UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

September 28, 1999

MEMORANDUM

SUBJECT: **Acephate.** (Chemical ID No. 103301/List A Reregistration Case No. 0042). Revised Dietary Exposure Analysis for the HED Revised Human Health Risk Assessment. No MRID#. DP Barcode D254604.

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THRU: Mohsen Sahafeyen
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and

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TO: DEEM files
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Background/Action Requested

A preliminary "Human Health Risk Assessment and Supporting Documentation for the HED RED" was issued 10/30/98 (F. Fort, D245803). The preliminary risk assessment included a summary of estimated chronic and acute dietary exposure and risk to acephate and its metabolite, methamidophos. The methamidophos exposure considered in this assessment are from the application of acephate only. This assessment does not include exposure from the application of methamidophos which is also a pesticide. The exposure from the application of methamidophos along with an aggregate dietary exposure assessment for both acephate and methamidophos will be addressed in another review. Chronic dietary exposure estimates were based on highly refined anticipated residues (ARs) and were below HED's level of concern. With no refinements made to

the acute dietary exposure (i.e., estimates were based on tolerance level residues and 100% Crop Treated (%CT)), the estimated acute dietary exposure and risk exceeded the Agency's level of concern, with 513% and 778% of the acephate and methamidophos aRfD consumed for children (1 to 6 years old), the most highly exposed population subgroup in each case.

The revised acute and chronic dietary risk analyses which incorporates the following changes were conducted for acephate and its metabolite, methamidophos:

- Acute anticipated residues were generated for acephate and methamidophos, and a probabilistic (Monte Carlo) (Tier 3) analysis was conducted.

- Incorporation of new % crop treated information from a revised quantitative usage analysis (QUA) was completed by the Biological and Economic Analysis Division (BEAD);

- An HED policy revision which allows the use of weighted average %CT in chronic dietary exposure analyses (rather than the estimated maximum %CT) was incorporated into the revised chronic analysis;

- HED revised the terms used for expressing dietary risk: an acute or chronic reference dose (aRfD or cRfD) which includes the FQPA factor (1X, 3X, or 10X) is now referred to as the acute or chronic Population Adjusted Dose (aPAD or cPAD);

Conclusions/Summary

Chronic

HED is not concerned for acephate chronic dietary risk below 100% of the chronic Population Adjusted Dose (cPAD), or 0.0012 mg/kg/day. Revised estimated chronic dietary exposure and risk for acephate are significantly below 100% of the cPAD. The most highly exposed population subgroup is children (1 to 6 years), with an estimated exposure corresponding to 17% cPAD. Estimated dietary exposure to the general US population is lower, corresponding to 7% cPAD.

For methamidophos (from acephate application only), HED is not concerned for risks below 100% of the cPAD of 0.0001 mg/kg/day. The most highly exposed population subgroup is children (1 to 6 years) with an estimated exposure corresponding to 19% of the cPAD. The dietary exposure to the US population is 16% of the cPAD. The results indicate that chronic exposure to methamidophos from application of acephate is below HED's level of concern.

An additional chronic analysis was conducted to show the contribution of food handling establishment uses to the dietary exposure for acephate. These uses include all commodities in the DEEM database except those where an existing tolerance is established and are included in the acephate chronic assessment discussed above. Residue data show that residues of acephate are not expected as a result of these uses; consequently, residues at ½ LOD (LOD = 0.015 ppm) were used in the chronic

analysis. When these uses are deleted, chronic risk estmates are significantly reduced. The highest exposed subpopulation is children (1 to 6 years) with 1% of the cPAD consumed (see Attachment 7). An analysis which includes residues of methamidophos was not conducted because no detectable residues of methamidophos (residues would be significantly less than the acephate residues found) were expected from these uses.

Acute

HED is not concerned for acephate and methamidophos (from acephate application only) because acute dietary risk is below 100% of the respective acute Population Adjusted Doses (aPAD), or 0.005 mg/kg/day(acephate) and 0.001 mg/kg/day(methamidophos). Risks at the 99.9th percentile of exposure are reported, since the acute assessment has been refined using residue distribution files and %CT data. Estimated acute dietary risks are below 100% of the aPADs for acephate and methamidophos. For acephate, at the 99.9th percentile of exposure, the most highly exposed population subgroup is children (1 to 6 years old), with 33% of the aPAD consumed. For methamidophos, infant are the most highly exposed subpopulation with 80% of the aPAD consumed. Estimated dietary exposure to the general US population is lower than that for infants, corresponding to 22% and 61% of the aPAD, of acephate and methamidophos, respectively. In accordance with HED policy, food handling establishment uses were not included in the acute dietary risk estimates (see memorandum titled "Final Office Policy for Performing Acute Dietary Exposure Assessments", D. Edwards, 6/13/96).

DETAILED CONSIDERATIONS

Toxicological Information:

Acephate

The chronic Reference Dose (RfD) is 0.0012 mg/kg bwt/day, based on a NOAEL of 2 ppm (0.12 mg/kg/day), the lowest dose level tested from a 90-day feeding study in rats, with an uncertainty factor of 100. The toxicity endpoint was the inhibition of brain cholinesterase activity in both sexes (See HazID Committee Report, 1/15/98). Acephate is classified as a Group C, possible human carcinogen. It was concluded that no quantitive risk assessment is needed based on the occurrence of tumors, mainly carcinomas in only one sex of one species, and only at the highest dose; and the lack of mutagenicity seen in *in vivo* mutagenicity studies. Therefore a cancer risk assessment was not performed.

The dose level for use in the acute dietary risk assessment is the acute RfD of 0.005 mg/kg bwt/day based on a NOAEL of 0.5 mg/kg/day from an acute neurotoxicity study in rats with a 100-fold uncertainty factor . Endpoints observed at the LOAEL were plasma and brain cholinesterase inhibition in female rats. (See HazID Committee Report, 1/15/98).

For acephate, the 10-fold FQPA safety factor to account for special susceptibiity in infants and children has been removed for all exposure scenarios. Therefore the cPAD and aPAD are the same as the cRfD and aRfD of 0.0012 mg/kg/bwt/day and 0.005 mg/kg/bwt/day, respectively.

Methamidophos

The chronic Reference Dose (RfD) used in the chronic analysis is 0.0003 mg/kg bwt/day, based on a NOAEL of 0.03 mg/kg/day with brain cholinesterase inhibition seen at 0.06 mg/kg/day and an uncertainty factor of 100 (See HazID Committee Report, 2/12/98). Methamidophos is classified as a "not likely" human carcinogen. Therefore a cancer risk assessment is not performed herein.

The reference dose used in the endpoint for the acute dietary risk assessment is 0.003 mg/kg bwt/day, based on a NOAEL of 0.3 mg/kg bwt/day from an acute neurotoxicity study in the rat and an uncertainty factor of 100 (See HazID Committee Report, 2/12/98). Effects at the LOAEL of 0.7 mg/kg/day included plasma, erythrocyte and brain cholinesterase inhibition (See HazID Committee Report, 2/12/98).

The FQPA safety factor committee reduced the FQPA safety factor to 3 for methamidophos for both acute and chronic exposure scenarios. There is an indication of neurotoxic effects in hens and in humans. A developmental neurotoxicity study is needed to properly evaluate the neurotoxicity of this chemical. Therefore the aPAD and cPAD are 0.001 mg/kg/day and 0.0001 mg/kg/day, respectively (RfD/3). A summary of this information is presented in Table 1.

Table 1. Summary of Doses/Endpoints for Dietary risk Assessment for Acephate and Methamidophos

Acephate				
Exposure Scenario	Dose (mg/kg/day) [Uncertainty Factor]	Endpoint	Study	RfD/PAD (mg/kg/day)
Acute dietary	0.5 (NOAEL) Conventional UF = 100X FQPA = 1X	Brain ChE inhibition	acute neurotoxicity range finding study	aRfD = 0.005 aPAD = 0.005
Chronic dietary	0.12 (NOAEL) Conventional UF = 100X FQPA = 1X	Brain ChE inhibition	90-day feeding study	RfD = 0.0012 cPAD = 0.0012
Carcinogenicity	n/a	n/a	Carcinogenicity, Mice, Rats	"C" carcinogen/ not quantifiable
Methamidophos				
Exposure Scenario	Dose (mg/kg/day) [Uncertainty Factor]	Endpoint	Study	RfD/PAD (mg/kg/day)

Acute dietary	0.3 (NOAEL) Conventional UF = 100X FQPA = 3X	Brain, plasma, erythrocyte ChE inhibition	acute neurotoxicity study in rats	aRfD = 0.003 aPAD = 0.001
Chronic dietary	0.03 (NOAEL) Conventional UF = 100X FQPA = 3X	Brain ChE inhibition	8-week toxicity study in rats	RfD = 0.0003 cPAD = 0.0001
Carcinogenicity	n/a	n/a	Carcinogenicity, Mice, Rats	"not likely" human carcinogen

1. ChE = cholinesterase; NOAEL = No Observable Adverse Effect Level; RfD = Reference Dose=NOAEL/UF; PAD = Population Adjusted Dose = RfD/FQPA Safety Factor
2. The conventional uncertainty factor of 100X consists of 10X for interspecies extrapolation and 10X for intraspecies variability

Usage Information

A revised quantitative usage analysis (QUA) was completed by BEAD/OPP (A. Halvorson, 6/8/99) [Attachment 8]. These data are based on available pesticide survey usage information for the years 1988 through 1997 and include both the estimated maximum and weighted average % CT, as well as average application rates and number of applications. The most significant markets for acephate in terms of pound active ingredient are cotton (23%), tobacco (21%), residential outdoors by consumers (20% or less), horticulture nurseries (8%), and golf courses (4%). Although tolerances exist for residues of acephate in macadamia nuts, non-bell peppers and Brussels sprouts, no %CT data were reported by BEAD. Therefore, % CT data will be translated from almonds (1%), bell peppers (48%), and cauliflower (11%), respectively (personal communication with A. Halvorson, 9/22/99).

For the chronic analysis, the weighted average %CT was incorporated; for the acute analysis, the estimated maximum %CT was used when appropriate.

Residue Information

The residue chemistry database for acephate is largely complete. Additional studies are required to reassess the tolerance for residues in cotton gin byproducts.

Tolerances for acephate are published in 40 CFR §180.108. The available data support the established tolerances in/on beans (succulent and dry form); Brussels sprouts; cauliflower; celery; cottonseed; cranberries; lettuce (head); peanuts; and peppers. The existing tolerances on cottonseed should be lowered from 2 to 0.5 ppm. The existing tolerances on mint should be raised from 15 to 27 ppm (see Residue Chemistry Chapter for the Reregistration Eligibility Decision (RED), F. Fort, 5/14/98).

Anticipated residues and percent crop treated data were used for all commodities (see Anticipated residue memoranda, F. Fort, 4/30/98 and 9/23/99). Anticipated residues used in the dietary risk analysis are summarized in Tables 2 and 3 below. These anticipated residues have been reviewed by the HED Chemistry Science Advisory Council (CHEMSAC) on April 23, 1998 (chronic) and August 18, 1999 (acute). The acute estimates are based on USDA Pesticide Data Program (PDP) monitoring data for succulent beans, celery and lettuce; and FDA Surveillance Monitoring data for cauliflower and peppers (acephate only; bell and non-bell). Monitoring data from the years 1994 through 1997 (PDP) and the years 1993 through 1998 (FDA) were considered. A weighted average of the limits of detection were be used in the assessment for all treated non-detects. Field trial data were used for Brussels sprouts, dry beans, cottonseed, cranberry, mint, macadamia nuts, peanuts, peppers (methamidophos only), and soybean. Although FDA data were available for methamidophos on peppers, these data were not used because HED believes that these data would greatly overestimate the risk to methamidophos from application of acephate since these data represent monitoring data from application of acephate and application of methamidophos. Additionally, because fresh peppers are considered nonblended, these data would be decomposited which would further overestimate the risk. BEAD-provided percent crop treated data have been incorporated into the anticipated residue or residue distribution file where appropriate. The residue distribution files (RDF) are attached (Attachment 1 and 2).

Table 2. Summary of Acephate Anticipated Residues for Chronic Dietary Risk Assessment

Commodity	Recommended Tolerance (ppm) Acephate (Methamidophos)	Anticipated Residue (ppm)		Percent crop treated[a]
		Acephate	Methamidophos	Average
Acephate				
Beans (Succulent and Dry) fresh cooked canned	3(1)	0.05 0.05 0.013	0.16 0.05 0.03	2
Brussels sprouts	3(1)	0.01	0.05	11[c]
Cauliflower	2(1)	0.01	0.13	11
Celery	10(1)	0.07	0.09	49
Cottonseed oil meal	0.5(0.1) 1	0.16 0.33	0.04 0.04	9
Cranberries	0.5(0.1)	0.01	0.1	34
Head Lettuce	10(1)	0.01	0.1	47
Macadamia Nuts	0.05	0.01	0.01	0.1[e]
Mint tops and leaves oil	27(2) n/a[b]	9.5 0.01	2 2	31
Peanut nutmeat meal oil	0.2 n/a[b] n/a[b]	0.01 0.01 0.01	0.01 0.01 0.01	5
Peppers	4(1)	0.2	0.45(non-bell)/ 0.31(bell)	24
Soybean	1	1	1	0.1[e]
Food handling Establishment Uses	0.02	0.008	n/a	100

a. Percent crop treated information has not been included in the anticipated residues.
b. No tolerances are required since data have shown that residues of acephate and methamidophos do not concentrate in these processed commodities.
c. Translated from cauliflower
d. BEAD reports 0.1% crop treated; however, 1 is used as a default.
e. Translated from almonds

Table 3. Summary of Data Used for Acephate and Methamidophos Used in Acute Monte Carlo Assessment

Commodity/ Food Form	Blended (B) Partially Blended (PB) Not Blended (NB)	% CT Estimated Max	Data Source PDP/FDA/FT	Anticipated Residue or Residue Data File Acephate	Anticipated Residue or Residue Data File Methamidophos
Succulent Beans (all food forms)	PB	39/47 fresh/proc.	PDP (1994 - 1997)	Use directly - RDF 736NZ[a], 1451Z[a], 191 ½LOD[a] (Fresh) RDF[b] # 1 736NZ, 1260Z, 382 ½LOD (Processed) RDF #2	Use directly - RDF 714NZ, 1457Z, 217 ½LOD (Fresh) RDF #1 714NZ, 1266Z, 408 ½LOD (Processed) RDF #2
Dry Beans (all food forms)	B	5	FT	AR[b] = 0.005 x 0.05 (%CT) = 0.00025ppm	AR = 0.005 x 0.05 (%CT) = 0.00025ppm
Brussels sprouts (all food forms)	PB	21[c]	FT	RDF = 38Z, 10NZ RDF #3	RDF = 23 Z, 6 NZ RDF #3
Cauliflower (all Food Forms except frozen:cooked)	NB	21	FDA (1993-1998)	RDF = 3 detects, 168Z, 42 ½ LOD RDF #4	RDF = 6 detects, 169Z, 39 ½ LOD RDF #4
Cauliflower (frozen:cooked)	PB			RDF = 3 detects, 168Z, 42 ½ LOD RDF #4	RDF = 6 detects, 169Z, 39 ½ LOD RDF #4
Celery (all food forms except canned, frozen, and celery juice	NB	68	PDP (1994)	Decomposite RDF #5 1000NZ 780Z 659@1/2LOD	Decomposite RDF #5 1000NZ 1231Z 1615 @1/2LOD
Celery (canned, frozen, juice)	PB	68		Use directly-RDF[c] 73NZ[d], 56Z[d], 47 ½LOD[d] RDF #6	Use directly-RDF 45NZ, 56Z, 75 ½LOD RDF #6
Cottonseed meal	B	13	FT	AR = 0.07x (Processing Factor = 1.41) x 0.13 (%CT) =0.013	AR = 0.02x (Processing Factor=1.00) x 0.13 (%CT)=0.0026
Cottonseed (oil)	B	13	FT	AR = 0.07x (Processing Factor = 0.20) x 0.13 (%CT) =0.0018	AR = 0.02x (Processing Factor=1.00) x 0.13 (%CT)=0.0026

Commodity/ Food Form	Blended (B) Partially Blended (PB) Not Blended (NB)	% CT Estimated Max	Data Source PDP/FDA/FT	Anticipated Residue or Residue Data File Acephate	Anticipated Residue or Residue Data File Methamidophos
Cranberries	PB	51	FT	RDF = 7Z, 7NZ RDF #7	RDF = 51@0.005, 49Z RDF #7
Cranberry juice	PB		FT	RDF = 7Z, 7NZ (Processing Factor = 0.31) RDF #7	RDF = 51@0.005, 49Z (Default Processing Factor) RDF #7
Head Lettuce	NB	63	PDP (1994)	Decomposite RDF #8 1000NZ 2846Z 3846 @1/2LOD	Decomposite RDF #8 1000NZ 6167Z 9499 @1/2LOD
Macadamia Nuts	PB	0.2[d,f]	FT	RDF = 1@0.01 99@0 RDF #9	RDF = 1@0.01 99@0 RDF #9
Mint	B	42	FT	AR = 6.7 ppm x 0.42 (%CT) = 2.8	AR = 0.5 X 0.42 (%CT) = 0.21
Mint oil	B		FT	AR = 0.01 X 0.42 (%CT) = 0.0042	AR = 0.01 ppm X 0.42 (%CT) = 0.0042
Peanut (all food forms)	B	10	FT	AR = 0.01 X 0.10 (%CT) = 0.001	AR =0.01 X 0.10 (%CT) = 0.001
Peanut Processed Commodities	B			AR = 0.01 X 0.10 (%CT) = 0.001 x (processing factor =0.13)	AR =0.01 X 0.10 (%CT) = 0.001 x (default processing factor)
Pepper Bell,(all food forms except canned, frozen and cured	NB	48[e]	FDA (1993-1998) FT for meth.	Decomposite RDF # 12 986NZ 4661Z 3317 @1/2LOD	RDF = 8NZ,9Z RDF # 11
Peppers ,Bell (canned, frozen, cured)	PB	48[e]	FDA (1993-1998) FT for meth.	RDF = 174NZ, 841Z, 602@1/2LOD RDF #13	RDF =8NZ, 9Z RDF #11

Commodity/ Food Form	Blended (B) Partially Blended (PB) Not Blended (NB)	% CT Estimated Max	Data Source PDP/FDA/FT	Anticipated Residue or Residue Data File Acephate	Anticipated Residue or Residue Data File Methamidophos
Pepper, Non Bell (all food forms except canned, frozen and cured)	NB	48[e]	FDA (1993-1998) FT for meth.	Decomposite RDF # 10 990NZ 5720Z 4290 @1/2LOD	RDF = 4NZ, 4Z RDF #10
Peppers, Non-Bell (canned, frozen and cured)	PB	48[e]	FDA (1993-1998) FT for meth.	RDF=141NZ, 836Z, 631@1/2LOD RDF # 11	RDF = 4NZ, 4Z RDF #10
Soybean	B	0.2[f]	FT	AR = 0.055 X 0.01 (%CT) = 0.00055	AR = 0.008 X 0.01 (%CT) = 0.00008
Soybean processed commodities	B	0.2[f]	FT	AR = 0.00055 x (processing factor = 0.54 (meal) or 0.007(oil))	AR = 0.008 X 0.01 (%CT) = 0.00008

a. NZ = nonzeroes; Z = zeroes, LOD = Limit of Detection
b RDF = Residue Distribution File; AR = Anticipated Residue
c. Percent crop treated translated from cauliflower
d. Percent crop treated translated from almonds
e. Percent crop treated translated from bell peppers
f. BEAD reported 0.2% crop treated; however, 1 is used as a default.

Meat, Poultry and Eggs

Exposures to acephate through meat, poultry and eggs were determined by calculating the dietary burden and multiplying it by the tissue to feed ratio from the appropriate feeding study. The acute anticipated residue for acephate in meat, poultry and eggs is as follows.

Dietary Burden

Meat	**AR**	**% in Diet**	**%dry matter**	**Feed Item Contribution**
soybean seed	0.00055	15%	89%	0.00009
soybean meal	0.00030	15%	92%	0.00005
cotton meal	0.013	15%	89%	0.00220
soybean hull	0.00030	15%	90%	0.00005
				0.00239

Poultry	**AR**	**% in Diet**	**Feed Item Contribution**
soybean seed	0.00055	20%	0.00011
soybean meal	0.00030	40%	0.00012
cotton meal	0.013	20%	0.00260
soybean hull	0.0003	20%	0.00006
			0.00289

Tissue to feed ratios were provided by the registrant and were calculated from results of cattle and poultry feeding studies (Acc. No. 15225, 15226, 15229). Ratios were calculated by dividing the residues detected in the tissues by the amount of acephate fed. Average tissue to feed ratios were used for the chronic assessment; maximum ratios for the acute assessment. Ruminant anticipated residues will be applied to all meat and meat byproducts. Since the dietary burden was calculated using feed items that are considered blended, a point estimate will be used in the acute assessment.

Milk

In 1997, PDP tested 727 samples of milk for acephate residues. No detectable residues were found in milk in this sampling period, therefore, residues were estimated at ½ of the PDP testing LOD (1/2LOD =1/2 x 0.001= 0.0005 ppm). Since milk is considered to be partially blended, an adjustment to include zeroes to correct for a maximum percent crop treated will be included in the residue distribution file in the acute assessment and as adjustment factor 2 in the chronic assessment.

The acute and chronic anticipated residues for acephate in meat, milk, poultry and eggs are as follows:

Table 4

Tissue	Average Ratio	Chronic Anticipated Residue[1]	Maximum Ratio	Acute Anticipated Residue[2]
Ruminant muscle	0.0065	0.000015	0.01	0.000023
Ruminant fat	0.0038	0.000009	0.0067	0.000016

Ruminant liver	0.0015	0.000004	0.0027	0.000006
Ruminant kidney	0.014	0.000033	0.021	0.000050
Poultry Muscle	0.0025	0.000007	0.004	0.000012
Poultry Fat	0.00033	0.000001	0.00033	0.000001
Poultry liver	0.00033	0.000001	0.00033	0.000001
Poultry kidney	0.000083	0.0000002	0.000083	0.0000002
Egg	0.0077	0.000022	0.009	0.000026
Milk	n/a	0.0005	n/a	0.0005*

*Residue distribution file created to include adjustment for percent crop treated for cotton (13% CT); RDF = 87 zeroes, 13 @ 0.005

Processing Factors

The registrant submitted information (MRID No. 447746-02) for processed, washed, cooked, and/or canned food forms. Acephate processing studies for beans, cauliflower, cotton, cranberries, mint, peanuts and soybeans were used to determine the impact of processing on residues. From these data, processing factors were calculated and applied to the residue levels in the assessment. Processing factors are calculated as the ratio of the residue in the processed food to those in the RAC. These factors were applied to the residue levels via adjustment factor 1. Processing factors are summarized in Table 5 below. Processing studied for washed, cooked, and canned succulent beans and frozen cauliflower also were also available. The factors calculated for these studies were applied to the residue levels in succulent beans, Brussels sprouts, peppers, and cauliflower. Because PDP samples are washed before being analyzed, washing factors were not applied when PDP data were used.

Methamidophos washing, cooking and canning factors were obtained from a study submitted by Bayer Corporation (MRID No. 448154-10). The cottonseed processing factors were discussed in the methamidophos AR memorandum (C. Olinger, 9/8/99).

Table 5. Acephate Washing, Cooking and Canning Factors

Processed Commodity	Processing Factor
Beans, washed	0.82
Beans, cooked	0.5
Beans, Canned	0.19
Cauliflower, processed and frozen	0.72
Cotton, Refined oil	0.20
Cotton, Meal	1.41
Cotton, Hulls	1.68
Cranberry, juice	0.31
Mint oil	0.07
Peanut, meal	0.13

Peanut, oil	0.13
Soybean, Hulls	0.54
Soybean, Meal	0.54
Soybean, Refined Oil	0.007
Soybean, Flour	0.38

Table 6. Methamidophos Washing, Cooking and Canning Factors

Processed Commodity	Processing Factor
Washing factor, generic Peach, washing Broccoli, washing Broccoli, washing Cucumber, washing	**0.77** 0.6 0.77 0.89 0.75
Beans, cooking	0.638
Beans, canning	0.697
Cauliflower, cooking	0.535
Cottonseed meal- processing	1.0
Cottonseed oil - processing	1.0
Peppers - cooking (from okra cooking study)	0.595

Results

HED conducts dietary risk assessments using the Dietary Exposure Evaluation Model (DEEM™), which incorporates consumption data generated in USDA's Continuing Surveys of Food Intakes by Individuals (CSFII), 1989-1992. For acute dietary risk assessments, the entire distribution of consumption events for individuals is combined with a distribution of residues (probabilistic analysis, referred to as 'Monte Carlo," risk at 99.9th percentile of exposure reported) to obtain a distribution of exposures in mg/kg/day. For chronic dietary risk assessments, the three-day average of consumption for each sub-population is combined with residues in commodities to determine average exposure in mg/kg/day. Detailed results of the chronic and acute dietary exposure and risk analyses are shown in Table 7.

Chronic

HED is not concerned for acephate chronic dietary risk below 100% of the chronic Population Adjusted Dose (cPAD), or 0.0012 mg/kg/day. Revised estimated chronic dietary exposure and risk for acephate are significantly below 100% of the cPAD. The most highly exposed population subgroup is children (1 to 6 years), with an estimated exposure corresponding to 17% cPAD. Estimated dietary exposure to the general US population is lower, corresponding to 7% cPAD.

For methamidophos (from acephate application only), HED is not concerned for risks below 100% of the cPAD of 0.0001 mg/kg/day. The most highly exposed population subgroup is children (1 to 6 years) with an estimated exposure corresponding to 19% of the cPAD. The dietary exposure to the US population is 16% of the cPAD. The results indicate that chronic exposure to methamidophos from application of acephate is below HED's level of concern.

An additional chronic analysis was conducted to show the contribution of food handling establishment uses to the dietary exposure for acephate. These uses include all commodities in the DEEM database except those where an existing tolerance is established and are included in the acephate chronic assessment discussed above. Residue data show that residues of acephate are not expected as a result of these uses; consequently, residues at ½ LOD (LOD = 0.015 ppm) were used in the chronic analysis. When these uses are deleted, chronic risk estmates are significantly reduced. The highest exposed subpopulation is children (1 to 6 years) with 1% of the cPAD consumed (see Attachment 7). An analysis which include residues of methamidophos was not conducted because no detectable residues of methamidophos (residues would be significantly less than the acephate residues found) are expected from these uses.

Acute

HED is not concerned for acephate and methamidophos (from acephate application only) because acute dietary risk is below 100% of the respective acute Population Adjusted Doses (aPAD), or 0.005 mg/kg/day(acephate) and 0.001 mg/kg/day(methamidophos). Risks at the 99.9th percentile of exposure are reported, since the acute assessment has been refined using residue distribution files and %CT data. Estimated acute dietary risks are below 100% of the aPADs for acephate and methamidophos. For acephate, at the 99.9th percentile of exposure, the most highly exposed population subgroup is children (1 to 6 years old), with 33% of the aPAD consumed. For methamidophos, infant are the most highly exposed subpopulation with 80% of the aPAD consumed. Estimated dietary exposure to the general US population is lower than that for infants, corresponding to 22% and 61% of the aPAD, of acephate and methamidophos, respectively. In accordance with HED policy, food handling establishment uses were not included in the acute dietary risk estimates (see memorandum titled "Final Office Policy for Performing Acute Dietary Exposure Assessments", D. Edwards, 6/13/96). [Attachments 5 and 6].

Table 7. Summary of Acephate and Methamidophos Acute and Chronic Non-Cancer Dietary Exposure and Risk Estimates

Population Subgroup	ACEPHATE				METHAMIDOPHOS				ACEPHATE No Food Handling Establishment Uses	
	Acute (99.9%-ile)		Chronic		Acute (99.9%-ile)		Chronic		Chronic	
	Exposure (mg/kg/day)	% aPAD	Exposure (mg/kg/day)	%cPAD	Exposure (mg/kg/day)	% aPAD	Exposure (mg/kg/day)	%cPAD	Exposure (mg/kg/day)	% aPAD
US Population	0.001111	22	0.000089	7	0.000611	61	0.000016	16	0.000008	1
All infants (<1 year)	0.000795	16	0.000185	15	0.000801	80	0.000004	4	0.000010	1
Children 1-6 years	0.001631	33	0.000209	17	0.000790	79	0.000019	19	0.000013	1
Children 7 -12 years	0.001549	31	0.000131	11	0.000702	70	0.000018	18	0.000010	1
Females 13 -50 years	0.000879	18	0.000068	6	0.000481	48	0.000016	16	0.000007	1

1. Acephate - The acute Population Adjusted Dose (aPAD) is 0.005 mg/kg/day ; the chronic PAD (cPAD) is 0.0012 mg/kg/day.
2. Methamidophos - The acute Population Adjusted Dose (aPAD) is 0.001 mg/kg/day ; the chronic PAD (cPAD) is 0.0001 mg/kg/day.

