E C O T O X

ECOTOXicology Database System

Code List

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By

CSC Corporation
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INTRODUCTION

This document contains all ECOTOX codes used in the storage and retrieval.

For brief information regarding field data, refer to the ECOTOX Data Field Definitions document. For each field listed in the Data Field Definition that utilizes a code, a notation is made to “View” the corresponding Code List. For more detailed field definitions, refer to the coding guidelines for the aquatic database (AQUIRE Coding Guidelines) and the terrestrial database (TERRETOX Coding Guidelines) available in PDF format on the ECOTOX web site.

In the aquatic browser report, the fields lacking author reported data are left blank, but in the ASCII delimited file reports NR (not reported) is used. For the terrestrial report, fields lacking author reported data are denoted with a NR (not reported).

Asterisks are used for several reasons, depending upon the field. Please refer to the ECOTOX Data Field Definitions to accurately interpret the asterisk (*) usage.

For chemical collective index names and CAS numbers, refer to the Browse Chemical documentation. For species numbers, Scientific names, Common names, refer to the Browse Species documentation. For effect measurement codes and definitions, refer to Browse Effect documentation.

CHEMICAL CODES

Chemical Grade

A	Analytical Grade
A or GU	Analytical or Guaranteed Grade
A or R	Analytical or Reagent Grade
A or T	Analytical or Technical Grade
ACS	American Chemical Society Grade
AL	Analysis Grade
AN	Analar Grade
AN or R	Analar or Reagent Grade
AR	A.R. Grade
B	Biological Grade
C	Commercial Grade
C OR AN	Commercial or Analar Grade
CG	Chemical Grade
CH	Chromatographic Grade
CL	Clinical Grade
CT	Certified Grade
DG	Distilled in Glass Grade
EL	Electrophoresis Grade
EM	Eastman Grade
EX	Experimental Grade
F	Field Grade
FFL	Free Flowing Grade
GR	GR Grade
GU	Guaranteed Grade
GUR	Guaranteed Reagent Grade
HG	Histological Grade
HPLC	High Performance Liquid Chromatography Grade
I	Industrial Grade
L	Laboratory Grade
MK	Merck Grade
NP	Normapur Grade
OP	Optima
PAN	Pestanal Grade
PFG	Purified Grade
PG	Pure Grade
PH	Pharmaceutical Grade
PRA	Practical Grade
PRG	Pesticide Residue Grade
PST	Pesticide Grade
R	Reagent Grade
RE	Research Grade
RE or A	Research or Analytical Grade
RFG	Reference Grade
RS	Residue Grade
S	Spectrophotometric Grade
SC	Scintillation Grade
SPC	Spectrochemical Grade
T	Technical Grade
T or A	Technical or Analytical Grade
T or P	Technical or Purified Grade
T or PU	Technical Grade or Pure
TIS	Tissue Culture Grade
ULV	ULV Grade
UP	Ultrapure Grade
USP	United States Pharmacopeia Grade
UV	UV Grade
UVS	Uvasol Grade

Chemical Formulation Codes

AAPS	Atomic Absorption Primary Standard
AI	Active Ingredient
AQ	Aqueous Solution
ARST	Analytical Reference Standard
AS	Aqueous Suspension
C	Commercial
CO	Concentrate
CP	Chemically Pure
CRY	Crystal
D	Dust
DC	Detached Crystals
DG	Dispersable Granule (Also: dry flowable)
DP	Dispersable Powder
E	Emulsion
EC	Emulsifiable Concentrate
EN	Encapsulated
FCASS	Fisher Certified Atomic Absorption Standard
FF	Flowable Formulation
FG	Finely Ground
FO	Formulated
G	Granule, Granular
GS	Gaseous
LD	Liquid
LDCO	Liquid Concentrate
MO	Miscible Oil
N	Nanograde
NF	Nonionized Form
OD	Oil Dispersion
OS	Oil Soluble
PA	Pro Analsi Quality
PF	Purified
PO	Powder
PRE	Prepared in Lab
PU	Pure (PU=A concentration type) Purissium or Puris
RC	Recrystallized
S	Solution
SD	Solid
SO	Soluble Concentrate
SP	Soluble Powder
SPCO	Spray Concentrate
SPL	Spray Liquid
SPO	Spray Powder
SRF	Slow Release Formulation
WP	Wettable Powder
WS	Water Soluble
W/W	Weight per weight

SPECIES CODES

Organism Source

CBC	Captive breeding colony	GOV	Government agency source
COM	Commercial source	LAB	Laboratory strain
DOM	Domestic	MLT	Multiple sources
GAM	Game farm	WLD	Wild strain

Lifestage

AD	Adult	NY	Nymph(s)
BS	Bud blast stage	PB	Mature, post-bloom stage (fruit trees)
CC	Cocoons	PH	Mature, pit-hardening stage (fruit trees)
EG	Egg	RC	Rooted cuttings
FB	Mature, full-bloom stage	RP	Reproductively mature
FG	Female gametophyte	RST	Rootstock
FO	Flower opening	SA	Subadult
GE	Gestation	SD	Seed
GS	Germinated seed	SE	Scape elongation
IB	Incipient bud	SG	Mature, side-green stage
IM	Immature	SI	Sexually immature
IN	Instar	SL	Seedling
JV	Juvenile; fledgling, hatchling, weanling	SM	Sexually mature
		SN	Sapling(s)
		SP	Sperm
LC	Lactational	TC	Tissue culture callus
LV	Larvae	TU	Tuber
MA	Mature	VG	Mature vegetative
MD	Mature dormant	VI	Virgin
MG	Male gametophyte	YE	Yearling
MT	Mature organism	YO	Young organism
MU	Multiple, Organisms at different lifestages		

Organism Age Duration

D	Day	S	Second
H	Hour	WK	Week
MI	Minute	YR	Year
MO	Month		

TEST CONDITION CODES

Aquatic Media Type

FW	Freshwater
SW	Saltwater

Terrestrial Media Type

AGR	Agar	MAN	Manure
AQU	Aqueous	MIN	Mineral soil
ART	Artificial soil	MIX	Mixture of media
CUL	Culture medium	NAT	Natural soil
FLT	Filter paper	NONE	No substrate
HUM	Humus	OTH	Other
HYP	Hydroponic	POP	Plaster of Paris
LIT	Litter	SLG	Sludge
		UKS	Unknown soil type

Test Location

Lab	Indoor Laboratory
FieldN	Field Natural
FieldA	Field Artificial
FieldU	Field Unknown

Exposure Duration Units

ABS	Abscission
ALV	Alevin
ANT	Anthesis
B0.25	0.25 Bloom Stage
BLM	Bloom Stage
BRD	Brood
BT	Boot Stage
CFS	Commercial Flowering Stage
D	Day
DAE	Days After Emergence
DPF	Days Post Fertilization
DPH	Days Post Hatch
DPHV	Days Post Harvest
EA	To Earing
EB	Early Bloom Stage
EL	Eggs Laid
EM	Emergence
ESLK	Early Silk Stage
EY	Eyed Stage
FI	Floral Initiation
FL	Flower Stage
FR	Fruit Stage
FRT	To Fertilization
FRY	Fry
FS	Flowering Stage
GE	Generation
GM	Germination
GS	Growing Season
H	Hour
HPF	Hours Post Fertilization
HPH	Hours Post Hatch
HT	Until Hatch
HV	Harvest
I2	Intermolt to Second Molt
IT	Intermolt-Molt
KH	Knee-High Stage
LF	Lifetime
LHV 15-20	Leaf Harvest, 15-20 cm
LHV 20-25	Leaf Harvest, 20-25 cm
LS6	Six Leaf Stage
MA	Maturity
MI	Minute
MO	Month
MYP	Mysis to Post-larvae
PAN	Panicle Formation Stage
PCI	Phytochron Index
PD	First Pod Set
PR	Priming
PM	Post Molt
RC	Ready for Consumption
RHV3	Root Harvest, 3 Grams
S	Second(s)
SO	Shooting Stage
SWM	Swim-up
SS	Squaring Stage
STG	Stage
TR	First Trifoliate Stage
TS	Time to Tassle
V	Vegetative Stage
WK	Week
YR	Year
ZM	Zoeae-Megalop
ZMY	Zoeae to Mysis
-n	negative values represent pretreatment times
-x	pretreatment response observation but time unknown

Exposure Type

DIET (D

DR	Drink, water
DT	Diet, Unspecified
FD	Food
GE	Gestational
GV	Gavage
LC	Lactation
OR	Oral via capsule

INJECTION (I)

IA	Intraarterial
IG	Intragastrical
IJ	Injection, unspecified
IM	Intramuscular
IP	Intraperitoneal
IR	Intraprostomial

ENVIRONMENTAL (V)

AG	Aerial - granular
AS	Aerial spray
CM	Culture medium
DA	Direct application
DU	Dusted
DW	Dropwise application
EN	Environmental, Unspecified
FS	Foliar Spray
FU	Fumigation
GG	Ground granular
GS	Ground spray
HP	Hydroponic solution
HS	Hand spray
IN	*In situ*
MI	Misted
MT	Multiple environmental routes

IS	Intrasegmentally (insects)
IV	Intravenous
PC	Percutaneous
SC	Subcutaneous
SD	Subdermal
YK	Yolk
MULTIPLE (M)	
MU	Multiple routes (e.g., inhalation and diet)
INHALATION (N)	
IH	Inhalation
TOPICAL (T terrestrial, C aquatic)	
DM	Dermal
MM	Immersion
OC	Ocular
SA	Surface area dose
SH	Eggshell
TP	Topical, general

PR	Present in Soil
PT	Painted
SO	Soaked or Dipped
SP	Spray
SS	Soil Slurry
WA	Watered
WATER	
B	Tidal
C	Topical
E	Lentic (static outdoor water system without measurable flow rate, e.g., ponds, lakes, troughs)
F	Flow-through
L	Leaching (used for leachate and sediment exposures, if water conc reported)
O	Lotic (flowing outdoor water system, e.g., streams)
P	Pulse (intermittent or fluctuating dosing)
R	Renewal
S	Static

Application Frequency

ADL	Ad libitum, without limit or restraint
CON	Continual, non-pulsed
DLY	Daily dosing regime not specified
EOD	Every other day
G per D	Grams per day
RES	Restricted Diet
WKY	Weekly
X	Dosed x time(s) per study period, e.g. 1 time = 1X
X per x D	X times per x days
X, 1X/wk	X times, 1 time per week
X per d	X times per day
X per wk	X times per week
x per Y	X times per year

Control Type

B	Baseline or background control: parameters of actual or representative test species measured before and after administration of test chemical, though not as part of the same test scenario. Pretreatment values, collected during the same test scenario as the observed responses, are recorded as exposure concentrations with a negative exposure duration; not as baseline control parameters.
C	Concurrent control: controls are run simultaneously with the exposure, e.g. in the laboratory where a chemical free test chamber is used or in field studies where the control data are obtained upstream from the exposure data; also includes field tests where the controls are run in a separate system, ie. pond A and pond B or field A and field B.
H	Historical Control
I	Indeterminate Control
K	Data for control is presented but without accompanying methodology to identify procedures used
M	Multiple controls were reported, e.g. historic and concurrent
O	The 'O' code should be used when a control is run in a different system (defined by different dilution water or soil properties) than the exposure treatments; i.e., control from pond A and effect information from pond B. See also concurrent controls.
P	Positive Control
S	Satisfactory Control
U	Unsatisfactory Control
V	Carrier or solvent; organisms exposed to carrier or solvent as the only control
Z	No controls were used in the study

EXPOSURE CODES

Dose Type Code

C Control
D Dose
E Endpoint only (no dose values reported)
P or PC Positive Control
R Range of doses
V Solvent control

Concentration Type

F FORMULATION: Generally reserved for commercial preparation prior to actual use and does not include the final dilution (e.g.; Baythroid, 2,4-D). Also included in this category are organic compounds with no pesticidal activity (e.g.; PCB, dioxin).

