4 BAS 92100I METH-OIL	0.0 a	0.3 b	0.8 b	1.2 b	2.0 b
5 BAS 92100I	0.0 a	0.0 b	0.5 b	0.0 b	0.5 b
6 METH-OIL	0.0 a	0.8 b	1.2 b	0.8 b	2.0 b
7 AGRI-MEK	0.0 a	0.0 b	0.0 b	0.0 b	0.0 b
LSD (P=.05)	0.00	0.90	1.28	2.28	3.31
Standard Deviation	0.00	0.61	0.86	1.53	2.23
CV	0.0	113.11	111.83	152.3	125.44
Bartlett's X2	0.0	3.426	2.373	5.394	8.238
P(Bartlett's X2)	.	0.18	0.499	0.067	0.041*
Replicate F	0.000	0.128	0.046	0.719	0.299
Replicate Prob(F)	1.0000	0.9420	0.9864	0.5533	0.8258
Treatment F	0.000	10.774	6.305	5.925	6.868
Treatment Prob(F)	1.0000	0.0001	0.0010	0.0015	0.0006

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	002 20/8/10	003 30/8/10	003 30/8/10	003 30/8/10	003 30/8/10
Crop: ID / Code / Resistance	1 CIDSI	1 CIDSI	1 CIDSI	1 CIDSI	1 CIDSI
Crop: Variety	FUKUMOTO	FUKUMOTO	FUKUMOTO	FUKUMOTO	FUKUMOTO
DAT / DALT / DAP	7 7 2055	17 17 2065	17 17 2065	17 17 2065	17 17 2065
SE: File / Group	2	2	3	3	3
Organism / Biotype	EUSISP	NNNNN	TETRUR	TETRUR	TETRUR
Rating Type	INFECT	PHYTOX	INFECT	INFECT	INFECT
Clarifier	INFEST#/MOTILES	CROP INJURY	INFEST. #/LEAF	INFEST. #/LEAF	INFEST. #/LEAF
Pest GS: From / To / Method	NF IX B		EX EX B	IX IX B	NF NF B
CALC Method	TCOUNT	P%EST	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	%	#	#	#
Part Rated	BX LEAF	PX TOTAL PLANT	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT
ARM Action Codes	L05	P	L05	L05	L05
Decimals Print	1	1	1	1	1
Trt Product Name	11	12	13	14	15
1 CHECK	0.0 a	0.0 a	2.3 a	2.4 a	2.7 a
2 BAS 92100I METH-OIL	0.0 a	0.0 a	0.0 b	0.0 b	0.0 b
3 BAS 92100I METH-OIL	0.0 a	0.0 a	0.0 b	0.0 b	0.0 b
4 BAS 92100I METH-OIL	0.0 a	0.0 a	0.0 b	0.0 b	0.0 b
5 BAS 92100I	0.0 a	0.0 a	0.0 b	0.0 b	0.0 b
6 METH-OIL	0.0 a	0.0 a	0.0 b	0.0 b	0.0 b
7 AGRI-MEK	0.0 a	0.0 a	0.0 b	0.0 b	0.0 b
LSD (P=.05)	0.00	0.00	0.84	0.91	0.85
Standard Deviation	0.00	0.00	0.57	0.61	0.57
CV	0.0	0.0	176.38	179.12	147.96
Bartlett's X2	0.0	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.	.
Replicate F	0.000	0.000	1.000	1.000	1.000
Replicate Prob(F)	1.0000	1.0000	0.4155	0.4155	0.4155
Treatment F	0.000	0.000	9.000	8.727	12.789
Treatment Prob(F)	1.0000	1.0000	0.0001	0.0002	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	003 30/8/10	003 30/8/10	004 13/9/10	004 13/9/10	004 13/9/10
Crop: ID / Code / Resistance	1 CIDSI	1 CIDSI	1 CIDSI	1 CIDSI	1 CIDSI
Crop: Variety	FUKUMOTO	FUKUMOTO	FUKUMOTO	FUKUMOTO	FUKUMOTO
DAT / DALT / DAP	17 17 2065	17 17 2065	31 31 2079	31 31 2079	31 31 2079
SE: File / Group	3	3	3	4	4
Organism / Biotype	TETRUR	EUSISP	NNNNN	TETRUR	TETRUR
Rating Type	INFECT	INFECT	PHYTOX	INFECT	INFECT
Clarifier	INFEST#/MOTILES	INFEST#/MOTILES	CROP INJURY	INFEST. #/LEAF	INFEST. #/LEAF
Pest GS: From / To / Method	NF IX B	NF IX B		EX EX B	IX IX B
CALC Method	TCOUNT	TCOUNT	P%EST	TCOUNT	TCOUNT
Rating Unit	#	#	%	#	#
Part Rated	BX LEAF	BX LEAF	PX TOTAL PLANT	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT
ARM Action Codes	L05	L05	P	L05	L05
Decimals Print	1	1	1	1	1
Trt Product Name	16	17	18	19	20
1 CHECK	5.1 a	0.0 a	0.0 a	0.2 a	0.3 a
2 BAS 92100I METH-OIL	0.0 b	0.0 a	0.0 a	0.0 a	0.0 a
3 BAS 92100I METH-OIL	0.0 b	0.0 a	0.0 a	0.0 a	0.0 a
4 BAS 92100I METH-OIL	0.0 b	0.0 a	0.0 a	0.0 a	0.0 a
5 BAS 92100I	0.0 b	0.0 a	0.0 a	0.0 a	0.0 a
6 METH-OIL	0.0 b	0.0 a	0.0 a	0.0 a	0.0 a
7 AGRI-MEK	0.0 b	0.0 a	0.0 a	0.0 a	0.0 a
LSD (P=.05)	1.75	0.00	0.00	0.17	0.19
Standard Deviation	1.18	0.00	0.00	0.11	0.13
CV	161.74	0.0	0.0	529.15	305.51
Bartlett's X2	0.0	0.0	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.	.	.
Replicate F	1.000	0.000	0.000	1.000	1.000
Replicate Prob(F)	0.4155	1.0000	1.0000	0.4155	0.4155
Treatment F	10.704	0.000	0.000	1.000	3.000
Treatment Prob(F)	0.0001	1.0000	1.0000	0.4552	0.0327

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	004 13/9/10	004 13/9/10	004 13/9/10
Crop: ID / Code / Resistance	1 CIDSI	1 CIDSI	1 CIDSI
Crop: Variety	FUKUMOTO	FUKUMOTO	FUKUMOTO
DAT / DALT / DAP	31 31 2079	31 31 2079	31 31 2079
SE: File / Group	4	4	4
Organism / Biotype	TETRUR	TETRUR	EUSISP
Rating Type	INFECT	INFECT	INFECT
Clarifier	INFEST. #/LEAF	INFEST#/MOTILES	INFEST#/MOTILES
Pest GS: From / To / Method	NF NF B	NF IX B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT
ARM Action Codes	L05	L05	L05
Decimals Print	1	1	1
Trt Product Name	21	22	23
1 CHECK	0.6 a	0.9 a	0.2 a
2 BAS 92100I METH-OIL	0.0 b	0.0 b	0.0 a
3 BAS 92100I METH-OIL	0.0 b	0.0 b	0.0 a
4 BAS 92100I METH-OIL	0.0 b	0.0 b	0.0 a
5 BAS 92100I	0.0 b	0.0 b	0.0 a
6 METH-OIL	0.0 b	0.0 b	0.0 a
7 AGRI-MEK	0.0 b	0.0 b	0.0 a
LSD (P=.05)	0.28	0.34	0.17
Standard Deviation	0.19	0.23	0.11
CV	216.02	176.38	529.15
Bartlett's X2	0.0	0.0	0.0
P(Bartlett's X2)	.	.	.
Replicate F	1.000	1.000	1.000
Replicate Prob(F)	0.4155	0.4155	0.4155
Treatment F	6.000	9.000	1.000
Treatment Prob(F)	0.0014	0.0001	0.4552

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2010/US/G61/A/11.0/US/U21/063	GEP:
Title:	BAS 92100I/EFFICACY/CITRUS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I10G61A-U21063	Licensee: Joseph Stout

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit	Mix Size	Unit
1	CHECK													
4	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	100	GAL/AC	2.3	L
	-CYFLUMETOFEN	212.0			14.522									
	NR 415 SPRAY OIL	98.0	%	AE	1.0	% v/v	1.0	% v/v	A	01	100	GAL/AC	2.3	L
5	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	100	GAL/AC	2.3	L
	-CYFLUMETOFEN	212.0			14.522									
6	NR 415 SPRAY OIL	98.0	%	AE	1.0	% v/v	1.0	% v/v	A	01	100	GAL/AC	2.3	L
7	AGRI-MEK	18.0	GA/L	EC	15.2	fl oz/a	20.0	g ai/ha	A	01	100	GAL/AC	2.3	L
	-ABAMECTIN	18.0			15.2									
	NR 415 SPRAY OIL	98.0	%	AE	1.0	% v/v	1.0	% v/v	A	01	100	GAL/AC	2.3	L

Replications: 3, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 1 meters, Treated plot size Length: 1 meters, Application volume: 100 gal/ac, Mix size: 2.3 liters, Format definitions: BASF.DEF, BASF.FRM

E17

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2010/US/G61/A/11.0/US/U21/063          GEP:
Title:          BAS 92100I/EFFICACY/CITRUS/MITES
GEP Guideline: CONFIDENTIAL
Short Trial ID: I10G61A-U21063              Licensee: Joseph Stout
```

GENERAL TRIAL INFORMATION

Originator: MENON ANIL Trial Status: 7 FINAL
Researcher: STOUT JOSEPH Validated: 17/5/10
Cooperator Data (Y/N)?: N
Name: BASF CORPORATION
Street1: 10181 AVENUE 416 Phone No: (559)591-2548
Fax No: (559)591-8730
Town: DINUBA
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 93618
Town: DINUBA Postal: 93618
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: FFX Trial Unit: U
Trt No: 7 Plot Width: 1 Unit: M
Reps: 3 Plot Length: 1
Plot Size: 1.00 M2
Factors: 1

	ONum	Objectives
1.	12104001	Efficacy trials on Mite species on citrus

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To	Spqu Code
A	01	1	1st appl when pest reaches locally recommended threshold	19/4/10	2:00 PM	2:40 PM	N1

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Carrier Type	Vol	Unit	Mix Size	Unit
1	SP	SGZ	H2O	100	GAL/AC	2.3	L

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT:				Plant Part	Pest Stage		Infestation			
App	Date	Insect	Description	Biotype	Fr	To	Min	Max	Mode	Deg	Meth
A 1	19/4/10	METTCI	METATETRANYCHUS CITRI								

COMMENTS

Date	Type	Comment
17/5/10	COM	Trial finalized 28 DAT. A second or third application was not required to adequately control mite populations with the targeted rates.