Attachments:

Attachment 1: Acephate Acute Dietary Exposure Analysis: Residue Distribution Files
Attachment 2: Methamidophos Acute Dietary Exposure Analysis: Residue Distribution Files
Attachment 3: Acephate Chronic Dietary Exposure Analysis
Attachment 4: Methamidophos Chronic, Non-Cancer Dietary Exposure Analysis
Attachment 5: Acephate Acute Dietary Exposure Analysis
Attachment 6: Methamidophos Acute Dietary Exposure Analysis
Attachment 7: Acephate Chronic Dietary Exposure Analysis Excluding Food Handling Establishment Uses
Attachment 8: Quantitative Usage Analysis

Attachments
cc: Reviewer (F. Fort), DEEM files;
RDI: DESAC 9/20/99: Whang Phang: 9/27/99
H7509C:RRB1:CM#2:Rm722H:305-7478:FAFort/FF: 9/18/99
C:\$myfiles\acephate\acephatedeem.

Acephate Residue Distribution Files

RDF #1
Fresh succulent beans
PDP data from 1994 - 1997 (2378 samples, 736 detects)
Data used directly
31% detected (Actual residues found ranged from 0.003 - 2.8 ppm)
39% CT

Succulent Beans-Fresh
Totalz = 1451
TOTALLOD = 191
LODRES = 0.00225

0.18	0.18	0.26	0.91	0.48	0.17	0.1	0.008
0.27	0.025	0.044	0.1	0.014	0.009	0.36	0.041
0.54	0.35	0.18	0.23	0.16	0.066	0.015	0.015
0.58	0.14	0.009	0.44	0.05	0.1	0.29	0.008
0.2	0.24	0.19	0.006	0.05	0.37	0.34	0.11
0.009	0.021	0.16	0.34	0.05	0.67	0.15	0.039
0.026	0.009	0.42	0.006	0.008	0.056	0.19	0.04
0.4	0.079	0.15	0.34	0.008	0.19	0.17	0.13
0.12	0.044	0.11	0.07	0.39	0.54	0.008	0.042
0.008	0.75	0.2	0.097	0.14	0.14	0.31	0.1
0.27	0.42	0.45	0.76	1.1	0.32	0.049	0.059
0.18	0.03	0.52	0.14	0.32	0.3	0.12	0.41
1.3	0.57	0.005	0.22	0.14	0.22	0.11	0.24
0.7	0.1	0.12	0.075	0.27	0.17	0.051	0.046
0.009	0.91	0.006	0.18	0.85	0.09	0.16	0.008
0.04	0.13	0.35	0.009	0.06	0.1	0.26	0.36
0.022	0.006	0.019	0.009	0.01	0.19	0.023	0.007
0.12	0.015	0.2	0.38	0.2	0.18	0.032	0.19
0.009	0.006	0.16	0.57	0.009	0.57	0.01	0.17
0.037	1.4	0.078	0.22	0.11	0.097	0.16	0.007
0.71	0.008	0.11	0.054	0.009	0.081	0.022	0.006
0.06	0.008	0.39	0.069	0.021	0.5	0.11	0.1
0.18	0.02	0.28	0.35	0.68	0.085	0.11	0.006
0.05	0.36	0.3	0.037	0.04	0.53	0.053	0.066
1.9	0.34	0.21	0.069	0.69	0.2	0.11	0.022
0.21	1.03	0.04	2.2	0.78	0.066	0.081	0.006
0.65	0.11	0.02	0.41	0.52	0.26	0.51	0.37
0.009	0.005	0.04	0.44	0.074	0.2	0.84	0.27
0.13	0.23	0.009	0.13	0.54	0.41	0.29	0.009
0.13	0.092	0.12	0.029	0.67	0.026	0.1	0.095
0.41	0.17	0.29	0.112	0.005	0.014	0.028	0.078
0.36	0.29	0.36	0.12	0.57	0.008	0.13	0.048
0.021	0.016	0.2	0.075	0.006	0.21	0.01	0.017
0.4	0.26	0.22	0.006	0.32	0.34	0.026	0.045
0.022	0.38	0.018	0.064	0.27	0.27	0.076	0.027
0.15	0.17	2.8	0.14	0.3	0.16	0.009	0.29
0.17	0.016	1.3	0.33	0.017	0.35	0.009	0.08
0.12	0.21	1.3	0.088	0.11	0.094	0.009	0.032
0.056	0.019	0.16	0.033	0.095	0.013	0.009	0.094
0.005	0.19	0.09	0.05	0.27	0.11	0.009	0.066

0.071	0.311	0.008	0.02	0.008	0.024	0.067	0.25
0.068	0.029	0.04	0.41	0.21	0.081	0.055	0.23
0.38	0.22	0.008	0.4	0.01	0.003	0.059	0.24
0.061	0.14	0.008	0.096	0.049	0.008	0.081	0.29
0.22	0.052	0.038	0.16	0.086	0.01	0.051	0.055
0.48	0.017	0.094	0.008	0.036	0.03	0.033	0.13
0.05	0.043	0.18	0.082	0.065	0.01	0.068	0.12
0.026	0.18	0.033	0.058	0.028	0.031	0.54	0.008
0.44	0.019	0.025	0.025	0.008	0.15	0.08	0.008
0.062	0.009	0.015	0.039	0.038	0.12	0.04	0.024
0.01	0.01	0.098	0.023	0.008	0.01	0.024	0.18
0.01	0.059	0.27	0.21	0.085	0.035	0.039	0.16
0.01	0.007	0.27	0.01	0.095	0.01	0.099	0.075
0.091	0.023	0.016	0.24	0.062	0.037	0.008	0.044
0.041	0.21	0.01	0.008	0.1	0.008	0.34	0.017
1.2	0.01	0.031	0.025	0.023	0.016	0.29	0.079
0.24	0.053	0.051	0.01	0.017	0.003	0.007	0.22
0.22	0.17	0.026	0.01	0.021	0.003	0.13	0.026
0.026	0.025	0.023	0.12	0.008	0.008	0.007	0.12
0.01	0.024	0.041	0.28	0.13	0.069	0.007	0.026
0.018	0.013	0.024	0.007	0.14	0.003	0.01	0.046
0.14	0.1	0.24	0.22	0.062	0.003	0.16	0.033
0.028	0.021	0.022	0.2	0.014	0.07	0.01	0.044
0.01	0.064	0.057	0.21	0.031	0.16	0.34	0.008
0.2	0.44	0.008	0.16	0.025	0.038	0.061	0.21
0.06	0.095	0.22	0.018	0.01	0.059	0.007	0.008
0.2	0.007	0.037	0.064	0.038	0.013	0.042	0.095
0.15	0.068	0.25	0.066	0.017	0.016	0.17	0.1
0.007	0.021	0.018	0.012	0.012	0.031	0.092	0.06
0.01	0.007	0.018	0.29	0.47	0.01	0.035	0.083
0.007	0.007	0.049	0.13	0.22	0.3	0.017	0.14
0.01	0.009	0.03	0.079	0.34	0.032	0.007	0.023
0.026	0.023	0.031	0.049	0.025	0.15	0.007	0.017
0.011	0.018	0.008	0.008	0.032	0.008	0.007	0.028
0.26	0.034	0.055	0.032	0.049	0.022	0.22	0.015
0.043	0.16	0.008	0.045	0.055	0.021	0.025	0.025
0.009	0.039	0.044	0.04	0.011	0.04	0.3	0.007
0.086	0.19	0.1	0.007	0.025	0.027	0.008	0.007
0.008	0.13	0.7	0.064	0.003	0.038	0.008	0.026
0.038	0.094	0.093	0.007	0.008	0.067	0.023	0.008
0.008	0.058	0.035	0.056	0.53	0.01	0.13	0.051
0.027	0.009	0.064	0.032	0.13	0.013	0.074	0.14
0.571	0.09	0.055	0.11	0.059	0.13	0.033	0.024
0.081	0.19	0.15	0.015	0.017	0.039	0.036	0.017
0.13	0.063	0.19	0.042	0.039	0.029	0.007	0.009
0.014	0.033	0.008	0.014	0.022	0.044	0.12	0.036
0.15	0.025	0.054	0.02	0.019	0.16	0.027	0.017
0.057	0.068	0.037	0.008	0.018	0.082	0.01	0.008
0.01	0.065	0.016	0.043	0.027	0.18	0.01	0.023
0.068	0.045	0.034	0.036	0.25	0.01	0.048	0.025
0.14	0.045	0.02	0.008	0.019	0.053	0.01	0.013
0.064	0.18	0.007	0.15	0.18	0.01	0.057	

RDF #2
Processed succulent beans
PDP data from 1994 - 1997 (2378 samples, 736 detects)
Data used directly
31% detected (actual residues found ranged from 0.003 - 2.8 ppm)
47% CT

Succulent Beans-Processed
TOTALZ = 1260
TOTALLOD = 382
LODRES = 0.00225

0.18	0.24	0.11	0.22	0.01	0.081	0.11	0.009
0.27	0.021	0.2	0.075	0.2	0.5	0.081	0.095
0.54	0.009	0.45	0.18	0.009	0.085	0.51	0.078
0.58	0.079	0.52	0.009	0.11	0.53	0.84	0.048
0.2	0.044	0.005	0.009	0.009	0.2	0.29	0.017
0.009	0.75	0.12	0.38	0.021	0.066	0.1	0.045
0.026	0.42	0.006	0.57	0.68	0.26	0.028	0.027
0.4	0.03	0.35	0.22	0.04	0.2	0.13	0.29
0.12	0.57	0.019	0.054	0.69	0.41	0.01	0.08
0.008	0.1	0.2	0.069	0.78	0.026	0.026	0.032
0.27	0.91	0.16	0.35	0.52	0.014	0.076	0.094
0.18	0.13	0.078	0.037	0.074	0.008	0.009	0.066
1.3	0.006	0.11	0.069	0.54	0.21	0.009	0.071
0.7	0.015	0.39	2.2	0.67	0.34	0.009	0.068
0.009	0.006	0.28	0.41	0.005	0.27	0.009	0.38
0.04	1.4	0.3	0.44	0.57	0.16	0.009	0.061
0.022	0.008	0.21	0.13	0.006	0.35	0.008	0.22
0.12	0.008	0.04	0.029	0.32	0.094	0.041	0.48
0.009	0.02	0.02	0.112	0.27	0.013	0.015	0.05
0.037	0.36	0.04	0.12	0.3	0.11	0.008	0.026
0.71	0.34	0.009	0.075	0.017	0.1	0.11	0.44
0.06	1.03	0.12	0.006	0.11	0.36	0.039	0.062
0.18	0.11	0.29	0.064	0.095	0.015	0.04	0.01
0.05	0.005	0.36	0.14	0.27	0.29	0.13	0.01
1.9	0.23	0.2	0.33	0.17	0.34	0.042	0.01
0.21	0.092	0.22	0.088	0.009	0.15	0.1	0.091
0.65	0.17	0.018	0.033	0.066	0.19	0.059	0.041
0.009	0.29	2.8	0.05	0.1	0.17	0.41	1.2
0.13	0.016	1.3	0.48	0.37	0.008	0.24	0.24
0.13	0.26	1.3	0.014	0.67	0.31	0.046	0.22
0.41	0.38	0.16	0.16	0.056	0.049	0.008	0.026
0.36	0.17	0.09	0.05	0.19	0.12	0.36	0.01
0.021	0.016	0.91	0.05	0.54	0.11	0.007	0.018
0.4	0.21	0.1	0.05	0.14	0.051	0.19	0.14
0.022	0.019	0.23	0.008	0.32	0.16	0.17	0.028
0.15	0.19	0.44	0.008	0.3	0.26	0.007	0.01
0.17	0.26	0.006	0.39	0.22	0.023	0.006	0.2
0.12	0.044	0.34	0.14	0.17	0.032	0.1	0.06
0.056	0.18	0.006	1.1	0.09	0.01	0.006	0.2
0.005	0.009	0.34	0.32	0.1	0.16	0.066	0.15
0.18	0.19	0.07	0.14	0.19	0.022	0.022	0.007
0.025	0.16	0.097	0.27	0.18	0.11	0.006	0.01
0.35	0.42	0.76	0.85	0.57	0.11	0.37	0.007
0.14	0.15	0.14	0.06	0.097	0.053	0.27	0.01

0.026	0.021	0.008	0.007	0.017	0.01	0.08	0.055
0.011	0.007	0.22	0.22	0.021	0.037	0.04	0.13
0.26	0.007	0.037	0.2	0.008	0.008	0.024	0.12
0.043	0.009	0.25	0.21	0.13	0.016	0.039	0.008
0.009	0.023	0.018	0.16	0.14	0.003	0.099	0.008
0.086	0.018	0.018	0.018	0.062	0.003	0.008	0.024
0.008	0.034	0.049	0.064	0.014	0.008	0.34	0.18
0.038	0.16	0.03	0.066	0.031	0.069	0.29	0.16
0.008	0.039	0.031	0.012	0.025	0.003	0.007	0.075
0.027	0.19	0.008	0.29	0.01	0.003	0.13	0.044
0.571	0.13	0.055	0.13	0.038	0.07	0.007	0.017
0.081	0.094	0.008	0.079	0.017	0.16	0.007	0.079
0.13	0.058	0.044	0.049	0.012	0.038	0.01	0.22
0.014	0.009	0.1	0.008	0.47	0.059	0.16	0.026
0.15	0.09	0.7	0.032	0.22	0.013	0.01	0.12
0.057	0.19	0.093	0.045	0.34	0.016	0.34	0.026
0.01	0.063	0.035	0.04	0.025	0.031	0.061	0.046
0.068	0.033	0.064	0.007	0.032	0.01	0.007	0.033
0.14	0.025	0.055	0.064	0.049	0.3	0.042	0.044
0.064	0.068	0.15	0.007	0.055	0.032	0.17	0.008
0.311	0.065	0.19	0.056	0.011	0.15	0.092	0.21
0.029	0.045	0.008	0.032	0.025	0.008	0.035	0.008
0.22	0.045	0.054	0.11	0.003	0.022	0.017	0.095
0.14	0.18	0.037	0.015	0.008	0.021	0.007	0.1
0.052	0.008	0.016	0.042	0.53	0.04	0.007	0.06
0.017	0.04	0.034	0.014	0.13	0.027	0.007	0.083
0.043	0.008	0.02	0.02	0.059	0.038	0.22	0.14
0.18	0.008	0.007	0.008	0.017	0.067	0.025	0.023
0.019	0.038	0.02	0.043	0.039	0.01	0.3	0.017
0.009	0.094	0.41	0.036	0.022	0.013	0.008	0.028
0.01	0.18	0.4	0.008	0.019	0.13	0.008	0.015
0.059	0.033	0.096	0.15	0.018	0.039	0.023	0.025
0.007	0.025	0.16	0.008	0.027	0.029	0.13	0.007
0.023	0.015	0.008	0.21	0.25	0.044	0.074	0.007
0.21	0.098	0.082	0.01	0.019	0.16	0.033	0.026
0.01	0.27	0.058	0.049	0.18	0.082	0.036	0.008
0.053	0.27	0.025	0.086	0.024	0.18	0.007	0.051
0.17	0.016	0.039	0.036	0.081	0.01	0.12	0.14
0.025	0.01	0.023	0.065	0.003	0.053	0.027	0.024
0.024	0.031	0.21	0.028	0.008	0.01	0.01	0.017
0.013	0.051	0.01	0.008	0.01	0.067	0.01	0.009
0.1	0.026	0.24	0.038	0.03	0.055	0.048	0.036
0.021	0.023	0.008	0.008	0.01	0.059	0.01	0.017
0.064	0.041	0.025	0.085	0.031	0.081	0.057	0.008
0.44	0.024	0.01	0.095	0.15	0.051	0.25	0.023
0.095	0.24	0.01	0.062	0.12	0.033	0.23	0.025
0.007	0.022	0.12	0.1	0.01	0.068	0.24	0.013
0.068	0.057	0.28	0.023	0.035	0.54	0.29	

RDF #3

Brussel Sprouts
Field Trial data used.

Brussels sprouts-FT
21% CT
TOTALZ = 38

0.08
0.23
0.63
1.0
2.1
1.6
1.3
1.4
0.97
0.45

RDF #4
Cauliflower
FDA data from 1993 - 1998 (213 samples, 3 detects)
Data used directly
1% detected (Actual residues found ranged from 0.01 - 0.143 ppm)
21% CT

Cauliflower-FDA
21% CT
TOTALZ =168

42, 0.001
0.143
0.03
0.01

RDF #5
All celery except canned, frozen and celery juice
PDP data from 1994 (176 samples, 73 detects)
Samples decomposited, n = 18 where n = number of samples in composite
No data points truncated. Data points range from 0.00003 - 6.69
41% detected (actual residues found ranged from 0.005 - 1.3 ppm)
39% CT

Celery-Fresh-Decomp
TOTALZ=780

659, 0.0016	0.00897	0.01259	2.17727	0.04144	0.06614	0.07149	0.00396
0.00265	0.00345	0.00679	0.00532	0.02348	0.18845	0.00540	0.05689
0.01508	0.00136	0.08059	0.00721	0.00117	0.01543	1.03695	0.00410
0.00934	0.16710	0.00389	0.80584	0.03128	0.08558	0.00506	0.00021
0.44531	0.00335	0.14386	0.00866	0.15280	0.31147	0.00199	0.00374
0.00424	0.12417	0.00073	0.03953	0.00556	0.51203	0.54087	0.00098
0.02945	0.00090	0.00152	0.01768	0.06216	0.02618	0.09202	0.03295
0.01401	0.00174	0.01024	0.02772	0.03653	0.00081	0.01702	0.04965
0.07660	0.01326	0.35211	0.03719	0.00007	0.04107	0.00165	0.00587
0.00483	0.00063	0.05883	0.10336	0.02752	0.00465	0.42852	0.00046
0.01670	0.21447	0.04356	0.00816	0.00086	0.19124	0.01340	0.00248
0.06964	0.05367	0.00009	0.00527	0.00179	0.00364	0.00235	0.00575
0.00881	0.04797	0.02487	0.06521	0.05978	0.00770	0.01053	0.00432
0.01869	0.00737	0.00843	0.00750	0.01510	0.00231	0.00610	0.67901
0.00077	0.03023	0.04576	0.00186	0.12239	0.39613	0.01366	0.01277
0.00139	0.00256	0.00207	0.01133	0.01130	0.02377	0.00096	0.00239
0.11370	0.07254	0.05486	0.04645	0.00642	0.03535	0.00269	0.00289
0.10202	0.25911	0.01485	0.01579	0.00195	0.00041	0.03647	0.02633
0.01787	0.00518	0.01748	0.02006	0.00675	0.08422	0.00444	0.00273
0.01164	0.00636	0.00759	0.00060	0.03086	0.00048	0.00616	0.00037
0.00593	0.04968	1.17101	0.08908	0.03262	0.01386	0.07485	0.00861
0.36000	0.00919	0.13924	0.01044	0.00401	0.07381	0.03863	0.00488
0.01451	0.13993	0.01209	0.04279	3.35879	0.55172	0.00260	0.00142
0.04760	0.08252	0.31931	0.00035	0.05414	0.02219	0.01882	0.00034
0.00596	0.00105	0.00024	0.00050	0.00937	0.03600	0.05279	1.99930
0.03404	0.00824	0.00354	0.00378	0.00246	0.00074	0.22157	0.08375
0.00254	0.00088	0.02100	0.05140	0.00070	0.00212	0.00158	0.04451
0.02530	0.00040	0.01458	0.00579	0.03921	0.00398	0.01012	0.00322
6.68766	0.06751	0.01423	0.00327	0.03324	0.00295	0.00014	0.00833
0.00110	0.01599	0.01105	0.00162	0.16567	0.00277	0.03372	0.13042
0.04199	0.00011	0.01938	0.04000	0.05774	0.00660	0.02018	0.00449
0.01094	0.00563	0.02454	0.00221	0.00092	0.00118	0.00469	0.01266
0.01352	0.29682	0.28904	0.00476	0.10585	1.27686	0.02428	0.02861
0.03229	0.00412	0.94388	0.02552	0.02200	0.00308	0.00103	0.00042
0.00209	0.04567	0.25012	0.09907	0.02504	0.20717	0.13533	0.00703
0.13258	0.01001	0.17375	0.00510	0.74403	0.10759	0.04221	0.16286
0.06202	0.00183	0.58754	0.00171	0.00440	0.00192	0.01057	0.01480
0.01431	0.00274	0.00546	0.03808	0.15974	0.03003	0.00155	0.00146
0.00341	0.06706	0.07771	0.00502	0.02686	0.00003	0.00418	0.00781
0.01846	0.00799	0.00133	0.00067	0.04376	0.00372	0.00458	0.10468
0.01556	0.00121	0.00916	0.01536	0.00807	0.01170	0.02307	0.03739
0.06083	0.00125	0.00065	0.01294	0.03193	0.00496	0.46242	0.00108
0.01217	0.00228	0.09663	0.02286	0.00060	0.09161	0.01369	0.03166
0.00623	0.05638	0.00149	0.17737	0.00078	0.11085	0.40104	0.02942
0.00131	0.01237	0.00560	0.24194	0.00604	0.01192	0.25529	0.12748

0.00018	0.02253	1.61000	0.01989	0.02363	0.00507	0.00026	0.33561
	0.00054	0.02140	0.02907	0.00162	0.04809	0.00258	0.00657
	0.00143	0.09760	0.00289	0.05097	0.02981	0.26031	0.01506
	0.00522	0.08749	0.00963	0.37906	0.00524	0.00006	0.10604
	0.08817	0.15476	0.00223	0.00191	0.00249	0.03010	0.01042
	0.01245	0.19466	0.01636	1.37275	0.03252	0.00454	0.01019
	0.01314	0.23052	0.00852	0.12954	0.01685	0.10487	0.01663
	0.00981	0.07360	0.00218	0.00180	0.13192	0.00342	0.00686
	0.34083	0.10944	0.00898	0.28557	0.05465	0.00357	0.02599
	0.30672	0.01962	0.00323	0.00019	0.08082	0.01094	0.03041
	0.01925	0.07031	0.21226	0.00587	0.00196	0.01723	0.00112
	0.07802	0.00128	0.18352	0.00011	0.00970	0.07529	0.00062
	0.00022	0.01033	0.01121	0.48870	0.00922	0.01761	0.00537
	0.00358	0.02342	0.00053	0.00052	0.00269	0.02167	0.16699
	0.48084	0.09481	0.04038	0.02849	0.00138	0.08881	0.00202
	0.01827	0.01725	0.02829	0.00429	0.23067	0.00022	0.00598
	0.02591	0.00947	0.00305	0.03404	0.01168	0.00049	0.00262
	0.06808	0.72615	0.01688	0.11581	2.91925	0.01645	0.05828
	0.04477	0.00027	0.17946	0.00882	0.05060	0.59366	0.00200
	0.06425	0.00791	0.00430	0.00142	0.00402	0.00485	0.00244
	0.01145	0.00652	0.01898	0.00127	0.15312	0.72562	0.02506
	0.12022	0.01190	0.02056	0.00336	0.07914	0.01193	0.05019
	0.00030	0.00315	0.00240	0.01611	0.02071	0.43775	0.00321
	0.05231	0.03839	0.00202	0.00957	0.00746	0.00987	0.00240
	0.85481	0.00727	0.00085	2.66142	0.01181	0.00120	0.00046
	0.14729	0.00284	0.00155	0.00057	0.02318	0.41129	0.00807
	0.02814	0.00768	0.00652	0.01392	0.00187	0.01423	1.55483
	0.02040	0.00713	0.65589	0.09113	0.01579	0.02725	0.02807
	0.02082	0.00743	0.00528	0.00089	0.00879	0.00718	0.22306
	0.00876	0.00312	0.00094	0.03094	0.03708	0.00036	0.35243
	0.05599	0.01667	0.00044	0.00236	0.07341	0.00215	0.05567
	0.02177	0.04731	0.00037	0.01705	0.00066	0.00376	0.11272
	0.00991	0.12671	0.01548	0.00124	0.09884	0.01332	0.00608
	0.01805	0.00971	0.12173	0.01836	0.56157	0.01274	0.00392
	0.03511	0.00336	0.00315	0.04502	0.00736	0.13063	0.00004
	0.01080	0.23453	0.06949	0.00068	0.06254	0.04153	0.00704
	0.00351	0.05961	0.00492	0.24645	0.00110	0.00032	0.04003
	0.11600	0.02655	0.00926	0.24313	0.06322	0.08341	0.00699
	0.00056	0.07974	0.00039	0.15861	0.00082	0.11106	0.00677
	0.00631	0.00113	0.12059	0.00409	0.00302	0.00055	0.00297
	0.02729	0.11858	0.00476	0.07716	0.31335	0.00329	0.02332
	0.00301	0.00177	0.03540	0.29490	0.05289	0.00301	0.04682
	0.00666	0.02154	0.61588	0.42471	0.00058	0.02394	0.77702
	0.09407	0.05026	0.00619	0.17051	0.03110	0.06447	0.00840
	0.00699	0.01810	0.04414	0.16391	0.00164	0.00098	0.01080
	0.00191	0.01067	0.02049	0.01237	0.00219	1.25557	0.00387
	0.19931	0.01612	0.00795	0.00612	0.00575	0.00644	0.01255
	0.03426	0.05148	0.00560	0.01142	0.10251	0.10785	0.90453
	0.02248	0.03489	0.00313	0.03883	0.03294	0.00283	0.00332
	0.00084	0.14997	0.00351	0.09013	0.02952	0.00226	0.01469
	0.00028	0.04895	0.00777	0.13872	0.02121	0.06110	0.00366
	0.01626	0.06341	0.03956	0.01796	0.00512	0.01969	0.02080
	0.26817	0.00455	0.06719	0.00539	0.00324	0.00470	0.03763
	0.02399	0.00101	0.00280	0.02627	0.10974	0.08724	0.00100
	0.00386	0.00168	0.04094	0.00029	0.14613	0.02098	0.00290
	0.62467	0.00686	0.05903	0.01125	0.00451	0.00345	0.00277
	0.28098	0.00017	0.01031	0.01857	0.19486	0.00255	0.00024
	0.03059	0.37627	0.07235	0.01372	0.11709	0.00106	0.54273

1.87700	0.05648	0.02882	0.00077	0.00361	0.00237	0.05481
0.30643	0.12653	0.01895	0.20290	0.00664	0.00821	0.02025
0.03370	0.00943	0.00680	0.00016	0.01777	0.01360	0.00169
0.00767	0.04647	0.03431	0.02740	0.03648	0.00548	0.00411
0.01113	0.00146	0.03826	0.01906	0.00309	0.00158	0.00014
0.00399	0.09988	0.27390	0.01528	0.09691	0.03642	0.00020
0.00073	0.94197	0.00756	0.00913	0.00575	0.00812	0.00150
0.01289	0.04936	0.20538	0.01403	0.06651	0.00891	0.36350
0.08394	0.03500	0.00251	0.00075	0.03805	0.00724	0.02449
0.02589	0.01328	0.02008	0.02282	0.07050	0.01433	0.32801
0.00378	0.05684	0.01740	0.00288	0.05807	0.08239	0.12382
0.15676	0.15035	0.00182	0.01487	0.14396	0.02184	0.39018
0.02879	0.00113	0.01000	0.00709	0.06515	0.00230	0.01309
0.00502	0.14083	0.00792	0.04193	0.18777	0.00438	0.04236
0.07092	0.00551	0.09262	0.03318	0.01065	0.00085	0.13548
0.01602	0.06821	0.04042	0.02212	0.03189	0.18593	0.01677
0.00060	0.10150	0.21150	0.02699	0.01559	0.02242	0.01046
0.09328	0.50835	0.02148	0.04742	0.00103	0.01012	0.00042
0.00369	0.00116	0.01145	0.05354	0.17564	0.00517	
0.01621	0.00134	0.02569	0.01156	0.00271	0.07479	
0.17880	0.00070	0.00593	0.00209	0.03154	0.27204	
0.02782	0.00143	0.00899	0.00835	0.02520	0.01207	
0.00154	0.01077	0.00625	0.04856	0.02379	0.01294	
0.00177	0.00871	0.00848	0.00131	0.01993	0.05186	
0.03470	0.21765	0.02472	0.00745	0.01100	0.02251	
0.04351	0.23726	0.00567	0.02926	1.04108	0.00048	
0.00485	0.16048	0.00009	0.02660	0.08520	0.06202	
0.09452	0.00426	0.01244	0.00853	0.03235	0.00031	
0.01342	0.01439	6.50396	0.00628	0.01520	0.25726	
0.00467	0.05230	0.00205	0.19303	0.03903	0.04305	
0.02422	0.01865	0.00173	0.01927	0.00190	0.00417	
0.00121	0.00134	0.01816	0.00096	0.00446	0.00222	
0.00947	0.07650	0.00091	0.04443	0.00169	0.03577	
0.00382	0.06024	0.01940	0.01225	0.06540	0.00776	
0.81396	0.00435	0.07816	0.45824	0.01458	0.00458	
0.00978	0.00642	0.00079	0.04558	0.04602	0.00212	