A ACTIVE INGREDIENT: Author refers to the concentration as active ingredient, active principle or various grades of reagents.

T TOTAL: The concentration of metals determined on an unfiltered sample after vigorous digestion, or the sum of the concentrations of metals in both dissolved and suspended fractions. Heavy metals and single elements (e.g. Na, Cl, Br) are coded as T.

D DISSOLVED: Those constituents of an unacidified sample that pass through a 0.45 um membrane filter (e.g. soluble metal).

L LABILE: The labile or free ion metal concentration determined by various analytical methods. When coding, the specific labile forms or complexes are not differentiated.

U UN-IONIZED: The undissociated, uncharged form of ammonia or hydrogen sulfide. The ammonia molecule, NH_3, is the unionized form. (In aqueous solution, ammonia assumes an equilibrium between NH_3 and NH^+_4.) The NH_3 is the toxic entity of the ammonia compound.

Gender

B Both
F Female
M Male

Dose or Result Statistical Method

CI Confidence Interval
CL Confidence Limit
CV Confidence Value
R Range
SD Standard Deviation
SE Standard Error

Chemical Analysis Method

C Calculated
M Measured
NR Not Reported or unclear if the concentration was measured or unmeasured
U Unmeasured (Nominal)
X Unmeasured values, but some measured values reported in publication

Ionic Fraction

Ag	Silver
Al	Aluminum
Am	Americium
As	Arsenic
AsO4	Arsenate
B	Boron
B4O7	Bromate
Ba	Barium
Be	Beryllium
BO3	Borate
BrO3	Bromate
Br	Bromine
C	Carbon
Ca	Calcium
Cd	Cadmium
Ce	Cerium
Cl	Chlorine
ClO2	Chlorite
ClO3	Chlorate
Cl04	Perchlorate
Cn	Cyanide
CPOX	Chlorine Produced Oxidant
Co	Cobalt
Cr	Chromium
Cr207	Chromate
CrVI	Chromium (VI)
Cs	Cesium
Cu	Copper
F	Fluorine
Fe	Iron
Ga	Gallium
Ge	Germanium
HCN	Hydrogen cyanide
Hg	Mercury
HS-	Hydrogen sulfide ion
I	Iodine
In	Indium
K	Potassium
La	Lanthanum
Li	Lithium
MeHg	Methylmercury
Mg	Magnesium
Mn	Manganese
Mn04	Manganate
Mo	Molybdenum
MoO4	Molybdate
N	Nitrogen
N3	Azide
Na	Sodium
NaN3	Sodium azide
Nb	Niobium
NH3	Ammonia (unionized)
NH4	Ammonium (total)
Ni	Nickel
NO2	Nitrite
NO3	Nitrate
NO2N	Ammonium nitrite
NO3N	Ammonium nitrate
P	Phosphorus
Pb3E	Triethyl Lead
Pb	Lead
PCP	Pentachlorophenate
PQT	Paraquat
Rb	Rubidium
Rh	Rhodium
Ru	Ruthenium
S	Sulfur
Sc	Scandium
Sm	Samarium
S2O3	Thiosulfate
Sb	Antimony
SbO4	Antimonate
SCN	Thiocyanate
Se	Selenium
SeO3	Selenite
SeO4	Selenate
SiO2	Silicate
Sn	Tin
SO4	Sulfate
Sr	Strontium
TBT	Tributyltin
TBTO	Tributyltin oxide
Te	Tellurium
Ti	Titanium
Tl	Thallium
TRBr	Total Residual Bromine
TRCl	Total Residual Chlorine
TROX	Total Residual Oxidant
U	Uranium
UO2	Uranium oxide (Uraninite)
V	Vanadium
W	Wolfram
WO4	Tungstate
Y	Yttrium
Zn	Zinc
Zr	Zirconium

CONCENTRATION, DOSE AND RESPONSE UNITS

1e- x/L	One exponential base ten to the negative x per Liter
1e- x/M	One exponential base ten to the negative x per Molar
1e- x dpm/g	One exponential base ten to the negative x disintegrations per minute per gram
1e- x dpm/mg Pi	One exponential base ten to the negative x disintegrations per minute per milligram Pi
1e- x J/beat/kg	One exponential base ten to the negative x Joules per beat per kilogram
1e- x mg/mg/d	One exponential base ten to the negative x milligrams per milligrams per day
1e- x mm3	One exponential base ten to the negative x

	per cubic millimeter
1e- x mm	One exponential base ten to the negative x per millimeters
1e-x RA	One exponential base ten to the negative x ratio
1e-x ug/g	One exponential base ten to the negative x micrograms per gram
1e+ x cal/g	One exponential base ten to the x calories per gram
1e+ x cells	One exponential base ten to the x cells
1e+ x cm	One exponential base ten to the x centimeters
1e+ x dpm/g org	One exponential base ten to the x disintegrations per minute per gram of organism
1e+ x dpm/mg DNA	One exponential base ten to the x disintegrations per minute per milligram deoxyribonucleic acid
1e+ x dpm/mg RNA	One exponential base ten to the x disintegrations per minute per ribonucleic acid
1e+ x dpm/ml	One exponential base ten to the x disintegrations per minute per milliliter
1e+ x dpm/org	One exponential based ten to the x disintegrations per minute per organism
1e+ x dpm/TI	One exponential base ten to the x disintegrations per minute per tissue
1e+ x IU/TI	One exponential base ten to the x International Units per tissue
1e+ x kg	One exponential base ten to the x kilogram
1e+ x/L	One exponential base ten to the x per Liter
1e+ x/ml	One exponential base ten to the x per milliliter
1e+ x/ml sperm	One exponential base ten to the x per milliliter sperm
1e+ x/mm	One exponential base ten to the x per millimeter
1e+ x/mm3	One exponential base ten to the x per cubic millimeter
1e+ x ng	One exponential base to the x nanograms
1e+ x ng/g	One exponential base to the x nanograms per gram
1e+ x no	One exponential base ten to the x number
1e+ x no/cm	One exponential base ten to the x number per centimeter
1e+ x no/cm3	One exponential base ten to the x number per cubic centimeter
1e+ x no/g TI	One exponential base ten to the x number per gram tissue
1e+ x no/L	One exponential base ten to the x number per Liter
1e+ x no/mg SP	One exponential base ten to the x number per milligram spleen
1e+ x no/mg TI	One exponential base ten to the x number per milligram tissue
1e+ x no/ml	One exponential base ten to the x number per milliliter
1e+ x no/org	One exponential base ten to the x number per organism
1e+ x RA	One exponential base ten to the x ratio
1e+ x RNA/TCA/DNA	One exponential base ten to the x counts per minute RNA per milligram TCA per milligram
1e+ x ug/g	One exponential base ten to the x number microgram per gram
1e+ x ug/TI	One exponential base ten of the x micrograms per tissue
1e+ x/ul	One exponential base ten to the x per microliter
10x6/ul	Ten to the sixth power per microliter
a-amino N/24h	Alpha aminonitrogen per 24 hours
absrb	Absorbance
act	Activity
act/g pro	Activity per gram protein
act/g TI	Activity per gram tissue
Activ/nonactiv	Activated to non-activated ratio
acts/3 mi	Acts per three minutes
ad	Adults
ad/jv	Adults per juvenile
AI lb/acre	Active ingredient pounds per acre
AI mg/kg	Active Ingredient milligrams per kilograms
AI mg/kg org	Active Ingredient milligrams per kilograms organism
AI mg/kg soil	Active Ingredient milligrams per kilogram soil
AI mg/L	Active ingredient milligrams per Liter
AI ug/cm2	Active ingredient micrograms per square centimeter
amend:unamend	Amended to unamended treatment ratio
AU	Arbitrary Units
B’	Chromatid break
B’‘	Isochromatid break
Beats*ml/mi2	Beats multiplied by milliliters per square minute
Beats/mi	Beats per minute
Bits	Bits
BO:LI	Bone to liver ratio
Bq	Becquerels
Bq/kg	Becquerels per kilogram
Bq/L	Becquerels per liter
Bq/g	Becquerels per gram
Bq/ml	Becquerels per milliliter
Bq/mg	Becquerels per milligram
Bq/org	Becquerels per organism
BR:BL	Brain to blood ratio
burrows	Burrows

C	Centigrade, degrees
Cal	Calories
castings	Castings
Casts/eu	Casts per experimental unit
cc	Cocoons
cc/10 ad	Cocoons per ten adults
cc/ad	Cocoons per adult
cc/cntr	Cocoons per container
cc/eu	Cocoons per experimental unit
cc/org	Cocoons per organism
cc/org/8w	Cocoons per organism per eight weeks
cc/org/wk	Cocoons per organism per week
cc/sad	Cocoons per surviving adult
cc/unit	Cocoons per unit
cell/8 srtl cel	Cells per eight Sertoli cells
cell/mi x10x3	Cells per minutes times ten to the third power
cell:nuclei	Cells to nuclei ratio
cells	Cells
cells/50mg	Cells per fifty milligrams
cells/100 clm	Cells per 100 coelomocytes
cells/1e+ x cells	Cells per one exponential based ten to the x cells
cells/area	Cells per area
cells/ml	Cells per milliliter
cells/mm	Cells per millimeter
cells/mm cortex	Cells per millimeter cortex
cells/mm folium	Cells per millimeter folium
cells/mm2	Cells per millimeter squared
cells/tubule	Cells per tubule
cells/u a	Cells per unit area
cfu/mg	Colony forming units per milligram
chem/d	Chemical per day
CHLA:CHLB	Chlorophyll a to chlorophyll b ratio
CI	Color Index
Ci/L	Curies per liter
Ci/mmol	Curies per millimole
Ci/mol	Curies per mole
Clusters	Clusters
Clutches	Clutches
cm	Centimeter
cm H20	Centimeters of water
cm/cm3	Centimeters per cubic centimeter
cm/d	Centimeters per day
cm/dm3	Centimeters per cubic decimeter
cm/g bdwt/h	Centimeters per gram body weight per hour
cm/g soil	Centimeters per gram soil
cm/org	Centimeters per organisms
cm/wk	Centimeters per week
cm2	Centimeters squared
cm2/kg	Centimeters squared per kilogram
cm2/org	Centimeters squared per organism
cm3	Centimeters cubed
cm3/eu	Centimeters cubed per experimental unit
cpm	Counts per minute
cpm x 1000	Counts per minute times 1000
cpm/1e+ x cells	Counts per minute per one exponential to the base ten to the x cells
cpm/cc	Counts per minute per cocoon
cpm/g TI	Counts per minute per gram tissue
cpm/L	Counts per minute per liter
cpm/mg	Counts per minute per milligram
cpm/mg pro	Counts per minute per milligram protein
cpm/mg RNA	Counts per minute per milligram RNA
cpm/mg UA	Counts per minute per milligram uronic acid
cpm/ml	Counts per minute per milliliter
cpm/org	Counts per minute per organism
CRB:BR	Cerebellum to brain ratio
CRM:BR	Cerebrum to brain ratio
cRNA/mgRNA/DNA	Counts per minute RNA per milligram RNA per milligram DNA
Cyc/deg	Cycles per degree
d	Day
DB/mg pro	Lipid aliphatic double bonds per milligram protein
Dead:live	Dead to living organism ratio
DNA:RNA	DNA to RNA ratio
dpm	Disintegrations per minute
dpm/167 mg tissue	Disintegrations per minute per 167 milligrams tissue
dpm treat:cntl	Disintegrations per minute treated to control ratio
dpm/EU	Disintegrations per minutes per experimental unit
dpm/g	Disintegrations per minute per gram
dpm/g *100	Disintegrations per minute per gram times 100
dpm/mg FA	Disintegrations per minute per milligram fatty acid
dpm/mg GH	Disintegrations per minute per milligram growth hormone
dpm/mg GH*100	Disintegrations per minute per milligram growth hormone times 100
dpm/mg pro	Disintegrations per minute per milligram protein
dpm/mg	Disintegrations per minute per milligram
dpm/ml	Disintegrations per minute per milliliter
e/hd	Eggs per hen day
e/org	Eggs per organism
e/org/d	Eggs per organism per day
e/org/wk	Eggs per organism per week
ea/eu	Ears per experimental unit
eggs	Eggs
eggs/10 wks	Eggs per 10 weeks
egg/100 ad	Eggs per 100 adults
egg/org/wk	Eggs per organism per week
eggs/BDAY	Eggs per bird day
eggs/d	Eggs per day
eggs/fm	Eggs per female