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2010/US/G61/A/11.0/US/U21/063	GEP:
Title:	BAS 92100I/EFFICACY/CITRUS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I10G61A-U21063	Licensee: Joseph Stout

Evaluation: No / Date	A03 22/4/10	A03 22/4/10	A07 26/4/10	A07 26/4/10	A14 3/5/10	A14 3/5/10	A21 10/5/10
Crop: ID / Code / Resistance	1 CIDCL	1 CIDCL	1 CIDCL	1 CIDCL	1 CIDCL	1 CIDCL	1 CIDCL
Crop: Variety	DE NULES	DE NULES	DE NULES	DE NULES	DE NULES	DE NULES	DE NULES
Crop GS: From / To / Method	56	56	60	60	62	62	67
DAT / DALT / DAP	3 3 2935	3 3 2935	7 7 2939	7 7 2939	14 14 2946	14 14 2946	21 21 2953
SE: File / Group	1	1	1	1	2	2	2
Organism / Biotype	METTCI	METTCI	METTCI	METTCI	METTCI	METTCI	METTCI
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Clarifier	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Pest GS: From / To / Method	EX EX	NF IV	EX EX	NF IV	EX EX	NF IV	EX EX
CALC Method	P%CONT	P%CONT	P%CONT	P%CONT	P%CONT	P%CONT	P%CONT
Rating Unit	%REL	%REL	%REL	%REL	%REL	%REL	%REL
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT
ARM Action Codes	TAB[1]	TAB[3]	TAB[6]	TAB[8]	TAB[12]	TAB[18]	TAB[22]
Decimals Print	1	1	1	1	1	1	1
Trt Product Name	2	4	7	9	13	19	23
1 CHECK	0.0 a	0.0 a	0.0 a	0.0 a	0.0 b	0.0 b	0.0 c
4 BAS 92100I NR 415 SPRAY OIL	35.6 a	98.5 a	42.4 a	100.0 a	87.5 a	99.6 a	90.1 a
5 BAS 92100I	-21.3 a	85.4 a	59.5 a	97.6 a	74.3 a	85.5 a	91.8 a
6 NR 415 SPRAY OIL	-199.2 a	-56.3 a	-94.7 a	-47.5 a	34.3 ab	58.4 a	56.3 b
7 AGRI-MEK NR 415 SPRAY OIL	-109.3 a	90.2 a	-51.4 a	87.4 a	78.2 a	80.3 a	93.6 a
LSD (P=.05)	267.27	207.03	256.60	201.96	45.34	43.14	21.11
Standard Deviation	141.95	109.96	136.28	107.27	24.08	22.91	11.21
CV	0.0	252.49	0.0	225.8	43.91	35.37	16.89
Bartlett's X2	5.837	35.639	6.905	21.969	8.249	14.134	4.312
P(Bartlett's X2)	0.12	0.001*	0.075	0.001*	0.041*	0.003*	0.23
Replicate F	1.712	1.064	1.020	1.031	0.423	0.992	0.413
Replicate Prob(F)	0.2404	0.3893	0.4032	0.3995	0.6689	0.4121	0.6747
Treatment F	1.342	1.167	0.668	1.182	7.010	8.745	38.523
Treatment Prob(F)	0.3344	0.3935	0.6318	0.3881	0.0100	0.0051	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
t=Mean descriptions are reported in transformed data units, and are not de-transformed.
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	A21 10/5/10	A21 10/5/10	A21 10/5/10	A28 17/5/10	A28 17/5/10
Crop: ID / Code / Resistance	1 CIDCL	1 CIDCL	1 CIDCL	1 CIDCL	1 CIDCL
Crop: Variety	DE NULES	DE NULES	DE NULES	DE NULES	DE NULES
Crop GS: From / To / Method	67	67	67	67	67
DAT / DALT / DAP	21 21 2953	21 21 2953	21 21 2953	28 28 2960	28 28 2960
SE: File / Group	2	2	2	2	2
Organism / Biotype	METTCI	METTCI	METTCI	METTCI	METTCI
Rating Type	CONTRO	CONTRO	NUMBER	CONTRO	CONTRO
Clarifier	CONTROL	CONTROL	NUMBER	CONTROL	CONTROL
Pest GS: From / To / Method	NF NF	IV IV	NF IV	EX EX	NF IV
CALC Method	P%CONT	P%CONT	ZCOUNT	P%CONT	P%CONT
Rating Unit	%REL	%REL	#	%REL	%REL
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	1 TPLOT	1 TPLOT	6 UNIT	1 TPLOT	1 TPLOT
ARM Action Codes	TAB[24]	TAB[26]	TL[28]	TAB[31]	TAB[33]
Decimals Print	1	1	1	1	1
Trt Product Name	25	27	30	32	34
1 CHECK	0.0 c	0.0 c	60.5 a	0.0 c	0.0 b
4 BAS 92100I NR 415 SPRAY OIL	100.0 a	98.0 a	0.4 b	83.0 ab	99.1 a
5 BAS 92100I	100.0 a	97.8 a	0.8 b	83.4 ab	97.7 a
6 NR 415 SPRAY OIL	51.5 b	45.2 b	28.9 a	58.2 b	-8.8 b
7 AGRI-MEK NR 415 SPRAY OIL	91.9 a	89.3 a	4.9 b	93.9 a	97.0 a
LSD (P=.05)	24.10	20.09	0.52t	22.19	68.92
Standard Deviation	12.80	10.67	0.28t	11.79	36.60
CV	18.64	16.16	31.28	18.51	64.22
Bartlett's X2	2.607	10.674	1.725	10.125	26.57
P(Bartlett's X2)	0.106	0.014*	0.786	0.018*	0.001*
Replicate F	0.564	1.105	1.791	0.214	1.105
Replicate Prob(F)	0.5900	0.3769	0.2276	0.8121	0.3771
Treatment F	34.385	48.513	20.244	31.100	7.053
Treatment Prob(F)	0.0001	0.0001	0.0003	0.0001	0.0098

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
t=Mean descriptions are reported in transformed data units, and are not de-transformed.
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

ARM Action Codes
TAB[1] = Abbott (% of Untreated)[1]
TAB[3] = Abbott (% of Untreated)[3]
TAB[6] = Abbott (% of Untreated)[6]
TAB[8] = Abbott (% of Untreated)[8]
TAB[12] = Abbott (% of Untreated)[12]
TAB[18] = Abbott (% of Untreated)[18]
TAB[22] = Abbott (% of Untreated)[22]
TAB[24] = Abbott (% of Untreated)[24]
TAB[26] = Abbott (% of Untreated)[26]
TL[28] = LOG([28]+ 1)
TAB[31] = Abbott (% of Untreated)[31]
TAB[33] = Abbott (% of Untreated)[33]

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2010/US/G61/A/11.0/US/U21/065	GEP:
Title:	BAS 92100I/EFFICACY/CITRUS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I10G61A-U21065	Licensee: Joseph Stout

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit	Mix Size	Unit
1	CHECK													
4	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	100	GAL/AC	2.3	L
	-CYFLUMETOFEN	212.0			14.522									
	NR 415 SPRAY OIL	98.0	%	AE	1.0	% v/v	1.0	% v/v	A	01	100	GAL/AC	2.3	L
5	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	100	GAL/AC	2.3	L
	-CYFLUMETOFEN	212.0			14.522									
6	NR 415 SPRAY OIL	98.0	%	AE	1.0	% v/v	1.0	% v/v	A	01	100	GAL/AC	2.3	L
7	AGRI-MEK	18.0	GA/L	EC	15.2	fl oz/a	20.0	g ai/ha	A	01	100	GAL/AC	2.3	L
	-ABAMECTIN	18.0			15.2									
	NR 415 SPRAY OIL	98.0	%	AE	1.0	% v/v	1.0	% v/v	A	01	100	GAL/AC	2.3	L

Replications: 3, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 1 meters, Treated plot size Length: 1 meters, Application volume: 100 gal/ac, Mix size: 2.3 liters, Format definitions: BASF.DEF, BASF.FRM

E18

BASF Corporation

```
                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2010/US/G61/A/11.0/US/U21/065          GEP:
Title:          BAS 92100I/EFFICACY/CITRUS/MITES
GEP Guideline: CONFIDENTIAL
Short Trial ID: I10G61A-U21065              Licensee: Joseph Stout
```

GENERAL TRIAL INFORMATION

Originator: MENON ANIL Trial Status: 7 FINAL
Researcher: STOUT JOSEPH Validated: 3/6/10
Cooperator Data (Y/N)?: N
Name: BASF CORPORATION
Street1: 10181 AVENUE 416 Phone No: (559)591-2548
Fax No: (559)591-8730
Town: DINUBA
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 93618
Town: DINUBA Postal: 93618
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: FFX Trial Unit: U
Trt No: 7 Plot Width: 1 Unit: M
Reps: 3 Plot Length: 1
Plot Size: 1.00 M2
Factors: 1

ONum	Objectives
1. 12104001	Efficacy trials on Mite species on citrus

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To	Spqu Code
A	01	1	1st appl when pest reaches locally recommended threshold	26/4/10	1:10 PM	1:45 PM	N1

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Carrier Type	Vol	Unit	Mix Size	Unit
1	SP	SGZ	H2O	100	GAL/AC	2.3	L

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT:

App		Date	Insect	Description	Plant Part	Pest Stage Biotype	Fr	To	Infestation Min	Max	Mode	Deg	Meth
A	1	26/4/10	METTCI	METATETRANYCHUS CITRI									

COMMENTS

Date	Type	Comment
26/4/10	APP	Application made with motorized mist blower. Plot size = 1/4 of tree.
29/4/10	ASM	Six leaves per plot were brushed onto glass plates. Eggs, immatures, and adults were counted.
24/5/10	COM	Trial finalized 28 DAT.