RDF #6
Canned and frozen celery and celery juice
PDP data from 1994 (176 samples, 73 detects)
41% detected (actual residues found were 0.005 - 1.3 ppm)
39% CT

Celery- PDP- 1994
68% CT
TOTALZ = 56

47, 0.0016	0.096	0.074	0.18	1.3	0.039	0.23	0.088
0.18	0.38	0.098	0.008	0.13	0.054	0.11	0.05
0.023	0.14	0.017	0.012	0.38	0.028	0.17	0.069
0.055	0.016	0.12	0.008	0.033	0.033	0.22	0.009
0.009	0.02	0.38	0.016	0.022	0.03	0.033	0.01
0.084	0.043	0.041	0.061	0.09	0.035	0.005	0.097
0.008	0.14	0.082	0.14	0.076	0.008	0.02	0.006
0.009	0.009	0.15	0.057	0.029	0.038	0.058	0.03
0.12	0.21	0.26	0.013	0.15	0.098	0.055	0.053
0.4	0.058						

RDF #7
Cranberries
Field trial data used
51% CT

Cranberries- Field Trial
51% CT
TOTALZ = 7

0.07
0.05
0.11
0.13
0.12
0.18
0.18

RDF #8
Lettuce
PDP data from 1994 (691 samples, 88detects)
Samples decomposited, n = 4.5 where n = number of samples in composite
No data points truncated. Data points ranged from 0.00006 - 0.97
13% detected (actual residues found were 0.005 - 0.25 ppm)
63% CT

Lettuce-Fresh-Decomp
TOTALZ=2846

3846, 0.0035	0.00659	0.00472	0.14114	0.01182	0.02254	0.00272	0.02100
0.00197	0.00388	0.00106	0.00349	0.03455	0.00086	0.00215	0.06528
0.00780	0.00113	0.00109	0.02851	0.00331	0.03640	0.00204	0.00131
0.00534	0.00517	0.00175	0.00114	0.00140	0.01051	0.00406	0.00569
0.11337	0.00243	0.02212	0.00526	0.01622	0.01165	0.00104	0.00019
0.00286	0.00116	0.00667	0.00065	0.00327	0.17011	0.26073	0.01473
0.01324	0.05223	0.00676	0.03387	0.00067	0.00295	0.00222	0.00982
0.00736	0.00237	0.00415	0.00125	0.00791	0.05040	0.06191	0.00310
0.02819	0.04130	0.02935	0.00356	0.00691	0.01231	0.03688	0.01137
0.00317	0.00084	0.00267	0.39759	0.01084	0.01811	0.00153	0.00094
0.00845	0.00141	0.04640	0.00342	0.05475	0.00476	0.01345	0.04421
0.02615	0.00705	0.00071	0.00435	0.06999	0.01412	0.00006	0.01760
0.00510	0.00063	0.00127	0.18119	0.01734	0.00061	0.00258	0.00589
0.00924	0.06363	0.00574	0.00503	0.01107	0.00075	0.00638	0.00129
0.00075	0.02128	0.09416	0.01671	0.00104	0.00378	0.00324	0.00283
0.00119	0.01947	0.02288	0.00884	0.01389	0.02510	0.03247	0.00304
0.03852	0.00443	0.01804	0.01262	0.04866	0.05744	0.03776	0.01091
0.03536	0.01352	0.00014	0.01592	0.00354	0.00794	0.00647	0.11680
0.00892	0.00192	0.01158	0.03573	0.02390	0.03077	0.02669	0.00722
0.00635	0.02700	0.00493	0.00480	0.01570	0.08546	0.00346	0.10436
0.00373	0.07388	0.01876	0.00339	0.00011	0.12660	0.22117	0.07302
0.09582	0.00335	0.00162	0.02482	0.01255	0.01206	0.00329	0.00271
0.00757	0.00394	0.02165	0.00449	0.00081	0.00077	0.00157	0.02228
0.01935	0.02002	0.00771	0.00149	0.00145	0.01722	0.13220	0.00279
0.00375	0.00527	0.00876	0.00622	0.02317	0.00308	0.03259	0.00027
0.01484	0.04539	0.00453	0.01898	0.00781	0.05811	0.00858	0.00259
0.00191	0.02990	0.24349	0.00809	0.04083	0.00253	0.00136	0.00090
0.01174	0.00095	0.04522	0.00977	0.00621	0.00458	0.10998	0.01447
0.96550	0.00484	0.00655	0.00061	0.00397	0.00177	0.00711	0.02001
0.00098	0.00082	0.08715	0.03176	0.00155	0.10335	0.00180	0.00370
0.01753	0.00044	0.00029	0.00583	0.00413	0.01118	0.00587	0.00049
0.00605	0.02551	0.00248	0.01779	0.01374	0.01530	0.00381	0.00187
0.00715	0.00817	0.01014	0.00040	0.01435	0.00045	0.00721	0.00364
0.01424	0.00016	0.00759	0.00053	0.00274	0.03038	0.00088	0.00290
0.00164	0.00358	0.00745	0.00261	0.56012	0.00051	0.00199	0.15825
0.04350	0.08226	0.00610	0.02056	0.02143	0.00730	0.01568	0.00684
0.02386	0.00280	0.00951	0.00366	0.00535	0.02738	0.00297	0.00182
0.00748	0.01873	0.01146	0.00233	0.00186	0.13430	0.00384	0.00211
0.00241	0.00564	0.08055	0.00134	0.00069	0.01058	0.02768	0.01212
0.00915	0.00147	0.20532	0.01687	0.01660	0.01552	0.01641	0.00202
0.00800	0.00203	0.07185	0.00171	0.01457	0.00072	0.00194	0.00041
0.02349	0.02538	0.05387	0.00313	0.05188	0.00165	0.00929	0.00501

0.00319	0.00899	0.00551	0.04066	0.00911	0.13619	0.00683	0.00269
0.00120	0.01521	0.00238	0.00226	0.01852	0.00443	0.04299	0.00007
0.00039	0.00599	0.06829	0.02610	0.00068	0.02401	0.01738	0.00427
0.37166	0.00246	0.02312	0.00322	0.07101	0.00098	0.00037	0.01687
0.03025	0.03914	0.01220	0.00530	0.07026	0.02422	0.03015	0.00425
0.01835	0.00057	0.02910	0.00043	0.05012	0.00078	0.03781	0.00414
0.00230	0.00392	0.00101	0.04036	0.00278	0.00219	0.00057	0.00216
0.00488	0.01247	0.03982	0.00313	0.02835	0.08586	0.00234	0.01101
0.04294	0.00218	0.00144	0.01531	0.08184	0.02103	0.00218	0.01910
0.00299	0.00409	0.01034	0.14650	0.10920	0.00059	0.01124	0.17605
0.00679	0.03316	0.02020	0.00386	0.05307	0.01382	0.02460	0.00491
0.01294	0.00425	0.00901	0.01823	0.05144	0.00135	0.00090	0.00599
0.00046	0.00152	0.00593	0.00994	0.00667	0.00169	0.25729	0.00266
0.00426	0.06004	0.00822	0.00470	0.00382	0.00364	0.00398	0.00675
0.05118	0.01492	0.02059	0.00356	0.00626	0.03549	0.03695	0.19853
0.00769	0.01069	0.01514	0.00225	0.01648	0.01446	0.00208	0.00236
0.00123	0.00079	0.04795	0.00246	0.03206	0.01326	0.00174	0.00764
0.00464	0.00034	0.01979	0.00462	0.04508	0.01021	0.02358	0.00255
0.03609	0.00828	0.02428	0.01672	0.00895	0.00332	0.00963	0.01006
0.01599	0.07592	0.00303	0.02542	0.00346	0.00231	0.00310	0.01607
0.00097	0.01126	0.00092	0.00206	0.01209	0.03746	0.03124	0.00092
0.01402	0.00265	0.00138	0.01718	0.00034	0.04698	0.01013	0.00212
0.01323	0.14815	0.00418	0.02294	0.00619	0.00300	0.00243	0.00204
0.04217	0.07877	0.00023	0.00577	0.00920	0.05898	0.00192	0.00030
0.00024	0.01364	0.09923	0.02695	0.00724	0.03943	0.00096	0.13256
0.01071	0.31318	0.00971	0.01113	0.00329	0.00032	0.09065	0.35357
0.00056	0.01029	0.01311	0.00133	0.01951	0.00193	0.00404	0.08436
0.00121	0.03414	0.00211	0.02043	0.01337	0.07416	0.00779	0.01473
0.00337	0.03132	0.00547	0.09981	0.00338	0.00010	0.03646	0.00457
0.03151	0.04916	0.00172	0.00152	0.00188	0.01347	0.00582	0.00614
0.00670	0.05893	0.00832	0.27609	0.01432	0.00302	0.00572	0.00273
0.00700	0.06736	0.00497	0.04271	0.00852	0.03614	0.00843	0.00071
0.00555	0.02731	0.00169	0.00146	0.04333	0.00242	0.00418	0.00689
0.09177	0.03738	0.00518	0.07979	0.02159	0.00250	0.01200	0.03031
0.08443	0.00960	0.00230	0.00024	0.02941	0.00605	0.01358	0.01196
0.00946	0.02634	0.06311	0.00370	0.00155	0.00867	0.00100	0.00261
0.02860	0.00111	0.05625	0.00016	0.00550	0.02781	0.00063	0.04966
0.00028	0.00578	0.00617	0.12202	0.00529	0.00882	0.00345	0.01300
0.00250	0.01104	0.00055	0.00054	0.00200	0.01039	0.05221	0.00327
0.12046	0.03337	0.01699	0.01290	0.00118	0.03169	0.00159	0.02652
0.00908	0.00867	0.01283	0.00289	0.06739	0.00028	0.00376	0.00818
0.01197	0.00540	0.00220	0.01485	0.00637	0.00052	0.00195	0.00061
0.02568	0.16688	0.00853	0.03909	0.50133	0.00835	0.02271	0.03294
0.01844	0.00032	0.05526	0.00510	0.02031	0.14231	0.00158	0.00256
0.02453	0.00468	0.00289	0.00120	0.00274	0.00318	0.00185	0.00826
0.00628	0.00402	0.00936	0.00110	0.04875	0.16678	0.01165	0.05510
0.04026	0.00647	0.00997	0.00238	0.02893	0.00648	0.02018	0.01266
0.00036	0.00226	0.00182	0.00822	0.01002	0.11184	0.00230	0.00128
0.02085	0.01633	0.00159	0.00544	0.00447	0.00558	0.00182	0.00143
0.18985	0.00438	0.00080	0.46599	0.00643	0.00105	0.00049	0.01507
0.04727	0.00208	0.00129	0.00058	0.01096	0.10646	0.00476	0.01803
0.01277	0.00457	0.00402	0.00732	0.00150	0.00745	0.30466	0.00318
0.00990	0.00431	0.15397	0.03234	0.00809	0.01245	0.01275	0.03329
0.01007	0.00446	0.00340	0.00083	0.00509	0.00434	0.06563	0.00711
0.00508	0.00224	0.00087	0.01377	0.01588	0.00041	0.09423	0.00309
0.02200	0.00844	0.00048	0.00180	0.02726	0.00167	0.02190	0.01134
0.01043	0.01926	0.00042	0.00859	0.00066	0.00260	0.03826	0.00106
0.00560	0.04197	0.00796	0.00108	0.03449	0.00707	0.00380	0.00540

0.00263	0.00505	0.00564	0.06089	0.01222	0.01410	0.00131	0.01787
0.18264	0.06437	0.00469	0.00022	0.00497	0.00801	0.01566	0.00282
0.00554	0.06891	0.03276	0.01251	0.00390	0.00093	0.00478	0.00172
0.02216	0.05059	0.01701	0.00939	0.05854	0.05433	0.00514	0.01544
0.04192	0.00287	0.06293	0.00788	0.00947	0.00201	0.00437	0.00461
0.00538	0.00752	0.01031	0.00525	0.00089	0.01398	0.00749	0.00304
0.01899	0.02085	0.00627	0.00737	0.01833	0.01170	0.02986	0.00166
0.00123	0.00923	0.01188	0.00073	0.00662	0.01119	0.01045	0.02163
0.03477	0.00115	0.00373	0.01082	0.11596	0.00972	0.00176	0.00985
0.20499	0.02816	0.00518	0.00211	0.01870	0.00608	0.00293	0.00138
0.01992	0.02332	0.00389	0.00771	0.00252	0.22187	0.00081	0.00279
0.01517	0.00292	0.00495	0.00429	0.00408	0.03066	0.05683	0.00019
0.00705	0.00397	0.01153	0.01751	0.00888	0.01426	0.01067	0.00025
0.02227	0.01302	0.00360	0.01455	0.01568	0.00785	0.00569	0.00126
0.04805	0.00934	0.00013	0.01056	0.00223	0.01654	0.00335	0.09656
0.00101	0.00416	0.00670	0.01236	0.03395	0.00152	0.02766	0.01144
0.04563	0.01494	0.94447	0.01930	0.00364	0.00298	0.07679	0.08903
0.00352	0.01628	0.00161	0.02124	0.02521	0.00138	0.00654	0.04121
0.02572	0.07720	0.00141	0.00632	0.01621	0.02488	0.00691	0.10212
0.03522	0.00452	0.00903	0.00163	0.02640	0.00759	0.02071	0.00698
0.12588	0.06148	0.00085	0.00489	0.02265	0.01884	0.01071	0.01765
0.00102	0.00189	0.00952	0.01966	0.04643	0.00181	0.00051	0.04425
0.00115	0.00978	0.02864	0.00113	0.02480	0.00482	0.02386	0.00848
0.00069	0.00873	0.00076	0.00446	0.05728	0.00719	0.00036	0.00584
0.00121	0.00147	0.00074	0.01317	0.00592	0.00350	0.07347	0.00046
0.00598							

RDF #9
Macadamia Nuts
Field Trial data used.
1% CT

Macadamia Nuts
1% CT
Totalz=99

0.01

RDF #10
All non-bell peppers except canned, frozen and cured
FDA data from 1993-1998 (1608 samples, 141 detects)
Samples decomposited, n = 84 where n = number of samples in composite
10 data points truncated at tolerance). 990 residue values used.
Decomposited data points range from 0.000014 - 3.93
9% detected (actual residues found ranged from 0.007 - 3.4 ppm)
48% CT

Nonbell peppers-decomp
TotalZ = 5720
48% CT

4290,0.0003	0.000329	0.000739	0.001254	0.001925	0.002751	0.003768	0.005015
0.000014	0.000344	0.000750	0.001277	0.001948	0.002785	0.003801	0.005032
0.000017	0.000349	0.000761	0.001277	0.001957	0.002795	0.003834	0.005050
0.000029	0.000355	0.000780	0.001308	0.001985	0.002845	0.003858	0.005124
0.000035	0.000367	0.000786	0.001325	0.001989	0.002854	0.003885	0.005127
0.000046	0.000381	0.000799	0.001343	0.002015	0.002860	0.003906	0.005217
0.000052	0.000389	0.000800	0.001361	0.002047	0.002868	0.003911	0.005235
0.000061	0.000398	0.000827	0.001373	0.002057	0.002921	0.003955	0.005244
0.000061	0.000406	0.000832	0.001380	0.002088	0.002946	0.004004	0.005271
0.000079	0.000413	0.000848	0.001401	0.002097	0.002994	0.004018	0.005325
0.000080	0.000423	0.000854	0.001410	0.002103	0.002995	0.004042	0.005379
0.000098	0.000433	0.000870	0.001445	0.002142	0.003010	0.004081	0.005455
0.000103	0.000449	0.000882	0.001452	0.002165	0.003038	0.004128	0.005456
0.000112	0.000454	0.000895	0.001471	0.002183	0.003071	0.004149	0.005511
0.000117	0.000456	0.000918	0.001479	0.002194	0.003091	0.004165	0.005520
0.000121	0.000472	0.000920	0.001513	0.002245	0.003120	0.004194	0.005552
0.000134	0.000478	0.000939	0.001519	0.002247	0.003134	0.004203	0.005578
0.000139	0.000500	0.000949	0.001526	0.002268	0.003155	0.004288	0.005646
0.000142	0.000509	0.000953	0.001544	0.002279	0.003164	0.004303	0.005653
0.000151	0.000514	0.000976	0.001560	0.002294	0.003234	0.004314	0.005711
0.000155	0.000528	0.000991	0.001574	0.002297	0.003240	0.004332	0.005740
0.000172	0.000545	0.001003	0.001604	0.002345	0.003248	0.004392	0.005768
0.000175	0.000546	0.001018	0.001611	0.002361	0.003263	0.004405	0.005793
0.000186	0.000564	0.001025	0.001632	0.002391	0.003301	0.004473	0.005844
0.000190	0.000570	0.001031	0.001643	0.002394	0.003321	0.004497	0.005898
0.000203	0.000576	0.001062	0.001662	0.002424	0.003360	0.004539	0.005929
0.000204	0.000586	0.001064	0.001670	0.002452	0.003390	0.004552	0.005947
0.000218	0.000606	0.001086	0.001706	0.002469	0.003408	0.004576	0.006020
0.000229	0.000609	0.001097	0.001710	0.002474	0.003408	0.004607	0.006048
0.000238	0.000618	0.001129	0.001746	0.002504	0.003470	0.004646	0.006085
0.000248	0.000628	0.001131	0.001752	0.002516	0.003483	0.004678	0.006143
0.000252	0.000641	0.001148	0.001760	0.002544	0.003512	0.004729	0.006201
0.000257	0.000649	0.001156	0.001765	0.002582	0.003519	0.004749	0.006203
0.000270	0.000667	0.001164	0.001802	0.002620	0.003580	0.004786	0.006238
0.000280	0.000679	0.001180	0.001811	0.002628	0.003582	0.004813	0.006298
0.000292	0.000683	0.001203	0.001846	0.002650	0.003623	0.004848	0.006397
0.000296	0.000692	0.001212	0.001857	0.002671	0.003662	0.004863	0.006398
0.000301	0.000706	0.001240	0.001875	0.002682	0.003669	0.004894	0.006402
0.000312	0.000716	0.001241	0.001880	0.002712	0.003709	0.004899	0.006451
0.000328	0.000730	0.001249	0.001913	0.002718	0.003736	0.004992	0.006555

0.006558	0.006625	0.009514	0.013398	0.018757	0.026379	0.037337	0.053172
	0.006631	0.009520	0.013398	0.018939	0.026420	0.037383	0.053378
	0.006676	0.009586	0.013594	0.019039	0.026594	0.037518	0.053798
	0.006703	0.009642	0.013600	0.019042	0.026622	0.037841	0.053891
	0.006770	0.009718	0.013683	0.019213	0.026980	0.037978	0.054557
	0.006824	0.009751	0.013755	0.019385	0.027091	0.038088	0.054959
	0.006851	0.009880	0.013881	0.019461	0.027406	0.038456	0.055725
	0.006880	0.009912	0.013994	0.019483	0.027477	0.038550	0.055807
	0.006938	0.009974	0.014050	0.019782	0.027689	0.038989	0.055818
	0.006970	0.010020	0.014130	0.019812	0.027717	0.039210	0.055912
	0.007031	0.010087	0.014168	0.019851	0.027882	0.039658	0.056903
	0.007058	0.010148	0.014305	0.019998	0.027998	0.039723	0.057106
	0.007094	0.010158	0.014340	0.020125	0.028239	0.039914	0.057467
	0.007133	0.010266	0.014352	0.020245	0.028384	0.040111	0.057893
	0.007202	0.010335	0.014510	0.020358	0.028504	0.040452	0.058646
	0.007272	0.010405	0.014619	0.020438	0.028750	0.040634	0.058716
	0.007280	0.010479	0.014689	0.020558	0.028883	0.041055	0.059042
	0.007311	0.010527	0.014719	0.020593	0.028922	0.041182	0.059270
	0.007409	0.010552	0.014873	0.020913	0.029188	0.041439	0.059702
	0.007415	0.010565	0.015003	0.020917	0.029220	0.041785	0.060075
	0.007480	0.010687	0.015030	0.021218	0.029552	0.041984	0.060436
	0.007518	0.010771	0.015049	0.021271	0.029864	0.042289	0.060765
	0.007577	0.010793	0.015256	0.021403	0.029991	0.042345	0.061332
	0.007594	0.010800	0.015297	0.021423	0.030097	0.042781	0.061399
	0.007722	0.011001	0.015415	0.021562	0.030309	0.043111	0.062190
	0.007743	0.011038	0.015526	0.021650	0.030479	0.043375	0.062240
	0.007777	0.011088	0.015699	0.021802	0.030595	0.043427	0.062883
	0.007792	0.011132	0.015703	0.021938	0.030853	0.043548	0.062960
	0.007862	0.011184	0.015815	0.022227	0.031044	0.044064	0.063908
	0.007862	0.011291	0.015831	0.022278	0.031160	0.044439	0.064145
	0.008045	0.011335	0.015977	0.022331	0.031549	0.044564	0.064823
	0.008045	0.011421	0.016030	0.022434	0.031642	0.044782	0.064999
	0.008091	0.011477	0.016144	0.022569	0.031695	0.045095	0.065727
	0.008104	0.011484	0.016257	0.022618	0.031730	0.045408	0.065841
	0.008176	0.011624	0.016300	0.022832	0.032210	0.045882	0.066246
	0.008229	0.011710	0.016478	0.022881	0.032266	0.046026	0.066515
	0.008294	0.011803	0.016553	0.023170	0.032615	0.046306	0.067303
	0.008333	0.011828	0.016553	0.023196	0.032794	0.046611	0.067782
	0.008384	0.011931	0.016788	0.023429	0.033036	0.047067	0.068641
	0.008423	0.011960	0.016863	0.023557	0.033192	0.047285	0.068731
	0.008550	0.012055	0.017040	0.023757	0.033293	0.047690	0.069112
	0.008562	0.012117	0.017067	0.023870	0.033555	0.047758	0.069807
	0.008643	0.012241	0.017127	0.024011	0.033790	0.048389	0.070347
	0.008661	0.012260	0.017255	0.024183	0.033823	0.048494	0.070498
	0.008677	0.012406	0.017286	0.024315	0.034063	0.048783	0.070977
	0.008735	0.012413	0.017428	0.024469	0.034144	0.048963	0.071446
	0.008810	0.012508	0.017552	0.024541	0.034527	0.049521	0.072485
	0.008864	0.012578	0.017640	0.024634	0.034638	0.049544	0.072655
	0.008969	0.012686	0.017683	0.024809	0.034980	0.049950	0.072819
	0.008975	0.012711	0.017737	0.024951	0.035069	0.050064	0.073304
	0.009010	0.012842	0.017946	0.025117	0.035374	0.050874	0.074120
	0.009086	0.012871	0.018044	0.025293	0.035624	0.050898	0.074151
	0.009108	0.012908	0.018176	0.025426	0.035908	0.051465	0.074814
	0.009162	0.013001	0.018208	0.025477	0.035942	0.051467	0.075720
	0.009291	0.013054	0.018503	0.025686	0.036176	0.051868	0.075938
	0.009306	0.013171	0.018510	0.025898	0.036351	0.051959	0.076266
	0.009349	0.013199	0.018628	0.025951	0.036712	0.052639	0.076965
	0.009407	0.013345	0.018655	0.026075	0.037004	0.052985	0.077196

0.078066	0.099300	0.127578	0.169536	0.234001	0.332556	0.546670	1.049708
0.078812	0.099625	0.129561	0.170484	0.234768	0.340544	0.551598	1.085548
0.079594	0.100536	0.129687	0.171098	0.240016	0.348146	0.556255	1.097168
0.080141	0.101677	0.130564	0.174959	0.240423	0.352585	0.559290	1.148584
0.080183	0.102215	0.133048	0.175547	0.242121	0.356653	0.579151	1.170631
0.081154	0.104024	0.133249	0.177027	0.246732	0.360027	0.588964	1.226020
0.081286	0.104028	0.134380	0.179663	0.248701	0.361598	0.593681	1.236434
0.081933	0.104292	0.135504	0.180162	0.249157	0.371196	0.611717	1.318498
0.082630	0.105039	0.136134	0.181885	0.252058	0.376940	0.623448	1.323799
0.083447	0.106388	0.136427	0.185338	0.253530	0.381310	0.632349	1.349566
0.083608	0.106762	0.138432	0.186458	0.259696	0.382937	0.647390	1.377842
0.084331	0.108421	0.139662	0.187506	0.260047	0.389592	0.652347	1.452870
0.085176	0.108848	0.141425	0.189330	0.267344	0.393854	0.677195	1.470644
0.085195	0.110199	0.141888	0.192173	0.268531	0.397770	0.677939	1.535373
0.086115	0.110322	0.145118	0.192577	0.270092	0.398252	0.690266	1.561118
0.086292	0.110706	0.145397	0.194689	0.272131	0.408919	0.695140	1.652988
0.087542	0.112169	0.147228	0.195111	0.279007	0.417572	0.710686	1.721524
0.087799	0.112895	0.147941	0.198458	0.279241	0.423567	0.733437	1.860906
0.088705	0.113995	0.148344	0.199024	0.284181	0.427906	0.753399	1.862519
0.089680	0.114267	0.148908	0.202460	0.286815	0.438409	0.767182	1.916392
0.089978	0.114899	0.150942	0.203121	0.292941	0.440272	0.797039	2.016434
0.090085	0.116033	0.151732	0.205517	0.293827	0.445643	0.797885	2.104406
0.091638	0.116293	0.155188	0.205977	0.299437	0.453400	0.818019	2.129306
0.092262	0.118859	0.155726	0.209606	0.300189	0.462982	0.827340	2.255135
0.093010	0.119158	0.157134	0.211736	0.303958	0.466643	0.861522	2.409726
0.093217	0.120507	0.158473	0.216355	0.308561	0.485000	0.869022	2.527115
0.093903	0.120881	0.159036	0.216770	0.312845	0.485356	0.898986	2.533104
0.093995	0.121723	0.161248	0.219150	0.315452	0.494910	0.915083	2.828453
0.095645	0.122875	0.163338	0.222429	0.317163	0.501670	0.928414	2.841655
0.096294	0.124620	0.164342	0.226046	0.322698	0.513284	0.956288	3.261866
0.096702	0.124997	0.165207	0.226862	0.325125	0.516255	0.993003	3.539778
0.097782	0.126760	0.166487	0.229379	0.329234	0.524523	1.003452	3.610261
0.098164	0.127136	0.167879	0.230839	0.332319	0.533712	1.028846	3.930232

RDF #11
Non-bell peppers: canned, frozen and cured
FDA data from 1993-1998 (1608 samples, 141 detects)
Data used directly
9% detected (actual residues found were 0.007 - 3.4 ppm)
48% CT

Non-bell peppers
48%CT
TOTALZ = 836

631, 0.0003	0.05000	0.001	0.04000	0.02000	0.04000	0.26000	0.11000
0.02000	0.23000	0.09000	0.30000	0.30000	2.30000	0.59000	0.04000
0.61000	0.09000	0.14000	0.02000	0.20000	0.30000	1.24000	0.15000
0.19000	0.55000	0.50000	0.05000	0.36000	0.07000	0.12000	0.50000
0.04000	0.49000	0.07000	0.05000	0.15000	0.20000	0.19000	0.25000
0.01700	0.09700	0.15000	0.50000	0.25000	0.30000	0.50000	0.25000
0.14000	0.19000	0.18000	0.25000	0.60000	0.06000	0.17000	0.20000
0.03000	2.10000	1.20000	0.52000	0.30000	0.90000	0.08000	0.08000
0.06000	0.40000	3.40000	0.06000	0.05000	0.22000	0.05000	0.70000
0.04000	0.20000	0.06000	0.25000	0.30000	0.001	0.05900	0.03000
0.00700	0.30000	0.19000	0.47000	0.30000	0.001	0.71700	0.35000
0.70000	0.01800	2.20000	0.05000	0.35000	0.01000	0.23300	0.35000
0.30000	0.20000	0.01000	0.14000	0.04000	0.02000	0.01600	0.02000
0.40000	0.43000	0.05000	0.50000	0.04000	0.08000	0.20300	0.05000
0.01000	0.08000	0.30000	0.04000	0.12000	0.07000	0.18000	0.30000
0.40000	0.05000	0.46000	0.02000	0.10000	0.02000	0.12000	0.05000
0.10000	0.39000	0.44000	0.04000	0.09000	0.28000	0.05000	0.40500
0.03800	0.22000	0.50000	0.01000	0.10000			