eggs/fm/d	Eggs per female per day
eggs/fm/wk	Eggs per female per week
eggs/org	Eggs per organism
eggs/org/d	Eggs per organism per day
eggs/pair	Eggs per pair
em/FM	Embryos per female
enz act	Enzyme activity
eu	Enzyme unit
EU/g	Enzyme unit (amount of enzyme needed to catalyze)/g
FD:Gain	Weight of food consumed to weight gained ratio
FD:WTR	Food to water ratio
FER	Feed efficiency ratio
Fet	Fetuses
Fetuses/litter	Fetuses per litter
Final:initial	Initial parameter to final parameter ratio
fl	Femtoliters
Fledge/pair	Fledge per pair
fm	Females
fm/lit	Females per litter
fmol/mg pro	Femtomol per milligram protein
FTS:PLC	Fetus to placenta ratio
FU/g	Fluorescence units per gram
g	Grams
G’	Chromatid gap
G’‘	Isochromatid gap
g %	Gram percent
g/ 0.5 m2	Grams per 0.5 square centimeter
g gain/kg fd	Grams gain per kilogram food
g H20/dm2/h	Grams water per square decameter per hour
g/4 d	Grams per 4 days
g/70 d	Grams per 70 days
g/100 g	Grams per 100 grams
g/100 g bdwt/h	Grams per 100 grams body weight per hour
g/100 g BW	Grams per 100 grams body weight
g/100 g BW/d	Grams per 100 grams body weight per day
g/100 g org	Grams per 100 grams organism
g/100 kg org	Grams per 100 kilograms organism
g/100 le	Grams per 100 leaves
g/100 ml	Grams per 100 milliliters
g/100 stl	Grams per 100 stolons
g/100 sd	Grams per 100 seeds
g/1000 gr	Grams per 1000 grains
g/13125 ft2	Grams per 13125 square feet
g/5 kg soil	Grams per 5 kilograms soil
g/BDAY	Grams per bird day
g/bdwt e0.75	Grams per body weight multiplied by one exponential to the 0.75
g/cc	Grams per cocoon
g/cm2	Grams per square centimeter
g/ctnr	Grams per experimental container
g/d	Grams per day
g/d/100 kg org	Grams per day per 100 kilograms per organism
g/d/org	Grams per day per organism
g/d/wght	Grams per day per weight
g/dl	Grams per deciliter
g/eu	Grams per experimental unit
g/fed	Grams per feddan (1 feddan = 1.038 acres)
g/fish	Grams per fish
g/fruit	Grams per fruit
g/ft2	Grams per square foot
g/g bdwt/d	Grams per gram body weight per day
g/g dry humus	Grams per gram dry humus
g/g fd	Grams per gram food
g/g TI	Grams per gram tissue
g/h	Grams per hour
g/ha	Grams per hectare
g/kg	Grams per kilogram
g/kg bdwt	Grams per kilogram body weight
g/kg bdwt/d	Grams per kilogram body weight per dry soil
g/kg fd	Grams per kilogram food
g/kg feed	Grams per kilogram feed
g/L	Grams per liter
g/LIT	Grams per litter
g/m2	Grams per square meter
g/m3	Grams per cubic meter
g/ml	Grams per milliliter
g/org	Grams per organism
g/org/d	Grams per organism per day
g/org/eu	Grams per organism per experimental unit
g/org/wk	Grams per organism per week
g/sample	Grams per sample
g/µg	Grams per microgram
g/wk	Grams per week
Gain:FD	Ratio of weight gained to weight of food consumed
gal/acre	Gallons per acre
gamma/day	Gamma/ per day (Von Bertalanffy growth)
gamma/g TI	Gamma counts per gram tissue
grade	Grade
grain/panicle	Grains per panicle
h	Hour
H’	Shannon-Weiner Diversity Index
Haugh U	Haugh Units
Hsk:Gr	Ratio plant husk to grain
Implants	Implants
in	Inches
in2	Square inches
Index	Index
IU	International Units
IU/g	International Units per gram
IU/kg bdwt	International Units per kilogram body weight
IU/L	International Units per liter
IU/mg	International Units per milligram
IU/mg Hb	International Units per milligram hemoglobin

IU/mg TI	International Units per milligram tissue
IU/orgwt	International Units per organ weight
J/beat	Joules per beat
J/d	Joules per day
jv	Juveniles
jv/ad	Juveniles per adult
jv/cc	Juveniles per cocoon
jv/cntr	Juveniles per container
jv/eu	Juveniles per experimental unit
jv/fm	Juveniles per female
jv/ftcc	Juveniles per fertile cocoon
jv/lit	Juveniles per litter
jv/mated fm	Juveniles per mated female
jv/org	Juveniles per organism
jv/org/wk	Juveniles per organisms per week
k2/d	Elimination rate constant 2 per day
ka/d	Elimination rate per day
kBq	KiloBecquerels
kBq/dm3	KiloBecquerels per cubic decimeter
kBq/eu	KiloBecquerels per experimental unit
kBq/L	KiloBecquerels per liter
kBq/ml	KiloBecquerels per milliliter
kcal	Kilocalories
kcal/d	Kilocalories per day
kg	Kilograms
kg/0.5 m2	Kilograms per 0.5 square meters
kg/11 meters	Kilograms per 11 meters
kg/d	Kilograms per day
kg/eu	Kilograms per experimental unit
kg/fed	Kilograms per feddan (1 feddan= 1.038 acres)
kg/ha	Kilograms per hectare
kg/L	Kilograms per liter
kg/org	Kilograms per organism
kg/org/d	Kilograms per organism per day
kg/wk	Kilograms per week
KI:BR	Kidney to brain ratio
kJ/d/org	KiloJoules per day per organism
L	Liters
L/24h	Liters per 24 hours
L/ha	Liters per hectare
Lamellae/axon	Lamellae per axon
lb	Pounds
lb/acre	Pounds per acre
lb/cwt sd	Pounds per hundred weight seed
lb/d	Pounds per day
lb/org/d	Pounds per organism per day
lb/plot	Pounds per plot
LGTH/s	Length per second
LGTH:THIK	Length to thickness ratio
LI:BR	Liver to brain ratio
lit	Litters
ln(Wf/Wi)	Ntural log (mean survivor weight/mean initial weight)
log 10 ug/g org	Log ten micrograms per gram organism
log2 titers	Log2 titers
log rel	Log relative activity per intensity
LU:BR	Lung to brain ratio
M	Molar (moles per liter)
m3	Cubic meters
maturity index	Maturity index
mBq	MilliBecquerels
mBq/ml	MilliBecquerels per milliliter
mCi	MilliCuries
mCI mg	MilliCuries milligram
mCi/mg	MilliCuries per milligram
mCi/ml	MilliCuries per milliliter
mCi/mmol	MilliCuries per millimole
meq	Milliequivalents
meq/100g	Milliequivalents per 100 gram
meq/g	Milliequivalents per gram
meq/L	Milliequivalents per liter
metric t/ha	Metric tons per hectare
mg	Milligrams
mg %	Milligrams percent
$mg^{1/3}$	Milligrams to 1/3 power
mg C/g OM	Milligrams carbon per gram organic matter
mg C2H4/eu/d	Milligrams of ethylene produced per experimental unit per day
mg C2H4/ed/h	Milligrams of ethylene produced per experimental unit per hour
mg CO2/100g soi	Milligrams carbon dioxide per 100 grams soil
mg CO2/dm2/h	Milligrams carbon dioxide per square decameter per hour
mg CO2/hr/g ndl	Milligrams carbon dioxide per hour per gram of needles
mg CO2/m2/sec	Milligrams carbon dioxide per square meter per second
mg H2O/d*cm2*T	Milligrams water per day times squared centimeters times Torr
mg N/100 ml	Milligrams nitrogen per 100 milliliters
mg NH3/g org	Milligrams ammonia per gram organism
mg NH3/g org/h	Milligrams ammonia per gram organism per hour
mg O2/g org	Milligrams oxygen per gram organism
mg P/h/g TI	Milligrams phosphorus per hour per gram tissue
mg pro/g	Milligrams protein per gram
mg pro/mg	Milligrams protein per milligram
mg pro/mi	Milligrams protein per minute
mg TI/kg bdwt	Milligrams tissue per kilogram body weight
mg urea/g org	Milligrams urea per gram organism
mg %	Milligram percent
mg/10g	Milligrams per 10 grams
mg/10g bdwt	Milligrams per 10 grams body weight
mg/10g org	Milligrams per 10 grams organism
mg/100g	Milligrams per 100 grams
mg/100g bw	Milligrams per 100 grams body weight
mg/100g TI	Milligrams per 100 grams tissue
mg/100g/d	Milligrams per 100 grams per day
mg/100 lbs	Milligrams per 100 pounds