BASF Corporation

Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID: DEV/I/2010/US/G61/A/11.0/US/U21/065 GEP:
Title: BAS 92100I/EFFICACY/CITRUS/MITES
GEP Guideline: CONFIDENTIAL
Short Trial ID: I10G61A-U21065 Licensee: Joseph Stout

Evaluation: No / Date	A03 29/4/10	A03 29/4/10	A07 3/5/10	A07 3/5/10	A14 10/5/10	A14 10/5/10	A14 10/5/10
Crop: ID / Code / Resistance	1 CIDCL	1 CIDCL	1 CIDCL	1 CIDCL	1 CIDCL	1 CIDCL	1 CIDCL
Crop: Variety	DE NULES	DE NULES	DE NULES	DE NULES	DE NULES	DE NULES	DE NULES
Crop GS: From / To / Method	60	60	60	60	67	67	67
DAT / DALT / DAP	3 3 2942	3 3 2942	7 7 2946	7 7 2946	14 14 2953	14 14 2953	14 14 2953
SE: File / Group	1	1	1	1	1	1	1
Organism / Biotype	METTCI	METTCI	METTCI	METTCI	METTCI	METTCI	METTCI
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Clarifier	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Pest GS: From / To / Method	EX EX	NF IV	EX EX	NF IV	EX EX	NF NF	NF IV
CALC Method	P%CONT	P%CONT	P%CONT	P%CONT	P%CONT	P%CONT	P%CONT
Rating Unit	%REL	%REL	%REL	%REL	%REL	%REL	%REL
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT
ARM Action Codes	TAB[1]	TAB[3]	TAB[6]	TAB[10]	TAB[14]	TAB[16]	TAB[20]
Decimals Print	1	1	1	1	1	1	1
Trt Product Name	2	4	7	11	15	17	21
1 CHECK	0.0 a	0.0 b	0.0 a	0.0 b	0.0 b	0.0 b	0.0 b
4 BAS 92100I NR 415 SPRAY OIL	-91.5 a	99.7 a	23.6 a	100.0 a	86.7 a	100.0 a	98.9 a
5 BAS 92100I	43.3 a	100.0 a	73.0 a	99.6 a	74.3 a	100.0 a	100.0 a
6 NR 415 SPRAY OIL	-73.2 a	79.7 a	11.5 a	80.4 a	9.0 b	75.8 a	77.5 a
7 AGRI-MEK NR 415 SPRAY OIL	15.9 a	97.1 a	60.2 a	97.0 a	95.1 a	87.9 a	91.7 a
LSD (P=.05)	138.32	16.09	64.75	15.01	45.55	30.41	16.83
Standard Deviation	73.46	8.55	34.39	7.97	24.19	16.15	8.94
CV	0.0	11.35	102.16	10.57	45.61	22.2	12.14
Bartlett's X2	4.091	13.842	3.515	12.931	11.582	0.524	8.406
P(Bartlett's X2)	0.252	0.001*	0.319	0.002*	0.009*	0.469	0.015*
Replicate F	0.686	1.437	0.200	0.799	0.320	0.361	0.597
Replicate Prob(F)	0.5308	0.2929	0.8225	0.4825	0.7348	0.7076	0.5731
Treatment F	1.896	75.658	2.521	86.966	10.395	20.172	66.595
Treatment Prob(F)	0.2046	0.0001	0.1237	0.0001	0.0030	0.0003	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	A21 17/5/10	A21 17/5/10	A21 17/5/10	A28 24/5/10	A28 24/5/10
Crop: ID / Code / Resistance	1 CIDCL	1 CIDCL	1 CIDCL	1 CIDCL	1 CIDCL
Crop: Variety	DE NULES	DE NULES	DE NULES	DE NULES	DE NULES
Crop GS: From / To / Method	67	67	67	69	69
DAT / DALT / DAP	21 21 2960	21 21 2960	21 21 2960	28 28 2967	28 28 2967
SE: File / Group	1	1	1	1	1
Organism / Biotype	METTCI	METTCI	METTCI	METTCI	METTCI
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Clarifier	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Pest GS: From / To / Method	EX EX	NF NF	IV IV	EX EX	NF IV
CALC Method	P%CONT	P%CONT	P%CONT	P%CONT	P%CONT
Rating Unit	%REL	%REL	%REL	%REL	%REL
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT	1 TPLOT
ARM Action Codes	TAB[23]	TAB[25]	TAB[27]	TAB[31]	TAB[33]
Decimals Print	1	1	1	1	1
Trt Product Name	24	26	28	32	34
1 CHECK	0.0 c	0.0 b	0.0 c	0.0 b	0.0 b
4 BAS 92100I NR 415 SPRAY OIL	83.6 a	100.0 a	98.6 a	70.2 a	94.9 a
5 BAS 92100I	93.5 a	100.0 a	100.0 a	96.0 a	91.2 a
6 NR 415 SPRAY OIL	35.8 b	38.6 ab	59.2 b	-22.8 b	39.3 ab
7 AGRI-MEK NR 415 SPRAY OIL	93.2 a	97.8 a	96.8 a	88.7 a	90.3 a
LSD (P=.05)	16.16	53.33	15.48	64.24	44.88
Standard Deviation	8.59	28.32	8.22	34.12	23.84
CV	14.02	42.09	11.59	73.5	37.74
Bartlett's X2	6.018	8.013	11.531	12.316	6.512
P(Bartlett's X2)	0.111	0.005*	0.003*	0.006*	0.089
Replicate F	1.203	0.942	1.261	2.242	0.520
Replicate Prob(F)	0.3492	0.4292	0.3342	0.1686	0.6132
Treatment F	70.863	7.870	82.639	7.574	9.361
Treatment Prob(F)	0.0001	0.0071	0.0001	0.0079	0.0041

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

ARM Action Codes
TAB[1] = Abbott (% of Untreated)[1]
TAB[3] = Abbott (% of Untreated)[3]
TAB[6] = Abbott (% of Untreated)[6]
TAB[10] = Abbott (% of Untreated)[10]
TAB[14] = Abbott (% of Untreated)[14]
TAB[16] = Abbott (% of Untreated)[16]
TAB[20] = Abbott (% of Untreated)[20]
TAB[23] = Abbott (% of Untreated)[23]
TAB[25] = Abbott (% of Untreated)[25]
TAB[27] = Abbott (% of Untreated)[27]
TAB[31] = Abbott (% of Untreated)[31]
TAB[33] = Abbott (% of Untreated)[33]

BASF Corporation

Type PG Year Cty Pl.No. Ver. Rev. Cty Reg No.
Trial ID: DEV I 2009 US G61 A 01.0 US UCA PM1 GEP:
Title: BAS 92100I/EFFICACY/CITRUS/MITES
GEP Guideline: CONFIDENTIAL Crop Destruct: N
Short Trial ID: I09G61A-UCAPM1 Licensee: Phil Munger

Trt	Product Name	Code Com	Number	P	Form Conc	Conc Unit	FO	AI Rate	AI Rate Unit	Appl Date	Appl Meth
1	CHECK		UNBEHA								
2	BAS 92100I	BAS	92100	I	212.0	GA/L	SC	106.0	G AI/HA	5/13/2009	SP
	INDUCE	BCH	88957	S	90.0	%	SL	32.0	FL OZ/100 GAL	5/13/2009	SP
3	BAS 92100I	BAS	92100	I	212.0	GA/L	SC	212.0	G AI/HA	5/13/2009	SP
4	BAS 92100I	BAS	92100	I	212.0	GA/L	SC	212.0	G AI/HA	5/13/2009	SP
	PENETRATOR PLUS	BAS	90841	S	100.0	%	EC	0.5	% V/V	5/13/2009	SP
5	BAS 92100I	BAS	92100	I	212.0	GA/L	SC	212.0	G AI/HA	5/13/2009	SP
	INDUCE	BCH	88957	S	90.0	%	SL	32.0	FL OZ/100 GAL	5/13/2009	SP
6	BAS 92100I	BAS	92100	I	212.0	GA/L	SC	212.0	G AI/HA	5/13/2009	SP
	SILWET L-77 AG	BAS	90371	S	100.0	%	DC	0.1	% V/V	5/13/2009	SP
7	REAPER 0.15EC	BAS	90920	I	18.0	GA/L	EC	2.63	G AI/HA	5/13/2009	SP

Exhibit 17

BASF Corporation

	Type	PG	Year	Cty	Pl.No.	Ver.	Rev.	Cty	Reg No.	
Trial ID:	DEV	I	2009	US	G61	A	01.0	US	UCA PM1	GEP:

Title: BAS 92100I/EFFICACY/CITRUS/MITES
GEP Guideline: CONFIDENTIAL Crop Destruct: N
Short Trial ID: I09G61A-UCAPM1 Licensee: Phil Munger

Trial Comments

_TITLE: BAS 92100I/EFFICACY/CITRUS/MITES

_RESULTS: All of the BAS 9210 00I treatments showed excellent control of all stages of the citrus red mite when compared to the untreated control. The standard treatment, Reaper, was less effective than BAS 9210.

_Trial Complete.

BASF Corporation

Type PG Year Cty Pl.No. Ver. Rev. Cty Reg No.
Trial ID: DEV I 2009 US G61 A 01.0 US UCA PM1 GEP:
Title: BAS 92100I/EFFICACY/CITRUS/MITES
GEP Guideline: CONFIDENTIAL Crop Destruct: N
Short Trial ID: I09G61A-UCAPM1 Licensee: Phil Munger

GENERAL TRIAL INFORMATION

Originator: WOFFORD JAMES Trial Status: 7 FINAL
Researcher: MUNGER PHILIP
Cooperator Data (Y/N)?: Y
Name: SCOTT HICKS
Org: BIO RESEARCH
Street1: 1738 N FOWLER Phone No: 559-455-5660
Fax No: 559-455-5661
Town: FRESNO Email: dan.forey@bio-research.net
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 93727
Town: FRESNO Postal: 93727
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

TRIAL DESIGN

Trial Design: RB RANDOMIZED BLOC DESIGN Trial Type: ORC ORCHARD
Trial Unit: U
Trt No: 7 Plot Width: 20 Unit: FT
Reps: 4 Plot Length: 20
Plot Size: 400.00 FT2
Factors: 1

No. ONum Objectives
1. 1210400Efficacy trials on Mite species (especially citrus red mite) on citrus (grapefruit and oranges)

SEEDING

Description: SATSUMA
Code: CIDUN
Variety: SATSUMA
Age: 10
Seedkind: T TRANSPLANTED SEEDLINGS
Trial Planting Date: 1/1/1999
Culture: ICO CONVENTIONAL IRRIGATED Planting Method: STA PARALLEL ROWS

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Spqu Code
A	01	1	1st appl when pest reaches locally recommended threshold	5/13/2009	N1

SPRAYER SETUPS

Set No	App Met	Carrier Type	Vol	Unit
1	SP	H2O	100	GAL/AC

CROP STAGE AT APPLICATION

	A
Application Date:	5/13/2009
Crop 1 / Res	CIDUN
Variety	SATSUMA

WEATHER

App	Date
A	5/13/2009

IRRIGATION AND PRECIPITATION

App	Date
A	5/13/2009

App	Date
A	5/13/2009

BASF Corporation

INSECT DESCRIPTION

App	No	Date	Insect Description	Biotype	Plant Part Fr	Plant Part To	Pest Stage Min	Pest Stage Max	Infestation Mode	Infestation Deg	Infestation Method
A	1	5/13/2009	METTCI Metatetranychus citri		BX	BX	EX	IX	CB	7.8	TCOUNT
	2		ZZYIAC Predatory mite,spec.not kn.(v)								

BASF Corporation

	Type	PG	Year	Cty	Pl.No.	Ver.	Rev.	Cty	Reg No.		