RDF #12
All Bell peppers except canned, frozen and cured
FDA data from 1993-1998 (1617 samples, 174 detects)
Samples decomposited, n = 84 where n = number of samples in composite
14 data points truncated at tolerance. 986 residue values used.
Decomposited data points range from 0.00004 - 3.96
11% detected (actual residues found were 0.005 - 3.14 ppm)
48% CT

Bell Pepper decomp
TotalZ=4661
48%CT

3317, 0.0003	0.00081	0.00175	0.00298	0.00449	0.00634	0.00859	0.01133
0.00004	0.00084	0.00181	0.00299	0.00452	0.00637	0.00861	0.01137
0.00005	0.00087	0.00182	0.00306	0.00454	0.00641	0.00864	0.01147
0.00008	0.00089	0.00185	0.00308	0.00464	0.00642	0.00875	0.01157
0.00009	0.00091	0.00186	0.00311	0.00465	0.00656	0.00878	0.01162
0.00012	0.00092	0.00190	0.00313	0.00469	0.00657	0.00891	0.01166
0.00013	0.00094	0.00192	0.00320	0.00471	0.00658	0.00895	0.01179
0.00015	0.00096	0.00195	0.00321	0.00474	0.00661	0.00903	0.01184
0.00016	0.00098	0.00200	0.00322	0.00475	0.00668	0.00906	0.01191
0.00020	0.00102	0.00200	0.00326	0.00484	0.00672	0.00910	0.01202
0.00020	0.00103	0.00204	0.00329	0.00487	0.00680	0.00916	0.01213
0.00024	0.00103	0.00206	0.00332	0.00493	0.00686	0.00923	0.01213
0.00025	0.00107	0.00207	0.00338	0.00493	0.00689	0.00929	0.01219
0.00027	0.00108	0.00211	0.00340	0.00499	0.00689	0.00939	0.01230
0.00028	0.00112	0.00215	0.00344	0.00505	0.00701	0.00942	0.01249
0.00030	0.00114	0.00217	0.00346	0.00508	0.00703	0.00949	0.01249
0.00032	0.00115	0.00220	0.00350	0.00509	0.00709	0.00954	0.01250
0.00034	0.00118	0.00221	0.00351	0.00515	0.00710	0.00961	0.01259
0.00034	0.00122	0.00223	0.00358	0.00517	0.00722	0.00964	0.01278
0.00036	0.00122	0.00229	0.00359	0.00523	0.00722	0.00970	0.01278
0.00037	0.00126	0.00229	0.00366	0.00530	0.00730	0.00970	0.01291
0.00041	0.00127	0.00234	0.00368	0.00537	0.00737	0.00988	0.01292
0.00042	0.00129	0.00236	0.00369	0.00539	0.00739	0.00992	0.01300
0.00044	0.00131	0.00243	0.00370	0.00543	0.00746	0.00995	0.01305
0.00045	0.00135	0.00243	0.00377	0.00547	0.00751	0.00999	0.01317
0.00048	0.00135	0.00246	0.00379	0.00549	0.00757	0.01013	0.01327
0.00048	0.00137	0.00248	0.00386	0.00555	0.00764	0.01013	0.01332
0.00051	0.00139	0.00250	0.00388	0.00556	0.00770	0.01030	0.01338
0.00054	0.00142	0.00253	0.00392	0.00563	0.00775	0.01033	0.01348
0.00056	0.00144	0.00258	0.00393	0.00569	0.00780	0.01035	0.01354
0.00058	0.00148	0.00259	0.00399	0.00571	0.00784	0.01040	0.01365
0.00059	0.00150	0.00265	0.00402	0.00581	0.00785	0.01050	0.01370
0.00060	0.00151	0.00265	0.00406	0.00583	0.00793	0.01060	0.01377
0.00063	0.00153	0.00267	0.00408	0.00584	0.00802	0.01074	0.01384
0.00065	0.00156	0.00268	0.00413	0.00585	0.00805	0.01074	0.01397
0.00068	0.00158	0.00273	0.00414	0.00596	0.00809	0.01085	0.01409
0.00069	0.00161	0.00273	0.00419	0.00600	0.00817	0.01086	0.01411
0.00070	0.00163	0.00279	0.00426	0.00610	0.00826	0.01092	0.01417
0.00072	0.00165	0.00282	0.00428	0.00610	0.00830	0.01097	0.01434
0.00076	0.00167	0.00286	0.00434	0.00613	0.00833	0.01110	0.01436
0.00076	0.00171	0.00290	0.00435	0.00618	0.00838	0.01111	0.01448
0.00079	0.00172	0.00292	0.00437	0.00624	0.00840	0.01122	0.01454
0.00080	0.00175	0.00293	0.00444	0.00628	0.00856	0.01127	0.01465

0.01468	0.02048	0.02845	0.03911	0.05391	0.07515	0.10572	0.15531
0.01492	0.02084	0.02866	0.03935	0.05427	0.07570	0.10701	0.15650
0.01496	0.02091	0.02885	0.03950	0.05456	0.07614	0.10709	0.15683
0.01502	0.02099	0.02916	0.03976	0.05476	0.07623	0.10813	0.15792
0.01505	0.02107	0.02916	0.03999	0.05519	0.07643	0.10826	0.15807
0.01517	0.02117	0.02936	0.04049	0.05552	0.07728	0.10980	0.16069
0.01517	0.02136	0.02939	0.04058	0.05571	0.07790	0.11018	0.16172
0.01551	0.02144	0.02964	0.04067	0.05637	0.07811	0.11128	0.16236
0.01551	0.02159	0.02974	0.04085	0.05652	0.07847	0.11157	0.16407
0.01559	0.02169	0.02994	0.04108	0.05661	0.07899	0.11275	0.16468
0.01561	0.02170	0.03013	0.04116	0.05667	0.07951	0.11293	0.16648
0.01574	0.02195	0.03021	0.04153	0.05748	0.08029	0.11359	0.16699
0.01584	0.02210	0.03052	0.04162	0.05758	0.08053	0.11402	0.16844
0.01596	0.02227	0.03065	0.04211	0.05816	0.08099	0.11530	0.17024
0.01603	0.02232	0.03065	0.04216	0.05847	0.08149	0.11607	0.17109
0.01612	0.02250	0.03106	0.04256	0.05887	0.08225	0.11746	0.17395
0.01619	0.02255	0.03120	0.04278	0.05914	0.08261	0.11761	0.17396
0.01642	0.02272	0.03150	0.04312	0.05931	0.08328	0.11822	0.17437
0.01645	0.02283	0.03155	0.04331	0.05975	0.08339	0.11935	0.17555
0.01659	0.02305	0.03166	0.04356	0.06014	0.08443	0.12022	0.17768
0.01662	0.02308	0.03188	0.04385	0.06020	0.08460	0.12046	0.17827
0.01665	0.02334	0.03193	0.04408	0.06060	0.08508	0.12123	0.18089
0.01676	0.02336	0.03218	0.04434	0.06074	0.08537	0.12199	0.18156
0.01690	0.02353	0.03240	0.04446	0.06138	0.08629	0.12367	0.18369
0.01699	0.02365	0.03255	0.04462	0.06157	0.08633	0.12394	0.18388
0.01718	0.02384	0.03263	0.04492	0.06214	0.08700	0.12420	0.18449
0.01719	0.02389	0.03272	0.04516	0.06229	0.08719	0.12498	0.18679
0.01726	0.02412	0.03308	0.04545	0.06280	0.08852	0.12630	0.18793
0.01740	0.02417	0.03325	0.04575	0.06322	0.08856	0.12635	0.18966
0.01743	0.02424	0.03348	0.04597	0.06370	0.08949	0.12741	0.19009
0.01753	0.02440	0.03354	0.04606	0.06375	0.08949	0.12887	0.19108
0.01777	0.02449	0.03405	0.04642	0.06415	0.09015	0.12922	0.19286
0.01779	0.02470	0.03406	0.04678	0.06444	0.09030	0.12975	0.19327
0.01787	0.02475	0.03427	0.04687	0.06504	0.09142	0.13087	0.19729
0.01797	0.02501	0.03432	0.04708	0.06553	0.09198	0.13124	0.19776
0.01817	0.02510	0.03449	0.04760	0.06609	0.09229	0.13264	0.19988
0.01818	0.02510	0.03481	0.04767	0.06617	0.09263	0.13384	0.20046
0.01830	0.02545	0.03498	0.04797	0.06639	0.09331	0.13509	0.20178
0.01840	0.02546	0.03499	0.04801	0.06693	0.09347	0.13597	0.20358
0.01854	0.02561	0.03528	0.04863	0.06716	0.09456	0.13603	0.20631
0.01860	0.02573	0.03558	0.04881	0.06734	0.09522	0.13759	0.20690
0.01883	0.02596	0.03571	0.04935	0.06796	0.09647	0.13780	0.20966
0.01888	0.02616	0.03575	0.04947	0.06811	0.09660	0.13884	0.21025
0.01900	0.02626	0.03627	0.04983	0.06885	0.09662	0.13995	0.21094
0.01908	0.02640	0.03632	0.04988	0.06922	0.09677	0.14126	0.21403
0.01920	0.02646	0.03639	0.05016	0.06996	0.09839	0.14152	0.21423
0.01931	0.02671	0.03665	0.05036	0.07007	0.09872	0.14267	0.21560
0.01933	0.02677	0.03686	0.05077	0.07039	0.09931	0.14402	0.21947
0.01952	0.02679	0.03707	0.05101	0.07072	0.10001	0.14405	0.21978
0.01964	0.02707	0.03727	0.05121	0.07129	0.10124	0.14552	0.22154
0.01977	0.02726	0.03741	0.05163	0.07159	0.10135	0.14580	0.22329
0.01990	0.02738	0.03761	0.05186	0.07229	0.10188	0.14780	0.22427
0.01999	0.02743	0.03767	0.05192	0.07250	0.10225	0.14821	0.22473
0.02003	0.02770	0.03823	0.05238	0.07293	0.10296	0.14965	0.22785
0.02006	0.02793	0.03823	0.05243	0.07350	0.10357	0.15120	0.22976
0.02028	0.02798	0.03875	0.05299	0.07383	0.10415	0.15168	0.23250
0.02043	0.02802	0.03885	0.05352	0.07434	0.10469	0.15185	0.23322
0.02047	0.02838	0.03907	0.05374	0.07443	0.10561	0.15432	0.23823

0.23866	0.28742	0.35659	0.44944	0.57842	0.78557	1.12877	1.91501
0.24150	0.29146	0.36206	0.45337	0.58687	0.78986	1.14826	1.92228
0.24260	0.29223	0.36330	0.46251	0.59329	0.80181	1.19042	1.95761
0.24323	0.29487	0.36711	0.46383	0.59568	0.81507	1.19162	1.99632
0.24410	0.30015	0.36931	0.47219	0.60546	0.83375	1.22000	2.09885
0.24725	0.30186	0.37409	0.47331	0.61171	0.84084	1.23312	2.12309
0.24847	0.30347	0.37525	0.47892	0.61745	0.84755	1.28119	2.21124
0.25381	0.30625	0.38317	0.48577	0.61816	0.85191	1.29172	2.24625
0.25464	0.31060	0.38378	0.49214	0.63379	0.88046	1.33375	2.37090
0.25682	0.31121	0.38634	0.49601	0.64645	0.89454	1.35630	2.46364
0.25888	0.31443	0.39328	0.49855	0.65521	0.90131	1.37495	2.65163
0.25975	0.31508	0.39625	0.50677	0.66155	0.92715	1.41391	2.65380
0.26316	0.32018	0.39693	0.51037	0.67687	0.94393	1.46513	2.72625
0.26638	0.32104	0.40130	0.51646	0.67959	0.95666	1.47968	2.86048
0.26793	0.32628	0.40351	0.52103	0.68742	0.97814	1.51503	2.97821
0.26926	0.32728	0.41277	0.52138	0.69871	0.98521	1.54403	3.01148
0.27123	0.33093	0.41330	0.53320	0.71265	1.02062	1.59377	3.17929
0.27337	0.33163	0.42425	0.54443	0.71797	1.02168	1.60988	3.38476
0.27592	0.33714	0.42602	0.55099	0.74462	1.03921	1.68105	3.54029
0.27738	0.34038	0.42836	0.55699	0.74514	1.04614	1.71151	3.54822
0.27832	0.34739	0.43142	0.56196	0.75898	1.06823	1.78790	3.93775
0.28425	0.34802	0.44171	0.56428	0.76877	1.10050	1.80224	3.95511
0.28515	0.35162	0.44206					

RDF #13
Bell peppers: canned, frozen and cured
FDA data from 1993-1998 (1617 samples, 174 detects)
Data used directly
11% detected (actual residues found ranged from 0.005 - 3.14 ppm)
48% CT

Bell Peppers
canned, frozen, cured
48% CT
TOTALZ = 841

602,0.0003	0.13000	0.44000	0.22000	0.37000	0.30000	0.13000	1.03000
0.04000	0.43000	0.50000	0.17000	0.76000	0.001	0.89000	1.30000
0.05300	0.26000	0.80000	0.25000	0.94800	0.70000	0.17000	0.11400
1.31000	0.06000	0.44000	0.20000	0.39000	0.40000	0.85000	1.42000
1.17000	0.13000	0.02000	0.08000	0.11000	0.45000	0.65000	0.98000
0.40000	0.08000	0.06900	0.15000	0.43000	0.02000	0.67000	0.91000
0.49600	0.10000	0.68000	0.25000	0.12000	0.40000	0.001	1.51000
0.69000	0.62000	0.18000	0.35000	0.08000	0.10000	3.14000	0.22000
0.84000	0.07800	0.13100	0.25000	0.18000	0.08000	0.02000	0.02800
0.001	0.45300	1.69000	0.30000	0.02000	0.40000	0.07000	0.17300
0.02700	0.83400	0.84000	0.30000	0.40000	0.20000	0.18000	0.10000
0.14000	0.46200	0.12800	0.30000	0.08000	0.08000	0.30000	0.30000
0.58000	0.42000	0.09800	0.20000	0.12000	0.22000	0.30000	2.00000
0.30000	0.02000	0.24000	0.15000	0.15000	0.14000	0.40000	0.07000
0.25000	0.36000	0.03000	0.07000	0.50000	1.60000	0.32000	0.15000
0.05000	0.34000	0.81000	0.40000	0.25000	0.16000	0.06000	0.25000
0.03000	0.40000	0.49000	0.90000	0.15000	0.12000	0.35000	0.04700
2.00000	0.40000	0.69000	0.20000	0.05000	0.12000	0.16000	0.05200
1.40000	0.05000	0.25000	0.50000	0.05000	0.07400	0.04000	0.15500
0.70000	0.15000	0.04000	0.40000	0.15000	1.07000	0.20000	0.24300
0.00500	0.40000	0.04000	0.04000	1.50000	0.29000	0.19900	
0.04000	0.03000	0.25000	0.001	1.70000	0.14000	0.14600	

RDF #14
Milk
PDP data from 1997
%CT from cotton used since it is highest %CT of animal feed items.

Milk
13% CT
Totalz=87

0.0005	0.0005	0.0005
0.0005	0.0005	0.0005
0.0005	0.0005	0.0005
0.0005	0.0005	0.0005
0.0005		

<u>Methamidophos Residue Distribution Files</u>

RDF #1
Fresh Succulent Beans
FDA data from 1993-1998 (2388 samples, 714 detects)
Data used directly
30% detected (actual residues found ranged from 0.007 - 3.4 ppm)
39% CT

Succulent Beans-Fresh
39% CT
TOTALZ = 1457

217, 0.00225	0.015	0.091	0.19	0.2	0.12	0.006	0.039
0.1	0.12	0.16	0.012	0.14	0.13	0.006	0.13
0.006	0.006	0.044	0.4	0.27	0.02	0.017	0.01
0.25	0.006	0.004	0.12	0.36	0.13	0.022	0.005
0.069	0.097	0.08	0.37	0.04	0.17	0.006	0.027
0.011	0.19	0.11	0.073	0.014	0.14	0.026	0.01
0.15	0.046	0.039	0.14	0.006	0.012	0.027	0.01
0.17	0.38	0.006	0.006	0.093	0.084	0.019	0.01
0.11	0.005	0.051	0.012	0.005	0.083	0.041	0.04
0.006	0.047	0.083	0.032	0.063	0.11	0.006	0.01
0.063	0.37	0.11	0.031	0.11	0.011	0.04	0.22
0.13	0.12	0.061	0.1	0.12	0.2	0.013	0.084
0.03	0.19	0.03	0.01	0.034	0.13	0.12	0.066
0.16	0.006	0.03	0.045	0.042	0.05	0.09	0.084
0.012	0.04	0.03	0.075	0.093	0.006	0.006	0.057
0.05	0.006	0.03	0.089	0.063	0.068	0.025	0.16
0.032	0.006	0.046	0.057	0.068	0.072	0.017	0.015
0.074	0.01	0.074	0.017	0.093	0.13	0.066	0.075
0.006	0.14	0.082	0.004	0.069	0.02	0.076	0.026
0.3	0.027	0.061	0.27	0.11	0.027	0.071	0.005
0.006	0.004	0.17	0.3	0.23	0.032	0.005	0.041
0.2	0.13	0.034	0.05	0.02	0.055	0.004	0.005
0.068	0.15	0.057	0.063	0.2	0.074	0.031	0.01
0.14	0.02	0.12	0.23	0.043	0.012	0.004	0.011
0.15	0.08	0.49	0.15	0.14	0.044	0.031	0.018
0.055	0.66	0.31	0.058	0.078	0.01	0.025	0.068
0.12	0.11	0.54	0.28	0.051	0.083	0.021	0.065
0.28	0.11	0.053	0.14	0.068	0.035	0.088	0.01
0.019	0.033	0.045	0.04	0.027	0.016	0.01	0.006
0.056	0.004	0.15	0.09	0.029	0.006	0.006	0.027
0.12	0.043	0.22	0.042	0.054	0.02	0.019	0.023
0.024	0.004	0.02	0.005	0.044	0.021	0.029	0.1
0.006	0.039	0.13	0.11	0.19	0.14	0.025	0.006
0.012	0.23	0.004	0.006	0.045	0.21	0.016	0.022
0.088	0.018	0.18	0.056	0.23	0.082	0.027	0.005
0.15	0.12	0.026	0.006	0.083	0.033	0.005	0.005
0.057	0.006	0.012	0.011	0.095	0.006	0.1	0.021
0.006	0.077	0.12	0.13	0.037	0.048	0.004	0.099
0.06	0.066	0.31	0.02	0.13	0.013	0.01	0.021
0.01	0.19	0.065	0.16	0.11	0.046	0.053	0.041
0.011	0.066	0.032	0.24	0.14	0.03	0.013	0.005
0.089	0.013	0.13	0.15	0.013	0.006	0.018	0.036
0.082	0.11	0.13	0.034	0.004	0.006	0.11	0.02
0.07	0.004	0.017	0.31	0.006	0.012	0.006	0.038

0.051	0.019	0.01	0.021	0.01	0.01	0.045	0.007
0.006	0.01	0.01	0.015	0.13	0.016	0.005	0.073
0.01	0.006	0.02	0.005	0.066	0.034	0.043	0.11
0.09	0.054	0.007	0.031	0.099	0.01	0.1	0.074
0.039	0.006	0.047	0.031	0.009	0.014	0.005	0.012
0.061	0.013	0.023	0.01	0.024	0.005	0.01	0.021
0.045	0.006	0.032	0.034	0.023	0.005	0.044	0.012
0.021	0.056	0.007	0.044	0.015	0.021	0.01	0.01
0.015	0.01	0.017	0.011	0.012	0.031	0.12	0.02
0.05	0.036	0.012	0.016	0.006	0.012	0.021	0.058
0.052	0.006	0.025	0.021	0.002	0.024	0.12	0.01
0.005	0.025	0.014	0.018	0.17	0.12	0.007	0.024
0.037	0.012	0.007	0.024	0.041	0.002	0.013	0.086
0.044	0.047	0.024	0.023	0.031	0.052	0.023	0.038
0.021	0.025	0.088	0.097	0.007	0.005	0.012	0.037
0.005	0.025	0.046	0.025	0.016	0.015	0.005	0.024
0.078	0.11	0.005	0.038	0.027	0.014	0.01	0.059
0.037	0.071	0.039	0.005	0.01	0.005	0.008	0.036
0.014	0.021	0.029	0.03	0.016	0.01	0.01	0.039
0.01	0.013	0.041	0.005	0.005	0.002	0.077	0.019
0.038	0.021	0.015	0.062	0.063	0.033	0.022	0.048
0.005	0.017	0.011	0.01	0.005	0.015	0.068	0.008
0.005	0.025	0.067	0.01	0.044	0.005	0.024	0.01
0.089	0.016	0.08	0.018	0.01	0.005	0.017	0.022
0.012	0.028	0.057	0.012	0.01	0.053	0.028	0.023
0.005	0.02	0.007	0.016	0.036	0.007	0.021	0.005
0.046	0.082	0.026	0.028	0.021	0.03	0.018	0.024
0.022	0.049	0.019	0.007	0.022	0.01	0.021	0.021
0.027	0.051	0.002	0.015	0.021	0.017	0.057	0.005
0.009	0.04	0.015	0.033	0.01	0.01	0.065	0.005
0.01	0.042	0.079	0.049	0.01	0.037	0.021	0.012
0.006	0.017	0.023	0.015	0.013	0.027	0.01	0.005
0.006	0.01	0.075	0.005	0.006	0.021	0.032	0.033
0.02	0.087	0.039	0.028	0.023	0.026	0.01	0.034
0.057	0.007	0.038	0.025	0.012	0.01	0.01	0.017
0.043	0.007	0.044	0.01	0.038	0.01	0.013	0.015
0.014	0.02	0.009	0.007	0.034	0.012	0.09	0.017
0.022	0.017	0.022	0.027	0.006	0.005	0.03	0.024
0.025	0.017	0.033	0.036	0.022	0.022	0.034	0.022
0.006	0.018	0.048	0.01	0.002	0.043	0.038	0.007
0.056	0.007	0.005	0.01	0.02	0.025	0.055	0.019
0.065	0.01	0.005	0.013	0.002	0.022	0.03	0.008
0.02	0.046	0.01	0.015	0.002	0.016	0.038	
0.017	0.16	0.024	0.009	0.035	0.046	0.007	
0.018	0.035	0.005	0.024	0.037	0.007	0.007	
0.036	0.023	0.005	0.013	0.005			

RDF #2
Processed Succulent Beans
FDA data from 1993-1998 (2388 samples, 714 detects)
Data used directly
30% detected (actual residues found ranged from 0.007 - 3.4 ppm)

47% CT

Succulent Beans-processed
47% CT
TOTALZ = 1266

408,	0.046	0.03	0.3	0.068	0.082	0.018	0.039
0.00225	0.38	0.03	0.05	0.027	0.033	0.11	0.061
0.1	0.005	0.03	0.063	0.029	0.006	0.006	0.045
0.006	0.047	0.046	0.23	0.054	0.048	0.039	0.021
0.25	0.37	0.074	0.15	0.044	0.013	0.13	0.015
0.069	0.12	0.082	0.058	0.19	0.046	0.01	0.05
0.011	0.19	0.061	0.28	0.045	0.03	0.005	0.052
0.15	0.006	0.17	0.14	0.23	0.006	0.027	0.005
0.17	0.04	0.034	0.04	0.083	0.006	0.01	0.037
0.11	0.006	0.057	0.09	0.095	0.012	0.01	0.044
0.006	0.006	0.12	0.042	0.037	0.006	0.01	0.021
0.063	0.01	0.49	0.005	0.13	0.006	0.04	0.005
0.13	0.14	0.31	0.11	0.11	0.017	0.01	0.078
0.03	0.027	0.54	0.006	0.14	0.022	0.22	0.037
0.16	0.004	0.053	0.056	0.013	0.006	0.084	0.014
0.012	0.13	0.045	0.006	0.004	0.026	0.066	0.01
0.05	0.15	0.15	0.011	0.006	0.027	0.084	0.038
0.032	0.02	0.22	0.13	0.12	0.019	0.057	0.005
0.074	0.08	0.02	0.02	0.13	0.041	0.16	0.005
0.006	0.66	0.13	0.16	0.02	0.006	0.015	0.089
0.3	0.11	0.004	0.24	0.13	0.04	0.075	0.012
0.006	0.11	0.18	0.15	0.17	0.013	0.026	0.005
0.2	0.033	0.026	0.034	0.14	0.12	0.005	0.046
0.068	0.004	0.012	0.31	0.012	0.09	0.041	0.022
0.14	0.043	0.12	0.2	0.084	0.006	0.005	0.027
0.15	0.004	0.31	0.14	0.083	0.025	0.01	0.009
0.055	0.039	0.065	0.27	0.11	0.017	0.011	0.01
0.12	0.23	0.032	0.36	0.011	0.066	0.018	0.006
0.28	0.018	0.13	0.04	0.2	0.076	0.068	0.006
0.019	0.12	0.13	0.014	0.13	0.071	0.065	0.02
0.056	0.006	0.017	0.006	0.05	0.005	0.01	0.057
0.12	0.077	0.19	0.093	0.006	0.004	0.006	0.043
0.024	0.066	0.012	0.005	0.068	0.031	0.027	0.014
0.006	0.19	0.4	0.063	0.072	0.004	0.023	0.022
0.012	0.066	0.12	0.11	0.13	0.031	0.1	0.025
0.088	0.013	0.37	0.12	0.02	0.025	0.006	0.006
0.15	0.11	0.073	0.034	0.027	0.021	0.022	0.056
0.057	0.004	0.14	0.042	0.032	0.088	0.005	0.065
0.006	0.091	0.006	0.093	0.055	0.01	0.005	0.02
0.06	0.16	0.012	0.063	0.074	0.006	0.021	0.017
0.01	0.044	0.032	0.068	0.012	0.019	0.099	0.018
0.011	0.004	0.031	0.093	0.044	0.029	0.021	0.036
0.089	0.08	0.1	0.069	0.01	0.025	0.041	0.019
0.082	0.11	0.01	0.11	0.083	0.016	0.005	0.01
0.07	0.039	0.045	0.23	0.035	0.027	0.036	0.006
0.015	0.006	0.075	0.02	0.016	0.005	0.02	0.054
0.12	0.051	0.089	0.2	0.006	0.1	0.038	0.006
0.006	0.083	0.057	0.043	0.02	0.004	0.051	0.013
0.006	0.11	0.017	0.14	0.021	0.01	0.006	0.006
0.097	0.061	0.004	0.078	0.14	0.053	0.01	0.056
0.19	0.03	0.27	0.051	0.21	0.013	0.09	0.01

0.036	0.02	0.005	0.025	0.021	0.01	0.007	0.012
0.006	0.007	0.01	0.01	0.022	0.002	0.013	0.021
0.025	0.047	0.024	0.007	0.021	0.033	0.023	0.012
0.012	0.023	0.005	0.027	0.01	0.015	0.012	0.01
0.047	0.032	0.005	0.036	0.01	0.005	0.005	0.02
0.025	0.007	0.021	0.01	0.013	0.005	0.01	0.058
0.025	0.017	0.015	0.01	0.006	0.053	0.008	0.01
0.11	0.012	0.005	0.013	0.023	0.007	0.01	0.024
0.071	0.025	0.031	0.015	0.012	0.03	0.077	0.086
0.021	0.014	0.031	0.009	0.038	0.01	0.022	0.038
0.013	0.007	0.01	0.024	0.034	0.017	0.068	0.037
0.021	0.024	0.034	0.013	0.006	0.01	0.024	0.024
0.017	0.088	0.044	0.01	0.022	0.037	0.017	0.059
0.025	0.046	0.011	0.13	0.002	0.027	0.028	0.036
0.016	0.005	0.016	0.066	0.02	0.021	0.021	0.039
0.028	0.039	0.021	0.099	0.002	0.026	0.018	0.019
0.02	0.029	0.018	0.009	0.002	0.01	0.021	0.048
0.082	0.041	0.024	0.024	0.035	0.01	0.057	0.008
0.049	0.015	0.023	0.023	0.037	0.012	0.065	0.01
0.051	0.011	0.097	0.015	0.005	0.005	0.021	0.022
0.04	0.067	0.025	0.012	0.01	0.022	0.01	0.023
0.042	0.08	0.038	0.006	0.016	0.043	0.032	0.005
0.017	0.057	0.005	0.002	0.034	0.025	0.01	0.024
0.01	0.007	0.03	0.17	0.01	0.022	0.01	0.021
0.087	0.026	0.005	0.041	0.014	0.016	0.013	0.005
0.007	0.019	0.062	0.031	0.005	0.046	0.09	0.005
0.007	0.002	0.01	0.007	0.005	0.007	0.03	0.012
0.02	0.015	0.01	0.016	0.021	0.045	0.034	0.005
0.017	0.079	0.018	0.027	0.031	0.005	0.038	0.033
0.017	0.023	0.012	0.01	0.012	0.043	0.055	0.034
0.018	0.075	0.016	0.016	0.024	0.1	0.03	0.017
0.007	0.039	0.028	0.005	0.12	0.005	0.038	0.015
0.01	0.038	0.007	0.063	0.002	0.01	0.007	0.017
0.046	0.044	0.015	0.005	0.052	0.044	0.007	0.024
0.16	0.009	0.033	0.044	0.005	0.01	0.007	0.022
0.035	0.022	0.049	0.01	0.015	0.12	0.073	0.007
0.023	0.033	0.015	0.01	0.014	0.021	0.11	0.019
0.01	0.048	0.005	0.036	0.005	0.12	0.074	0.008
0.01	0.005	0.028					

RDF #3
Brussel Sprouts
Field Trial data used.