mg/100mg TI	Milligrams per 100 milligrams tissue
mg/100ml	Milligrams per 100 milliliters
mg/12h	Milligrams per 12 hours
mg/24h	Milligrams per 24 hours
mg/24h/kg	Milligrams per 24 hours per kilograms
mg/70g	Milligrams per 70 grams
mg/cc	Milligrams per cocoon
mg/cm	Milligrams per centimeter
mg/cm2	Milligrams per square centimeter
mg/cm2/d	Milligrams per square centimeter per day
mg/cm2*Torr	Milligrams per square centimeter times Torr
mg/cm3	Milligrams per cubed centimeter
mg/cntr	Milligrams per container
mg/d	Milligrams per day
mg/d/wght	Milligrams per day per weight
mg/dl	Milligrams per deciliter
mg/dm3	Milligrams per cubic decimeter
mg/dose	Milligrams per dose
mg/d/100 mg org	Milligrams per day per 100 milligrams organisms
mg/eu	Milligrams per experimental unit
mg/fish	Milligrams per fish
mg/g	Milligrams per gram
mg/g ash	Milligrams per gram ash
mg/g bdwt	Milligrams per gram body weight
mg/g MIT	Milligrams per gram mitochondria
mg/g clay	Milligrams per gram clay
mg/g TI	Milligrams per gram tissue
mg/g N	Milligrams per gram nitrogen
mg/g org	Milligrams per gram organism
mg/g pod	Milligrams per gram of pod
mg/g soil	Milligrams per gram soil
mg/g/d	Milligrams per gram per day
mg/gland/g bdwt	Mlligrams per gland per gram body weight
mg/h	Milligrams per hour
mg/ha	Milligrams per hectare
mg/in2/d	Milligrams per square inch per day
mg/jv	Milligrams per juvenile
mg/kg	Milligrams per kilogram
mg/kg bdwt	Milligrams per kilogram body weight
mg/kg bdwt/d	Milligrams per kilogram body weight per day
mg/kg/d soil	Milligrams per kilogram per day soil
mg/kg dry wt	Milligrams per kilogram dry weight
mg/kg fd	Milligrams per kilogram food
mg/kg org	Milligrams per kilogram organism
mg/kg org/d	Milligrams per kilogram organism per day
mg/kg soil	Milligrams per kilogram soil
mg/kg wt	Milligrams per kilogram weight
mg/kg/d	Milligrams per kilogram per day
mg/kg/fish	Mlligrams per kilogram per fish
mg/kg/L	Milligrams per kilogram per liter
mg/kg/org	Milligrams per kilogram per organism
mg/kg TI	Milligrams per kilogram tissue
mg/kg/wk	Milligrams per kilogram per week
mg/l	Milligrams per liter
mg/l/d	Milligrams per liter per day
mg/m2	Milligrams per square meter
mg/mi	Milligrams per minute
mg/ml	Milligrams per milliliter
mg/mg	Milligrams per milligrams
mg/mg node	Milligram per milligram nodules
mg/org	Milligrams per organism
mg/org/d	Milligrams per organism per day
mg/organis	Milligrams per organism
mg/org/wk	Milligrams per organism per week
mg/orwt	Milligrams per organ weight
mg/TI	Milligrams per tissue
mi	Minute
mi/nmol Rh	Minutes per nanomoles rhodopsin
micronaires	Micronaires
microns	Microns
ml	Milliliters
ML	Males
ml/70d	Milliliters per 70 days
ml/100g	Milliliters per 100 grams
ml/100g bdwt	Milliliters per 100 grams body weight
ml/100g bdwt/d	Milliliters per 100 grams body weight per day
ml/24h	Milliliters per 24 hours
ml/body wt	Milliliters per body weight
ml/d	Milliliters per day
ml/d/100g BW	Milliters per day per 100 grams body weight
ml/d/org	Milliters per day per organism
ml/eu	Milliliters per experimental unit
ML:FM	Ratio of males to females
ml/g food	Milliliters per gram food
ml/g/h	Milliliters per gram per hour
ml/h	Milliliters per hour
ml/kg	Milliliters per kilogram
ml/kg/d	Milligrams per kilogram per day
ml/L	Milliliters per liter
ml/lit	Milliliters per litter
ml/10 L	Milliliters per 10 liters
ml/m2	Milliliters per square meter
ml/mi	Milliliters per minute
ml/mi/100g	Mlliliters per minute per 100 grams
ml/mi/kg	Milliliters per minute per kilogram
ml/org	Millliliters per organism
ml/org/d	Milliliters per organism per day
mm	Millimeters
mM	MilliMolar (millimoles per liter)
mM/g	Millimoles per gram
mmg	Micromilligrams
mmHg	Millimeters mercury
mmHg/s	Millimeters mercury per second
mm/org	Millimeters per organism
mm/ug pro	Millimeters per microgram protein
mm2	Millimeters squared
mm2/org/d	Millimeters squared per organism per day

mm3	Millimeters cubed
mm3/100 g d soil	Cubic millimeters per 100 grams dry soil
mm3/L	Millimeter cubed per liter
mmol	Millimoles
mmol NO2/kg	Millimoles nitrogen dioxide per kilogram
mmol/100 g	Millimoles per 100 grams
mmol/g	Millimoles per gram
mmol/h/g TI	Millimoles per hour per gram tissue
mmol/kg	Millimoles per kilogram
mmol/kg/d	Millimoles per kilogram per day
mmol/kg soil	Millimoles per kilogram soil
mmol/L	Millimoles per liter
mmol/m3	Millimoles per cubic meter
mol	Moles
mol/g	Moles per gram
mol/L	Moles per liter
mol/m3	Moles per cubic meter
mol/ml	Moles per milliliter
mol/org	Moles per organism
molal	Molality
morph/org	Ectomycorrhizal morphotypes per organism
mOsm	Milliosmoles
mp/mg pro/15 mi	Microsomal proteins per milligram protein per fifteen minutes
ms	Milliseconds
mU	International milliunits (nmol substrate transformed per minute per milliliter
m U/mg pro	Micro Units per milligram protein
m U/ml	Millunit per milliliter
m U/org	Milliunits per organism
mu	Milliunits
mu/24h	Milliunits per 24 hours
mu/24h/kg	Milliunits per 24 hours per kilogram
mu/g	Milliunits per gram organism
mu/mi/ml	Milliunit per minute per milliliter
mu/ml	Milliunit per milliliter
N	Normal (equivalents per liter)
NA	Not applicable
nCi	NanoCuries
nCi/L	NanoCuries per liter
nCi/g org	NanoCuries per gram organism
ng	Nanograms
ng/100g bdwt	Nanograms per 100 grams body weight
ng ATP/g d soil	Nanograms ATP per grams dry soil
ng/cm	Nanograms per centimeter
ng/cm2	Nanograms per square centimeter
ng/d	Nanograms per day
ng/dl	Nanograms per deciliter
ng/egg	Nanograms per egg
ng/fish	Nanograms/fish
ng/g	Nanograms per gram
ng/g bdwt	Nanograms per gram body weight
ng/g diet	Nanograms per gram diet
ng/g dry wt	Nanograms per gram dry weight
ng/g org	Nanograms per gram organism
ng/g TI/4h	Nanograms per gram tissue per four hours
ng/g/d	Nnograms per gram per day
ng/gland	Nanograms per gland
ng/kg	Nanograms per kilogram
ng/L	Nannograms per liter
ng/mg	Nanograms per milligram
ng/mg pro	Nanograms per milligram protein
ng/mg/mi	Nanograms per milligram per minute
ng/min	Nanograms per minute
ng/ml	Nanograms per milliliter
ng/ml blood/d	Nanograms per milliliter blood per day
ng/mm/day	Nanograms per millimeter per day
ng/org	Nanograms per organism
ng/organis	Nnograms per organism
ng/or wt	Nanograms per organ weight
ng/TI	Nanograms per tissue
nkat/mg pro	Nanokatals per milligrams protein
nM	NanoMolar (nanomoles per liter)
nM DSMN:uM LYSI	Nanomoles desmosine to micromoles lysine ratio
nM/g	NanoMolar per gram
nM/L	NanoMolar per liter
nmol	Nanomoles
nmol ATP/g soil	Nanomoles adenosine triphosphate per gram of soil
nmol enz/hr	Nanomoles enzyme per hour
nmol MDA/mg pro	Nanomoles per malonaldehyde per milligram protein
nmol mdhyde/g	Nanomoles malondialdehyde per gram
nmol PBG/h/ml	Nanomoles porphobilinogen per hour per milliliter
nmol/g	Nanomoles per gram
nmol/g/30mi	Nanomoles per gram per 30 minutes
nmol/g/4 mi	Nanomole per gram per 4 minutes
nmol/g humus	Nanomoles per gram humus
nmol/g/h	Nanomoles per gram per hour
nmol/g pro	Nanomoles per gram protein
nmol/g ro/4h	Nanomoles per gram root per 4 hours
nmol/g soil	Nanomoles per gram soil
nmol/g TI	Nanomoles per gram tissue
nmol/g TI/h	Nanomoles per gram tissue per hour
nmol/kg	Nanomoles per kilogram
nmol/g/mi	Nanomoles per gram per minute
nmol/kg/mi	Nanomoles per kilogram per minute
nmol/L	Nanomoles per liter
nmol/mg	Nanomoles per milligram
nmol/mg pro	Nanomoles per milligram protein
nmol/mg pro/h	Nanomoles per milligram protein per hour
nmol/mg pro/mi	Nanomoles per milligram protein per minute
nmol/mg TI	Nanomoles per milligram tissue
nmol/mg/20mi	Nanomoles per milligram per 20 minutes
nmol/mg/mi	Nanomoles per milligram per minute
nmol/mg pro/30mi	Nanomoles per milligram protein per 30 minutes

nmol/mi/g	Nanomoles per minute per gram
nmol/mi/mg pro	Nanomoles per minute per milligram protein
nmol/mi/ml	Nanomoles per minute per milliliter
nmol/mi/ml RBC	Nanomoles per minute per milliliter red blood cells
nmol/mi/org	Nanomoles per minutes per organism
nmol/ml	Nanomoles per milliliter
nmol/ml RBC/h	Nanomoles per milliliter red blood cells per hour
nmol/nm p450/mi	Nanomoles per nanomole cytochrome P450 per minute
nmol/org	Nanomoles per organism
nmol/org/0.5 h	Nanomoles per organism per 0.5 hours
nmol/org/h	Nanomoles per organism per hour
nmol/TI	Nanomoles per tissue
no	Number
no >15cm	Number greater than 15 centimeters
no errors	No errors
no follicles	Number of follicles
no/1 mi	Number per 1 minute
no/5 mi	Number per 5 minutes
no/10 mi	Number per 10 minutes
no/100 u2	Number per 100 microns squared
no/100 WBC	Number per 100 white blood cells
no/1000	Number per 1000
no/1000 RBCE	Number per 1000 red blood cells
no/5000 cells	Number per 5000 cells
no/15000 x field	Number per 15000 times field
no/area	Number per area
no/cell	Number per cell
no/cm	Number per centimeter
no/d	Number per day
no/eu	Number per experimental unit
no/fm	Number per female
no/g	Number per gram
no/g soil	Number per gram soil
no/h	Number per hour
no/ha	Number per hectare
no/litter	Number of organisms per litter
no/m2	Number per square meter
no/mg TI	Number per milligram tissue
no/mm2	Number per square millimeter
no/mi	Number per minute
no/nuclei	Number per nuclei
no/org	Number per organism
no/org/d	Number per organism per day
no/panicle	Number per panicle
no/plot	Number per experimental plot
no/preg FM	Number per pregnant female
no/sec	Number per second
no/sertoli	Number per sertoli cells
no/so	Number per shoot
nuclei:nucleoi	Nuclei to nucleoi ratio
OD	Optical density
OD/100% RBC	Optical density of 100% red blood cells
OD/g pro	Units of optical density change per gram protein
OD/WGHT	Optical density per weight
open bol/org	Open bolls per organism
org	Organism
org conc/soil c	Organism concentration per soil concentration
org/0.25ft2	Organisms per 0.25 square feet
org/0.25m2	Organisms per 0.25 square meters
org/0.3m	Organisms per 0.3 meters
org/10 m	Organisms per 10 meters
org/100g soil	Organisms per 100 grams soil
org/200cm3 soil	Organisms per 200 cubic centimeters of soil
org/50 cm2	Organisms per 50 square centimeters
org/cm ro	Organisms per centimeter root
org/cntr	Organisms per container
org/d/cntr	Organisms per day per container
org/eu	Organisms per experimental unit
org/fm	Organisms per female
org/ft2	Organisms per foot squared
org/g	Organisms per gram
org/g dry soil	Organisms per gram dry soil
org/g humus	Organisms per gram humus
org/g root	Organisms per gram root
org/g soil	Organisms per gram soil
org/ha	Organisms per hectare
org/kg soil	Organisms per kilogram soil
org/lit	Organisms per litter
org/m2	Organisms per square meter
org/plot	Organisms per plot
org/sample	Organisms per sample
org/sector	Organisms per sector
org/trap	Organisms per trap
org/tree	Organisms per tree
org/wk	Organisms per week
OT	Optical transmission
OT/1 cm WDTH	Optical transmission per one centimeter bone width
OT/10cm BO	Optical transmission per ten centimeters bone
OT/10kg WGHT	Optical transmission per ten kilograms weight
OT/1 mm CCT	Optical transmission per one millimeter combined cortical thickness
OV:BR	Ovary to brain ratio
oz	Ounces
oz/acre	Ounces per acre
%	Percent
% Cell Volume	Percent cell volume
% * g	Percent multiplied by weight in grams
% act	Percent activity
% arb	Percent arbuscularity
% ash	Percent ash
% change	Percent change
% clitellate	Percent clitellate
% corn	Percent corn pollen