Trial ID:	DEV	I	2009	US	G61	A	01.0	US	UCA PM1	GEP:	
Title:	BAS 92100I/EFFICACY/CITRUS/MITES										
GEP Guideline:	CONFIDENTIAL									Crop Destruct:	N
Short Trial ID:	I09G61A-UCAPM1					Licensee:	Phil Munger				

Additional Information (Validation List Comments)
7, FINAL = 50
MUNGER PHILIP = MUNGEP
Y = YES
CA, CALIFORNIA = US
US, UNITED STATES OF AMERICA = Y
RB = RANDOMIZED BLOC DESIGN
ORC, ORCHARD = ORCHARD
12104001 = Efficacy profile
CIDUN, SATSUMA = CITRUS UNSHIU
T, TRANSPLANTED SEEDLINGS = 70
ICO, CONVENTIONAL IRRIGATED = 10
STA, PARALLEL ROWS = 30
01 = PRACTICE,AT USUAL TIME
SP = SPRAY
H2O = WATER
GAL/AC = Gallon / Acre
METTCI, Metatetranychus citri = MITE, CITRUS RED
BX = LEAF
EX = EGGS
IX = ADULTS
CB = CRAWLERS, ACTIVE
TCOUNT = HT COUNT INSECTS BEF.+AFT.TRT
ZZYIAC, Predatory mite,spec.not kn.(v) = PREDATORY MITE,SPEC.NOT KN.(V)

BASF Corporation

	Type	PG	Year	Cty	Pl.No.	Ver.	Rev.	Cty	Reg No.
Trial ID:	DEV	I	2009	US	G61	A	01.0	US	UCA PM1

GEP:
Title: BAS 92100I/EFFICACY/CITRUS/MITES
GEP Guideline: CONFIDENTIAL Crop Destruct: N
Short Trial ID: I09G61A-UCAPM1 Licensee: Phil Munger

Evaluation: No / Date								001 5/13/2009	001 5/13/2009
Crop: ID / Code / Resistance								1 CIDUN -	1 CIDUN -
Crop: Variety								SATSUMA	SATSUMA
Crop GS: From / To / Method								- - B	- - B
DAT / DALT / DAP								0 0 3785	0 0 3785
SE: File / Group								- 1	- 1
Organism / Biotype								METTCI -	METTCI -
Rating Type								INFECT	INFECT
Clarifier								INFEST/# EGGS	INFEST/#IMMATUR
Pest GS: From / To / Method									
CALC Method								TCOUNT	TCOUNT
Rating Unit								#	#
Part Rated								BX LEAF	BX LEAF
# Subsamples / Class								1 1	1 1
Sample Size / Unit								20 TPLOT	20 TPLOT
Assessed by									
ARM Action Codes								L05	L05
Decimals Print								1	1
Trt Product Name	Code Com	Number	Form Conc	Conc Unit	FO	AI Rate	AI Rate Unit	Appl Code	1	2
1 CHECK		UNBEHA							12.0 a	3.5 a
2 BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	23.5 a	4.5 a
INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	19.8 a	2.8 a
4 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	26.0 a	4.3 a
PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	21.3 a	3.3 a
INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	22.3 a	1.0 a
SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7 REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	10.8 a	2.5 a
LSD (P=.01)									35.11	6.57
Standard Deviation									17.25	3.23
CV									89.14	103.85
Replicate F									0.865	0.763
Replicate Prob(F)									0.4770	0.5297
Treatment F									0.451	0.535
Treatment Prob(F)									0.8346	0.7747

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	AI FO	AI Rate	AI Rate Unit	Appl Code	001 5/13/2009 1 CIDUN - SATSUMA - - B 0 0 3785 - 1 METTCI - INFECT INFEST/# ADULT TCOUNT # BX LEAF 1 1 20 TPLOT L05 1 — 3	001 5/13/2009 1 CIDUN - SATSUMA - - B 0 0 3785 - 1 METTCI - INFECT INFEST/#MOTILES TCOUNT # BX LEAF 1 1 20 TPLOT L05 1 — 4
1	CHECK		UNBEHA							4.3 a	7.8 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	3.0 a	7.5 a
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	2.0 a	4.8 a
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	4.3 a	8.5 a
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	4.5 a	8.3 a
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	5.3 a	6.3 a
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	0.8 a	3.3 a
LSD (P=.01)										6.88	12.93
Standard Deviation										3.38	6.35
CV										98.6	96.15
Replicate F										0.475	0.539
Replicate Prob(F)										0.7036	0.6617
Treatment F										0.888	0.384
Treatment Prob(F)										0.5241	0.8798

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date	001 5/13/2009	001 5/13/2009
Crop: ID / Code / Resistance	1 CIDUN -	1 CIDUN -
Crop: Variety	SATSUMA	SATSUMA
Crop GS: From / To / Method	- - B	- - B
DAT / DALT / DAP	0 0 3785	0 0 3785
SE: File / Group	- 1	- 1
Organism / Biotype	ZZYIAC -	METTCI -
Rating Type	INFECT	INFECT
Clarifier	INFEST/#PRDMIT	INFEST/#MOTILES
Pest GS: From / To / Method		
CALC Method	TCOUNT	P%FREQ
Rating Unit	#	%
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT
Assessed by		
ARM Action Codes	L05	L05
Decimals Print	1	2

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	FO	AI Rate	AI Rate Unit	Appl Code	5	6
1	CHECK		UNBEHA							0.0 a	53.75 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	0.8 a	48.75 a
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.8 a	46.25 a
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.5 a	40.00 a
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	51.25 a
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	55.00 a
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	0.0 a	48.75 a

LSD (P=.01)	1.20	41.949
Standard Deviation	0.59	20.613
CV	205.65	41.98
Replicate F	0.276	1.565
Replicate Prob(F)	0.8420	0.2324
Treatment F	1.552	0.239
Treatment Prob(F)	0.2182	0.9577

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date	002 5/18/2009	002 5/18/2009
Crop: ID / Code / Resistance	1 CIDUN -	1 CIDUN -
Crop: Variety	SATSUMA	SATSUMA
Crop GS: From / To / Method	- - B	- - B
DAT / DALT / DAP	5 5 3790	5 5 3790
SE: File / Group	- 1	- 1
Organism / Biotype	METTCI -	METTCI -
Rating Type	INFECT	INFECT
Clarifier	INFEST/# EGGS	INFEST/#IMMATUR
Pest GS: From / To / Method		
CALC Method	TCOUNT	TCOUNT
Rating Unit	#	#
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT
Assessed by		
ARM Action Codes	L05	L05
Decimals Print	1	1

Trt	Product Name	Code Com	Code Number	Form Conc	Conc Unit	Form	AI Rate	AI Rate Unit	Appl Code	7	8
1	CHECK		UNBEHA							22.5 a	1.8 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	4.0 b	0.8 a
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	3.0 b	0.0 a
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	3.3 b	0.0 a
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	1.5 b	0.0 a
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.5 b	0.0 a
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	9.0 b	1.3 a

LSD (P=.01)	8.54	1.86
Standard Deviation	4.20	0.91
CV	67.15	170.4
Replicate F	0.770	1.300
Replicate Prob(F)	0.5258	0.3050
Treatment F	13.317	2.543
Treatment Prob(F)	0.0001	0.0582

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date	002 5/18/2009	002 5/18/2009
Crop: ID / Code / Resistance	1 CIDUN -	1 CIDUN -
Crop: Variety	SATSUMA	SATSUMA
Crop GS: From / To / Method	- - B	- - B
DAT / DALT / DAP	5 5 3790	5 5 3790
SE: File / Group	- 1	- 1
Organism / Biotype	METTCI -	METTCI -
Rating Type	INFECT	INFECT
Clarifier	INFEST/# ADULT	INFEST/#MOTILES
Pest GS: From / To / Method		
CALC Method	TCOUNT	TCOUNT
Rating Unit	#	#
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT
Assessed by		
ARM Action Codes	L05	L05
Decimals Print	1	1

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	Form	AI Rate	AI Rate Unit	Appl Code	9	10
1	CHECK		UNBEHA							3.0 a	5.0 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	0.3 b	1.0 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 b	0.0 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.3 b	0.3 b
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.3 b	0.3 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 b	0.0 b
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	1.8 ab	3.0 ab

LSD (P=.01)	1.68	2.89
Standard Deviation	0.83	1.42
CV	105.15	104.51
Replicate F	0.349	0.213
Replicate Prob(F)	0.7904	0.8861
Treatment F	7.744	7.367
Treatment Prob(F)	0.0003	0.0004

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date										002 5/18/2009	002 5/18/2009
Crop: ID / Code / Resistance										1 CIDUN -	1 CIDUN -
Crop: Variety										SATSUMA	SATSUMA
Crop GS: From / To / Method										- - B	- - B
DAT / DALT / DAP										5 5 3790	5 5 3790
SE: File / Group										- 1	- 1
Organism / Biotype										ZZYIAC -	METTCI -
Rating Type										INFECT	INFECT
Clarifier										INFEST/#PRDMIT	INFEST/#MOTILES
Pest GS: From / To / Method											
CALC Method										TCOUNT	P%FREQ
Rating Unit										#	%
Part Rated										BX LEAF	BX LEAF
# Subsamples / Class										1 1	1 1
Sample Size / Unit										20 TPLOT	20 TPLOT
Assessed by											
ARM Action Codes										L05	L05
Decimals Print										1	2
Trt Product Name	Code Com	Number	Form Conc	Conc Unit	Form	AI Rate	AI Rate Unit		Appl Code	11	12
1 CHECK		UNBEHA								0.0 a	67.50 a
2 BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA		A	0.0 a	3.75 b
INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL		A		
3 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA		A	0.0 a	1.25 b
4 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA		A	0.0 a	2.50 b
PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V		A		
5 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA		A	0.0 a	1.25 b
INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL		A		
6 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA		A	0.0 a	0.00 b
SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V		A		
7 REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA		A	0.0 a	52.50 a
LSD (P=.01)										0.00	15.596
Standard Deviation										0.00	7.664
CV										0.0	41.67
Replicate F										0.000	0.988
Replicate Prob(F)										1.0000	0.4206
Treatment F										0.000	56.392
Treatment Prob(F)										1.0000	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	AI FO	AI Rate	AI Rate Unit	Appl Code	13	14
	Evaluation: No / Date									003 5/22/2009	003 5/22/2009
	Crop: ID / Code / Resistance									1 CIDUN -	1 CIDUN -
	Crop: Variety									SATSUMA	SATSUMA
	Crop GS: From / To / Method									- - B	- - B
	DAT / DALT / DAP									9 9 3794	9 9 3794
	SE: File / Group									- 1	- 1