Brussels sprouts
21% CT
TOTALZ = 23

0.06
0.08
0.06
0.04
0.01
0.02

RDF #4
Cauliflower
FDA data from 1993 - 1998 (214 samples, 6 detects)
3% detected (actual residues found ranged from 0.003 - 0.12 ppm)
21% CT

Cauliflower
21% CT
TOTALZ = 169

39, 0.00015
0.026
0.12
0.01
0.01
0.003
0.01

RDF #5
All celery except canned, frozen and celery juice
PDP data from 1994 (176 samples, 45 detects)
Samples decomposited, n = 18 where n = number of samples in composite
No data points truncated. Data points were 0.000086 - 0.342
26% detected (actual residues found ranged from 0.004 - 0.082 ppm)
68% CT

Celery-decomp-fresh
TOTALZ=1231

1615, 0.0015	0.004559	0.003417	0.064804	0.007566	0.013234	0.002119	0.012448
0.001606	0.002883	0.000940	0.002633	0.019155	0.000781	0.001726	0.033236
0.005278	0.000991	0.000957	0.016220	0.002511	0.020042	0.001655	0.001128
0.003801	0.003698	0.001449	0.001000	0.001189	0.006836	0.002998	0.004016
0.053602	0.001922	0.013020	0.003751	0.009953	0.007469	0.000924	0.000211
0.002214	0.001017	0.004608	0.000616	0.002486	0.076176	0.110260	0.009157
0.008346	0.027397	0.004664	0.018830	0.000626	0.002272	0.001777	0.006444
0.005019	0.001883	0.003057	0.001080	0.005345	0.026565	0.031742	0.002371
0.016061	0.022357	0.016630	0.002679	0.004752	0.007837	0.020267	0.007314
0.002422	0.000768	0.002087	0.158894	0.007017	0.010947	0.001286	0.000842
0.005660	0.001203	0.024728	0.002588	0.028539	0.003441	0.008459	0.023713
0.015047	0.004834	0.000661	0.003183	0.035299	0.008823	0.000078	0.010680
0.003654	0.000600	0.001096	0.080454	0.010545	0.000578	0.002023	0.004137
0.006113	0.032503	0.004048	0.003610	0.007147	0.000697	0.004437	0.001111
0.000691	0.012589	0.045641	0.010210	0.000918	0.002820	0.002465	0.002194
0.001033	0.011657	0.013406	0.005885	0.008698	0.014525	0.018154	0.002334
0.021048	0.003234	0.010912	0.008007	0.025769	0.029749	0.020685	0.007061
0.019543	0.008497	0.000164	0.009793	0.002664	0.005363	0.004492	0.055004
0.005930	0.001566	0.007435	0.019718	0.013920	0.017327	0.015319	0.004939
0.004420	0.015473	0.003545	0.003466	0.009673	0.041965	0.002614	0.049893
0.002786	0.036995	0.011287	0.002568	0.000131	0.058979	0.095616	0.036622
0.046339	0.002538	0.001353	0.014385	0.007968	0.007701	0.002500	0.002112
0.005141	0.002923	0.012780	0.003272	0.000744	0.000712	0.001320	0.013101
0.011595	0.011940	0.005223	0.001261	0.001229	0.010481	0.061234	0.002164
0.002797	0.003761	0.005840	0.004340	0.013553	0.002360	0.018209	0.000285
0.009216	0.024263	0.003300	0.011404	0.005284	0.030050	0.005734	0.002031
0.001559	0.016901	0.103916	0.005448	0.022137	0.001993	0.001160	0.000810
0.007523	0.000851	0.024181	0.006418	0.004333	0.003332	0.052210	0.009014
0.342615	0.003489	0.004538	0.000584	0.002942	0.001460	0.004869	0.011936
0.000879	0.000753	0.042685	0.017809	0.001302	0.049474	0.001480	0.002767
0.010642	0.000439	0.000306	0.004103	0.003045	0.007209	0.004127	0.000482
0.004236	0.014730	0.001957	0.010779	0.008619	0.009458	0.002839	0.001535
0.004897	0.005494	0.006622	0.000400	0.008952	0.000450	0.004932	0.002728
0.008890	0.000181	0.005157	0.000514	0.002132	0.017138	0.000799	0.002243
0.001366	0.002688	0.005073	0.002045	0.213805	0.000495	0.001620	0.071552
0.023383	0.040603	0.004265	0.012221	0.012665	0.004982	0.009663	0.004710
0.013900	0.002173	0.006268	0.002741	0.003810	0.015659	0.002287	0.001493
0.005092	0.011272	0.007367	0.001854	0.001524	0.062072	0.002860	0.001703
0.001908	0.003988	0.039871	0.001148	0.000648	0.006876	0.015809	0.007731
0.006062	0.001245	0.089653	0.010293	0.010155	0.009577	0.010051	0.001638
0.005393	0.001642	0.036112	0.001419	0.009069	0.000669	0.001582	0.000413
0.013716	0.014663	0.028140	0.002397	0.027237	0.001377	0.006142	0.003596

0.002436	0.005971	0.003906	0.022055	0.006039	0.062828	0.004702	0.002098
0.001047	0.009415	0.001889	0.001806	0.011162	0.003231	0.023147	0.000086
0.000390	0.004200	0.034556	0.015025	0.000635	0.013979	0.010562	0.003132
0.149883	0.001944	0.013527	0.002451	0.035748	0.000878	0.000379	0.010298
0.017073	0.021339	0.007774	0.003780	0.035418	0.014083	0.017025	0.003118
0.011075	0.000551	0.016508	0.000430	0.026437	0.000717	0.020712	0.003050
0.001834	0.002907	0.000898	0.021914	0.002160	0.001756	0.000545	0.001735
0.003516	0.007923	0.021663	0.002397	0.016141	0.042137	0.001860	0.007114
0.023122	0.001751	0.001220	0.009467	0.040422	0.012463	0.001751	0.011466
0.002303	0.003015	0.006738	0.066928	0.051892	0.000566	0.007243	0.078473
0.004683	0.018487	0.012035	0.002868	0.027779	0.008665	0.014272	0.003536
0.008183	0.003118	0.005981	0.011012	0.027038	0.001156	0.000811	0.004200
0.000458	0.001281	0.004164	0.006511	0.004608	0.001406	0.108997	0.002079
0.003129	0.030911	0.005525	0.003404	0.002846	0.002729	0.002949	0.004655
0.026920	0.009258	0.012235	0.002679	0.004364	0.019607	0.020301	0.087077
0.005211	0.006938	0.009374	0.001799	0.010087	0.009011	0.001679	0.001873
0.001065	0.000729	0.025441	0.001944	0.017953	0.008360	0.001440	0.005184
0.003365	0.000346	0.011820	0.003353	0.024119	0.006666	0.013758	0.002003
0.019890	0.005559	0.014112	0.010217	0.005949	0.002518	0.006336	0.006578
0.009829	0.037877	0.002324	0.014683	0.002609	0.001841	0.002376	0.009872
0.000865	0.007253	0.000829	0.001667	0.007718	0.020544	0.017556	0.000826
0.008771	0.002075	0.001176	0.010458	0.000350	0.024994	0.006618	0.001708
0.008340	0.067581	0.003077	0.013437	0.004319	0.002310	0.001924	0.001653
0.022763	0.039106	0.000245	0.004069	0.006087	0.030438	0.001565	0.000311
0.000257	0.008566	0.047762	0.015446	0.004948	0.021476	0.000858	0.061377
0.006949	0.129227	0.006379	0.007179	0.002503	0.000331	0.044165	0.143543
0.000539	0.006707	0.008273	0.001144	0.011678	0.001578	0.002989	0.041499
0.001053	0.018959	0.001705	0.012151	0.008418	0.037113	0.005274	0.009154
0.002553	0.017592	0.003883	0.048004	0.002561	0.000118	0.020067	0.003323
0.017685	0.025996	0.001425	0.001284	0.001537	0.008473	0.004098	0.004288
0.004630	0.030417	0.005582	0.115864	0.008933	0.002320	0.004035	0.002123
0.004804	0.034150	0.003571	0.023015	0.005695	0.019915	0.005645	0.000665
0.003931	0.015627	0.001403	0.001234	0.023304	0.001913	0.003077	0.004740
0.044635	0.020505	0.003702	0.039543	0.012746	0.001970	0.007663	0.017100
0.041525	0.006321	0.001836	0.000263	0.016661	0.004237	0.008532	0.007641
0.006238	0.015146	0.032274	0.002768	0.001305	0.005783	0.000890	0.002047
0.016264	0.000974	0.029213	0.000180	0.003901	0.015872	0.000596	0.026225
0.000292	0.004073	0.004308	0.057125	0.003770	0.005869	0.002602	0.008218
0.001972	0.007134	0.000532	0.000525	0.001623	0.006765	0.027386	0.002486
0.056495	0.018586	0.010360	0.008160	0.001028	0.017772	0.001333	0.015235
0.006019	0.005787	0.008121	0.002232	0.034164	0.000296	0.002803	0.005502
0.007647	0.003837	0.001766	0.009216	0.004432	0.000504	0.001592	0.000582
0.014815	0.074918	0.005703	0.021315	0.194228	0.005602	0.013320	0.018381
0.011119	0.000334	0.028770	0.003656	0.012091	0.065265	0.001325	0.002013
0.014240	0.003392	0.002236	0.001047	0.002135	0.002429	0.001518	0.005546
0.004372	0.002972	0.006179	0.000969	0.025807	0.074880	0.007473	0.028697
0.021868	0.004487	0.006527	0.001888	0.016423	0.004495	0.012024	0.008028
0.000364	0.001808	0.001499	0.005522	0.006560	0.052977	0.001832	0.001105
0.012370	0.010008	0.001335	0.003866	0.003259	0.003949	0.001500	0.001216
0.083770	0.003203	0.000736	0.182312	0.004464	0.000933	0.000482	0.009338
0.025129	0.001682	0.001114	0.000559	0.007084	0.050763	0.003439	0.010904
0.008091	0.003324	0.002974	0.004998	0.001262	0.005072	0.126179	0.002427
0.006492	0.003160	0.069875	0.018089	0.005447	0.007915	0.008077	0.018547
0.006583	0.003252	0.002574	0.000759	0.003649	0.003174	0.033389	0.004874
0.003639	0.001794	0.000787	0.008634	0.009773	0.000409	0.045669	0.002366
0.012959	0.005652	0.000468	0.001481	0.015600	0.001389	0.012908	0.007300
0.006787	0.011547	0.000418	0.005741	0.000622	0.002039	0.020925	0.000936
0.003961	0.022669	0.005375	0.000956	0.019124	0.004848	0.002833	0.003839

ATTACHMENT 2: Methamidophos Residue Distribution Files

0.002060	0.003624	0.003395	0.007945	0.030241	0.028349	0.003681	0.009536
0.081009	0.032832	0.018292	0.006196	0.006244	0.001631	0.003195	0.003348
0.003925	0.034830	0.010367	0.005327	0.000802	0.008748	0.005096	0.002333
0.013037	0.026649	0.032194	0.003744	0.011061	0.007502	0.016882	0.001379
0.022647	0.002221	0.006724	0.005024	0.004578	0.007213	0.006803	0.012771
0.003827	0.005112	0.004370	0.000675	0.054663	0.006389	0.001456	0.006459
0.011407	0.012368	0.007602	0.007010	0.011256	0.004252	0.002263	0.001181
0.001065	0.006106	0.002784	0.001700	0.001984	0.095876	0.000739	0.002167
0.019261	0.001004	0.003704	0.005227	0.003011	0.017274	0.029476	0.000210
0.089529	0.016047	0.002889	0.003148	0.005905	0.008902	0.006926	0.000270
0.011888	0.013625	0.003559	0.010631	0.009664	0.005307	0.004017	0.001088
0.009393	0.002252	0.007404	0.009057	0.001784	0.010123	0.002536	0.046646
0.004838	0.002940	0.002703	0.006861	0.018866	0.001278	0.015800	0.007356
0.013093	0.008224	0.000152	0.007863	0.002728	0.002292	0.038250	0.043478
0.025486	0.006172	0.004628	0.011566	0.014580	0.001178	0.004531	0.022314
0.000895	0.003061	0.336143	0.012568	0.009947	0.014414	0.004752	0.048964
0.024370	0.009268	0.001348	0.004401	0.015173	0.005157	0.012296	0.004792
0.002649	0.009986	0.001197	0.001362	0.013287	0.011330	0.006944	0.010705
0.014834	0.038429	0.005994	0.003523	0.024740	0.001489	0.000499	0.023732
0.019474	0.003288	0.000774	0.011755	0.014375	0.003482	0.013899	0.005675
0.058688	0.031553	0.006272	0.000992	0.029675	0.004918	0.000365	0.004110
0.000910	0.001548	0.016284	0.003256	0.004159	0.002640	0.036814	0.000454
0.001009	0.006421	0.000703	0.008311	0.008815	0.001124	0.010824	
0.000647	0.005821	0.000689	0.007785	0.005399	0.009654	0.002190	
0.001051	0.001242	0.031292	0.003573	0.000838	0.003455	0.001422	
0.004191	0.003985	0.000238	0.002898				

RDF #6
Canned and frozen celery and celery juice
PDP data from 1994 (176 samples, 73 detects)
41% detected (actual residues found ranged from 0.005 - 1.3 ppm)
39% CT

Celery
68% CT
TOTALZ=56

75, 0.0023	0.045	0.008	0.013	0.005	0.005	0.004	0.017
0.008	0.019	0.082	0.006	0.024	0.005	0.004	0.006
0.006	0.03	0.011	0.006	0.005	0.005	0.012	0.004
0.006	0.006	0.005	0.016	0.005	0.012	0.009	0.017
0.006	0.006	0.006	0.015	0.008	0.005	0.009	0.018
0.006	0.006	0.006	0.009	0.005	0.004		

RDF #7
Cranberries
Field trial data used
51% CT

Cranberries- Field Trial
51% CT
TOTALZ =49

51, 0.005

RDF #8
Lettuce
PDP data from 1994 (691 samples, 41 detects)
Samples decomposited, n = 4.5 where n = number of samples in composite
No data points truncated. Data points ranged from 0.000603 - 0.273
6% detected (actual residues found were 0.004 - 0.042 ppm)
63% CT

Lettuce-decomp-fresh
TOTALZ=6167

9500, 0.0034	0.00092	0.01018	0.01436	0.00397	0.00294	0.00179	0.00193
0.00144	0.00314	0.00386	0.00100	0.00571	0.00708	0.00373	0.00205
0.00438	0.00171	0.00390	0.00233	0.02117	0.00056	0.00215	0.00575
0.00322	0.00094	0.00263	0.10514	0.02582	0.00066	0.01388	0.03906
0.03813	0.02038	0.01279	0.00225	0.00836	0.00244	0.01568	0.00412
0.00195	0.00167	0.00184	0.00273	0.00581	0.01127	0.00377	0.03566
0.00672	0.01685	0.01852	0.05570	0.00086	0.02201	0.01184	0.02672
0.00418	0.00072	0.00063	0.00307	0.00698	0.00445	0.00227	0.00186
0.01238	0.00110	0.00101	0.00811	0.01924	0.01329	0.06544	0.01023
0.00212	0.00403	0.00342	0.00485	0.00231	0.03034	0.00218	0.00191
0.00468	0.00058	0.03281	0.00646	0.01083	0.04169	0.00120	0.00029
0.01165	0.02390	0.01046	0.00780	0.00771	0.00623	0.04317	0.00180
0.00311	0.00986	0.00863	0.01499	0.00014	0.00067	0.01392	0.00076
0.00502	0.00918	0.00017	0.00296	0.00643	0.00831	0.00473	0.00722
0.00066	0.00277	0.00603	0.00224	0.00070	0.00207	0.00106	0.00938
0.00096	0.00683	0.00302	0.01117	0.00112	0.02221	0.03720	0.00240
0.01593	0.00141	0.00890	0.00280	0.01056	0.00176	0.00406	0.00047
0.01487	0.01195	0.00123	0.00115	0.00438	0.00285	0.00134	0.00138
0.00488	0.02697	0.01000	0.00365	0.01670	0.00132	0.00348	0.00237
0.00371	0.00221	0.00434	0.00899	0.00364	0.03538	0.00246	0.00197
0.00241	0.00252	0.00481	0.00451	0.00254	0.00586	0.00411	0.04993
0.03328	0.00938	0.00283	0.00526	0.00119	0.00755	0.00075	0.00394
0.00427	0.00319	0.07073	0.00056	0.00262	0.00044	0.00145	0.00135
0.00913	0.01819	0.01814	0.01363	0.00692	0.01315	0.00770	0.00152
0.00242	0.01298	0.00380	0.00346	0.00717	0.00048	0.00201	0.00625
0.00737	0.00080	0.03083	0.00853	0.00188	0.00415	0.00247	0.00147
0.00140	0.00298	0.00031	0.00039	0.13871	0.01209	0.01220	0.00041
0.00610	0.00071	0.00173	0.00050	0.00992	0.04372	0.00799	0.00306
0.21542	0.00043	0.00541	0.00181	0.00323	0.00561	0.00142	0.00213
0.00082	0.01142	0.00429	0.00959	0.00137	0.00764	0.00505	0.00097
0.00843	0.00455	0.00422	0.00238	0.00062	0.00064	0.00976	0.00038
0.00357	0.00019	0.00359	0.00165	0.00807	0.00125	0.02440	0.09957
0.00408	0.00233	0.00514	0.00105	0.00726	0.00187	0.00104	0.01310
0.00713	0.02942	0.00598	0.00817	0.02027	0.00154	0.00339	0.00875
0.00124	0.00191	0.02892	0.00128	0.01033	0.00148	0.00022	0.00163
0.01758	0.00889	0.06163	0.00210	0.00074	0.00258	0.00733	0.00300
0.01082	0.00337	0.02637	0.00613	0.01522	0.00086	0.00528	0.01739
0.00424	0.00114	0.02089	0.01459	0.00558	0.07476	0.00208	0.00202
0.00169	0.00147	0.04552	0.00219	0.00606	0.00159	0.00594	0.00392
0.00498	0.01137	0.00229	0.00109	0.05293	0.02338	0.00079	0.00660
0.00447	0.00292	0.01249	0.00792	0.00199	0.01538	0.01781	0.00045
0.01068	0.00087	0.00093	0.00217	0.01980	0.00117	0.00846	0.00269
0.00382	0.00089	0.00318	0.00060	0.00633	0.00680	0.00349	0.02005
0.00249	0.00131	0.00059	0.00443	0.00865	0.00009	0.00102	0.00433

0.00098	0.00069	0.01902	0.00172	0.01373	0.00673	0.00130	0.00431
0.00288	0.00034	0.00930	0.00287	0.01809	0.00545	0.01071	0.00177
0.01511	0.00460	0.01097	0.00811	0.00490	0.00220	0.00519	0.00538
0.00783	0.02757	0.00204	0.01138	0.00227	0.00164	0.00208	0.00786
0.00081	0.00589	0.00078	0.00149	0.00624	0.01558	0.01345	0.00078
0.00704	0.00183	0.00108	0.00829	0.00035	0.01870	0.00541	0.00153
0.00671	0.04734	0.00265	0.01048	0.00363	0.00203	0.00171	0.00148
0.01714	0.02841	0.00025	0.00344	0.00500	0.02248	0.00141	0.00031
0.00026	0.00688	0.03423	0.01193	0.00412	0.01623	0.00080	0.04327
0.00566	0.08670	0.00523	0.00584	0.00218	0.00033	0.03182	0.09563
0.00052	0.00548	0.00666	0.00105	0.00919	0.00142	0.00258	0.03002
0.00097	0.01445	0.00153	0.00954	0.00677	0.02705	0.00438	0.00732
0.00222	0.01348	0.00329	0.03440	0.00223	0.00013	0.01524	0.00284
0.01354	0.01940	0.00129	0.00117	0.00138	0.00681	0.00346	0.00361
0.00388	0.02247	0.00461	0.07830	0.00716	0.00203	0.00341	0.00187
0.00401	0.02503	0.00304	0.01732	0.00470	0.01513	0.00466	0.00063
0.00333	0.01206	0.00127	0.00113	0.01752	0.00170	0.00265	0.00396
0.03214	0.01555	0.00315	0.02870	0.00997	0.00175	0.00620	0.01312
0.03004	0.00518	0.00163	0.00027	0.01281	0.00357	0.00686	0.00619
0.00512	0.01172	0.02374	0.00240	0.00119	0.00477	0.00083	0.00181
0.01252	0.00090	0.02164	0.00019	0.00330	0.01224	0.00057	0.01956
0.00029	0.00344	0.00362	0.04046	0.00320	0.00484	0.00226	0.00662
0.00175	0.00580	0.00051	0.00051	0.00146	0.00552	0.02037	0.00217
0.04004	0.01418	0.00822	0.00658	0.00095	0.01360	0.00121	0.01178
0.00495	0.00477	0.00655	0.00196	0.02504	0.00030	0.00243	0.00455
0.00619	0.00325	0.00158	0.00737	0.00372	0.00049	0.00143	0.00056
0.01148	0.05212	0.00471	0.01612	0.12682	0.00463	0.01039	0.01404
0.00878	0.00033	0.02133	0.00311	0.00950	0.04582	0.00121	0.00178
0.01106	0.00290	0.00196	0.00097	0.00188	0.00212	0.00137	0.00459
0.00367	0.00256	0.00507	0.00090	0.01927	0.05209	0.00606	0.02128
0.01651	0.00376	0.00534	0.00168	0.01264	0.00377	0.00945	0.00648
0.00036	0.00161	0.00135	0.00457	0.00537	0.03771	0.00163	0.00102
0.00970	0.00796	0.00121	0.00328	0.00279	0.00334	0.00135	0.00111
0.05784	0.00275	0.00070	0.11954	0.00375	0.00087	0.00047	0.00746
0.01880	0.00151	0.00103	0.00054	0.00576	0.03624	0.00294	0.00862
0.00653	0.00284	0.00256	0.00416	0.00115	0.00422	0.08478	0.00212
0.00531	0.00271	0.04883	0.01383	0.00451	0.00639	0.00652	0.01416
0.00538	0.00279	0.00224	0.00072	0.00310	0.00272	0.02451	0.00407
0.00310	0.00160	0.00074	0.00693	0.00778	0.00040	0.03283	0.00207
0.01013	0.00467	0.00046	0.00134	0.01205	0.00126	0.01009	0.00593
0.00554	0.00910	0.00041	0.00474	0.00060	0.00180	0.01584	0.00087
0.00335	0.01707	0.00445	0.00089	0.01457	0.00405	0.00245	0.00325
0.00491	0.00331	0.01664	0.00497	0.04422	0.00393	0.00185	0.00182
0.00752	0.00168	0.00161	0.00881	0.00277	0.01741	0.00009	0.05606
0.00354	0.02531	0.01163	0.00061	0.01087	0.00837	0.00269	0.00332
0.00172	0.01054	0.00214	0.02612	0.00082	0.00037	0.00817	0.01019
0.01614	0.00629	0.00321	0.02590	0.01095	0.01307	0.00268	0.01706
0.00053	0.01270	0.00042	0.01971	0.00068	0.01569	0.00262	0.00324
0.00251	0.00084	0.01654	0.00190	0.00157	0.00053	0.00155	0.00899
0.00640	0.01637	0.00210	0.01243	0.03046	0.00165	0.00579	0.00098
0.00156	0.00112	0.00756	0.02930	0.00977	0.00156	0.00904	0.01467
0.00260	0.00550	0.04691	0.03699	0.00054	0.00589	0.05442	0.06155
0.01411	0.00945	0.00248	0.02064	0.00696	0.01109	0.00301	0.00935
0.00268	0.00492	0.00870	0.02013	0.00106	0.00076	0.00354	0.00750
0.00117	0.00351	0.00533	0.00386	0.00127	0.07396	0.00184	0.00404
0.02281	0.00457	0.00291	0.00246	0.00237	0.00254	0.00390	0.01023
0.00740	0.00960	0.00233	0.00367	0.01491	0.01540	0.05997	0.01905
0.00565	0.00749	0.00160	0.00802	0.00722	0.00150	0.00167	0.00084

0.01827	0.00507	0.00235	0.00270	0.00888	0.00586	0.00424	0.00761
0.00230	0.00263	0.00016	0.00842	0.00176	0.00523	0.01297	0.00286
0.01149	0.00741	0.00387	0.00725	0.00259	0.00358	0.00555	0.00204
0.01482	0.00794	0.21162	0.00559	0.00486	0.06561	0.00132	0.00125
0.04149	0.02795	0.00123	0.00635	0.00770	0.01325	0.00199	0.00999
0.00085	0.00282	0.00110	0.00911	0.00159	0.00713	0.00070	0.00529
0.00093	0.02325	0.00493	0.00984	0.01438	0.00440	0.02182	0.00108
0.00062	0.00139	0.00073	0.00370	0.00237	0.00804	0.00564	0.00191
0.00097	0.00526	0.00515	0.00124	0.01131	0.00117	0.00339	0.00022
0.00353	0.00480	0.01254	0.00300	0.00791	0.00201	0.00221	0.00027
0.00308	0.00113	0.00067	0.00925	0.01174	0.00108	0.01219	0.00100
0.02413	0.00337	0.00065	0.00092	0.01037	0.01119	0.02782	0.03349
0.02550	0.00290	0.02307	0.00279	0.01853	0.00429	0.00380	0.00597
0.01986	0.01398	0.00024	0.00669	0.01116	0.00894	0.00397	0.03136
0.00195	0.00823	0.00642	0.00630	0.02195	0.00134	0.00965	0.01682
0.00425	0.02369	0.00509	0.00304	0.00351	0.00297	0.00566	0.03504
0.00970	0.00549	0.00442	0.00250	0.00707	0.00410	0.00048	0.00400
0.00502	0.00367	0.00318	0.02235	0.00447	0.00229	0.01082	0.00848
0.00093	0.00616	0.00418	0.00512	0.00079	0.00103	0.00036	0.01782
0.01237	0.00241	0.00064	0.00075	0.02104	0.00770	0.02685	0.00469
0.01062	0.00315	0.00571	0.00874	0.00146	0.00295	0.00856	0.00347
0.00198	0.00250	0.00152	0.00384	0.00702	0.00313	0.00193	0.00044
0.00254	0.00303	0.00434	0.03883	0.00608	0.00274	0.00129	
0.00663	0.00601						

RDF #9
Field Trial data used.
1% CT

Macadamia Nuts
1% CT
Totalz=99

0.01

RDF #10
Bell pepper
Field trial data used
48% CT

Non-Bell peppers- Field trial data
48%CT
TOTALZ = 4

0.48
0.59
0.35
0.38

RDF #11
Bell pepper
Field trial data used
48% CT

Bell peppers-Field Trial Data
48%CT
TOTALZ = 9

0.22
0.25
0.15
0.17
0.30
0.32
0.52
0.51

ATTACHMENT 3: Acephate Chronic Assessment

U.S. Environmental Protection Agency Ver. 6.74
DEEM Chronic analysis for ACEPHATE 1989-92 data
Residue file: D:\103301fin.R96 Adjust. #2 used
Analysis Date 09-27-1999 Residue file dated: 09-27-1999/03:30:44/8
Reference dose (RfD) = 0.0012 mg/kg bw/day
Comment:Anticipated Residue file - Use in registration and reregistration chronic runs. HAZID report dated 1/15/98