%/d	Percent per day
% d wght	Percent dry weight
% dev CNTL	Percent deviation from control
% dose ret	Percent dose retained
% dose/h	Percent dose per hour
% earliness	Percent earliness
% FATL	Percent of total fatty acids
% FM	Percent female
% g	Percent grams
%/g TI	Percent per gram tissue
% INHIB	Percent inhibition
% lit	Percent of litter
% mg	Percent milligrams
% mg/g bdwt	Percent milligrams per gram body weight
% NaCl	Percent sodium chloride
% of bdwt	Percent of body weight
% of CNTL	Percent of control
% of initial	Percent of initial quantity
% of max yld	Percent of maximum yield
% of org	Percent of organisms
% of tolerance	Percent of tolerance
% of total	Percent of total value
% org	Percent of organisms
%/org/d	Percent per organism per day
% PLIPD	Percent of total phospholipid
% RBC	Percent red blood cells
% S/ppm Zn	Percent sulfur per parts per million zinc
% sat	Percent saturation
% sperm	Percent sperm
% succ br/fm	Percent successful broods per female
% tolerance	Percent tolerance
% total dose	Percent total dose
% total oil	Percent Total Oil Content
% vol	Percent volume
% v/v	Percent volume per volume
% wght	Percent weight
% wght/org	Percent weight per organism
%/wk	Percent per week
pCi/g	PicoCuries per gram
pCi/L	PicoCuries per liter
pCi/ml	PicoCuries per milliliter
pecks/s	Pecks per second
pellets	Pellets
pellet/d	Pellets per day
pellet/org/d	Pellets per organisms per day
pg	Picograms
pg/dm3	Picograms per decimeter cubed
pg/g	Picograms per gram
pg/L	Picograms per liter
pg/mg org	Picograms per milligram organism
pg/ml	Picograms per milliliter
pg/org	Picograms per organism
pg/TI	Picograms per tissue
pH	pH
PI g/L	PI (π) grams per liter
PL:BL	Plasma to blood ratio
PLC:BL	Placenta to blood ratio
pmol/g	Picomoles per gram
pmol/g/mi	Picomoles per gram per minute
pmol/hr/mg	Picomoles per hour per milligram
pmol/L	Picomoles per liter
pmol/mg	Picomoles per milligram
pmol/mg/d	Picomoles per milligram per day
pmol/mg/mi	Picomoles per milligram per minute
pmol/mg pro	Picomoles per milligram protein
pmol/mg pro/h	Picomoles per milligram protein per hour
pmol/mg pro/mi	Picomoles per milligram protein per minute
pmol/mi/mg pro	Picomoles per minute per milligram protein
pmol/mg/nmol r	Picomoles per milligram per nanomole rhodopsin
pmol/ml	Picomoles per milliliter
pmol/nm P450/mi	Picomoles per nanomole cytochrome P450 per minute
ppb	Parts per billion
ppb/2H/org	Parts per billion per two hours per organism
ppm	Parts per million
ppm dw fd	Parts per million dry weight food
ppm/eu	Parts per million per experimental unit
ppm/organi	Parts per million per organism
ppt	Parts per thousand
pptr	Parts per trillion
q/ha	Quintals per hectare
RA	Ratio: use the number, no unit needed
RA 1e-x	Ratio times one exponential base ten to the negative x
RA/wk	Ratio per week
rate/mi	Rate per minute
rate/100 org	Rate per 100 organisms
rev/5h	Revolutions per 5 hours
rgv	Relative gray value
RI	Ratcliffe Index
RNA:DNA	RNA to DNA ratio
ro:so	Root to shoot ratio
rpm	Revolutions per minute
RR	Centric fusions
RSA/TI	Relative specific activity per tissue
RV:TV	Right ventricle to total ventricle ratio
s	Seconds
s/8 rpm	Seconds per 8 revolutions per minute
s/12 rpm	Seconds per 12 revolutions per minute
s/16 rpm	Seconds per 16 revolutions per minute
s/g	Seconds per gram
s/h	Seconds per hour
sd/org/d	Seeds per organism per day
SFU	Sigma Frankel units

sgth:wght	Strength to weight ratio
sigma u/100 ml	Sigma units per 100 milliliters
SP:BR	Spleen to brain ratio
so:gr	Shoot to grain ratio
so:ro	Shoot to root ratio
species	Species
spec gravity	Specific gravity
spines/u area	Spines per unit area
str:gr	Ratio plant straw to grain
succ br	Successful broods
succ br/fm	Successful broods per female
T3:T4	Triidothyronine (T3) to thyroxine (T4) ratio
t/ha	Tons per hectare
t/ha gr/t/ha gr	Tons per hectare grain over tons per hectare grain plus straw [t/ha gr/t/ha gr + str]
taxa	Taxa
TE:BR	Testes to brain ratio
tillers/m2	Tillers per square meter
tons/acre	Tons per acre
top:root	Top to root ratio
TS:BR	Thymus to brain ratio
treated:cntl	Treated to control ratio
u	Units
u2	Microns squared
u3	Microns cubed
u act	Unit activity (an increase in absorbance at 555 nm of 0.100, with a 1.0 cm light path, per milliliter of erythrocytes per hour, a 38 C)
u act/h	Unit activity per hour
U of fl	Units of fluorescence
U/0.2 ml	Units per 0.2 milliliters
u/g	Units per gram
u/l	Units per liter
u/mg N2	Units per milligram nitrogen
U/mg pro	Units per milligram protein
U/ml	Units per milliliter
U/ml RBC	Units per milliliter red blood cells
U/TI	Units per tissue
uBq	MicroBecquerels
uCi	MicroCuries
uCi/3.6mg	MicroCuries per 3.6 milligrams
uCi/30mg	MicroCuries per 30 milligrams
uCi/g	MicroCuries per gram
uCi/g org	MicroCuries per gram organism
uCi/kg	MicroCuries per kilogram
uCi/L	MicroCuries per liter
uCi/mg	MicroCuries per milligram
uCi/ml	MicroCuries per milliliter
uCi/nmol	MicroCuries per nanomole
uCi/org	MicroCuries per organism
uCi/ug	MicroCuries per micrograms
uCi/ul	MicroCuries per microliter
ueq/g	Microequivalents per gram
ueq/g pro/mi	Microatom equivalents per gram protein per minute
ueq/L	Microequivalents per liter
ug	Micrograms
ug %	Micrograms percent
ug CO2/g d sl/h	Micrograms carbon dioxide per grams dry soil per hour
ug frmzn/100 g	Micrograms formazan formed per 100 grams tissue
ug GHA/1e+x c/h	Micrograms gamma-glutamylhydroximate per one exponential base x cells per hour
ug NANA/TI	Micrograms N–acetyl neuraminic acid per tissue
ug N/g	Micrograms nitrogen per gram
ug Pi/mg	Micrograms Pi per milligram
ug Pi/mg MIT	Micrograms Pi/milligram mitochrondria
ug Pi/mg TI	Micrograms Pi/milligram tissue
ug POH/mg pro/m	Micrograms phenol per milligrams protein per minute
ug pro 1d/ne	Micrograms proteolipid per nerve pair
ug TTC/mg pro/h	Micrograms triphenyl tetrazolium chloride reduces per milligram per hour
ug/100g	Micrograms per 100 grams
ug/100g/d	Micrograms per 100 grams per day
ug/10 g bdwt	Micrograms per 10 grams body weight
ug/100 g bdwt	Micrograms per 100 grams body weight
ug/100g org d	Micrograms per 100 grams organism per day
ug/100mg	Micrograms per 100 milligrams
ug/100ml RBC	Micrograms per 100 milliliters red blood cells
ug/100mg/30mi	Micrograms per 100 milligrams per 30 minutes
ug/200mg/30mi	Micrograms per 200 milligrams per 30 minutes
ug/100 mg/h	Micrograms per 100 milligrams per hour
ug/100ml	Micrograms per 100 milliliters
ug/24h	Micrograms per 24 hours
ug/72h	Micrograms per 72 hours
ug/24h/org	Micrograms per 24 hours per organism
ug/50µl	Micrograms per 50 microliter
ug/bee	Micrograms per bee
ug/cell	Micrograms per cell
ug/cm2	Micrograms per square centimeter
ug/cm2/d	Micrograms per square centimeter per day
ug/cm3	Micrograms per cubic centimeter
ug/d	Micrograms per day
ug/d/org	Micrograms per day per organism
ug/disk	Micrograms per disk
ug/dl	Micrograms per deciliter

ug/dm3	Micrograms per cubic decimeter
ug/egg	Micrograms per egg
ug/eu	Micrograms per experimental unit
ug/eu/d	Micrograms per experimental unit per day
ug/fish	Micrograms per fish
ug/g	Micrograms per gram
ug/g ash	Micrograms per gram ash
ug/g bdwt	Micrograms per gram body weight
ug/g bdwt/d	Micrograms per gram body weight per day
ug/g d soil	Micrograms per gram dry soil
ug/g d soil/h	Micrograms per gram dry soil per hour
ug/g food	Micrograms per gram food
ug/g npro	Micrograms per gram nonprotein
ug/g org	Micrograms per gram organism
ug/g org/d	Micrograms per gram organism per day
ug/g org/wk	Micrograms per gram organism per week
ug/g org X 1E2	Micrograms per gram organisms times ten to the power of two
ug/g pro	Micrograms per gram protein
ug/g soil	Micrograms per gram soil
ug/g dry wt	Micrograms per dry weight
ug/g tissue	Micrograms per gram tissue
ug/g/d	Micrograms per gram per day
ug/g/TI	Micrograms per gram tissue
ug/g/wk	Micrograms per gram per week
ug/h/100g	Micrograms per hour per 100 grams
ug/kg	Micrograms per kilogram
ug/kg bdwt	Micrograms per kilogram body weight
ug/kg LD	Micrograms per kilogram lipid
ug/kg org	Micrograms per kilogram organism
ug/kg soil	Micrograms per kilogram soil
ug/kg TI	Micrograms per kilogram tissue
ug/kg/d	Micrograms per kilogram per day
ug/L	Micrograms per liter
ug/L/d	Micrograms per liter per day
ug/mg	Micrograms per milligram
ug/mg food	Micrograms per milligram food
ug/mg MIT	Micrgrams per milligram mitochondria
ug/mg pro	Micrograms per milligrams protein
ug/mg pro/hr	Micrograms per milligrams protein per hour
ug/mg TI	Micrograms per milligrams tissue
ug/mi/mg pro	Micrograms per minute per milligrams protein
ug/ml	Micrograms per milliliter
ug/org	Micrograms per organism
ug/organis	Micrograms per organism
ug/tank/wk	Micrograms per tank per week
ug/TI	Micrograms per tissue
ug/ul	Micrograms per microliter
uIU/ml	MicroInternational units per milliliter
ul	Microliter
ul3	Cubic microliters
ulCO2/50mgTI/10	Microliters carbon dioxide per 50 milligrams tissue per 10 minutes
ul O2/g/h	Microliters per oxygen per gram per hour
ul O2/hr/g	Microliters oxygen per hour per gram
ul O2/mi/g	Microliters oxygen per minute per gram
ul Uq/ml	Microliters per square micrometer
ul/100ml	Microliters per 100 milliliters
ul/20ml	Microliters per 20 milliliters
ul/beat/kg	Microliters per beat per kilogram
ul/cm2	Microliters per centimeter squared
ul/egg	Microliters per egg
ul/g	Microliters per gram
ul/g bdwt	Micromiler per gram body weight
ul/g/h	Microliters per gram per hour
ul/kg	Microliters per kilogram
ul/L	Microliters per liter
ul/ml	Microliters per milliliter
um	Micrometers
uM	MicroMolar (micromoles per liter)
um2	Square micrometers
um3	Cubic micrometers
uM BAPNA/mi/mgP	Micromoles of BAPNA inhibited per minute per milligram protein
uM BAPNA/mi/ml	Micromoles per BAPNA inhibited per minutes per milliliter
uM BTEE/mi/mgP	Micromoles per BTEE inhibited per minutes per milligrams protein
uM/cm3	Micromolar per cubed centimeter
uM/g	Micromoles per gram
uM/h	Micromoles per hour
uM/h/mg pro	Micromolar per hour per milligram protein
uM/kg	Micromoles per kilogram
uM/kg wght	Micromoles per kilogram weight
uM/L	MicroMolar/liter
uM/min/g	Micromolar per minute per gram
uM/mg pro	Micromolar per milligram protein
uM P/g	Micromolar Phosphorus per gram
uM SAPNA/mi/mgP	Micromoles per SAPNA inhibited per minutes per milligram protein
uM SAPNA/mi/ml	Micromoles per SAPNA inhibited per minutes per milliliter
uM TAME/mi/mgP	Micromoles per TAME inhibited per minutes per milligrams protein
uM/TI	Micromoles per tissue
um/s	Micrometers per second
um/um2	Micrometers per micrometer squared
umol	Micromoles
umol C2H4/g/h	Micromoles of ethylene produced per gram per hour
umol C2H4/org/h	Micromoles of ethylene produced per organism per hour
umol GH/mgpro/m	Micromoles reduced glutathione per milligrams protein per minute
umol NADPH/mg P	Micromoles NADPH per milligram protein