	Organism / Biotype									METTCI -	METTCI -
	Rating Type									INFECT	INFECT
	Clarifier									INFEST/# EGGS	INFEST/#IMMATUR
	Pest GS: From / To / Method										
	CALC Method									TCOUNT	TCOUNT
	Rating Unit									#	#
	Part Rated									BX LEAF	BX LEAF
	# Subsamples / Class									1 1	1 1
	Sample Size / Unit									20 TPLOT	20 TPLOT
	Assessed by										
	ARM Action Codes									L05	L05
	Decimals Print									1	1
1	CHECK		UNBEHA							46.0 a	6.8 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	4.8 c	0.8 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	2.5 c	0.3 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.8 c	0.0 b
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	5.8 c	0.3 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	5.5 c	1.5 b
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	28.0 b	2.8 b
	LSD (P=.01)									16.74	3.39
	Standard Deviation									8.22	1.67
	CV									61.73	95.31
	Replicate F									0.981	0.800
	Replicate Prob(F)									0.4238	0.5098
	Treatment F									17.256	8.298
	Treatment Prob(F)									0.0001	0.0002

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date										003 5/22/2009	003 5/22/2009
Crop: ID / Code / Resistance										1 CIDUN -	1 CIDUN -
Crop: Variety										SATSUMA	SATSUMA
Crop GS: From / To / Method										- - B	- - B
DAT / DALT / DAP										9 9 3794	9 9 3794
SE: File / Group										- 1	- 1
Organism / Biotype										METTCI -	METTCI -
Rating Type										INFECT	INFECT
Clarifier										INFEST/# ADULT	INFEST/#MOTILES
Pest GS: From / To / Method											
CALC Method										TCOUNT	TCOUNT
Rating Unit										#	#
Part Rated										BX LEAF	BX LEAF
# Subsamples / Class										1 1	1 1
Sample Size / Unit										20 TPLOT	20 TPLOT
Assessed by											
ARM Action Codes										L05	L05
Decimals Print										1	1
Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	AI FO	AI Rate	Unit	Appl Code	15	16
1	CHECK		UNBEHA							5.0 a	11.8 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	1.0 ab	1.8 bc
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 b	0.3 c
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 b	0.0 c
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.3 b	0.5 c
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	1.3 ab	2.8 bc
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	3.8 ab	6.5 ab
LSD (P=.01)										3.96	5.52
Standard Deviation										1.95	2.71
CV										121.07	80.84
Replicate F										1.242	1.196
Replicate Prob(F)										0.3237	0.3394
Treatment F										4.157	10.170
Treatment Prob(F)										0.0086	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date									003 5/22/2009	003 5/22/2009
Crop: ID / Code / Resistance									1 CIDUN -	1 CIDUN -
Crop: Variety									SATSUMA	SATSUMA
Crop GS: From / To / Method									- - B	- - B
DAT / DALT / DAP									9 9 3794	9 9 3794
SE: File / Group									- 1	- 1
Organism / Biotype									ZZYIAC -	METTCI -
Rating Type									INFECT	INFECT
Clarifier									INFEST/#PRDMIT	INFEST/#MOTILES
Pest GS: From / To / Method										
CALC Method									TCOUNT	P%FREQ
Rating Unit									#	%
Part Rated									BX LEAF	BX LEAF
# Subsamples / Class									1 1	1 1
Sample Size / Unit									20 TPLOT	20 TPLOT
Assessed by										
ARM Action Codes									L05	L05
Decimals Print									1	2
Trt Product Name	Code Com	Number	Form Conc	Conc Unit	AI FO	AI Rate	AI Rate Unit	Appl Code	17	18
1 CHECK		UNBEHA							0.5 a	87.50 a
2 BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	0.0 a	8.75 c
INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	1.25 c
4 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.3 a	5.00 c
PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	3.75 c
INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	10.00 c
SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7 REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	0.0 a	60.00 b
LSD (P=.01)									0.61	23.004
Standard Deviation									0.30	11.304
CV									281.97	44.89
Replicate F									0.391	0.212
Replicate Prob(F)									0.7607	0.8868
Treatment F									1.696	36.708
Treatment Prob(F)									0.1794	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date	004 5/27/2009	004 5/27/2009
Crop: ID / Code / Resistance	1 CIDUN -	1 CIDUN -
Crop: Variety	SATSUMA	SATSUMA
Crop GS: From / To / Method	- - B	- - B
DAT / DALT / DAP	14 14 3799	14 14 3799
SE: File / Group	- 1	- 1
Organism / Biotype	METTCI -	METTCI -
Rating Type	INFECT	INFECT
Clarifier	INFEST/# EGGS	INFEST/#IMMATUR
Pest GS: From / To / Method		
CALC Method	TCOUNT	TCOUNT
Rating Unit	#	#
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT
Assessed by		
ARM Action Codes	L05	L05
Decimals Print	1	1

Trt	Product Name	Code Com	Code Number	Form Conc	Conc Unit	Form	AI Rate	AI Rate Unit	Appl Code	19	20
1	CHECK		UNBEHA							85.8 a	16.5 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	8.8 b	0.5 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	3.3 b	0.0 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	1.5 b	0.0 b
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	3.3 b	0.8 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	3.3 b	0.0 b
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	93.5 a	12.3 a

LSD (P=.01)	69.27	6.43
Standard Deviation	34.04	3.16
CV	119.59	73.68
Replicate F	1.880	1.070
Replicate Prob(F)	0.1691	0.3867
Treatment F	6.061	19.692
Treatment Prob(F)	0.0013	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

	004 5/27/2009	004 5/27/2009
Evaluation: No / Date	004 5/27/2009	004 5/27/2009
Crop: ID / Code / Resistance	1 CIDUN -	1 CIDUN -
Crop: Variety	SATSUMA	SATSUMA
Crop GS: From / To / Method	- - B	- - B
DAT / DALT / DAP	14 14 3799	14 14 3799
SE: File / Group	- 1	- 1
Organism / Biotype	METTCI -	METTCI -
Rating Type	INFECT	INFECT
Clarifier	INFEST/# ADULT	INFEST/#MOTILES
Pest GS: From / To / Method		
CALC Method	TCOUNT	TCOUNT
Rating Unit	#	#
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT
Assessed by		
ARM Action Codes	L05	L05
Decimals Print	1	1

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	FO	AI Rate	AI Rate Unit	Appl Code	21	22
1	CHECK		UNBEHA							9.3 a	25.8 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	2.0 b	2.5 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.3 b	0.3 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 b	0.0 b
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.5 b	1.3 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.3 b	0.3 b
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	10.0 a	22.3 a

	21	22
LSD (P=.01)	6.38	11.42
Standard Deviation	3.14	5.61
CV	98.69	75.21
Replicate F	0.952	0.841
Replicate Prob(F)	0.4365	0.4889
Treatment F	8.076	16.418
Treatment Prob(F)	0.0002	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	AI FO	AI Rate	AI Rate Unit	Appl Code	23	24
	Evaluation: No / Date									004 5/27/2009	004 5/27/2009
	Crop: ID / Code / Resistance									1 CIDUN -	1 CIDUN -
	Crop: Variety									SATSUMA	SATSUMA
	Crop GS: From / To / Method									- - B	- - B
	DAT / DALT / DAP									14 14 3799	14 14 3799
	SE: File / Group									- 1	- 1
	Organism / Biotype									ZZYIAC -	METTCI -
	Rating Type									INFECT	INFECT
	Clarifier									INFEST/#PRDMIT	INFEST/#MOTILES
	Pest GS: From / To / Method										
	CALC Method									TCOUNT	P%FREQ
	Rating Unit									#	%
	Part Rated									BX LEAF	BX LEAF
	# Subsamples / Class									1 1	1 1
	Sample Size / Unit									20 TPLOT	20 TPLOT
	Assessed by										
	ARM Action Codes									L05	L05
	Decimals Print									1	2
1	CHECK		UNBEHA							0.0 a	87.50 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	0.0 a	41.25 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	12.50 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	6.25 b
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	16.25 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	13.75 b
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	0.0 a	78.75 a
	LSD (P=.01)									0.00	35.843
	Standard Deviation									0.00	17.613
	CV									0.0	48.11
	Replicate F									0.000	0.763
	Replicate Prob(F)									1.0000	0.5296
	Treatment F									0.000	14.672
	Treatment Prob(F)									1.0000	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	AI FO	AI Rate	AI Rate Unit	Appl Code	005 6/3/2009 1 CIDUN - SATSUMA - - B 21 21 3806 - 1 METTCI - INFECT INFEST/# EGGS TCOUNT # BX LEAF 1 1 20 TPLOT L05 1 — 25	005 6/3/2009 1 CIDUN - SATSUMA - - B 21 21 3806 - 1 METTCI - INFECT INFEST/#IMMATUR TCOUNT # BX LEAF 1 1 20 TPLOT L05 1 — 26
1	CHECK		UNBEHA							144.3 a	27.3 a
2	BAS 92100I	BAS	92100	212.0 GA/L	SC	106.0 G	AI/HA		A	23.5 bc	3.5 b
	INDUCE	BCH	88957	90.0 %	SL	32.0 FL	OZ/100	GAL	A		
3	BAS 92100I	BAS	92100	212.0 GA/L	SC	212.0 G	AI/HA		A	8.3 c	0.8 b
4	BAS 92100I	BAS	92100	212.0 GA/L	SC	212.0 G	AI/HA		A	8.8 c	0.8 b
	PENETRATOR PLUS	BAS	90841	100.0 %	EC	0.5 %	V/V		A		
5	BAS 92100I	BAS	92100	212.0 GA/L	SC	212.0 G	AI/HA		A	13.5 c	1.5 b
	INDUCE	BCH	88957	90.0 %	SL	32.0 FL	OZ/100	GAL	A		
6	BAS 92100I	BAS	92100	212.0 GA/L	SC	212.0 G	AI/HA		A	4.3 c	1.0 b
	SILWET L-77 AG	BAS	90371	100.0 %	DC	0.1 %	V/V		A		
7	REAPER 0.15EC	BAS	90920	18.0 GA/L	EC	2.63 G	AI/HA		A	83.0 ab	20.0 a
LSD (P=.01)										61.31	13.97
Standard Deviation										30.13	6.87
CV										73.87	87.78
Replicate F										0.393	0.423
Replicate Prob(F)										0.7595	0.7388
Treatment F										12.449	10.339
Treatment Prob(F)										0.0001	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date	005 6/3/2009	005 6/3/2009
Crop: ID / Code / Resistance	1 CIDUN -	1 CIDUN -
Crop: Variety	SATSUMA	SATSUMA
Crop GS: From / To / Method	- - B	- - B