Food Code	Crop Grp	Food Name	RESIDUE (ppm)	Adj.Factors #1	#2
1	13A	Blackberries	0.008000	1.000	1.000
2	13A	Boysenberries	0.008000	1.000	1.000
3	13A	Dewberries	0.008000	1.000	1.000
4	13A	Loganberries	0.008000	1.000	1.000
5	13A	Raspberries	0.008000	1.000	1.000
6	13A	Youngberries	0.008000	1.000	1.000
7	13B	Blueberries	0.008000	1.000	1.000
8	O	Cranberries	0.010000	1.000	0.340
9	O	Cranberries-juice	0.010000	0.310	0.340
10	13B	Currants	0.008000	1.000	1.000
11	13B	Elderberries	0.008000	1.000	1.000
12	13B	Gooseberries	0.008000	1.000	1.000
13	O	Grapes	0.008000	1.000	1.000
14	O	Grapes-raisins	0.008000	1.000	1.000
15	O	Grapes-juice	0.008000	1.000	1.000
16	13B	Huckleberries	0.008000	1.000	1.000
17	O	Strawberries	0.008000	1.000	1.000
18	O	Juneberry	0.008000	1.000	1.000
19	O	Mulberries	0.008000	1.000	1.000
20	10	Citrus citron	0.008000	1.000	1.000
22	10	Grapefruit-peeled fruit	0.008000	1.000	1.000
23	10	Grapefruit-juice	0.008000	1.000	1.000
24	10	Kumquats	0.008000	1.000	1.000
26	10	Lemons-peeled fruit	0.008000	1.000	1.000
27	10	Lemons-peel	0.008000	1.000	1.000
28	10	Lemons-juice	0.008000	1.000	1.000
30	10	Limes-peeled fruit	0.008000	1.000	1.000
31	10	Limes-peel	0.008000	1.000	1.000
32	10	Limes-juice	0.008000	1.000	1.000
33	10	Oranges-juice-concentrate	0.008000	3.700	1.000
34	10	Oranges-peeled fruit	0.008000	1.000	1.000
35	10	Oranges-peel	0.008000	1.000	1.000
36	10	Oranges-juice	0.008000	1.000	1.000
37	10	Tangelos	0.008000	1.000	1.000
38	10	Tangerines	0.008000	1.000	1.000
39	10	Tangerines-juice	0.008000	1.000	1.000
40	14	Almonds	0.008000	1.000	1.000
41	14	Brazil nuts	0.008000	1.000	1.000
42	14	Cashews	0.008000	1.000	1.000
43	14	Chestnuts	0.008000	1.000	1.000
44	14	Filberts (hazelnuts)	0.008000	1.000	1.000
45	14	Hickory nuts	0.008000	1.000	1.000
46	14	Macadamia nuts (bush nuts)	0.010000	1.000	0.010
47	14	Pecans	0.008000	1.000	1.000
48	14	Walnuts	0.008000	1.000	1.000
49	14	Butter nuts	0.008000	1.000	1.000
50	O	Pistachio nuts	0.008000	1.000	1.000
51	14	Beechnuts	0.008000	1.000	1.000

52	11	Apples	0.008000	1.000	1.000
53	11	Apples-dried	0.008000	1.000	1.000
54	11	Apples-juice/cider	0.008000	1.000	1.000
55	11	Crabapples	0.008000	1.000	1.000
56	11	Pears	0.008000	1.000	1.000
57	11	Pears-dried	0.008000	1.000	1.000
58	11	Quinces	0.008000	1.000	1.000
59	12	Apricots	0.008000	1.000	1.000
60	12	Apricots-dried	0.008000	1.000	1.000
61	12	Cherries	0.008000	1.000	1.000
62	12	Cherries-dried	0.008000	1.000	1.000
63	12	Cherries-juice	0.008000	1.000	1.000
64	12	Nectarines	0.008000	1.000	1.000
65	12	Peaches	0.008000	1.000	1.000
66	12	Peaches-dried	0.008000	1.000	1.000
67	12	Plums (damsons)	0.008000	1.000	1.000
68	12	Plums-prunes (dried)	0.008000	1.000	1.000
69	12	Plums/prune-juice	0.008000	1.000	1.000
70	O	Avocados	0.008000	1.000	1.000
72	O	Bananas	0.008000	1.000	1.000
73	O	Bananas-dried	0.008000	1.000	1.000
74	O	Coconut	0.008000	1.000	1.000
75	O	Coconut-dried (copra)	0.008000	1.000	1.000
76	O	Coconut-water	0.008000	1.000	1.000
77	O	Dates	0.008000	1.000	1.000
78	O	Figs	0.008000	1.000	1.000
79	O	Guava	0.008000	1.000	1.000
80	O	Mangoes	0.008000	1.000	1.000
81	11	Loquats	0.008000	1.000	1.000
82	O	Olives	0.008000	1.000	1.000
84	O	Papayas-pulp	0.008000	1.000	1.000
85	O	Papayas-dried	0.008000	1.000	1.000
86	O	Papayas-juice	0.008000	1.000	1.000
87	O	Pawpaws	0.008000	1.000	1.000
88	O	Persimmons	0.008000	1.000	1.000
89	O	Pineapples-peeled fruit	0.008000	1.000	1.000
90	O	Pineapples-dried	0.008000	1.000	1.000
91	O	Pineapples-juice	0.008000	1.000	1.000
92	O	Passion fruit (granadilla)	0.008000	1.000	1.000
93	O	Pomegranates	0.008000	1.000	1.000
94	O	Plantains-ripe	0.008000	1.000	1.000
95	O	Lychees (litchi)/fresh	0.008000	1.000	1.000
96	O	Lychee-dried	0.008000	1.000	1.000
97	O	Kiwi fruit	0.008000	1.000	1.000
98	O	Acerola	0.008000	1.000	1.000
99	O	Ginkgo nuts	0.008000	1.000	1.000
100	O	Maney (mammee apple)	0.008000	1.000	1.000
101	O	Pitanga (surinam cherry)	0.008000	1.000	1.000
102	O	Soursop (annona muricata)	0.008000	1.000	1.000
103	O	Sugar apples (sweetsop)	0.008000	1.000	1.000
104	O	Bread fruit	0.008000	1.000	1.000
105	O	Bread nuts	0.008000	1.000	1.000
106	O	Carambola (starfruit)	0.008000	1.000	1.000
107	O	Cherimoya	0.008000	1.000	1.000
108	O	Longan fruit	0.008000	1.000	1.000
109	O	Genip (spanish lime)	0.008000	1.000	1.000
110	O	Chocolate-cocoa butter	0.008000	1.000	1.000
111	O	Chocolate	0.008000	1.000	1.000
112	O	Coffee	0.008000	1.000	1.000
113	O	Tea	0.008000	1.000	1.000

114	1AB	Chicory	0.008000	1.000	1.000
115	19B	Anise	0.008000	1.000	1.000
116	19A	Basil	0.008000	1.000	1.000
117	19B	Caraway	0.008000	1.000	1.000
118	19B	Cassia	0.008000	1.000	1.000
119	19B	Cinnamon	0.008000	1.000	1.000
120	19B	Clove	0.008000	1.000	1.000
121	19B	Coriander	0.008000	1.000	1.000
122	19B	Cumin	0.008000	1.000	1.000
123	19A	Dill	0.008000	1.000	1.000
124	1CD	Ginger	0.008000	1.000	1.000
125	O	Hops	0.008000	1.000	1.000
126	1AB	Horseradish	0.008000	1.000	1.000
127	19A	Rosemary	0.008000	1.000	1.000
128	19A	Marjoram	0.008000	1.000	1.000
129	19A	Oregano	0.008000	1.000	1.000
130	19B	Mustard seed	0.008000	1.000	1.000
131	19B	Nutmeg	0.008000	1.000	1.000
132	19B	Mace	0.008000	1.000	1.000
133	19A	Sage	0.008000	1.000	1.000
134	19A	Savory	0.008000	1.000	1.000
135	19A	Bay	0.008000	1.000	1.000
136	19A	Thyme	0.008000	1.000	1.000
137	1CD	Turmeric	0.008000	1.000	1.000
138	19B	Allspice	0.008000	1.000	1.000
139	8	Paprika	0.200000	1.000	0.240
140	19B	Poppy	0.008000	1.000	1.000
141	9A	Melons-cantaloupes-juice	0.008000	1.000	1.000
142	9A	Melons-cantaloupes-pulp	0.008000	1.000	1.000
143	9A	Casabas	0.008000	1.000	1.000
144	9A	Crenshaws	0.008000	1.000	1.000
145	9A	Melons-honeydew	0.008000	1.000	1.000
146	9A	Melons-persian	0.008000	1.000	1.000
147	9A	Watermelon	0.008000	1.000	1.000
148	9B	Cucumbers	0.008000	1.000	1.000
149	9B	Pumpkin	0.008000	1.000	1.000
150	9B	Squash-summer	0.008000	1.000	1.000
151	9B	Squash-winter	0.008000	1.000	1.000
152	9B	Bitter melon	0.008000	1.000	1.000
153	O	Towelgourd	0.008000	1.000	1.000
154	8	Eggplant	0.008000	1.000	1.000
155	8	Peppers-sweet(garden)	0.200000	1.000	0.240
156	8	Peppers-chilli incl jalapeno	0.200000	1.000	0.240
157	8	Peppers-other	0.200000	1.000	0.240
158	8	Pimientos	0.200000	1.000	0.240
159	8	Tomatoes-whole	0.008000	1.000	1.000
160	8	Tomatoes-juice	0.008000	1.000	1.000
161	8	Tomatoes-puree	0.008000	1.000	1.000
162	8	Tomatoes-paste	0.008000	1.000	1.000
163	8	Tomatoes-catsup	0.008000	1.000	1.000
164	8	Groundcherries	0.008000	1.000	1.000
165	2	Beets-garden-tops(greens)	0.008000	1.000	1.000
166	4B	Celery	0.070000	1.000	0.490
167	4A	Chicory(french/belgian endive)	0.008000	1.000	1.000
168	5A	Broccoli	0.008000	1.000	1.000
169	5A	Brussels sprouts			
		14-Boiled	0.010000	1.000	0.110
		42-Frozen: Cooked	0.010000	0.720	0.110
170	5A	Cabbage-green and red	0.008000	1.000	1.000
171	5A	Cauliflower			

		11-Uncooked	0.010000	1.000	0.110
		12-Cooked: NFS	0.010000	1.000	0.110
		14-Boiled	0.010000	1.000	0.110
		15-Fried	0.010000	1.000	0.110
		42-Frozen: Cooked	0.010000	0.720	0.110
172	5B	Collards	0.008000	1.000	1.000
174	5B	Kale	0.008000	1.000	1.000
175	5A	Kohlrabi	0.008000	1.000	1.000
176	4A	Lettuce-leafy varieties	0.008000	1.000	1.000
177	4A	Dandelion-greens	0.008000	1.000	1.000
178	4A	Endive-curley and escarole	0.008000	1.000	1.000
179	19B	Fennel	0.008000	1.000	1.000
180	4A	Cress-garden/field	0.008000	1.000	1.000
181	O	Artichokes-globe	0.008000	1.000	1.000
183	5B	Mustard greens	0.008000	1.000	1.000
184	4A	Parsley	0.008000	1.000	1.000
185	4B	Rhubarb	0.008000	1.000	1.000
186	4A	Spinach	0.008000	1.000	1.000
187	4A	Swiss chard	0.008000	1.000	1.000
188	2	Turnips-tops	0.008000	1.000	1.000
189	O	Watercress	0.008000	1.000	1.000
190	2	Taro-greens	0.008000	1.000	1.000
191	4A	Cress-upland	0.008000	1.000	1.000
192	4A	Lettuce-head varieties	0.010000	1.000	0.470
193	O	Lambsquarter	0.008000	1.000	1.000
195	O	Grapes-leaves	0.008000	1.000	1.000
197	1AB	Beets-garden-roots	0.008000	1.000	1.000
198	1AB	Carrots	0.008000	1.000	1.000
199	1AB	Celeriac	0.008000	1.000	1.000
200	19A	Chives	0.008000	1.000	1.000
201	1CD	Taro-root	0.008000	1.000	1.000
202	3	Garlic	0.008000	1.000	1.000
204	3	Leeks	0.008000	1.000	1.000
205	3	Onions-dry-bulb (cipollini)	0.008000	1.000	1.000
206	3	Onions-dehydrated or dried	0.008000	1.000	1.000
207	1C	Potatoes/white-whole	0.008000	1.000	1.000
208	1C	Potatoes/white-unspecified	0.008000	1.000	1.000
209	1C	Potatoes/white-peeled	0.008000	1.000	1.000
210	1C	Potatoes/white-dry	0.008000	1.000	1.000
211	1C	Potatoes/white-peel only	0.008000	1.000	1.000
212	1AB	Radishes-roots	0.008000	1.000	1.000
213	2	Radishes-tops	0.008000	1.000	1.000
214	1AB	Rutabagas-roots	0.008000	1.000	1.000
215	2	Rutabagas-tops	0.008000	1.000	1.000
216	1AB	Salsify(oyster plant)	0.008000	1.000	1.000
217	3	Shallots	0.008000	1.000	1.000
218	1CD	Sweet potatoes (incl yams)	0.008000	1.000	1.000
219	1AB	Turnips-roots	0.008000	1.000	1.000
220	1AB	Parsnips	0.008000	1.000	1.000
221	1CD	Yambean tuber (jicama)	0.008000	1.000	1.000
222	1CD	Cassava (yuca blanca)	0.008000	1.000	1.000
224	1CD	Yautia (tannier)	0.008000	1.000	1.000
225	1AB	Parsley roots	0.008000	1.000	1.000
226	O	Water chestnuts	0.008000	1.000	1.000
227	6C	Beans-dry-great northern	0.050000	0.500	0.020
228	6C	Beans-dry-kidney			
		12-Cooked: NFS	0.013000	0.500	0.020
		13-Baked	0.050000	0.500	0.020
		14-Boiled	0.050000	0.500	0.020
		32-Canned: Cooked	0.013000	0.190	0.020

		34-Canned: Boiled	0.013000	0.190	0.020
		42-Frozen: Cooked	0.050000	0.500	0.020
229	6C	Beans-dry-lima			
		14-Boiled	0.050000	0.500	0.020
		32-Canned: Cooked	0.013000	0.190	0.020
230	6C	Beans-dry-navy (pea)			
		32-Canned: Cooked	0.013000	0.190	0.020
		34-Canned: Boiled	0.013000	0.190	0.020
231	6C	Beans-dry-other			
		12-Cooked: NFS	0.050000	0.500	0.020
		13-Baked	0.050000	0.500	0.020
		14-Boiled	0.050000	0.500	0.020
		15-Fried	0.050000	0.500	0.020
		34-Canned: Boiled	0.013000	0.190	0.020
232	6C	Beans-dry-pinto			
		12-Cooked: NFS	0.050000	0.500	0.020
		13-Baked	0.050000	0.500	0.020
		14-Boiled	0.050000	0.500	0.020
		15-Fried	0.050000	0.500	0.020
		32-Canned: Cooked	0.013000	0.190	0.020
		42-Frozen: Cooked	0.050000	0.500	0.020
233	6B	Beans-succulent-lima			
		11-Uncooked	0.050000	1.000	0.290
		12-Cooked: NFS	0.050000	0.500	0.290
		14-Boiled	0.050000	0.500	0.290
		32-Canned: Cooked	0.013000	0.190	0.350
		42-Frozen: Cooked	0.050000	0.500	0.350
		44-Frozen: Boiled	0.050000	0.500	0.350
234	6A	Beans-succulent-green			
		11-Uncooked	0.050000	1.000	0.290
		12-Cooked: NFS	0.050000	0.500	0.290
		14-Boiled	0.050000	0.500	0.290
		31-Canned: NFS	0.013000	0.190	0.350
		32-Canned: Cooked	0.013000	0.190	0.350
		34-Canned: Boiled	0.013000	0.190	0.350
		42-Frozen: Cooked	0.050000	0.500	0.350
		44-Frozen: Boiled	0.050000	0.500	0.350
		51-Cured: NFS (smoked/pickled/saltd)	0.050000	0.500	0.350
235	6A	Beans-succulent-other			
		34-Canned: Boiled	0.013000	0.190	0.350
236	6A	Beans-succulent-yellow/wax			
		14-Boiled	0.050000	0.500	0.290
		32-Canned: Cooked	0.013000	0.190	0.350
		42-Frozen: Cooked	0.050000	0.500	0.350
237	15	Corn/pop	0.008000	1.000	1.000
238	15	Corn/sweet	0.008000	1.000	1.000
240	6C	Peas (garden)-dry	0.008000	1.000	1.000
241	6AB	Peas (garden)-green	0.008000	1.000	1.000
243	6C	Lentils	0.008000	1.000	1.000
244	6C	Mung beans (sprouts)	0.050000	1.000	0.290
245	O	Okra	0.008000	1.000	1.000
247	O	Carob	0.008000	1.000	1.000
248	O	Alfalfa sprouts	0.008000	1.000	1.000
249	6C	Beans-dry-broadbeans			
		14-Boiled	0.050000	0.500	0.020
250	6B	Beans-succulent-broadbeans	0.050000	1.000	0.290
251	6C	Beans-dry-pigeon beans	0.050000	1.000	0.020
252	O	Sesame seeds	0.008000	1.000	1.000
253	6	Beans-unspecified	0.050000	1.000	0.290

254	O	Pinenuts	0.008000	1.000	1.000
255	6A	Soybeans-sprouted seeds	1.000000	0.330	0.010
256		Beans-dry-hyacinth	0.050000	0.500	0.020
257		Beans-succulent-hyacinth	0.050000	1.000	0.290
258	6C	Beans-dry-blackeye peas/cowpea			
		14-Boiled	0.050000	0.500	0.020
259	6C	Beans-dry-garbanzo/chick pea			
		12-Cooked: NFS	0.013000	0.500	0.020
		14-Boiled	0.050000	0.500	0.020
		15-Fried	0.050000	0.500	0.020
		32-Canned: Cooked	0.013000	0.190	0.020
261	O	Mushrooms	0.008000	1.000	1.000
262	3	Onions-green	0.008000	1.000	1.000
263	O	Poke greens	0.008000	1.000	1.000
264	O	Bamboo shoots	0.008000	1.000	1.000
265	15	Barley	0.008000	1.000	1.000
266	15	Corn grain-endosperm	0.008000	1.000	1.000
267	15	Corn grain-bran	0.008000	1.000	1.000
268	15	Corn grain/sugar/hfcs	0.008000	1.000	1.000
269	15	Oats	0.008000	1.000	1.000
270	15	Rice-rough (brown)	0.008000	1.000	1.000
271	15	Rice-milled (white)	0.008000	1.000	1.000
272	15	Rye-rough	0.008000	1.000	1.000
273	15	Rye-germ	0.008000	1.000	1.000
274	15	Rye-flour	0.008000	1.000	1.000
275	15	Sorghum (including milo)	0.008000	1.000	1.000
276	15	Wheat-rough	0.008000	1.000	1.000
277	15	Wheat-germ	0.008000	1.000	1.000
278	15	Wheat-bran	0.008000	1.000	1.000
279	15	Wheat-flour	0.008000	1.000	1.000
280	15	Millet	0.008000	1.000	1.000
281	O	Honey	0.008000	1.000	1.000
282	1A	Sugar-beet	0.008000	1.000	1.000
283	O	Sugar-cane	0.008000	1.000	1.000
284	O	Sugar-cane/molasses	0.008000	1.000	1.000
286	15	Buckwheat	0.008000	1.000	1.000
287	6C	Guar beans	0.050000	1.000	1.000
288	O	Castor beans	0.050000	1.000	1.000
289	15	Corn grain-oil	0.008000	1.000	1.000
290	O	Cottonseed-oil	0.330000	0.200	0.090
291	O	Cottonseed-meal	0.330000	1.410	0.090
292	O	Flax seed	0.008000	1.000	1.000
293	O	Peanuts-oil	0.010000	0.130	0.100
294	O	Safflower-seed	0.008000	1.000	1.000
295	O	Safflower-oil	0.008000	1.000	1.000
296	O	Sesame-oil	0.008000	1.000	1.000
297	6A	Soybeans-oil	1.000000	0.007	0.010
298	O	Sunflower-oil	0.008000	1.000	1.000
299	O	Coconut-oil	0.008000	1.000	1.000
300	O	Olive oil	0.008000	1.000	1.000
302	O	Palm oil	0.008000	1.000	1.000
303	6A	Soybean-other	1.000000	1.000	0.010
304	6A	Soybeans-mature seeds dry	1.000000	1.000	0.010
305	6A	Soybeans-flour (full fat)	1.000000	0.380	0.010
306	6A	Soybeans-flour (low fat)	1.000000	0.380	0.010
307	6A	Soybeans-flour (defatted)	1.000000	0.380	0.010
308	O	Oriental vegetables/non-leafy	0.008000	1.000	1.000
309	O	Seeds (misc.)	0.008000	1.000	1.000
310	O	Peppermint	9.500000	1.000	0.310
311	O	Peppermint-oil	0.010000	1.000	0.310

312	O	Spearmint	9.500000	1.000	0.310
313	O	Spearmint-oil	0.010000	1.000	0.310
314	O	Vinegar	0.008000	1.000	1.000
315	O	Grapes-wine and sherry	0.008000	1.000	1.000
316	O	Alcohol-distilled	0.008000	1.000	1.000
317	O	Gelatin	0.008000	1.000	1.000
318	D	Milk-nonfat solids	0.000500	1.000	0.130
319	D	Milk-fat solids	0.000500	1.000	0.130
320	D	Milk sugar (lactose)	0.000500	1.000	0.130
321	M	Beef-meat byproducts	0.000033	1.000	1.000
322	M	Beef-other organ meats	0.000033	1.000	1.000
323	M	Beef-dried	0.000015	1.920	1.000
324	M	Beef-fat w/o bones	0.000009	1.000	1.000
325	M	Beef-kidney	0.000033	1.000	1.000
326	M	Beef-liver	0.000004	1.000	1.000
327	M	Beef-lean (fat/free) w/o bones	0.000015	1.000	1.000
328	M	Goat-meat byproducts	0.000033	1.000	1.000
329	M	Goat-other organ meats	0.000033	1.000	1.000
330	M	Goat-fat w/o bone	0.000009	1.000	1.000
331	M	Goat-kidney	0.000033	1.000	1.000
332	M	Goat-liver	0.000004	1.000	1.000
333	M	Goat-lean (fat/free) w/o bone	0.000015	1.000	1.000
334	M	Horsemeat	0.000033	1.000	1.000
336	M	Sheep-meat byproducts	0.000033	1.000	1.000
337	M	Sheep-other organ meats	0.000033	1.000	1.000
338	M	Sheep-fat w/o bone	0.000009	1.000	1.000
339	M	Sheep-kidney	0.000033	1.000	1.000
340	M	Sheep-liver	0.000004	1.000	1.000
341	M	Sheep-lean (fat free) w/o bone	0.000015	1.000	1.000
342	M	Pork-meat byproducts	0.000033	1.000	1.000
343	M	Pork-other organ meats	0.000033	1.000	1.000
344	M	Pork-fat w/o bone	0.000009	1.000	1.000
345	M	Pork-kidney	0.000033	1.000	1.000
346	M	Pork-liver	0.000004	1.000	1.000
347	M	Pork-lean (fat free) w/o bone	0.000015	1.000	1.000
355	P	Turkey-byproducts	0.000001	1.000	1.000
356	P	Turkey-giblets (liver)	0.000001	1.000	1.000
357	P	Turkey--fat w/o bones	0.000001	1.000	1.000
358	P	Turkey- lean/fat free w/o bones	0.000007	1.000	1.000
360	P	Poultry-other-lean (fat free) w/	0.000007	1.000	1.000
361	P	Poultry-other-giblets(liver)	0.000001	1.000	1.000
362	P	Poultry-other-fat w/o bones	0.000001	1.000	1.000
363	P	Eggs-whole	0.000022	1.000	1.000
364	P	Eggs-white only	0.000022	1.000	1.000
365	P	Eggs-yolk only	0.000022	1.000	1.000
367	P	Chicken-giblets(liver)	0.000001	1.000	1.000
368	P	Chicken-fat w/o bones	0.000001	1.000	1.000
369	P	Chicken-lean/fat free w/o bones	0.000007	1.000	1.000
377	11	Apples-juice-concentrate	0.008000	3.000	1.000
378	O	Bananas-juice	0.008000	1.000	1.000
379	1A	Sugar-beet-molasses	0.008000	1.000	1.000
380	13A	Blackberries-juice	0.008000	1.000	1.000
383	5B	Cabbage-savoy	0.008000	1.000	1.000
384	4B	Celery juice	0.070000	1.000	0.490
385	P	Chicken-giblets (excl. liver)	0.000001	1.000	1.000
387	O	Coconut-milk	0.008000	1.000	1.000
388	15	Corn grain/sugar-molasses	0.008000	1.000	1.000
389	O	Cranberries-juice-concentrate	0.010000	0.930	0.340
392	O	Grapes-juice-concentrate	0.008000	3.000	1.000
393	O	Guava-juice	0.008000	1.000	1.000

397	9B	Okra/chinese (luffa)	0.008000	1.000	1.000
398	D	Milk-based water	0.000500	1.000	0.130
399	15	Oats-bran	0.008000	1.000	1.000
401	O	Passion fruit-juice	0.008000	1.000	1.000
402	12	Peaches-juice	0.008000	1.000	1.000
403	O	Peanuts-butter	0.010000	1.890	0.100
404	11	Pears-juice	0.008000	1.000	1.000
405	6B	Peas-succulent/blackeye/cowpea	0.008000	1.000	1.000
406	O	Pineapples-juice-concentrate	0.008000	3.700	1.000
407	1AB	Radishes-japanese (daiken)	0.008000	1.000	1.000
408	15	Rice-bran	0.008000	1.000	1.000
409	15	Rice-wild	0.008000	1.000	1.000
410	12	Apricot juice	0.008000	1.000	1.000
414	O	Soursop-juice	0.008000	1.000	1.000
415	9B	Squash-spaghetti	0.008000	1.000	1.000
416	O	Strawberries-juice	0.008000	1.000	1.000
417	O	Sunflower-seeds	0.008000	1.000	1.000
418	2	Sweet potatos-leaves	0.008000	1.000	1.000
420	10	Tangerines-juice-concentrate	0.008000	3.170	1.000
423	8	Tomatoes-dried	0.008000	14.300	1.000
436	9A	Watermelon-juice	0.008000	1.000	1.000
441	10	Grapefruit-juice-concentrate	0.008000	8.200	1.000
442	10	Lemons-juice-concentrate	0.008000	5.700	1.000
443	10	Limes-juice-concentrate	0.008000	6.000	1.000
448	10	Grapefruit peel	0.008000	1.000	1.000
449	P	Turkey-other organ meats	0.000001	1.000	1.000
452	5B	Bok choy	0.008000	1.000	1.000
467	19B	Celery seed	0.070000	1.000	1.000
480	O	Plantains-green	0.008000	1.000	1.000
481	O	Plantains-dried	0.008000	3.900	1.000
482	O	Soybeans-protein isolate	1.000000	1.000	0.010
484	O	Radishes-oriental	0.008000	1.000	1.000
496	O	Nopales	0.008000	1.000	1.000
911	O	Molasses-nfs	0.008000	1.000	1.000
940	O	Peanuts-hulled	0.010000	1.000	0.100

U.S. Environmental Protection Agency Ver. 6.74
DEEM Chronic analysis for ACEPHATE (1989-92 data)
Residue file name: D:\103301fin.R96 Adjustment factor #2 used.
Analysis Date 09-27-1999/03:31:40 Residue file dated: 09-27-1999/03:30:44/8
Reference dose (RfD, CHRONIC) = .0012 mg/kg bw/day
COMMENT 1: Anticipated Residue file - Use in registration and reregistration chronic runs. HAZID report dated 1/15/98

Total exposure by population subgroup

Population Subgroup	Total Exposure mg/kg body wt/day	Percent of Rfd
U.S. Population (total)	0.000089	7.4%
U.S. Population (spring season)	0.000087	7.2%
U.S. Population (summer season)	0.000090	7.5%
U.S. Population (autumn season)	0.000093	7.7%
U.S. Population (winter season)	0.000088	7.3%
Northeast region	0.000095	8.0%
Midwest region	0.000087	7.3%
Southern region	0.000084	7.0%
Western region	0.000095	7.9%
Hispanics	0.000091	7.6%
Non-hispanic whites	0.000089	7.4%
Non-hispanic blacks	0.000086	7.2%
Non-hisp/non-white/non-black)	0.000110	9.2%
All infants (< 1 year)	0.000185	15.4%
Nursing infants	0.000081	6.8%
Non-nursing infants	0.000229	19.1%
Children 1-6 yrs	0.000209	17.4%
Children 7-12 yrs	0.000131	10.9%
Females 13-19(not preg or nursing)	0.000072	6.0%
Females 20+ (not preg or nursing)	0.000067	5.6%
Females 13-50 yrs	0.000068	5.6%
Females 13+ (preg/not nursing)	0.000071	5.9%
Females 13+ (nursing)	0.000102	8.5%
Males 13-19 yrs	0.000080	6.6%
Males 20+ yrs	0.000068	5.6%
Seniors 55+	0.000069	5.8%
Pacific Region	0.000096	8.0%