	per minute
umol NH3/1e+ xc/h	Micromoles ammonium per one exponential x to the base 10 cells per hour
umol Pbg/h/g	Micromoles of porphobilinogen per hour per gram
umol Pi/mgp/30m	Micromoles Pi per milligram protein per 30 minutes
umol Pi/mg pro/h	Micromoles Pi per milligram protein per hour
umol pyv mg p/h	Micromoles pyruvate per milligram protein per hour
umol/10g/h	Micromoles per 10 grams per hour
umol/10mg/h	Micromoles per 10 milligrams per hour
umol/100 g	Micromoles per 100 grams
umol/100 g org	Micromoles per 100 grams organism
umol/100 ml	Micromoles per 100 milliliters
umol/dl/h	Micromoles per decaliter per hour
umol/dm3	Micromoles per cubic decimeter
umol/eu	Micromoles per experimental unit
umol/g	Micromoles per gram
umol/g/15 mi	Micromoles per gram per 15 minutes
umol/g ash	Micromoles per gram ash
umol/g org	Micromoles per gram organism
umol/g pro/h	Micromoles per gram protein per hour
umol/g soil	Micromoles per gram soil
umol/g TI	Micromoles per gram tissue
umol/g TI/h	Micromoles per gram tissue per hour
umol/g/h	Micromoles per gram per hour
umol/g/mi	Micromoles per gram per minute
umol/h/g pro	Micromoles per hour per gram protein
umol/h/mg pro	Micromoles per hour per milligram protein
umol/kg	Micromoles per kilogram
umol/L	Micromoles per liter
umol/l RBC/mi	Micromoles per liter red blood cells per minute
umol/mg pro	Micromoles per milligram protein
umol/mg pro/mi	Micromoles per milligram protein per minute
umol/mg/20	Micromoles per milligram per 20 minutes
umol/mg/h	Micromoles per milligram per hour
umol/mg/mi	Micromoles per milligram per minute
umol/mi/mg pro	Micromoles per minute per milligram protein
umol/mi/ml	Micromoles per minute per milliliter
umol/ml/mi	Micrograms per milliliter per minute
umol/mi/g	Micromoles per minute per gram
umoles/l agar	Micromoles per liter agar
units	Units
units/mg pro/mi	Units enzyme per milligram protein per minute
units/l	Units per liter
units/lit	Units per litter
units/mg pro	Units per milligram protein
uU/ml	Microunits per milliliter
uV	MicroVolts
Wght/lit	Weight per litter
v/v	Volume per volume
V	Response value
w	Week
WER	Water efficiency ratio

RESULTS CODES

Endpoint Codes

Endpoint Code	Endpoint Name: Definition
BAF	**Bioaccumulation Factor:** A value that is the "ratio of the concentration of a chemical in the organism to that in the medium. Bioaccumulation refers to both uptake of dissolved chemicals from water (bioconcentration) and uptake from ingested food and sediment residues. BAF values are only reported in the terrestrial database. Values reported as BCF in pore water or hydroponic studies are reported in ECOTOX as a BAF.
BCF	**Bioconcentration Factor**: A unitless value describing the degree to which a chemical can be concentrated in the tissues of an organism in the aquatic environment. At apparent equilibrium during the uptake phase of a bioconcentration test, the BCF is the concentration of a chemical in one or more tissues of the aquatic organism divided by the average concentration in the water. $$BCF = \frac{g/kg\ chemical\ in\ organism\ tissue}{g/L\ chemical\ in\ H_2O}$$ or it is calculated from a ratio of rate constants, if at steady state, BCF = K1 (uptake) / K2 (elimination)
BCFD	**BCF dry-weight:** Bioconcentration factor derived using dry weight.
ECxx	**xx% Effective Concentration:** Effective concentration for xx% of tested organisms.
EC50	**Median Effective Concentration:** Effective concentration for 50% of the organisms tested. Used when an effect other than death is the observed endpoint.
EDxx	xx% Effective Dose: Effective dose for xx% of the organisms tested. Used when an effect other than death is the observed endpoint.
ED50	**Median Effective Dose**: Effective dose for 50% of the organisms tested. Used when an effect other than death is the observed endpoint.
ET50	**Median Effective Time:** Median time to effect or estimated mean survival time.
ICxx	**xx% Inhibition Concentration:** Statistically or graphically estimated concentration of test material, under specified concentrations, is expected to cause a xx% inhibition of a biological process for which the data are dichotomous.
IC50	**Median Inhibition Concentration:** Statistically or graphically estimated concentration of test material, under specified concentrations, is expected to cause a 50% inhibition of a biological process for which the data are dichotomous.
LC50	**Median Lethal Concentration:** Statistically estimated concentration that is expected to be lethal to 50% of a group of organisms tested. Death may be defined by the mortality, intoxification and population effect groups. TLms and TL50s with death as the measured endpoint are reported as LC50*.
LCxx	**xx% Lethal Concentration:** Lethal concentration for xx% of the tested organisms.
LD50	**Median Lethal Dose:** A statistically estimated dose that is expected to be lethal to 50% of a group of organisms.

Endpoint Code	Endpoint Name: Definition
LDxx	**xx% Lethal Dose:** A statistically estimated dose that is expected to be lethal to xx% of a group of organisms.
LETC	**Lethal Threshold Concentration:** Toxicity curve asymptotic concentration indicating an incipient LC50 value. Acute lethal action has essentially ceased.
LOEC LOEL	**Lowest Observed Effect Concentration/Level:** Lowest concentration or level (LOEL) that has a statistically significant adverse effect on the tested organisms. The term MEC (Minimum Effective Concentration) is coded as LOEC.
LR50	**Median Lethal Residue Concentration:** Statistically estimated toxicant tissue residue concentration that is expected to be lethal to 50% of a group of organisms tested. The residue value is displayed in the concentration field.
LT50	**Mean Survival Time:** Represents time until death of 50% of the tested organisms.
LTxx	**xx% Death Time:** Time until xx% test organisms are dead.
MATC	**Maximum Acceptable Toxicant Concentration:** Hypothetical threshold concentration that is the geometric mean between the NOEC and LOEC concentration. The term Chronic Value (ChV) is encoded as MATC.
NOEC NOEL	No-**o**bservable-**e**ffect-**l**evel: highest dose (concentration) producing effects not significantly different from responses of controls according to author's reported statistical test (NOEAL/NOEC)
NR-LETH	**Lethal:** 100% mortality or 0% survival including algicidal and herbicidal effects. No statistically derived endpoint reported. This is only used in the aquatic database.
NR-ZERO	**Zero Mortality:** 0% mortality or 100% survival of organisms. (No statistically derived endpoint reported). This is only used in the aquatic database.
$T_{1/2}$	**Time One-Half:** Time required for one-half of ingested dose to be eliminated.

Effect/Measurement Codes

EFFECT	Effect Name
ACC	**Accumulation**
AEG	**Avian/Reptile Egg**
AVO	**Avoidance Behavior**
BCM	**Biochemical**
BEH	**Behavior**
CEL	**Cellular**
DVP	**Developmental**
ENZ	**Enzyme**
FDB	**Feeding Behavior**
GEN	**Genetic**
GRO	**Growth**
HIS	**Histology**
HRM	**Hormone**
IMM	**Immunological**
INJ	**Injury**
ITX	**Intoxication**

MOR Mortality
MPH Morphology
NOC No Group Code
PHY Physiology
POP Population
PRS Ecosystem Processes
REP Reproduction

Note: Some EE_Comment field measurement codes may not be defined in this document, but are available in the ECOTOX Code Appendix file from the ECOTOX web site Download file area (www.epa.gov/ecotox/download.htm)

ACC ACCUMULATION GROUP

Measurement Code	Measurement Name
ASML	Assimilation Efficiency
BDBN	Body Burden
BDCN	Body Concentration
ELIM	Elimination (General term for loss or disappearance of a substance from an organism by either passive or active transport mechanism, e.g. diffusion and metabolic transformation).
GACC	Accumulation, General
LBCN	Lethal Body Concentration
RATO	Ratio
RSDE	Residue
UPTK	Uptake (The fraction of total available chemical in a medium (food, water) that is transferred to the organism (measured as the incoming - outgoing concentrations) or a process by which materials are transferred into and onto an organism.)