DAT / DALT / DAP	21 21 3806	21 21 3806
SE: File / Group	- 1	- 1
Organism / Biotype	METTCI -	METTCI -
Rating Type	INFECT	INFECT
Clarifier	INFEST/# ADULT	INFEST/#MOTILES
Pest GS: From / To / Method		
CALC Method	TCOUNT	TCOUNT
Rating Unit	#	#
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT
Assessed by		
ARM Action Codes	L05	L05
Decimals Print	1	1

Trt	Product Name	Code Com	Code Number	Form Conc	Conc Unit	Form FO	AI Rate	AI Rate Unit	Appl Code	27	28
1	CHECK		UNBEHA							18.0 a	45.3 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	1.0 b	4.5 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	1.8 b	2.5 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	1.0 b	1.8 b
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	1.0 b	2.5 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.3 b	1.3 b
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	14.8 a	34.8 a
LSD (P=.01)										8.23	20.15
Standard Deviation										4.04	9.90
CV										74.96	74.94
Replicate F										0.573	0.274
Replicate Prob(F)										0.6398	0.8431
Treatment F										14.038	14.073
Treatment Prob(F)										0.0001	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	AI FO	AI Rate	AI Rate Unit	Appl Code	29	30
	Evaluation: No / Date									005 6/3/2009	005 6/3/2009
	Crop: ID / Code / Resistance									1 CIDUN -	1 CIDUN -
	Crop: Variety									SATSUMA	SATSUMA
	Crop GS: From / To / Method									- - B	- - B
	DAT / DALT / DAP									21 21 3806	21 21 3806
	SE: File / Group									- 1	- 1
	Organism / Biotype									ZZYIAC -	METTCI -
	Rating Type									INFECT	INFECT
	Clarifier									INFEST/#PRDMIT	INFEST/#MOTILES
	Pest GS: From / To / Method										
	CALC Method									TCOUNT	P%FREQ
	Rating Unit									#	%
	Part Rated									BX LEAF	BX LEAF
	# Subsamples / Class									1 1	1 1
	Sample Size / Unit									20 TPLOT	20 TPLOT
	Assessed by										
	ARM Action Codes									L05	L05
	Decimals Print									1	2
1	CHECK		UNBEHA							0.0 a	95.00 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	0.0 a	43.75 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	23.75 c
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	28.75 bc
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	32.50 bc
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	23.75 c
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	0.0 a	86.25 a
	LSD (P=.01)									0.00	18.186
	Standard Deviation									0.00	8.937
	CV									0.0	18.74
	Replicate F									0.000	5.765
	Replicate Prob(F)									1.0000	0.0060
	Treatment F									0.000	45.716
	Treatment Prob(F)									1.0000	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date									006 6/10/2009	006 6/10/2009
Crop: ID / Code / Resistance									1 CIDUN -	1 CIDUN -
Crop: Variety									SATSUMA	SATSUMA
Crop GS: From / To / Method									- - B	- - B
DAT / DALT / DAP									28 28 3813	28 28 3813
SE: File / Group									- 1	- 1
Organism / Biotype									METTCI -	METTCI -
Rating Type									INFECT	INFECT
Clarifier									INFEST/# EGGS	INFEST/#IMMATUR
Pest GS: From / To / Method										
CALC Method									TCOUNT	TCOUNT
Rating Unit									#	#
Part Rated									BX LEAF	BX LEAF
# Subsamples / Class									1 1	1 1
Sample Size / Unit									20 TPLOT	20 TPLOT
Assessed by										
ARM Action Codes									L05	L05
Decimals Print									1	1
Trt Product Name	Code Com	Number	Form Conc	Conc Unit	AI FO	Rate	AI Rate Unit	Appl Code	31	32
1 CHECK		UNBEHA							225.3 a	33.0 a
2 BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	55.3 b	7.3 bc
INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	19.5 b	1.5 c
4 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	25.8 b	0.8 c
PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	15.8 b	1.8 c
INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6 BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	13.8 b	1.8 c
SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7 REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	158.3 a	24.0 ab
LSD (P=.01)									92.48	17.53
Standard Deviation									45.45	8.62
CV									61.95	86.15
Replicate F									1.867	0.746
Replicate Prob(F)									0.1714	0.5389
Treatment F									13.766	9.220
Treatment Prob(F)									0.0001	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	AI FO	AI Rate	AI Rate Unit	Appl Code	006 6/10/2009 1 CIDUN - SATSUMA - - B 28 28 3813 - 1 METTCI - INFECT INFEST/# ADULT TCOUNT # BX LEAF 1 1 20 TPLOT L05 1 — 33	006 6/10/2009 1 CIDUN - SATSUMA - - B 28 28 3813 - 1 METTCI - INFECT INFEST/#MOTILES TCOUNT # BX LEAF 1 1 20 TPLOT L05 1 — 34
1	CHECK		UNBEHA							24.3 a	57.3 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	5.0 bc	12.3 bc
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.3 c	1.8 c
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	1.0 c	1.8 c
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.3 c	2.0 c
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	1.8 c	3.5 c
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	17.0 ab	41.0 ab
LSD (P=.01)										14.34	30.51
Standard Deviation										7.04	14.99
CV										99.61	87.83
Replicate F										0.940	0.852
Replicate Prob(F)										0.4421	0.4834
Treatment F										7.473	9.165
Treatment Prob(F)										0.0004	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT).

BASF Corporation

Evaluation: No / Date	006 6/10/2009	006 6/10/2009
Crop: ID / Code / Resistance	1 CIDUN -	1 CIDUN -
Crop: Variety	SATSUMA	SATSUMA
Crop GS: From / To / Method	- - B	- - B
DAT / DALT / DAP	28 28 3813	28 28 3813
SE: File / Group	- 1	- 1
Organism / Biotype	ZZYIAC -	METTCI -
Rating Type	INFECT	INFECT
Clarifier	INFEST/#PRDMIT	INFEST/#MOTILES
Pest GS: From / To / Method		
CALC Method	TCOUNT	P%FREQ
Rating Unit	#	%
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT
Assessed by		
ARM Action Codes	L05	L05
Decimals Print	1	2

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	Form	AI Rate	AI Rate Unit	Appl Code	35	36
1	CHECK		UNBEHA							0.8 a	96.25 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	0.5 a	42.50 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.3 a	22.50 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.3 a	21.25 b
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.3 a	18.75 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	16.25 b
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	0.3 a	81.25 a

LSD (P=.01)	1.12	32.145
Standard Deviation	0.55	15.796
CV	171.97	37.01
Replicate F	1.364	2.074
Replicate Prob(F)	0.2857	0.1395
Treatment F	0.740	17.355
Treatment Prob(F)	0.6243	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	AI FO	AI Rate	AI Rate Unit	Appl Code	37	38
	Evaluation: No / Date									007 6/18/2009	007 6/18/2009
	Crop: ID / Code / Resistance									1 CIDUN -	1 CIDUN -
	Crop: Variety									SATSUMA	SATSUMA
	Crop GS: From / To / Method									- - B	- - B
	DAT / DALT / DAP									36 36 3821	36 36 3821
	SE: File / Group									- 1	- 1
	Organism / Biotype									METTCI -	METTCI -
	Rating Type									INFECT	INFECT
	Clarifier									INFEST/# EGGS	INFEST/#IMMATUR
	Pest GS: From / To / Method										
	CALC Method									TCOUNT	TCOUNT
	Rating Unit									#	#
	Part Rated									BX LEAF	BX LEAF
	# Subsamples / Class									1 1	1 1
	Sample Size / Unit									20 TPLOT	20 TPLOT
	Assessed by										
	ARM Action Codes									L05	L05
	Decimals Print									1	1
1	CHECK		UNBEHA							230.8 a	46.3 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	83.5 bc	14.8 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	34.8 c	8.5 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	28.3 c	5.0 b
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	44.5 c	10.8 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	40.8 c	9.8 b
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	144.5 b	34.0 a
	LSD (P=.01)									62.46	17.06
	Standard Deviation									30.69	8.38
	CV									35.4	45.48
	Replicate F									0.952	0.197
	Replicate Prob(F)									0.4367	0.8974
	Treatment F									24.138	13.695
	Treatment Prob(F)									0.0001	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date	007 6/18/2009	007 6/18/2009
Crop: ID / Code / Resistance	1 CIDUN -	1 CIDUN -
Crop: Variety	SATSUMA	SATSUMA
Crop GS: From / To / Method	- - B	- - B
DAT / DALT / DAP	36 36 3821	36 36 3821
SE: File / Group	- 1	- 1
Organism / Biotype	METTCI -	METTCI -
Rating Type	INFECT	INFECT
Clarifier	INFEST/# ADULT	INFEST/#MOTILES
Pest GS: From / To / Method		
CALC Method	TCOUNT	TCOUNT
Rating Unit	#	#
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT
Assessed by		
ARM Action Codes	L05	L05
Decimals Print	1	1

Trt No.	Product Name	Code Com	Code Number	Form Conc	Form Conc Unit	FO	AI Rate	AI Rate Unit	Appl Code	39	40
1	CHECK		UNBEHA							37.3 a	83.5 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	11.0 bc	25.8 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	4.0 c	12.5 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	4.5 c	9.5 b
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	3.0 c	13.8 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	4.0 c	13.8 b
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	22.5 b	56.5 a

LSD (P=.01)	13.77	28.41
Standard Deviation	6.77	13.96
CV	54.9	45.4
Replicate F	0.925	0.486
Replicate Prob(F)	0.4489	0.6963
Treatment F	14.761	16.533
Treatment Prob(F)	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date	007 6/18/2009	007 6/18/2009
Crop: ID / Code / Resistance	1 CIDUN -	1 CIDUN -
Crop: Variety	SATSUMA	SATSUMA
Crop GS: From / To / Method	- - B	- - B
DAT / DALT / DAP	36 36 3821	36 36 3821
SE: File / Group	- 1	- 1
Organism / Biotype	ZZYIAC -	METTCI -