ATTACHMENT 4: Methamidophos (Acephate application only)Chronic Assessment

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U.S. Environmental Protection Agency                                  Ver. 6.74
DEEM Chronic analysis for METHAMIDOPHOS                             1989-92 data
Residue file: D:\methchronic2.R96                                 Adjust. #2 used
Analysis Date 09-27-1999            Residue file dated: 09-27-1999/04:44:43/8
Reference dose (RfD) = 0.0001 mg/kg bw/day
Comment:Chronic Analysis - Reregistration File .  HAZID report dated 2/21/98
--------------------------------------------------------------------------------
Food Crop                                  RESIDUE         Adj.Factors
Code  Grp  Food Name                        (ppm)           #1     #2
---- ---- ------------------------------  ----------      ------ ------
   8 O    Cranberries                       0.100000       0.770  0.340
   9 O    Cranberries-juice                 0.100000       1.100  0.340
  46 14   Macadamia nuts (bush nuts)        0.010000       1.000  0.010
 155 8    Peppers-sweet(garden)
             11-Uncooked                    0.310000       0.770  0.240
             12-Cooked: NFS                 0.310000       0.595  0.240
             13-Baked                       0.310000       0.595  0.240
             14-Boiled                      0.310000       0.595  0.240
             31-Canned: NFS                 0.310000       0.595  0.240
             32-Canned: Cooked              0.310000       0.595  0.240
             34-Canned: Boiled              0.310000       0.595  0.240
             42-Frozen: Cooked              0.310000       0.595  0.240
             51-Cured: NFS (smoked/pickled/saltd)
                                            0.310000       0.595  0.240
 156 8    Peppers-chilli incl jalapeno
             11-Uncooked                    0.450000       0.770  0.240
             12-Cooked: NFS                 0.450000       0.595  0.240
             13-Baked                       0.450000       0.595  0.240
             14-Boiled                      0.450000       0.595  0.240
             15-Fried                       0.450000       0.595  0.240
             31-Canned: NFS                 0.450000       0.770  0.240
             32-Canned: Cooked              0.450000       0.595  0.240
             33-Canned: Baked               0.450000       0.595  0.240
             34-Canned: Boiled              0.450000       0.595  0.240
             42-Frozen: Cooked              0.450000       0.595  0.240
             51-Cured: NFS (smoked/pickled/saltd)
                                            0.450000       0.595  0.240
             52-Cured: Cooked(smokd/pickld/saltd)
                                            0.450000       0.595  0.240
             60-Canned: Cured               0.450000       0.595  0.240
 157 8    Peppers-other                     0.450000       0.770  0.240
 166 4B   Celery                            0.090000       0.770  0.490
 169 5A   Brussels sprouts
             14-Boiled                      0.050000       0.535  0.110
             42-Frozen: Cooked              0.050000       0.535  0.110
 171 5A   Cauliflower
             11-Uncooked                    0.130000       0.770  0.110
             12-Cooked: NFS                 0.130000       0.535  0.110
             14-Boiled                      0.130000       0.535  0.110
             15-Fried                       0.130000       0.535  0.110
             42-Frozen: Cooked              0.130000       0.535  0.110
 192 4A   Lettuce-head varieties            0.100000       0.770  0.470
 227 6C   Beans-dry-great northern          0.160000       0.770  0.020
 228 6C   Beans-dry-kidney
             12-Cooked: NFS                 0.050000       0.638  0.020
             13-Baked                       0.050000       0.638  0.020
             14-Boiled                      0.050000       0.638  0.020
             32-Canned: Cooked              0.030000       0.697  0.020
             34-Canned: Boiled              0.030000       0.697  0.020
             42-Frozen: Cooked              0.050000       0.638  0.020
 229 6C   Beans-dry-lima
             14-Boiled                      0.050000       0.638  0.020
             32-Canned: Cooked              0.030000       0.697  0.020
 230 6C   Beans-dry-navy (pea)
             32-Canned: Cooked              0.030000       0.697  0.020
             34-Canned: Boiled              0.030000       0.697  0.020
 231 6C   Beans-dry-other
             12-Cooked: NFS                 0.050000       0.638  0.020
             13-Baked                       0.050000       0.638  0.020
             14-Boiled                      0.050000       0.638  0.020
             15-Fried                       0.050000       0.638  0.020
             34-Canned: Boiled              0.030000       0.697  0.020
 232 6C   Beans-dry-pinto
             12-Cooked: NFS                 0.050000       0.638  0.020
             13-Baked                       0.050000       0.638  0.020
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		14-Boiled	0.050000	0.638	0.020
		15-Fried	0.050000	0.638	0.020
		32-Canned: Cooked	0.030000	0.697	0.020
		42-Frozen: Cooked	0.050000	0.638	0.020
233	6B	Beans-succulent-lima			
		11-Uncooked	0.160000	0.770	0.290
		12-Cooked: NFS	0.050000	0.638	0.290
		14-Boiled	0.050000	0.638	0.290
		32-Canned: Cooked	0.030000	0.697	0.350
		42-Frozen: Cooked	0.050000	0.638	0.350
		44-Frozen: Boiled	0.050000	0.638	0.350
234	6A	Beans-succulent-green			
		11-Uncooked	0.160000	0.770	0.290
		12-Cooked: NFS	0.050000	0.638	0.290
		14-Boiled	0.050000	0.638	0.290
		31-Canned: NFS	0.030000	0.697	0.350
		32-Canned: Cooked	0.030000	0.697	0.350
		34-Canned: Boiled	0.030000	0.697	0.350
		42-Frozen: Cooked	0.050000	0.638	0.350
		44-Frozen: Boiled	0.050000	0.638	0.350
		51-Cured: NFS (smoked/pickled/saltd)	0.050000	0.638	0.350
235	6A	Beans-succulent-other			
		34-Canned: Boiled	0.030000	0.697	0.350
236	6A	Beans-succulent-yellow/wax			
		14-Boiled	0.050000	0.638	0.290
		32-Canned: Cooked	0.030000	0.697	0.350
		42-Frozen: Cooked	0.030000	0.638	0.350
249	6C	Beans-dry-broadbeans			
		14-Boiled	0.050000	0.638	0.020
250	6B	Beans-succulent-broadbeans	0.160000	0.770	0.290
251	6C	Beans-dry-pigeon beans	0.160000	0.770	0.020
253	6	Beans-unspecified	0.160000	0.770	0.290
255	6A	Soybeans-sprouted seeds	0.008000	0.330	0.010
256		Beans-dry-hyacinth	0.160000	0.770	0.020
257		Beans-succulent-hyacinth	0.160000	0.770	0.290
258	6C	Beans-dry-blackeye peas/cowpea			
		14-Boiled	0.050000	0.638	0.020
259	6C	Beans-dry-garbanzo/chick pea			
		12-Cooked: NFS	0.050000	0.638	0.020
		14-Boiled	0.050000	0.638	0.020
		15-Fried	0.050000	0.638	0.020
		32-Canned: Cooked	0.030000	0.697	0.020
290	O	Cottonseed-oil	0.040000	1.000	0.090
291	O	Cottonseed-meal	0.040000	1.000	0.090
293	O	Peanuts-oil	0.010000	1.000	0.050
297	6A	Soybeans-oil	0.008000	1.000	0.010
303	6A	Soybean-other	0.008000	0.770	0.010
304	6A	Soybeans-mature seeds dry	0.008000	0.770	0.010
305	6A	Soybeans-flour (full fat)	0.008000	1.000	0.010
306	6A	Soybeans-flour (low fat)	0.008000	1.000	0.010
307	6A	Soybeans-flour (defatted)	0.008000	1.000	0.010
310	O	Peppermint	2.000000	0.770	0.310
311	O	Peppermint-oil	2.000000	1.000	0.310
312	O	Spearmint	2.000000	0.770	0.310
313	O	Spearmint-oil	2.000000	1.000	0.310
384	4B	Celery juice	0.090000	1.000	0.490
389	O	Cranberries-juice-concentrate	0.100000	3.300	0.340
403	O	Peanuts-butter	0.010000	1.890	0.050
467	19B	Celery seed	0.090000	1.000	0.490
482	O	Soybeans-protein isolate	0.008000	1.000	0.010
940	O	Peanuts-hulled	0.010000	1.000	0.050

ATTACHMENT 4: Methamidophos (Acephate application only)Chronic Assessment

U.S. Environmental Protection Agency Ver. 6.74
DEEM Chronic analysis for METHAMIDOPHOS (1989-92 data)
Residue file name: D:\methchronic2.R96 Adjustment factor #2 used.
Analysis Date 09-27-1999/04:45:16 Residue file dated: 09-27-1999/04:44:43/8
Reference dose (RfD, CHRONIC) = .0001 mg/kg bw/day
COMMENT 1: Chronic Analysis - Reregistration File . HAZID report dated 2/21/98

Total exposure by population subgroup

Population Subgroup	Total Exposure mg/kg body wt/day	Total Exposure Percent of Rfd
U.S. Population (total)	0.000016	15.5%
U.S. Population (spring season)	0.000016	15.7%
U.S. Population (summer season)	0.000015	15.0%
U.S. Population (autumn season)	0.000015	14.5%
U.S. Population (winter season)	0.000017	16.9%
Northeast region	0.000016	16.2%
Midwest region	0.000014	13.6%
Southern region	0.000015	14.8%
Western region	0.000018	18.3%
Hispanics	0.000017	17.3%
Non-hispanic whites	0.000016	16.1%
Non-hispanic blacks	0.000010	10.1%
Non-hisp/non-white/non-black)	0.000017	16.9%
All infants (< 1 year)	0.000004	4.0%
Nursing infants	0.000001	0.6%
Non-nursing infants	0.000005	5.4%
Children 1-6 yrs	0.000019	18.6%
Children 7-12 yrs	0.000018	18.2%
Females 13-19(not preg or nursing)	0.000012	12.5%
Females 20+ (not preg or nursing)	0.000016	16.0%
Females 13-50 yrs	0.000016	15.5%
Females 13+ (preg/not nursing)	0.000013	12.7%
Females 13+ (nursing)	0.000019	19.3%
Males 13-19 yrs	0.000012	12.4%
Males 20+ yrs	0.000015	14.7%
Seniors 55+	0.000015	14.7%
Pacific Region	0.000019	18.5%

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U.S. Environmental Protection Agency                                  Ver. 6.73
DEEM Acute analysis for ACEPHATE                                    1989-92 data
Residue file name: D:\acephate1.R96                               Adjust. #2 used
Analysis Date 09-27-1999            Residue file dated: 09-27-1999/03:54:06/8
Reference dose (aRfD) = 0.005 mg/kg bw/day
Comment: Acephate Acute Run
--------------------------------------------------------------------------------
RDF indices and file names for Monte Carlo Analysis
 1  sbeanfrs.rdf
 2  sbeanpro.rdf
 3  brsprout.rdf
 4  caulif.rdf
 5  celeryhan.rdf
 6  celfrz.rdf
 7  cranberr.rdf
 8  letthans.rdf
 9  macadami.rdf
 10 nonbellpepperhan.rdf
 11 nonpepfrz.rdf
 12 pepperhans.rdf
 13 bellpepf.rdf
 14 milk.rdf
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Food	Crop Grp	Food Name	RESIDUE (ppm)	RDF #	Adj.Factors #1	Code #2
8	O	Cranberries	0.500000	7	1.000	1.000
9	O	Cranberries-juice	0.500000	7	0.310	1.000
46	14	Macadamia nuts (bush nuts)	0.050000	9	1.000	1.000
155	8	Peppers-sweet(garden)				
		11-Uncooked	4.000000	12	1.000	1.000
		12-Cooked: NFS	4.000000	12	1.000	1.000
		13-Baked	4.000000	12	1.000	1.000
		14-Boiled	4.000000	12	1.000	1.000
		31-Canned: NFS	4.000000	13	1.000	1.000
		32-Canned: Cooked	4.000000	13	1.000	1.000
		34-Canned: Boiled	4.000000	13	1.000	1.000
		42-Frozen: Cooked	4.000000	13	1.000	1.000
		51-Cured: NFS (smoked/p	4.000000	13	1.000	1.000
156	8	Peppers-chilli incl jalapeno				
		11-Uncooked	4.000000	10	1.000	1.000
		12-Cooked: NFS	4.000000	10	1.000	1.000
		13-Baked	4.000000	10	1.000	1.000
		14-Boiled	4.000000	10	1.000	1.000
		15-Fried	4.000000	10	1.000	1.000
		31-Canned: NFS	4.000000	11	1.000	1.000
		32-Canned: Cooked	4.000000	11	1.000	1.000
		33-Canned: Baked	4.000000	11	1.000	1.000
		34-Canned: Boiled	4.000000	11	1.000	1.000
		42-Frozen: Cooked	4.000000	11	1.000	1.000
		51-Cured: NFS (smoked/p	4.000000	11	1.000	1.000
		52-Cured: Cooked(smokd/	4.000000	11	1.000	1.000
		60-Canned: Cured	4.000000	11	1.000	1.000
157	8	Peppers-other				
		11-Uncooked	4.000000	10	1.000	1.000
158	8	Pimientos				
		12-Cooked: NFS	4.000000	10	1.000	1.000
		14-Boiled	4.000000	10	1.000	1.000
		31-Canned: NFS	4.000000	11	1.000	1.000
		60-Canned: Cured	4.000000	11	1.000	1.000
166	4B	Celery				
		11-Uncooked	10.000000	5	1.000	1.000
		12-Cooked: NFS	10.000000	5	1.000	1.000
		13-Baked	10.000000	5	1.000	1.000
		14-Boiled	10.000000	5	1.000	1.000
		15-Fried	10.000000	5	1.000	1.000
		31-Canned: NFS	10.000000	6	1.000	1.000
		32-Canned: Cooked	10.000000	6	1.000	1.000
		34-Canned: Boiled	10.000000	6	1.000	1.000
		42-Frozen: Cooked	10.000000	6	1.000	1.000
169	5A	Brussels sprouts				
		14-Boiled	3.000000	3	1.000	1.000
		42-Frozen: Cooked	3.000000	3	0.720	1.000
171	5A	Cauliflower				
		11-Uncooked	2.000000	4	1.000	1.000
		12-Cooked: NFS	2.000000	4	1.000	1.000

		14-Boiled	2.000000	4	1.000	1.000
		15-Fried	2.000000	4	1.000	1.000
		42-Frozen: Cooked	2.000000	4	0.720	1.000
192	4A	Lettuce-head varieties	10.000000	8	1.000	1.000
227	6C	Beans-dry-great northern				
		32-Canned: Cooked	0.000250	0	0.190	1.000
228	6C	Beans-dry-kidney				
		12-Cooked: NFS	0.000250	0	0.500	1.000
		13-Baked	0.000250	0	0.500	1.000
		14-Boiled	0.000250	0	0.500	1.000
		32-Canned: Cooked	0.000250	0	0.190	1.000
		34-Canned: Boiled	0.000250	0	0.190	1.000
		42-Frozen: Cooked	0.000250	0	0.500	1.000
229	6C	Beans-dry-lima				
		14-Boiled	0.000250	0	0.500	1.000
		32-Canned: Cooked	0.000250	0	0.190	1.000
230	6C	Beans-dry-navy (pea)				
		32-Canned: Cooked	0.000250	0	0.190	1.000
		34-Canned: Boiled	0.000250	0	0.190	1.000
231	6C	Beans-dry-other	0.000250	0	0.820	1.000
232	6C	Beans-dry-pinto				
		12-Cooked: NFS	0.000250	0	0.500	1.000
		13-Baked	0.000250	0	0.500	1.000
		14-Boiled	0.000250	0	0.500	1.000
		15-Fried	0.000250	0	0.500	1.000
		32-Canned: Cooked	0.000250	0	0.190	1.000
		42-Frozen: Cooked	0.000250	0	0.500	1.000
233	6B	Beans-succulent-lima				
		11-Uncooked	3.000000	1	1.000	1.000
		12-Cooked: NFS	3.000000	1	0.500	1.000
		14-Boiled	3.000000	1	0.500	1.000
		32-Canned: Cooked	3.000000	2	0.190	1.000
		42-Frozen: Cooked	3.000000	2	0.500	1.000
		44-Frozen: Boiled	3.000000	2	0.500	1.000
234	6A	Beans-succulent-green				
		11-Uncooked	3.000000	1	1.000	1.000
		12-Cooked: NFS	3.000000	1	0.500	1.000
		14-Boiled	3.000000	1	0.500	1.000
		31-Canned: NFS	3.000000	2	0.190	1.000
		32-Canned: Cooked	3.000000	2	0.190	1.000
		34-Canned: Boiled	3.000000	2	0.190	1.000
		42-Frozen: Cooked	3.000000	2	0.500	1.000
		44-Frozen: Boiled	3.000000	2	0.500	1.000
		51-Cured: NFS (smoked/p	3.000000	2	0.500	1.000
235	6A	Beans-succulent-other				
		34-Canned: Boiled	3.000000	2	0.190	1.000
236	6A	Beans-succulent-yellow/wax				
		14-Boiled	3.000000	1	0.500	1.000
		32-Canned: Cooked	3.000000	2	0.190	1.000
		42-Frozen: Cooked	3.000000	2	0.500	1.000
249	6C	Beans-dry-broadbeans				
		14-Boiled	0.000250	0	0.500	1.000
250	6B	Beans-succulent-broadbeans	3.000000	1	1.000	1.000
251	6C	Beans-dry-pigeon beans	0.000250	0	0.820	1.000
253	6	Beans-unspecified	3.000000	1	1.000	1.000
255	6A	Soybeans-sprouted seeds	0.000550	0	0.330	1.000
256	6C	Beans-dry-hyacinth	0.000250	0	0.820	1.000
257	6	Beans-succulent-hyacinth	3.000000	1	1.000	1.000
258	6C	Beans-dry-blackeye peas/cowpea				
		14-Boiled	0.000250	0	0.500	1.000
259	6C	Beans-dry-garbanzo/chick pea				
		12-Cooked: NFS	0.000250	0	0.500	1.000
		14-Boiled	0.000250	0	0.500	1.000
		15-Fried	0.000250	0	0.500	1.000
		32-Canned: Cooked	0.000250	0	0.190	1.000
290	O	Cottonseed-oil	0.001800	0	1.000	1.000
291	O	Cottonseed-meal	0.013000	0	1.000	1.000
293	O	Peanuts-oil	0.001000	0	0.130	1.000
297	6A	Soybeans-oil	0.000550	0	0.007	1.000
303	6A	Soybean-other	0.000550	0	1.000	1.000
304	6A	Soybeans-mature seeds dry	0.000550	0	1.000	1.000
305	6A	Soybeans-flour (full fat)	0.000550	0	0.380	1.000
306	6A	Soybeans-flour (low fat)	0.000550	0	0.380	1.000
307	6A	Soybeans-flour (defatted)	0.000550	0	0.380	1.000
310	O	Peppermint	2.800000	0	1.000	1.000
311	O	Peppermint-oil	0.004200	0	1.000	1.000
312	O	Spearmint	2.800000	0	1.000	1.000

313	O	Spearmint-oil	0.004200	0	1.000	1.000
318	D	Milk-nonfat solids	0.000500	14	1.000	1.000
319	D	Milk-fat solids	0.000500	14	1.000	1.000
320	D	Milk sugar (lactose)	0.000500	14	1.000	1.000
321	M	Beef-meat byproducts	0.000050	0	1.000	1.000
322	M	Beef-other organ meats	0.000023	0	1.000	1.000
323	M	Beef-dried	0.000023	0	1.920	1.000
324	M	Beef-fat w/o bones	0.000016	0	1.000	1.000
325	M	Beef-kidney	0.000050	0	1.000	1.000
326	M	Beef-liver	0.000006	0	1.000	1.000
327	M	Beef-lean (fat/free) w/o bones	0.000023	0	1.000	1.000
328	M	Goat-meat byproducts	0.000050	0	1.000	1.000
329	M	Goat-other organ meats	0.000050	0	1.000	1.000
330	M	Goat-fat w/o bone	0.000016	0	1.000	1.000
331	M	Goat-kidney	0.000050	0	1.000	1.000
332	M	Goat-liver	0.000006	0	1.000	1.000
333	M	Goat-lean (fat/free) w/o bone	0.000023	0	1.000	1.000
334	M	Horsemeat	0.000023	0	1.000	1.000
336	M	Sheep-meat byproducts	0.000050	0	1.000	1.000
337	M	Sheep-other organ meats	0.000050	0	1.000	1.000
338	M	Sheep-fat w/o bone	0.000016	0	1.000	1.000
339	M	Sheep-kidney	0.000050	0	1.000	1.000
340	M	Sheep-liver	0.000006	0	1.000	1.000
341	M	Sheep-lean (fat free) w/o bone	0.000023	0	1.000	1.000
342	M	Pork-meat byproducts	0.000050	0	1.000	1.000
343	M	Pork-other organ meats	0.000050	0	1.000	1.000
344	M	Pork-fat w/o bone	0.000016	0	1.000	1.000
345	M	Pork-kidney	0.000050	0	1.000	1.000
346	M	Pork-liver	0.000006	0	1.000	1.000
347	M	Pork-lean (fat free) w/o bone	0.000023	0	1.000	1.000
355	P	Turkey-byproducts	0.000001	0	1.000	1.000
356	P	Turkey-giblets (liver)	0.000001	0	1.000	1.000
357	P	Turkey--fat w/o bones	0.000001	0	1.000	1.000
358	P	Turkey- lean/fat free w/o bones	0.000012	0	1.000	1.000
360	P	Poultry-other-lean (fat free) w/	0.000012	0	1.000	1.000
361	P	Poultry-other-giblets(liver)	0.000001	0	1.000	1.000
362	P	Poultry-other-fat w/o bones	0.000001	0	1.000	1.000
363	P	Eggs-whole	0.000026	0	1.000	1.000
364	P	Eggs-white only	0.000026	0	1.000	1.000
365	P	Eggs-yolk only	0.000026	0	1.000	1.000
366	P	Chicken-byproducts	0.000001	0	1.000	1.000
367	P	Chicken-giblets(liver)	0.000001	0	1.000	1.000
368	P	Chicken-fat w/o bones	0.000001	0	1.000	1.000
369	P	Chicken-lean/fat free w/o bones	0.000012	0	1.000	1.000
384	4B	Celery juice	10.000000	6	1.000	1.000
385	P	Chicken-giblets (excl. liver)	0.000001	0	1.000	1.000
389	O	Cranberries-juice-concentrate	0.500000	7	0.930	1.000
398	D	Milk-based water	0.000500	14	1.000	1.000
403	O	Peanuts-butter	0.001000	0	1.890	1.000
424	M	Veal-fat w/o bones	0.000016	0	1.000	1.000
425	M	Veal-lean (fat free) w/o bones	0.000020	0	1.000	1.000
426	M	Veal-kidney	0.000050	0	1.000	1.000
427	M	Veal-liver	0.000006	0	1.000	1.000
428	M	Veal-other organ meats	0.000050	0	1.000	1.000
429	M	Veal-dried	0.000020	0	1.920	1.000
430	M	Veal-meat byproducts	0.000050	0	1.000	1.000
449	P	Turkey-other organ meats	0.000001	0	1.000	1.000
467	19B	Celery seed	10.000000	6	1.000	1.000
482	O	Soybeans-protein isolate	0.000550	0	1.000	1.000
940	O	Peanuts-hulled	0.001000	0	1.000	1.000

ATTACHMENT 5: Acephate Acute Assessment

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U.S. Environmental Protection Agency                                  Ver. 6.73
DEEM ACUTE analysis for ACEPHATE                                (1989-92 data)
Residue file: acephate1.R96                        Adjustment factor #2 NOT used.
Analysis Date: 09-27-1999/05:55:05    Residue file dated: 09-27-1999/03:54:06/8
Acute Reference Dose (aRfD) =   0.005000 mg/kg body-wt/day
MC iterations = 1000     MC list in residue file     MC seed =    10
Run Comment: Acephate Acute Run
==============================================================================
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Summary calculations:

	95th Percentile Exposure	95th Percentile % aRfD	99th Percentile Exposure	99th Percentile % aRfD	99.9th Percentile Exposure	99.9th Percentile % aRfD
U.S. pop - all seasons:	0.000027	0.54	0.000186	3.71	0.001111	22.22
All infants (<1 year):	0.000007	0.15	0.000093	1.85	0.000795	15.90
Nursing infants (<1 year):	0.000001	0.03	0.000006	0.13	0.000051	1.02
Non-nursing infants (<1 yr):	0.000012	0.24	0.000130	2.59	0.000942	18.85
Children (1-6 years):	0.000045	0.89	0.000361	7.22	0.001631	32.63
Children (7-12 years):	0.000031	0.61	0.000242	4.84	0.001549	30.99
Females (13+/preg/not nsg):	0.000029	0.58	0.000146	2.91	0.000653	13.07
Females (13+/nursing):	0.000039	0.79	0.000237	4.74	0.001037	20.75
Females (13-19 yrs/np/nn):	0.000019	0.38	0.000146	2.93	0.000787	15.75
Females (20+ years/np/nn):	0.000027	0.54	0.000177	3.54	0.001060	21.19
Females (13-50 years):	0.000024	0.48	0.000164	3.28	0.000879	17.58
Males (13-19 years):	0.000018	0.35	0.000136	2.72	0.000606	12.12
Males (20+ years):	0.000024	0.49	0.000160	3.19	0.000940	18.79

ATTACHMENT 6: Methamidophos Acute Assessment (acephate application only)