BEH BEHAVIOR GROUP

AVO AVOIDANCE EFFECT

Measurement Code	**Measurement Name**
CHEM	Chemical Avoidance
FOOD	Food Avoidance
GAVO	Avoidance, General
STIM	Stimulus Avoidance
WATR	Water Avoidance

BEH BEHAVIOR EFFECT

Measurement Code	**Measurement Name**

BEH BEHAVIOR EFFECT	
ACTP	Accuracy of Learned Task, Performance
ACTV	Activity, General
ADOT	Adopt/Adoption
AGCL	Aggregation/Clumping
AGGT	Aggression
APCH	Approach
ATTK	Attack
BBBH	Burrow Behavior, Burrowing Length
BOBB	Bob, Bobbing
BOWW	Bow, Bowing
BWAX	Bees Wax Produced
CASE	Case Leaving Behavior
COMA	Colony Maintenance (Bees)
COMB	Comb Built
CRDN	Coordination
DPLY	Displaying Behavior
DRMT	Dormant, Adverse Condition Response
DTCH	Ability to Detach from Substrate
ECMB	Empty Combs
EQUL	Equilibrium
FLIT	Flight
FLTR	Filtration Rate
FLYG	Flying Behavior
FOOT	Foot Retraction
FRZG	Freezing Behavior
FTTR	Flutter
GBHV	Behavioral Changes, General
GRAB	Grab, grabbing
GROM	Grooming
INST	Sleeping Time, Induced

BEH BEHAVIOR EFFECT	
JUMP	Jumping
KILL	Kill
LOCO	Distance Moved, Change in Direct Movement
MIGR	Migration
MOTL	Motility
NACT	Non-social activity
NMVM	Movements, Number of
NRSP	Neuroresponse
NVOC	Vocalizations, Number of
ORNT	Orientation
PALR	Palmar grasp
PHTR	Phototactic Response
PLAR	Placing reflex
PNPY	Prey Penetration
POLC	Pollen Collected
PRVU	Predator Vulnerability
REST	Rest
RRSP	Righting Response
RSPT	Response Time to a Stimulus
RVSE	Reversals
SACT	Social Activity
SEBH	Search Behavior
SLEP	Sleeping
SMEL	Smell, Sniff
SRED	Spread, Spreading
STLT	Startle
STPY	Stereotypy
STRS	Stress, Observed
SURF	Surfacing
SWIM	Swimming

BEH BEHAVIOR EFFECT	
THML	Temperature Tolerance
VACL	Valve Closure
VCLF	Visual Cliff
VIBR	Vibrissea Placing
VISP	Visual Placing
VMVT	Vertical or Rearing Movements
WTCH	Watch, Watching

FDB FEEDING BEHAVIOR EFFECT	
BGNG	Begging Behavior
FCNS	Food Consumption (Amount or Rate)
FDNG	Feeding Behavior (Activity)
FECL	Fecal Production
FEFF	Feeding Efficiency
FSTR	Food Storage
FTIM	Feeding Time
GFDB	Feeding Behavior, General
LTBD	Litter Breakdown
PRBE	Predatory Behavior
STRK	Strikes (Number of times food source was hit)
WCON	Water Consumption

BCM BIOCHEMICAL GROUP

BCM BIOCHEMICAL EFFECT	
Measurement Code	**Measurement Name**
1HPY	1-Hydroxypyrene
4ORA	4-Oxo-retinoic Acid
5HAA	5-Hydroxyindole Acetic Acid
7BRF	7-Benzyloxyoxyresorufin
7ERF	7-Ethoxyresorufin
7MRF	7-Methoxyresorufin

BCM BIOCHEMICAL EFFECT	
7PRF	7-Pentoxyresorufin
AAIB	Alpha-Aminoisobutyrate
AABA	Alpha-Aminobutyric Acid
ABPT	Androgen Binding Protein
ACAR	Alpha-Carotene
ACHL	Acetylcholine
ACID	Acid Produced
ACRR	Acetylene Reduction Rate/Plant Roots Nodule
ACTN	Actin
ADPT	Adenosine diphosphate (ADP)
AGLB	Alpha-Globulins
AION	Anions
ALAN	Alanine
ALBM	Albumin
ALCO	Aluminum Content
ALGL	Albumin to globulin ratio
ALLA	Allantoin
ALLT	Allantoic Acid
AMAC	Amino Acid(s), General Term
AMMO	Ammonia
AMNN	Amino nitrogen
AMPT	Adenosine Monophosphate
ANTH	Anthocyanin
ARGI	Arginine
ASCA	Ascorbic Acid
ASCO	Arsenic Content
ASHC	Ash Content
ASPA	Aspartate
ASPR	Asparagine

BCM BIOCHEMICAL EFFECT	
ATCO	Alpha-Tocopherol Concentration
ATPT	Adenosine Triphosphate
B2MG	beta2-Microglobulin
BACO	Barium Content
BAGA	Bisphenol A glucuronic acid
BCAR	beta-Carotene
BCON	Boron Content
BFCO	Bromoform Concentration
BGLB	Beta-Globulins
BHNC	Behenic Acid
BIOT	Biotin Content
BLLB	Bilirubin
BUNT	Blood Urea Nitrogen
CAAL	Calcium to Aluminum Ratio
CACO	Calcium Content
CAMP	Adenosine 3',5'-cyclic Monophosphate
CANA	Calcium to Sodium Ratio
CAPH	Calcium/Phosphorus Ratio
CARB	Carbohydrate
CARC	Carotenoid Content
CARO	Carotene
CAZN	Calcium to Zinc Ratio
CCON	Carbon Content
CDCO	Cadmium Content
CDST	Acid Soluble Thiol
CDZN	Cadmium to Zinc Ratio
CGMP	Cyclic guanylic acid
CHLA	Chlorophyll A Concentration
CHLB	Chlorophyll B Concentration

BCM BIOCHEMICAL EFFECT	
CHLC	Chlorophyll C Concentration
CHLN	Choline
CHLO	Chlorophyll, General
CHLR	Chloride
CHOL	Cholesterol
CLCO	Chlorine Concentration
CLMD	Calmodulin
CMPH	Camphor
CO2C	Carbon Dioxide
COCO	Cobalt Content
CP2K	Cytochrome P2K
CP3K	Cytochrome P3K
CRBR	Cerebroside
CRCO	Chromium Content
CREA	Creatinine
CRMD	Ceramide
CRPR	Chromium to Phosphorus Ratio
CRTN	Creatine
CUAI	Copper Accumulation Index
CUCO	Copper Content
CUMO	Copper to Molybdenum Ratio
CYSI	Cystine
CYTN	Cysteine
DALA	Delta-Aminolevulinic Acid
DDRP	Didehydroretinyl palmitate
DGDG	Digalactosyl diglyceride (glycolipid)
DHCA	1,25-Dihydrocholecalciferol
DHRT	Dehydroretinol
DPPA	2,3-Diphosphoglyceric acid
DRYM	Dry Matter

BCM BIOCHEMICAL EFFECT	
DSMN	Desmosine
DTBL	Direct Bilirubin (Conjugated)
ECCR	Echinochrome
ELST	Elastin
ENKP	Enkephalin
ERUC	Erucic Acid
ESAA	Amino Acids, Essential
ETCO	Epsillon- Tocopherol Concentration
ETHL	Ethylene
FAME	Fatty Acid Methyl Ester
FATL	Fatty Acid, Total
FENR	Fenretinide (4-Hydroxy-retinoic acid)
FEAI	Iron Accumulation Index
FECO	Iron Content
FEMN	Iron to Manganese Ratio
FEZN	Iron to Zinc Ratio
FFTA	Fatty Acids, Free or Nonesterified
FIBR	Fiber
FLRS	Fluorescence (Used for algae or other organisms that naturally fluoresce, may be used to measure chlorophyll or population growth rate. For example, if it is specifically stated that fluorescence is used to measure chlorophyll A, code the measurement as CHLA.)
FRCT	Fructose
GABA	Gamma-Aminobutyric Acid
GBCM	General Biochemical Effect
GERA	Geranyl Acetate
GERN	Geraniol
GGLB	Gamma-Globulins
GINS	Ginsenosides
GLCN	Glycine
GLOB	Globulin

BCM BIOCHEMICAL EFFECT	
GLTH	Glutathione
GLTL	Galactolipid
GLTT	Glutamate
GLUC	Glucose
GLYC	Glycogen
GLYP	Glycoprotein Composition
GLYT	Total Glycolipid Content
GMIN	Glutamine
GNGL	Ganglioside
GPRO	Glial Fibrillary Acidic Protein
GTAS	Glutamine and Asparagine
GTCO	Gamma-Tocopherol
GTMA	Glutamic Acid
GYCL	Glycerol Content
H108	Heat Shock Protein 108
H2O2	Hydrogen Peroxide
HDCB	Hydrocarbons
HDCH	High Density Lipoprotein Cholesterol: Total Cholesterol Ratio
HDLC	High Density Lipoprotein Cholesterol
HEME	Heme Content
HEMT	Hematological Parameters
HGCO	Mercury Concentration
HIST	Histidine
HITY	Histidine to Tyrosine Ratio
HMCT	Hematocrit (Anemia)
HMGL	Hemoglobin
HMGT	Hemaglutinin
HNMS	N[3H-methyl]scopolamine
HP20	Heat Shock Protein 20

BCM BIOCHEMICAL EFFECT	
HP30	Heat Shock Protein 30
HP32	Heat Shock Protein 32
HP40	Heat Shock Protein 40
HP42	Heat Shock Protein 42
HP52	Heat Shock Protein 52
HP60	Heat Shock Protein 60 (HSP60)
HP70	Heat Shock Protein 70 (HSP70)
HP72	Heat Shock Protein 72
HP73	Heat Shock Protein 73
HP75	Heat Shock Protein 75
HP 90	Heat Shock Protein 90
HP 96	Heat Shock Protein 96
HPLN	Hydroxyproline
HSTM	Histamine
IBIL	Indirect Bilirubin (Free)
ISDM	Isodesmosine
IDMN	Isodesmosine + Desmosine
ILEU	Isoleucine
IMNT	Iso-menthone
KCON	Potassium Content
LA2S	L-Ascorbyl-2-Sulfate
LACT	Lactate
LCTA	Lactic Acid
LASC	L-Ascorbic Acid
LCCT	Leucocrit
LDLP	Low density protein
LDNT	Lipids, Neutral
LDPL	Lipids, Polar
LDPO	Lipid Peroxides

BCM BIOCHEMICAL EFFECT	
LGHE	Leghemoglobin
LIPT	Lipids, Total
PBIC	Lead 131-Iodine Content
LEUC	Leucine
LICO	Lithium Content
LIMO	Limonene
LINA	Linalool
LINO	Linoleic Acid
LIPD	Lipid
LNEI	Linolenic and Eicosanoic Acid
LPSA	Lipid Soluble Antioxidants
LUTE	Lutein
LYSI	Lysine
MCHC	Mean Corpuscular Hemoglobin Concentration (hemoglobin/hematocrit)
MCHG	Mean Corpuscular Hemoglobin (hemoglobin *10/red blood cell count)
MCPR	Microsomal Proteins (Proteins found in microsomes)
MCPV	Mean Corpuscular Volume
METH	Methionine
MGAL	Magnesium to Aluminum Ratio
MGCO	Magnesium
MLDH	Malondialdehyde
MNAC	Menthyl Acetate
MNAI	Manganese Accumulation Index
MNCO	Manganese Content
MNFE	Manganese to Iron Ratio
MNTH	Menthone
MOCO	Molybdenum Content
MRNN	Marennine
MRXC	Mirex Concentration

BCM BIOCHEMICAL EFFECT	
MTHL	Menthol
MTLN	Metallothionein
MYLN	Myelin
NACO	Sodium Content
NADP	Nicatinamide-Adenine Dinucleotide Phosphate, Reduced
NAKR	Sodium Potassium Ratio
NCON	Nitrogen
NEAA	Amino Acids, Nonessential
NICO	Nickel Content
NIFE	Nickel to Nitrogen Ratio
NKPH	Enkephalin
NPSH	Nonprotein Sulfhydryl
NPSS	Ninhydrid-Positive Substances
NRGC	Energy Compound
NSRA	Nitrogen to Sulfur Ratio
NSUG	Non-reducing sugars
NUAC	Nucleic Acids
NUTR	Nutrient Status Change
OGLT	Oxidized Glutathione
OLCO	Oil Content
OLEC	Oleic Acid
OLYD	Oil Yield
ORNI	Ornithine
OSDB	Oestradiol Breakdown Products
PALL	Palmitoleic Acid
PALM	Palmitic Acid
PBCO	Lead Content
PBAI	Lead Accumulation Index
PBHB	Poly-beta-Hydroxybutyrate
PCBC	Polychlorobiphenyl Concentration