Rating Type	INFECT	INFECT
Clarifier	INFEST/#PRDMIT	% Infest leaves
Pest GS: From / To / Method		
CALC Method	TCOUNT	TCOUNT
Rating Unit	#	%
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT
Assessed by		
ARM Action Codes	L05	L05
Decimals Print	1	1

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	FO	AI Rate	AI Rate Unit	Appl Code	41	42
1	CHECK		UNBEHA							0.5 a	98.8 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	0.8 a	78.8 ab
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.5 a	57.5 bc
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	58.8 bc
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.8 a	50.0 c
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	48.8 c
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	0.3 a	87.5 a

	41	42
LSD (P=.01)	1.19	25.46
Standard Deviation	0.58	12.51
CV	148.7	18.25
Replicate F	2.058	1.293
Replicate Prob(F)	0.1417	0.3073
Treatment F	1.186	9.920
Treatment Prob(F)	0.3572	0.0001

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date	008 6/24/2009	008 6/24/2009
Crop: ID / Code / Resistance	1 CIDUN -	1 CIDUN -
Crop: Variety	SATSUMA	SATSUMA
Crop GS: From / To / Method	- - B	- - B
DAT / DALT / DAP	42 42 3827	42 42 3827
SE: File / Group	- 1	- 1
Organism / Biotype	METTCI -	METTCI -
Rating Type	INFECT	INFECT
Clarifier	INFEST/# EGGS	INFEST/#IMMATUR
Pest GS: From / To / Method		
CALC Method	TCOUNT	TCOUNT
Rating Unit	#	#
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT
Assessed by		
ARM Action Codes	L05	L05
Decimals Print	1	1

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	FO	AI Rate	AI Rate Unit	Appl Code	43	44
1	CHECK		UNBEHA							214.0 a	14.0 ab
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	176.0 ab	16.8 ab
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	75.3 c	6.0 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	79.0 c	5.3 b
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	71.5 c	4.3 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	89.3 bc	4.0 b
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	175.0 ab	26.5 a
LSD (P=.01)										86.04	16.17
Standard Deviation										42.28	7.95
CV										33.63	72.48
Replicate F										0.525	0.498
Replicate Prob(F)										0.6708	0.6882
Treatment F										8.112	4.591
Treatment Prob(F)										0.0002	0.0054

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date										008 6/24/2009	008 6/24/2009
Crop: ID / Code / Resistance										1 CIDUN -	1 CIDUN -
Crop: Variety										SATSUMA	SATSUMA
Crop GS: From / To / Method										- - B	- - B
DAT / DALT / DAP										42 42 3827	42 42 3827
SE: File / Group										- 1	- 1
Organism / Biotype										METTCI -	METTCI -
Rating Type										INFECT	INFECT
Clarifier										INFEST/# ADULT	INFEST/#MOTILES
Pest GS: From / To / Method											
CALC Method										TCOUNT	TCOUNT
Rating Unit										#	#
Part Rated										BX LEAF	BX LEAF
# Subsamples / Class										1 1	1 1
Sample Size / Unit										20 TPLOT	20 TPLOT
Assessed by											
ARM Action Codes										L05	L05
Decimals Print										1	1
Trt	Product Name	Code Com	Code Number	Form Conc	Conc Unit	FO	AI Rate	AI Rate Unit	Appl Code	45	46
1	CHECK		UNBEHA							17.8 a	31.8 ab
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	12.5 a	29.3 ab
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	4.3 a	10.3 b
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	4.8 a	10.0 b
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	4.5 a	8.8 b
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	6.8 a	10.8 b
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	15.3 a	41.8 a
LSD (P=.01)										13.76	25.43
Standard Deviation										6.76	12.50
CV										71.98	61.39
Replicate F										1.159	0.843
Replicate Prob(F)										0.3526	0.4881
Treatment F										2.811	4.708
Treatment Prob(F)										0.0414	0.0048

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	FO	AI Rate	AI Rate Unit	Appl Code	47	48
	Evaluation: No / Date									008 6/24/2009	008 6/24/2009
	Crop: ID / Code / Resistance									1 CIDUN -	1 CIDUN -
	Crop: Variety									SATSUMA	SATSUMA
	Crop GS: From / To / Method									- - B	- - B
	DAT / DALT / DAP									42 42 3827	42 42 3827
	SE: File / Group									- 1	- 1
	Organism / Biotype									METTCI -	ZZYIAC -
	Rating Type									INFECT	INFECT
	Clarifier									% Infest leaves	INFEST/#PRDMIT
	Pest GS: From / To / Method										
	CALC Method									TCOUNT	TCOUNT
	Rating Unit									%	#
	Part Rated									BX LEAF	BX LEAF
	# Subsamples / Class									1 1	1 1
	Sample Size / Unit									20 TPLOT	20 TPLOT
	Assessed by										
	ARM Action Codes									L05	L05
	Decimals Print									1	1
1	CHECK		UNBEHA							96.3 a	0.0 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	80.0 ab	0.0 a
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	66.3 b	0.0 a
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	66.3 b	0.0 a
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	65.0 b	0.0 a
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	76.3 ab	0.0 a
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	95.0 a	0.0 a
	LSD (P=.01)									21.59	0.00
	Standard Deviation									10.61	0.00
	CV									13.62	0.0
	Replicate F									5.778	0.000
	Replicate Prob(F)									0.0060	1.0000
	Treatment F									6.365	0.000
	Treatment Prob(F)									0.0010	1.0000

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	FO	AI Rate	AI Rate Unit	Appl Code	009 7/9/2009 1 CIDUN - SATSUMA - - B 57 57 3842 - 1 METTCI - INFECT INFEST/# EGGS TCOUNT # BX LEAF 1 1 20 TPLOT L05 1 — 49	009 7/9/2009 1 CIDUN - SATSUMA - - B 57 57 3842 - 1 METTCI - INFECT INFEST/#IMMATUR TCOUNT # BX LEAF 1 1 20 TPLOT L05 1 — 50
1	CHECK		UNBEHA							41.3 a	1.8 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0 G	AI/HA	A	40.0 a	2.8 a
	INDUCE	BCH	88957	90.0 %		SL	32.0 FL	OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0 G	AI/HA	A	27.8 a	2.5 a
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0 G	AI/HA	A	19.3 a	2.0 a
	PENETRATOR PLUS	BAS	90841	100.0 %		EC	0.5 %	V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0 G	AI/HA	A	16.0 a	4.5 a
	INDUCE	BCH	88957	90.0 %		SL	32.0 FL	OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0 G	AI/HA	A	16.0 a	0.8 a
	SILWET L-77 AG	BAS	90371	100.0 %		DC	0.1 %	V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63 G	AI/HA	A	23.0 a	4.3 a
LSD (P=.01)										30.81	5.18
Standard Deviation										15.14	2.54
CV										57.84	96.29
Replicate F										0.293	0.949
Replicate Prob(F)										0.8296	0.4381
Treatment F										1.995	1.118
Treatment Prob(F)										0.1197	0.3909

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date	009 7/9/2009	009 7/9/2009
Crop: ID / Code / Resistance	1 CIDUN -	1 CIDUN -
Crop: Variety	SATSUMA	SATSUMA
Crop GS: From / To / Method	- - B	- - B
DAT / DALT / DAP	57 57 3842	57 57 3842
SE: File / Group	- 1	- 1
Organism / Biotype	METTCI -	METTCI -
Rating Type	INFECT	INFECT
Clarifier	INFEST/# ADULT	INFEST/#MOTILES
Pest GS: From / To / Method		
CALC Method	TCOUNT	TCOUNT
Rating Unit	#	#
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT
Assessed by		
ARM Action Codes	L05	L05
Decimals Print	1	1

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	FO	AI Rate	AI Rate Unit	Appl Code	51	52
1	CHECK		UNBEHA							4.3 a	6.3 a
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	4.3 a	7.0 a
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	1.5 a	4.0 a
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	2.8 a	4.8 a
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	1.8 a	6.3 a
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	1.8 a	2.5 a
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	3.8 a	8.0 a

LSD (P=.01)	5.16	8.14
Standard Deviation	2.53	4.00
CV	88.66	72.26
Replicate F	1.558	1.026
Replicate Prob(F)	0.2340	0.4045
Treatment F	0.933	0.893
Treatment Prob(F)	0.4953	0.5207

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

Evaluation: No / Date	009 7/9/2009	010 7/21/2009
Crop: ID / Code / Resistance	1 CIDUN -	1 CIDUN -
Crop: Variety	SATSUMA	SATSUMA
Crop GS: From / To / Method	- - B	- - B
DAT / DALT / DAP	57 57 3842	69 69 3854
SE: File / Group	- 1	- 1
Organism / Biotype	ZZYIAC -	NNNNN -
Rating Type	INFECT	GREENT
Clarifier	INFEST/#PRDMIT	chlorophyllindx
Pest GS: From / To / Method		
CALC Method	TCOUNT	MWCGS
Rating Unit	#	#
Part Rated	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1
Sample Size / Unit	20 TPLOT	20 TPLOT
Assessed by		
ARM Action Codes	L05	L05
Decimals Print	1	1

Trt	Product Name	Code Com	Number	Form Conc	Conc Unit	FO	AI Rate	AI Rate Unit	Appl Code	53	54
1	CHECK		UNBEHA							0.0 a	141.0 bc
2	BAS 92100I	BAS	92100	212.0	GA/L	SC	106.0	G AI/HA	A	0.0 a	162.8 abc
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
3	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	185.5 a
4	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.0 a	152.0 abc
	PENETRATOR PLUS	BAS	90841	100.0	%	EC	0.5	% V/V	A		
5	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.3 a	160.8 abc
	INDUCE	BCH	88957	90.0	%	SL	32.0	FL OZ/100 GAL	A		
6	BAS 92100I	BAS	92100	212.0	GA/L	SC	212.0	G AI/HA	A	0.5 a	164.0 ab
	SILWET L-77 AG	BAS	90371	100.0	%	DC	0.1	% V/V	A		
7	REAPER 0.15EC	BAS	90920	18.0	GA/L	EC	2.63	G AI/HA	A	0.0 a	129.3 c

LSD (P=.01)	0.88	30.70
Standard Deviation	0.43	15.08
CV	403.07	9.64
Replicate F	0.702	3.570
Replicate Prob(F)	0.5630	0.0347
Treatment F	0.830	5.735
Treatment Prob(F)	0.5622	0.0017

Means followed by same letter do not significantly differ (P=.01, Duncan's New MRT)

BASF Corporation

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          Type PG Year Cty Pl.No. Ver. Rev. Cty Reg No.