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U.S. Environmental Protection Agency                                  Ver. 6.73
DEEM Acute analysis for METHAMIDOPHOS/ACEPHATE                      1989-92 data
Residue file name: D:\methacepfin.R96                        Adjust. #2 NOT used
Analysis Date 09-27-1999             Residue file dated: 09-27-1999/04:17:02/8
Reference dose (aRfD) = 0.001 mg/kg bw/day
Comment: Methamidophos from acephate use
--------------------------------------------------------------------------------
RDF indices and file names for Monte Carlo Analysis
 1  methsbean.rdf
 2  methsbeanpro.rdf
 3  methbrsprout.rdf
 4  methcaulif.rdf
 5  methcelhan.rdf
 6  methceleryfrz.rdf
 7  methcranberr.rdf
 8  methletthans.rdf
 9  macadami.rdf
 10 methnonbellFT.rdf
 11 methbellFT.rdf
```

Food	Crop Grp	Food Name	RESIDUE (ppm)	RDF #	Adj.Factors #1	Code #2
8	O	Cranberries	0.500000	7	1.000	1.000
9	O	Cranberries-juice	0.500000	7	1.100	1.000
46	14	Macadamia nuts (bush nuts)	0.050000	9	1.000	1.000
155	8	Peppers-sweet(garden)				
		11-Uncooked	4.000000	11	0.770	1.000
		12-Cooked: NFS	4.000000	11	0.595	1.000
		13-Baked	4.000000	11	0.595	1.000
		14-Boiled	4.000000	11	0.595	1.000
		31-Canned: NFS	4.000000	11	0.595	1.000
		32-Canned: Cooked	4.000000	11	0.595	1.000
		34-Canned: Boiled	4.000000	11	0.595	1.000
		42-Frozen: Cooked	4.000000	11	0.595	1.000
		51-Cured: NFS (smoked/p	4.000000	11	0.595	1.000
156	8	Peppers-chilli incl jalapeno				
		11-Uncooked	4.000000	10	0.770	1.000
		12-Cooked: NFS	4.000000	10	0.595	1.000
		13-Baked	4.000000	10	0.595	1.000
		14-Boiled	4.000000	10	0.595	1.000
		15-Fried	4.000000	10	0.595	1.000
		31-Canned: NFS	4.000000	10	0.595	1.000
		32-Canned: Cooked	4.000000	10	0.595	1.000
		33-Canned: Baked	4.000000	10	0.595	1.000
		34-Canned: Boiled	4.000000	10	0.595	1.000
		42-Frozen: Cooked	4.000000	10	0.595	1.000
		51-Cured: NFS (smoked/p	4.000000	10	0.595	1.000
		52-Cured: Cooked(smokd/	4.000000	10	0.595	1.000
		60-Canned: Cured	4.000000	10	0.595	1.000
157	8	Peppers-other				
		11-Uncooked	4.000000	10	0.770	1.000
158	8	Pimientos				
		12-Cooked: NFS	4.000000	10	0.595	1.000
		14-Boiled	4.000000	10	0.595	1.000
		31-Canned: NFS	4.000000	10	0.595	1.000
		60-Canned: Cured	4.000000	10	0.595	1.000
166	4B	Celery				
		11-Uncooked	10.000000	5	0.770	1.000
		12-Cooked: NFS	10.000000	5	0.535	1.000
		13-Baked	10.000000	5	0.535	1.000
		14-Boiled	10.000000	5	0.535	1.000
		15-Fried	10.000000	5	0.535	1.000
		31-Canned: NFS	10.000000	6	0.535	1.000
		32-Canned: Cooked	10.000000	6	0.535	1.000
		34-Canned: Boiled	10.000000	6	0.535	1.000
		42-Frozen: Cooked	10.000000	6	0.535	1.000
169	5A	Brussels sprouts				
		14-Boiled	3.000000	3	0.535	1.000
		42-Frozen: Cooked	3.000000	3	0.535	1.000
171	5A	Cauliflower				
		11-Uncooked	2.000000	4	0.770	1.000
		12-Cooked: NFS	2.000000	4	0.535	1.000
		14-Boiled	2.000000	4	0.535	1.000

		15-Fried	2.000000	4	0.535	1.000
		42-Frozen: Cooked	2.000000	4	0.535	1.000
192	4A	Lettuce-head varieties				
		11-Uncooked	10.000000	8	1.000	1.000
227	6C	Beans-dry-great northern				
		32-Canned: Cooked	0.000250	0	0.697	1.000
228	6C	Beans-dry-kidney				
		12-Cooked: NFS	0.000250	0	0.638	1.000
		13-Baked	0.000250	0	0.638	1.000
		14-Boiled	0.000250	0	0.638	1.000
		32-Canned: Cooked	0.000250	0	0.697	1.000
		34-Canned: Boiled	0.000250	0	0.697	1.000
		42-Frozen: Cooked	0.000250	0	0.638	1.000
229	6C	Beans-dry-lima				
		14-Boiled	0.000250	0	0.638	1.000
		32-Canned: Cooked	0.000250	0	0.697	1.000
230	6C	Beans-dry-navy (pea)				
		32-Canned: Cooked	0.000250	0	0.697	1.000
		34-Canned: Boiled	0.000250	0	0.697	1.000
231	6C	Beans-dry-other	0.000250	0	0.770	1.000
232	6C	Beans-dry-pinto				
		12-Cooked: NFS	0.000250	0	0.638	1.000
		13-Baked	0.000250	0	0.638	1.000
		14-Boiled	0.000250	0	0.638	1.000
		15-Fried	0.000250	0	0.638	1.000
		32-Canned: Cooked	0.000250	0	0.697	1.000
		42-Frozen: Cooked	0.000250	0	0.638	1.000
233	6B	Beans-succulent-lima				
		11-Uncooked	3.000000	1	1.000	1.000
		12-Cooked: NFS	3.000000	1	0.638	1.000
		14-Boiled	3.000000	1	0.638	1.000
		32-Canned: Cooked	3.000000	2	0.697	1.000
		42-Frozen: Cooked	3.000000	2	0.638	1.000
		44-Frozen: Boiled	3.000000	2	0.638	1.000
234	6A	Beans-succulent-green				
		11-Uncooked	3.000000	1	1.000	1.000
		12-Cooked: NFS	3.000000	1	0.638	1.000
		14-Boiled	3.000000	1	0.638	1.000
		31-Canned: NFS	3.000000	2	0.697	1.000
		32-Canned: Cooked	3.000000	2	0.697	1.000
		34-Canned: Boiled	3.000000	2	0.697	1.000
		42-Frozen: Cooked	3.000000	2	0.638	1.000
		44-Frozen: Boiled	3.000000	2	0.638	1.000
		51-Cured: NFS (smoked/p	3.000000	2	0.638	1.000
235	6A	Beans-succulent-other				
		34-Canned: Boiled	3.000000	2	0.697	1.000
236	6A	Beans-succulent-yellow/wax				
		14-Boiled	3.000000	1	0.638	1.000
		32-Canned: Cooked	3.000000	2	0.697	1.000
		42-Frozen: Cooked	3.000000	2	0.697	1.000
249	6C	Beans-dry-broadbeans				
		14-Boiled	0.000250	0	0.638	1.000
250	6B	Beans-succulent-broadbeans	3.000000	1	1.000	1.000
251	6C	Beans-dry-pigeon beans	0.000250	0	0.770	1.000
253	6	Beans-unspecified	3.000000	1	1.000	1.000
255	6A	Soybeans-sprouted seeds	0.000080	0	1.000	1.000
256	6C	Beans-dry-hyacinth	0.000250	0	0.770	1.000
257	6	Beans-succulent-hyacinth	3.000000	1	1.000	1.000
258	6C	Beans-dry-blackeye peas/cowpea				
		14-Boiled	0.000250	0	0.638	1.000
259	6C	Beans-dry-garbanzo/chick pea				
		12-Cooked: NFS	0.000250	0	0.638	1.000
		14-Boiled	0.000250	0	0.638	1.000
		15-Fried	0.000250	0	0.638	1.000
		32-Canned: Cooked	0.000250	0	0.697	1.000
290	O	Cottonseed-oil	0.002600	0	1.000	1.000
291	O	Cottonseed-meal	0.002600	0	1.000	1.000
293	O	Peanuts-oil	0.001000	0	1.000	1.000
297	6A	Soybeans-oil	0.000080	0	1.000	1.000
303	6A	Soybean-other	0.000080	0	1.000	1.000
304	6A	Soybeans-mature seeds dry	0.000080	0	1.000	1.000
305	6A	Soybeans-flour (full fat)	0.000080	0	1.000	1.000
306	6A	Soybeans-flour (low fat)	0.000080	0	1.000	1.000
307	6A	Soybeans-flour (defatted)	0.000080	0	1.000	1.000
310	O	Peppermint	0.210000	0	1.000	1.000
311	O	Peppermint-oil	0.004200	0	1.000	1.000

ATTACHMENT 6: Methamidophos Acute Assessment (acephate application only)

312	O	Spearmint	0.210000	0	1.000	1.000
313	O	Spearmint-oil	0.004200	0	1.000	1.000
384	4B	Celery juice	10.000000	6	1.000	1.000
389	O	Cranberries-juice-concentrate	0.500000	7	3.300	1.000
403	O	Peanuts-butter	0.001000	0	1.890	1.000
467	19B	Celery seed	10.000000	6	1.000	1.000
482	O	Soybeans-protein isolate	0.000080	0	1.000	1.000
940	O	Peanuts-hulled	0.001000	0	1.000	1.000

ATTACHMENT 6: Methamidophos Acute Assessment (acephate application only)

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U.S. Environmental Protection Agency                                  Ver. 6.73
DEEM ACUTE analysis for METHAMIDOPHOS/ACEPHATE                (1989-92 data)
Residue file: methacepfin.R96                      Adjustment factor #2 NOT used.
Analysis Date: 09-27-1999/07:02:28    Residue file dated: 09-27-1999/04:17:02/8
Acute Reference Dose (aRfD) =   0.001000 mg/kg body-wt/day
MC iterations = 1000     MC list in residue file     MC seed =    10
Run Comment: Methamidophos from acephate use
===============================================================================
```

Summary calculations:

	95th Percentile Exposure	95th Percentile % aRfD	99th Percentile Exposure	99th Percentile % aRfD	99.9th Percentile Exposure	99.9th Percentile % aRfD
U.S. pop - all seasons:	0.000046	4.56	0.000198	19.82	0.000611	61.08
All infants (<1 year):	0.000005	0.54	0.000086	8.60	0.000801	80.13
Nursing infants (<1 year):	0.000000	0.02	0.000002	0.22	0.000021	2.12
Non-nursing infants (<1 yr):	0.000009	0.95	0.000132	13.18	0.000902	90.16
Children (1-6 years):	0.000065	6.49	0.000278	27.85	0.000790	78.96
Children (7-12 years):	0.000064	6.39	0.000232	23.16	0.000702	70.21
Females (13+/preg/not nsg):	0.000021	2.11	0.000084	8.36	0.000228	22.77
Females (13+/nursing):	0.000060	5.97	0.000182	18.22	0.000401	40.07
Females (13-19 yrs/np/nn):	0.000032	3.22	0.000129	12.91	0.000379	37.88
Females (20+ years/np/nn):	0.000043	4.27	0.000187	18.71	0.000580	58.03
Females (13-50 years):	0.000045	4.50	0.000173	17.34	0.000481	48.11
Males (13-19 years):	0.000029	2.87	0.000137	13.73	0.000469	46.90
Males (20+ years):	0.000047	4.75	0.000197	19.69	0.000583	58.27

```
U.S. Environmental Protection Agency                                  Ver. 6.74
DEEM Chronic analysis for ACEPHATE                                 1989-92 data
Residue file: D:\103301finNOFHE.R96                              Adjust. #2 used
Analysis Date 09-27-1999             Residue file dated: 09-27-1999/03:38:23/8
Reference dose (RfD) = 0.0012 mg/kg bw/day
Comment:Anticipated Residue file - Use in registration and reregistration chronic runs.  HAZID
report dated 1/15/98
--------------------------------------------------------------------------------
Food Crop                                     RESIDUE         Adj.Factors
Code  Grp  Food Name                           (ppm)           #1     #2
---- ---- ------------------------------  ----------      ------ ------
   8 O    Cranberries                        0.010000       1.000  0.340
   9 O    Cranberries-juice                  0.010000       0.310  0.340
  46 14   Macadamia nuts (bush nuts)         0.010000       1.000  0.010
 139 8    Paprika                            0.200000       1.000  0.240
 155 8    Peppers-sweet(garden)              0.200000       1.000  0.240
 156 8    Peppers-chilli incl jalapeno       0.200000       1.000  0.240
 157 8    Peppers-other                      0.200000       1.000  0.240
 158 8    Pimientos                          0.200000       1.000  0.240
 166 4B   Celery                             0.070000       1.000  0.490
 169 5A   Brussels sprouts
             14-Boiled                       0.010000       1.000  0.110
             42-Frozen: Cooked               0.010000       0.720  0.110
 171 5A   Cauliflower
             11-Uncooked                     0.010000       1.000  0.110
             12-Cooked: NFS                  0.010000       1.000  0.110
             14-Boiled                       0.010000       1.000  0.110
             15-Fried                        0.010000       1.000  0.110
             42-Frozen: Cooked               0.010000       0.720  0.110
 192 4A   Lettuce-head varieties             0.010000       1.000  0.470
 227 6C   Beans-dry-great northern           0.050000       0.500  0.020
 228 6C   Beans-dry-kidney
             12-Cooked: NFS                  0.013000       0.500  0.020
             13-Baked                        0.050000       0.500  0.020
             14-Boiled                       0.050000       0.500  0.020
             32-Canned: Cooked               0.013000       0.190  0.020
             34-Canned: Boiled               0.013000       0.190  0.020
             42-Frozen: Cooked               0.050000       0.500  0.020
 229 6C   Beans-dry-lima
             14-Boiled                       0.050000       0.500  0.020
             32-Canned: Cooked               0.013000       0.190  0.020
 230 6C   Beans-dry-navy (pea)
             32-Canned: Cooked               0.013000       0.190  0.020
             34-Canned: Boiled               0.013000       0.190  0.020
 231 6C   Beans-dry-other
             12-Cooked: NFS                  0.050000       0.500  0.020
             13-Baked                        0.050000       0.500  0.020
             14-Boiled                       0.050000       0.500  0.020
             15-Fried                        0.050000       0.500  0.020
             34-Canned: Boiled               0.013000       0.190  0.020
 232 6C   Beans-dry-pinto
             12-Cooked: NFS                  0.050000       0.500  0.020
             13-Baked                        0.050000       0.500  0.020
             14-Boiled                       0.050000       0.500  0.020
             15-Fried                        0.050000       0.500  0.020
             32-Canned: Cooked               0.013000       0.190  0.020
             42-Frozen: Cooked               0.050000       0.500  0.020
 233 6B   Beans-succulent-lima
             11-Uncooked                     0.050000       1.000  0.290
             12-Cooked: NFS                  0.050000       0.500  0.290
             14-Boiled                       0.050000       0.500  0.290
             32-Canned: Cooked               0.013000       0.190  0.350
             42-Frozen: Cooked               0.050000       0.500  0.350
             44-Frozen: Boiled               0.050000       0.500  0.350
 234 6A   Beans-succulent-green
             11-Uncooked                     0.050000       1.000  0.290
             12-Cooked: NFS                  0.050000       0.500  0.290
             14-Boiled                       0.050000       0.500  0.290
             31-Canned: NFS                  0.013000       0.190  0.350
             32-Canned: Cooked               0.013000       0.190  0.350
             34-Canned: Boiled               0.013000       0.190  0.350
             42-Frozen: Cooked               0.050000       0.500  0.350
             44-Frozen: Boiled               0.050000       0.500  0.350
             51-Cured: NFS (smoked/pickled/saltd)
                                             0.050000       0.500  0.350
 235 6A   Beans-succulent-other
             34-Canned: Boiled               0.013000       0.190  0.350
```

236	6A	Beans-succulent-yellow/wax			
		14-Boiled	0.050000	0.500	0.290
		32-Canned: Cooked	0.013000	0.190	0.350
		42-Frozen: Cooked	0.050000	0.500	0.350
244	6C	Mung beans (sprouts)	0.050000	1.000	0.290
249	6C	Beans-dry-broadbeans			
		14-Boiled	0.050000	0.500	0.020
250	6B	Beans-succulent-broadbeans	0.050000	1.000	0.290
251	6C	Beans-dry-pigeon beans	0.050000	1.000	0.020
253	6	Beans-unspecified	0.050000	1.000	0.290
255	6A	Soybeans-sprouted seeds	1.000000	0.330	0.010
256		Beans-dry-hyacinth	0.050000	0.500	0.020
257		Beans-succulent-hyacinth	0.050000	1.000	0.290
258	6C	Beans-dry-blackeye peas/cowpea			
		14-Boiled	0.050000	0.500	0.020
259	6C	Beans-dry-garbanzo/chick pea			
		12-Cooked: NFS	0.013000	0.500	0.020
		14-Boiled	0.050000	0.500	0.020
		15-Fried	0.050000	0.500	0.020
		32-Canned: Cooked	0.013000	0.190	0.020
287	6C	Guar beans	0.050000	1.000	1.000
288	O	Castor beans	0.050000	1.000	1.000
290	O	Cottonseed-oil	0.330000	0.200	0.090
291	O	Cottonseed-meal	0.330000	1.410	0.090
293	O	Peanuts-oil	0.010000	0.130	0.100
297	6A	Soybeans-oil	1.000000	0.007	0.010
303	6A	Soybean-other	1.000000	1.000	0.010
304	6A	Soybeans-mature seeds dry	1.000000	1.000	0.010
305	6A	Soybeans-flour (full fat)	1.000000	0.380	0.010
306	6A	Soybeans-flour (low fat)	1.000000	0.380	0.010
307	6A	Soybeans-flour (defatted)	1.000000	0.380	0.010
310	O	Peppermint	9.500000	1.000	0.310
311	O	Peppermint-oil	0.010000	1.000	0.310
312	O	Spearmint	9.500000	1.000	0.310
313	O	Spearmint-oil	0.010000	1.000	0.310
318	D	Milk-nonfat solids	0.000500	1.000	0.130
319	D	Milk-fat solids	0.000500	1.000	0.130
320	D	Milk sugar (lactose)	0.000500	1.000	0.130
321	M	Beef-meat byproducts	0.000033	1.000	1.000
322	M	Beef-other organ meats	0.000033	1.000	1.000
323	M	Beef-dried	0.000015	1.920	1.000
324	M	Beef-fat w/o bones	0.000009	1.000	1.000
325	M	Beef-kidney	0.000033	1.000	1.000
326	M	Beef-liver	0.000004	1.000	1.000
327	M	Beef-lean (fat/free) w/o bones	0.000015	1.000	1.000
328	M	Goat-meat byproducts	0.000033	1.000	1.000
329	M	Goat-other organ meats	0.000033	1.000	1.000
330	M	Goat-fat w/o bone	0.000009	1.000	1.000
331	M	Goat-kidney	0.000033	1.000	1.000
332	M	Goat-liver	0.000004	1.000	1.000
333	M	Goat-lean (fat/free) w/o bone	0.000015	1.000	1.000
334	M	Horsemeat	0.000033	1.000	1.000
336	M	Sheep-meat byproducts	0.000033	1.000	1.000
337	M	Sheep-other organ meats	0.000033	1.000	1.000
338	M	Sheep-fat w/o bone	0.000009	1.000	1.000
339	M	Sheep-kidney	0.000033	1.000	1.000
340	M	Sheep-liver	0.000004	1.000	1.000
341	M	Sheep-lean (fat free) w/o bone	0.000015	1.000	1.000
342	M	Pork-meat byproducts	0.000033	1.000	1.000
343	M	Pork-other organ meats	0.000033	1.000	1.000
344	M	Pork-fat w/o bone	0.000009	1.000	1.000
345	M	Pork-kidney	0.000033	1.000	1.000
346	M	Pork-liver	0.000004	1.000	1.000
347	M	Pork-lean (fat free) w/o bone	0.000015	1.000	1.000
355	P	Turkey-byproducts	0.000001	1.000	1.000
356	P	Turkey-giblets (liver)	0.000001	1.000	1.000
357	P	Turkey--fat w/o bones	0.000001	1.000	1.000
358	P	Turkey- lean/fat free w/o bones	0.000007	1.000	1.000
360	P	Poultry-other-lean (fat free) w/	0.000007	1.000	1.000
361	P	Poultry-other-giblets(liver)	0.000001	1.000	1.000
362	P	Poultry-other-fat w/o bones	0.000001	1.000	1.000
363	P	Eggs-whole	0.000022	1.000	1.000
364	P	Eggs-white only	0.000022	1.000	1.000
365	P	Eggs-yolk only	0.000022	1.000	1.000
367	P	Chicken-giblets(liver)	0.000001	1.000	1.000
368	P	Chicken-fat w/o bones	0.000001	1.000	1.000
369	P	Chicken-lean/fat free w/o bones	0.000007	1.000	1.000
384	4B	Celery juice	0.070000	1.000	0.490

385	P	Chicken-giblets (excl. liver)	0.000001	1.000	1.000
389	O	Cranberries-juice-concentrate	0.010000	0.930	0.340
398	D	Milk-based water	0.000500	1.000	0.130
403	O	Peanuts-butter	0.010000	1.890	0.100
449	P	Turkey-other organ meats	0.000001	1.000	1.000
467	19B	Celery seed	0.070000	1.000	1.000
482	O	Soybeans-protein isolate	1.000000	1.000	0.010
940	O	Peanuts-hulled	0.010000	1.000	0.100

U.S. Environmental Protection Agency Ver. 6.74
DEEM Chronic analysis for ACEPHATE (1989-92 data)
Residue file name: D:\103301finNOFHE.R96 Adjustment factor #2 used.
Analysis Date 09-27-1999/03:38:57 Residue file dated: 09-27-1999/03:38:23/8
Reference dose (RfD, CHRONIC) = .0012 mg/kg bw/day
COMMENT 1: Anticipated Residue file - Use in registration and reregistration chronic runs. HAZID report dated 1/15/98

Total exposure by population subgroup

Population Subgroup	Total Exposure mg/kg body wt/day	Total Exposure Percent of Rfd
U.S. Population (total)	0.000008	0.7%
U.S. Population (spring season)	0.000008	0.6%
U.S. Population (summer season)	0.000008	0.7%
U.S. Population (autumn season)	0.000008	0.7%
U.S. Population (winter season)	0.000008	0.7%
Northeast region	0.000009	0.7%
Midwest region	0.000007	0.6%
Southern region	0.000007	0.6%
Western region	0.000009	0.8%
Hispanics	0.000009	0.8%
Non-hispanic whites	0.000008	0.7%
Non-hispanic blacks	0.000005	0.5%
Non-hisp/non-white/non-black)	0.000011	1.0%
All infants (< 1 year)	0.000010	0.8%
Nursing infants	0.000002	0.2%
Non-nursing infants	0.000013	1.1%
Children 1-6 yrs	0.000013	1.1%
Children 7-12 yrs	0.000010	0.8%
Females 13-19(not preg or nursing)	0.000006	0.5%
Females 20+ (not preg or nursing)	0.000007	0.6%
Females 13-50 yrs	0.000007	0.6%
Females 13+ (preg/not nursing)	0.000006	0.5%
Females 13+ (nursing)	0.000009	0.8%
Males 13-19 yrs	0.000006	0.5%
Males 20+ yrs	0.000007	0.6%
Seniors 55+	0.000007	0.6%
Pacific Region	0.000009	0.7%

Quantitative Usage Analysis for Acephate

Case No.: 0042 PC Code: 103301
Date: 6-8-99 Analyst: Alan Halvorson

Based on available pesticide usage information for 1988 through 1997, total annual domestic usage of acephate is approximately 4 to 5 million pounds active ingredient (a.i.). In terms of pounds a.i., acephate usage is allocated to cotton (23%), tobacco (21%), residential outdoors by consumers (20% or less), horticulture nurseries (8%), golf courses (4%) and other sites. Sites with over 25 percent of acres treated include tobacco (61%), celery (49%), head lettuce (47%), lima beans (41%), snap beans for processing (35%), cranberries (34%), mint (31%) and fresh snap beans (29%). Important using states include Arizona, California, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Texas and Virginia. Per-acre rates are generally less than 2.5 pounds a.i. per application and less than 4.5 pounds a.i. per year.

ATTACHMENT 8: Quantitative Usage Analysis

Acephate Case #: 0042 AI #: 103301 EPA's QUANTITATIVE USAGE ANALYSIS Analyst: Alan Halvorson 08-June-99

Site	Acres (000) Grown	Acres Treated (000) Wtd Avg	Acres Treated (000) Est Max	% Crop Treated Wtd Avg	% Crop Treated Est Max	Lb AI Applied (000) Wtd Avg	Lb AI Applied (000) Est Max	Avg Application Rates lb ai/ A/year	Avg Application Rates # appl/ year	Avg Application Rates lb ai/ A/appl	States of Most Usage (% of total lb ai used by these states)
Almonds	434	0.5	1.1	0.1%	0.3%	0.3	0.6	0.6	1.0	0.6	CA 100%
Apples	509	1	5	0.2%	1.1%	2	10	1.9	1.3	1.4	MI 85%
Apricots	21	2	5	11%	23%	6	13	2.6	1.0	2.6	FL 100%
Citrus, Other	55	0.2	0.9	0.4%	1.6%	-	-	-	1.0	-	-
Cranberries	29	10	15	34%	51%	9	13	0.9	1.0	0.9	WI MA 89%
Grapefruit	159	1	8	1%	5%	2	11	1.5	2.0	0.8	FL 100%
Grapes	820	1	3	0.1%	0.3%	0.4	1.8	0.7	1.3	0.5	AZ NC 100%
Oranges	874	2	11	0.2%	1.3%	3	17	1.5	1.9	0.8	FL 100%
Walnuts	205	0.06	0.13	0.03%	0.06%	-	-	-	1.0	-	CA 100%
Beans, Dry	1,809	45	89	2%	5%	40	58	0.9	1.0	0.9	CA 100%
Beans, Lima	69	28	37	41%	54%	37	49	1.3	1.0	1.3	DE CA WA WI 93%
Beans, Snap, Fresh	68	20	26	29%	39%	28	37	1.4	1.0	1.4	FL GA 82%
Beans, Snap, Processing	149	53	71	35%	47%	57	76	1.1	1.0	1.1	WI MI IL 93%
Brussels Sprouts	4	-	-	-	-	0.1	0.3	-	-	-	CA 100%
Carrots/Radishes	166	2	5	1%	3%	3	6	1.1	1.0	1.1	FL 90%
Cauliflower	57	6	12	11%	21%	7	11	1.0	1.0	1.0	CA AZ 92%
Celery	34	16	23	49%	68%	23	36	1.4	1.0	1.4	CA FL 90%
Lettuce, Head	195	92	123	47%	63%	110	147	1.2	1.0	1.2	CA 81%
Lettuce, Other	62	12	17	18%	28%	11	16	0.9	1.0	0.9	CA 93%
Mint	155	49	65	31%	42%	55	74	1.1	1.1	1.0	OR WA 81%
Onions, Dry	123	0.2	0.5	0.2%	0.4%	0.2	0.5	1.0	1.0	1.0	TX 90%
Peanuts	1,582	79	157	5%	10%	51	109	0.6	1.2	0.5	GA FL VA NC AL TX 86%
Peppers, Bell	63	15	30	24%	48%	33	66	2.2	1.0	2.2	NJ CA FL MI 86%
Potatoes	1,433	1	2	0.10%	0.13%	1.0	1.4	0.7	1.8	0.4	TX WI NC NY NM 92%
Soybeans	63,342	39	95	0.1%	0.2%	23	75	0.6	1.1	0.5	KS LA MS MN ND WI 79%
Alfalfa	23,701	4	14	0.02%	0.06%	3	14	0.8	1.0	0.7	MT KY CO AZ 83%
Cotton	12,967	1,110	1,651	9%	13%	880	1,684	0.8	1.8	0.4	AZ MS TX AR LA CA 83%
Lots/Farmsteads/etc	24,232	5	11	0.02%	0.05%	3	7	0.7	1.9	0.4	LA TX ND FL MO CA 68%
Pasture	75,719	23	47	0.03%	0.06%	17	35	0.7	1.0	0.7	GA KY 84%
Summer Fallow	26,332	8	16	0.03%	0.06%	19	38	2.4	1.0	2.4	NC TX 100%
Tobacco	716	440	587	61%	82%	800	1,067	1.8	2.3	0.8	NC KY GA SC TN 87%
Woodland	62,089	11	27	0.02%	0.04%	6	15	0.6	1.0	0.6	AL FL PA GA 84%
Horticulture Nurseries	378	64	89	17%	23%	288	337	4.5	6.4	0.7	-
Institutional Turf	4,447	<15	25	<0.3%	0.6%	28	64	>1.9	>1.0	1.9	-
- Cemeteries	451	-	-	-	-	-	-	-	-	-	-
- Educational Facil	1,413	<10	22	<0.7%	1.6%	21	57	>2.0	>1.0	2.0	-
- Parks	2,583	<4	6	<0.16%	0.23%	7	15	>1.7	>1.0	1.7	-
Golf Courses	1,440	<97	144	<7%	10%	139	206	>1.4	>1.0	1.4	-
Landscapes by LMCs	21,515	13	30	0.06%	0.14%	25	57	1.9	1.8	1.1	-
Lawn/Turf by LCOs	31,044	60	94	0.2%	0.3%	121	190	2.0	2.2	0.9	-

Site	Acres (000) Grown	Acres Treated (000) Wtd Avg	Acres Treated (000) Est Max	% Crop Treated Wtd Avg	% Crop Treated Est Max	Lb AI Applied (000) Wtd Avg	Lb AI Applied (000) Est Max	Avg Application Rates lb ai/ A/year	Avg Application Rates # appl/ year	Avg Application Rates lb ai/ A/appl	States of Most Usage (% of total lb ai used by these states)
Ofc/Retail Indoor by CPAs	-	-	-	-	-	99	221	-	-	-	-
Pest Sites by PCOs	-	-	-	-	-	76	116	-	-	-	-
Resident'l Indoor by CPAs	-	-	-	-	-	31	47	-	-	-	-
Residl Outdr by Consumers	-	-	-	-	-	<740	<780	-	-	-	-
Roadway Rights-of-Way	11,300	<29	47	<0.3%	0.4%	16	25	>0.5	>1.0	0.5	-
Turf Farms	265	<29	37	<11%	14%	41	53	>1.4	>1.0	1.4	-
Whole/Manu Indoor by CPAs	-	-	-	-	-	12	28	-	-	-	-
Total						<3,770	4,730				

COLUMN HEADINGS

- Weighted Average--the most recent years and more reliable data are weighted more heavily.
- Estimated Maximum is estimated from available data.
- Average Application Rates are calculated from the weighted averages.

NOTES ON TABLE DATA

- Usage data primarily cover 1988 - 1997.
- Calculations of the above numbers may not appear to agree because they may be displayed as rounded.
- A dash (-) indicates that information on this site is NOT available in EPA sources or is insufficient for estimation.
- Acres grown for non-agricultural sites refer to acreage potentially available for treatment, e.g., acreage that is maintained.
- Some sites may overlap. E.g., the three indoor sites by CPAs may overlap Pest Sites by PCOs.

Site and Applicator Definitions

Citrus, Other include kumquats, limes, tangelos, and tangerines.
Office/Retail Indoor includes public buildings.
Wholesale/Manufacturing Indoor includes storage areas and transport vehicles.

CPA = commercial pesticide applicator certified in at least 1 of 5 non-agricultural pest control categories
LCO = lawn care operator
LMC = landscape maintenance contractor
PCO = pest control operator

SOURCES: USDA/NASS, Agricultural Chemical Usage -- 1990-1997 Field Crop Summaries, 1990, 1992, 1994 & 1996 Vegetable Summaries, 1991 Fruits and and Nuts Summary, 1993, 1995 & 1997 Fruits Summaries; L.P. Gianessi & J.E. Anderson, National Center for Food and Agricultural Policy, Pesticide Use in U.S. Crop Production, Feb. 1995; Research Triangle Institute, Results of the 1993 Certified/Commercial Pesticide Applicator Survey, Aug. 1995; Kline & Co. -- Professional Markets for Pesticides and Fertilizers, 1990-1995, Consumer Markets for Pesticides and Fertilizers, 1989, 1990, 1993 & 1995; proprietary EPA sources, 1988-1997; and Mint Industry Research Council, comments to EPA dated 3/11/99.