Trial ID: DEV  I  2009 US  G61    A    01.0 US  UCA PM1          GEP:
Title:          BAS 92100I/EFFICACY/CITRUS/MITES
GEP Guideline:  CONFIDENTIAL                                Crop Destruct: N
Short Trial ID: I09G61A-UCAPM1   Licensee:  Phil Munger
 Crop: ID / Code / Resistance
 1, CIDUN, , SATSUMA = SATSUMA

 B = BBCH SCALE

 3785 = 1 1/1/1999
 3790 = 1 1/1/1999
 3794 = 1 1/1/1999
 3799 = 1 1/1/1999
 3806 = 1 1/1/1999
 3813 = 1 1/1/1999
 3821 = 1 1/1/1999
 3827 = 1 1/1/1999
 3842 = 1 1/1/1999
 3854 = 1 1/1/1999
Organism / Biotype
 METTCI = METATETRANYCHUS CITRI
 ZZYIAC = PREDATORY MITE,SPEC.NOT KN.(V)
 NNNNN = USEFUL PLANTS
Rating Type
 INFECT,  = INFECTION (F); INFESTATION (I)
 GREENT,  = LEAF, GREEN TISSUE
CALC Method
 TCOUNT = HT COUNT INSECTS BEF.+AFT.TRT
 P%FREQ = EST % FREQ/INCID OF ATTACK
 MWCGS = MEASURING/WEIGHING ON THE CROP
Rating Unit
 # = NUMBER
 % = PERCENT
Part Rated
 BX,  = LEAF

 TPLOT = TOTAL PLOT
ARM Action Codes
 L05 = Perform 5% Least Significant Difference mean separation on Standardized Summary
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BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2009/US/G61/A/01.0/US/UCA/PM2	GEP:
Title:	BAS 92100I/EFFICACY/CITRUS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I09G61A-UCAPM2	Licensee: Phil Munger

Trt	Product Name	Form Conc	Conc Unit	FO	Product Rate	Prod Unit	AI Rate	AI Rate Unit	Appl Code	Appl Time	VOL	Unit	Mix Size	Unit
1	CHECK													
3	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	130	GAL/AC	3	GALLONS
	-CYFLUMETOFEN	212.0			14.522									
4	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	130	GAL/AC	3	GALLONS
	-CYFLUMETOFEN	212.0			14.522									
	PENETRATOR PLUS	100.0	%	EC	0.125	% v/v	0.125	% v/v	A	01	130	GAL/AC	3	GALLONS
5	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	130	GAL/AC	3	GALLONS
	-CYFLUMETOFEN	212.0			14.522									
	INDUCE	90.0	%	SL	0.25	% v/v	0.25	% v/v	A	01	130	GAL/AC	3	GALLONS
	-ACTIVE INGREDIENT	90.0			0.25									
6	BAS 92100I	212.0	GA/L	SC	13.7	fl oz/a	212.0	g ai/ha	A	01	130	GAL/AC	3	GALLONS
	-CYFLUMETOFEN	212.0			14.522									
	SILWET L-77 AG	100.0	%	DC	0.125	% v/v	0.125	% v/v	A	01	130	GAL/AC	3	GALLONS
7	AGRI-MEK	18.0	GA/L	EC	12.0	fl oz/a	15.8	g ai/ha	A	01	130	GAL/AC	3	GALLONS
	-ABAMECTIN	18.0			12									

Replications: 4, Untreated treatments: 1, Reference treatment number: 1, Design: Randomized Complete Block, Treatment units: US standard, Treated plot size Width: 12 feet, Treated plot size Length: 21 feet, Application volume: 130 gal/ac, Mix size: 3 gallons, Format definitions: BASF.DEF, BASF.FRM

E20

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2009/US/G61/A/01.0/US/UCA/PM2	GEP:
Title:	BAS 92100I/EFFICACY/CITRUS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I09G61A-UCAPM2	Licensee: Phil Munger

Trial Comments

TITLE: BAS 92100I/EFFICACY/CITRUS/MITES

RESULTS: All of the treatments showed excellent control of citrus red mite in this trial. Agri-Mek was less effective than BAS 921OOI in evaluations taken 30 days after application.

Trial Complete.

BASF Corporation

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                Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.
Trial ID:       DEV/I/2009/US/G61/A/01.0/US/UCA/PM2          GEP:
Title:          BAS 92100I/EFFICACY/CITRUS/MITES
GEP Guideline: CONFIDENTIAL
Short Trial ID: I09G61A-UCAPM2              Licensee: Phil Munger
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GENERAL TRIAL INFORMATION

Originator: WOFFORD JAMES Trial Status: 7 FINAL
Researcher: MUNGER PHILIP Validated: 3/8/10
Cooperator Data (Y/N)?: Y
Name: JAKE J. ZACCARIA
Org: ZACCARIA AG CONSULTING
Street1: 5408 SUMMERWING WAY Phone No: 661-393-4981
Town: BAKERSFIELD
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA Postal: 93308
Location: JOHNSTON FARMS
Town: EDISON Postal: 93220
State: CA CALIFORNIA
Country: US UNITED STATES OF AMERICA

Trial Design:
RB RANDOMIZED BLOC DESIGN Trial Type: ORC Trial Unit: U
Trt No: 7 Plot Width: 12 Unit: FT
Reps: 4 Plot Length: 21
Plot Size: 252.00 FT2
Factors: 1

ONum	Objectives
1. 12104001	Efficacy trials on Mite species (especially citrus red mite) on citrus (grapefruit and oranges)

APPLICATION TIMINGS

App Code	Timing Code	Set No	Description	Date	Hour From	To	Spqu Code
A	01	1	1st appl when pest reaches locally recommended threshold	21/5/09	7:00 AM	8:00 AM	N1

SPRAYER SETUPS

Set No	App Met	Sprayer Typ	Carrier Type	Vol	Unit	Mix Size	Unit
1	SP	SGT	H2O	130	GAL/AC	3	GALLONS

INCORPORATION

Set No
1

INSECT DESCRIPTION

INSECT:				Plant Part	Pest Stage		Infestation			
App	Date	Insect	Description	Biotype	Fr	To	Min	Max	Mode	Deg	Meth
A	1 21/5/09	METTCI	METATETRANYCHUS CITRI								
	2	ZZYIAC	PREDATORY MITE,SPEC.NOT KN.(V)								

BASF Corporation

	Typ/P/Year/Ct/Pl./V/Rev /Ct/Reg/No.	
Trial ID:	DEV/I/2009/US/G61/A/01.0/US/UCA/PM2	GEP:
Title:	BAS 92100I/EFFICACY/CITRUS/MITES	
GEP Guideline:	CONFIDENTIAL	
Short Trial ID:	I09G61A-UCAPM2	Licensee: Phil Munger

Evaluation: No / Date	001 20/5/09	001 20/5/09	002 25/5/09	002 25/5/09	003 29/5/09
Crop: ID / Code / Resistance	1 CIDSI	1 CIDSI	1 CIDSI	1 CIDSI	1 CIDSI
Crop: Variety	NAVEL	NAVEL	NAVEL	NAVEL	NAVEL
DAT / DALT / DAP	-1 -1 1506	-1 -1 1506	4 4 1511	4 4 1511	8 8 1515
SE: File / Group	1	1	1	1	1
Organism / Biotype	METTCI	METTCI	METTCI	METTCI	METTCI
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	INFEST/10 LEAF	INFEST/10 LEAF	INFEST/10 LEAF	INFEST/10 LEAF	INFEST/10 LEAF
Pest GS: From / To / Method	EX EX B	NF IX B	EX EX B	NF IX B	EX EX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT
ARM Action Codes	APC	APC	APC	APC	APC
Decimals Print	1	1	1	1	1
Trt Product Name	1	4	7	10	13
1 CHECK	18.0 a (0.0%)	15.6 a (0.0%)	95.3 a (0.0%)	14.6 a (0.0%)	24.2 a (0.0%)
3 BAS 92100I	18.0 a (0.0%)	15.6 a (0.0%)	3.5 a (96.4%)	0.0 b (100.0%)	2.6 b (89.4%)
4 BAS 92100I PENETRATOR PLUS	18.0 a (0.0%)	15.6 a (0.0%)	2.3 a (97.6%)	0.0 b (100.0%)	1.5 b (93.8%)
5 BAS 92100I INDUCE	18.0 a (0.0%)	15.6 a (0.0%)	3.8 a (96.1%)	0.0 b (100.0%)	4.1 b (83.2%)
6 BAS 92100I SILWET L-77 AG	18.0 a (0.0%)	15.6 a (0.0%)	4.1 a (95.8%)	0.3 b (97.9%)	1.8 b (92.5%)
7 AGRI-MEK	18.0 a (0.0%)	15.6 a (0.0%)	4.5 a (95.3%)	1.1 b (92.8%)	4.2 b (82.6%)
LSD (P=.05)	0.00	0.01	79.31	3.33	6.78
Standard Deviation	0.00	0.01	52.63	2.21	4.50
CV	0.0	0.04	278.73	83.29	70.59
Bartlett's X2	0.0	0.0	87.905	11.702	23.719
P(Bartlett's X2)	.	.	0.001*	0.003*	0.001*
Replicate F	0.000	1216504.122	0.986	0.924	0.992
Replicate Prob(F)	1.0000	0.0001	0.4257	0.4533	0.4231
Treatment F	0.000	0.000	2.024	28.039	15.225
Treatment Prob(F)	1.0000	1.0000	0.1332	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

BASF Corporation

Evaluation: No / Date	003 29/5/09	004 12/6/09	004 12/6/09	005 20/6/09	005 20/6/09
Crop: ID / Code / Resistance	1 CIDSI	1 CIDSI	1 CIDSI	1 CIDSI	1 CIDSI
Crop: Variety	NAVEL	NAVEL	NAVEL	NAVEL	NAVEL
DAT / DALT / DAP	8 8 1515	22 22 1529	22 22 1529	30 30 1537	30 30 1537
SE: File / Group	1	1	1	1	1
Organism / Biotype	METTCI	METTCI	METTCI	METTCI	METTCI
Rating Type	INFECT	INFECT	INFECT	INFECT	INFECT
Clarifier	INFEST/10 LEAF	INFEST/10 LEAF	INFEST/10 LEAF	INFEST/10 LEAF	INFEST/10 LEAF
Pest GS: From / To / Method	NF IX B	EX EX B	NF IX B	EX EX B	NF IX B
CALC Method	TCOUNT	TCOUNT	TCOUNT	TCOUNT	TCOUNT
Rating Unit	#	#	#	#	#
Part Rated	BX LEAF	BX LEAF	BX LEAF	BX LEAF	BX LEAF
# Subsamples / Class	1 1	1 1	1 1	1 1	1 1
Sample Size / Unit	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT	10 TPLOT
ARM Action Codes	APC	APC	APC	APC	APC
Decimals Print	1	1	1	1	1
Trt Product Name	16	19	22	25	28
1 CHECK	18.6 a (0.0%)	27.0 a (0.0%)	19.7 a (0.0%)	34.0 a (0.0%)	43.1 a (0.0%)
3 BAS 92100I	0.3 b (98.4%)	0.8 c (97.2%)	0.0 c (100.0%)	2.3 b (93.4%)	1.1 c (97.6%)
4 BAS 92100I PENETRATOR PLUS	0.8 b (96.0%)	1.1 c (96.1%)	1.1 c (94.7%)	4.1 b (88.1%)	3.2 c (92.7%)
5 BAS 92100I INDUCE	2.4 b (87.1%)	2.4 c (91.1%)	1.1 c (94.7%)	4.1 b (88.1%)	1.7 c (96.2%)
6 BAS 92100I SILWET L-77 AG	0.3 b (98.4%)	2.0 c (92.8%)	0.6 c (97.0%)	4.1 b (87.9%)	3.6 c (91.6%)
7 AGRI-MEK	7.4 b (60.5%)	11.3 b (58.3%)	10.8 b (45.2%)	12.0 b (64.7%)	22.4 b (48.1%)
LSD (P=.05)	7.92	5.56	6.68	9.48	11.55
Standard Deviation	5.25	3.69	4.44	6.29	7.67
CV	106.12	49.95	80.12	62.46	61.46
Bartlett's X2	37.205	28.815	21.06	21.336	35.698
P(Bartlett's X2)	0.001*	0.001*	0.001*	0.001*	0.001*
Replicate F	0.965	3.430	0.168	0.928	0.792
Replicate Prob(F)	0.4350	0.0444	0.9161	0.4514	0.5170
Treatment F	7.523	31.468	13.182	15.065	19.673
Treatment Prob(F)	0.0010	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
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