BCM BIOCHEMICAL EFFECT	
PCLV	Packed Cell Volume
PCON	Phosphorus Content
PCRE	Phosphocreatinine
PFER	Phosphorus to Iron Ratio
PHEN	Phenylalanine
PHPH	pH
PHSC	Phosphatidyl choline (phospholipid)
PHSE	Phosphatidyl ethanolamine (phospholipid)
PHSI	Phosphatidyl inositol (phospholipid)
PHSP	Phosphatide Phosphorus
PHST	Phospholipid Content, Total
PHTC	Phytochelatin
PHYC	Phycocyanin
PINE	Alpha-Pinene
PLAC	Pulp: Acid
PLAT	Platelets
POLD	Peroxidizable Lipids
PORP	Porphyrin
PPHT	Phosphate
PRCO	Protein Content
PRLN	Proline
PROB	Protein Binding
PRSL	Protein, Soluble
PRTL	Protein, Total
PRTO	Protoporphyrin
PRUR	Protein to Urea Ratio
PSPI	Phosphotidylserine and Phosphotidylinosital
PSPY	Phosphoenol Pyruvate
PYRT	Pyrethrum

BCM BIOCHEMICAL EFFECT	
PZNR	Phosphorus to Zinc Ratio
RBGD	Retinoyl beta-glucuronide
RBVL	Relative blood volume (volume/100 g body weight)
RGSH	Reduced Glutathione
RHDP	Rhodopsin
RIBO	Riboflavin Content
RSUG	Reducing Sugars
SCON	Sulfur Content
SECO	Selenium Content
SERI	Serine
SESR	Selenium to Sulfur Ratio
SEWE	Steryl Esters and Wax Esters
SFTD	Sulfatides
SGRV	Specific Gravity
SICO	Silicon Content
SILA	Sialic Acid
SLFT	Sulfur Concentration
SMET	Secondary Metabolism
SPHG	Sphingomyelin
SPMD	Spermidine
SRCO	Strontium Content
SSER	Sulfur to Selenium Ratio
SSUG	Soluble Sugar
STER	Stearic Acid
STES	Sterol Esters
STOL	Sterols
STRH	Starch Content

BCM BIOCHEMICAL EFFECT	
SUGA	Sugar Content
TAUR	Taurine
TBAR	Thiobarbituric Acid Reactive Substances
TERP	T-Terpinene
TFAA	Amino Acids, Total Free
THBA	Thiobarbituric Acid
THRE	Threonine
TLBL	Bilirubin, Total
TLCO	Thallium Content
TMAO	Trimethylamine Oxide
TRIG	Triglycerides
TRTY	Tryptophan to Tyrosine Ratio
TRYP	Tryptophan
TSFN	Transferrin
TTAA	Amino Acids, Total
TTRN	Transthyretin
TYMD	Thymidine
TYRO	Tyrosine
UREA	Urea
UREN	Urea nitrogen
URIC	Uric Acid
VALI	Valine
VCON	Vanadium Content
VEPO	Vitellogenin Protein Ratio
VIDD	Retinyl Palmate: Dehydroretinyl Palmitate
VITA	Vitamin A
VITE	Vitellogenin
VLDL	Very Low Density Lipoprotein
VMAC	Vanillylmandelic Acid
VPRO	Vimetin Heat Shock Protein

BCM BIOCHEMICAL EFFECT	
VTAE	Vitamin A Ester (Retinyl Ester)
VTD3	Vitamin D3
VTME	Vitamin E
WTCO	Water Content
ZNAI	Zinc Accumulation Index
ZNCD	Zinc to Cadmium Ratio
ZNCO	Zinc Content
ZNFE	Zinc to Iron Ratio
ZNNA	Zinc to Sodium Ratio
ZNPP	Zinc Protoporphyrin
ZPRO	Zona Radiata Protein

ENZ ENZYME EFFECT	
Measurement Code	**Measurement Name**
2OHB	2-OH Biphenyl Hydroxylase
450R	NADPH-cytochrome P-450 Reductase
4OHB	4-OH Biphenyl Hydroxylase
5NLT	5-Nucleotidase Activity
AATT	Alanine Aminotransferase
ACHE	Acetylcholinesterase
ACPH	Acid Phosphatase
AEPX	Aldrin Epoxidase
AFCD	Alpha-Fucosidase
AGCT	Alpha-Galactosidase
AGKN	Arginine Kinase
AGSE	Alpha-Glucosidase
AHDX	Aniline Hydroxylase
AHHD	Aryl hydrocarbon hydrolase
ALAD	(Delta) Δ -Aminolevulinic Acid Dehydrogenase
ALAS	(Gamma) Γ-ALA Synthetase

ENZ ENZYME EFFECT	
ALDH	Aldehyde Dehydrogenase (ALDH)
ALDO	Aldolase
ALIE	Ali Esterase
ALLN	Allantoinase
ALPH	Alkaline Phosphatase
AMNS	Alpha-Mannosidase
AMYL	Alpha-Amylase
APND	Aminopyrine N-demethylase
ARMT	Aromatase
ASAT	Aspartate Aminotransferase
ASOA	Ascorbic Acid Oxidase Activity
ATPA	Adenosine Triphosphatase
ATRP	Alanine Transpeptidase
B5P4	B5/P-450
BAPH	Benzo(a)pyrene Hydroxylase
BCHE	Buterylcholinesterase
BCOD	Butoxycoumurin O-dealkylase
BGAL	(Beta) B-galactosidase
BGCR	Beta-Glucuronidase
BGMD	Beta-Glucosaminidase
BGSE	Beta-Glucosidase
BHXA	Benzpyrene hydroxylase
BPND	Benzphetamine-n-demethylase
BROD	Benzylresorufin O-deethylase
CAAH	Carbonic Anhydrase
CACA	Choline Acetyltransferase
CAPK	Choline phosphokinase
CATP	Calcium Adenosine Triphosphatase (ATPase)
CCOX	Cytochrome C-oxidase
CEST	Cholinesterase

ENZ ENZYME EFFECT	
CHIT	Chitobiase
CMYS	Chymotrypsin
CP1A	Cytochrome P1A
CPSE	Creatine Phosphokinase
CRKI	Creatine Kinase
CTHP	Cathepsin
CTLS	Catalase
CY2C	Cytochrome P-450 (CYP2C)
CYAA	Cytochrome aa3
CYAM	Cystine Aminopeptidase
CYB5	Cytochrome B-5
CYCC	Cytochrome c + c1
CYP2	Cytochrome P2
CYP3	Cytochrome P3A
CYST	Cysteine Dioxygenase
CYTB	Cytochrome b
DBHD	Delta-5-3-beta Hydroxysteroid Dehydrogenase
DBHX	Dopamine beta-Hydroxylase
DEAS	Dehydroascorbatase
DSCA	Diethylsuccinase
ECOD	Ethoxycoumurin O-deethylase
EPHY	Epoxide Hydrase
EROD	7-Ethoxyresorufin O-deethylase
ESLI	Esterase Lipase
ESST	Estradiol Sulfotransferase
ESTE	Esterase
ESTS	Elastase
FDPA	Fructose-Diphosphate Aldolase
FMOO	Flavin-containing Monooxygenase
G6PD	Glucose-6-phosphate Dehydrogenase

ENZ ENZYME EFFECT	
G6PT	Glucose-6-phosphatase
GENZ	General Enzyme Activity
GGTP	Gamma - Glutamyl Transpeptidase
GGTR	(Gamma) Γ-glutamyl Transferase
GLAD	Glutamic Acid Dehydrogenase
GLMC	Glutamate Decarboxylase
GLMD	Glutamate Dehydrogenase
GLMS	Glutamine Synthetase
GLPP	Glycogen Phosphorylase
GLPX	Glutathione Peroxidase
GLRE	Glutathione Reductase
GLTR	Glucuronyl Transferase
GLUR	Beta-Glucoronidase
GLUT	Glutaminase
GMPP	Cyclic Guanylic Acid Phosphodiesterase
GOTR	Glutamic-oxaloacetic Transaminase
GPTR	Glutamic Pyruvic Transaminase
GSTR	Glutathione S-transferase
GULO	L-Gulonolactone oxidase
HAFS	N-Hydroxy-2-acetylaminofluorene Sulfotransferase
HEPX	Heptachlor Epoxidase
HOXY	Heme Oxygenase
HPSE	Hydrogen Peroxidase
HXKN	Hexokinase
ICDH	Isocitrate Dehydrogenase
IPYR	Inorganic Pyrophosphate
LADH	Lactate Dehydrogenase
LEAM	Leucine Aminopeptidase
LGDD	L-Gulonate dehydrogenase and decarboxylase
LIPS	Lipase

ENZ ENZYME EFFECT	
LNSE	L-Leucyl-beta-Naphthylamide Splitting Enzyme
LYZM	Lysozyme Activity
MADH	Malic Dehydrogenase
MALE	Malic Enzyme
MAOA	Mono Amino Oxidase
MCOD	Methoxycoumarin O-dealkylase
MGAT	Magnesium adenosine triphosphatase
MLDA	Malate Dehydrogenase
MROD	Methoxyresorufin-o-deethylase
MUDH	Multiple Dehydrogenases (Measured Total Produced by Soil Microorganisms)
NABH	N-Acteyl-beta-Hexosaminidase
NACR	NADH-cytochrome c Reductase
NADG	Beta-N-Acetyl-D-Glucosaminidase
NADH	Nicotinamide Adenine Dinucleotide (reduced)
NAGD	N-Acetyl-beta-d-Glucosamimidase
NCB5	NADH Cytochrome B5 Reductase
NCCR	NADPH Cytochrome C Reductase
NDCC	NADH Cytochrome C Reductase
NDFC	NADH Ferricyanide Reductase
NDMT	N-Demethylase
NITG	Nitrogenase
NKAT	Sodium Potassium ATPase
NNDE	Nitrosamine-N-Demethylase
NRDT	Nitrate Reductase
O1LH	Omega-1-Laurate Hydroxylase
O2LH	Omega-2-Laurate Hydroxylase
ORDC	Ornithine Decarboxylase
P420	Cytochrome P-420
P450	Cytochrome P-450
PBHD	Pentobarbital Hydroxylase

ENZ ENZYME EFFECT	
PCHE	Pseudocholinesterase
PCOD	Propoxycoumarin O-dealkylase
PCTN	Pectinase activity
PFRC	Phosphofructokinase
PHLA	Phosphorylase A
PKSC	Protein Kinase C
PNAD	P-nitroanisole Demethylase
PODA	Peroxidase
PPHL	Phosphorylase
PPPA	Phosphoenolpyruvic Acid
PROD	Pentylresorufin O-Deethylase
PRTA	Proteolytic Activity
PRTS	Protease
PSPM	Phosphoamidase
PYKN	Pyruvate Kinase
RNPH	5'-Ribonucleotide Phosphohydrolase
RNSE	RNase
SBDH	Sorbitol Dehydrogenase
SCDH	Succinate Dehydrogenase
SGOT	Serum Glutamate Oxalo Acetate Transaminase
SGPT	Serum Glutamic Pyruvic Transaminase
SODA	Superoxide Dismutase (Sod) Enzyme Activity
SPGX	Selenium Dependent Glutathion Peroxidase
SSAR	Serum Glutamate Oxalo Acetate Transaminase and Serum Glutamic Pyruvic Transaminase to Alkaline P
SSRA	Serum Glutamate Oxalo Acetate Transaminase to Serum Glutamic Pyruvic Transaminase Ratio
T16A	Testosterone 16-alpha Hydroxylase
TAMN	Transaminase
TBHY	Testosterone 16 beta-Hydroxylase

ENZ ENZYME EFFECT	
THMN	Thiaminase
THTR	Thiol Transferase
TPHX	Tryptophan hydroxylase
TPSY	Trypsin
TRBA	Tributyrinase
TT2A	Testosterone 2-alpha hydroxylase
TT6A	Testosterone 6-alpha hydroxylase
TT6B	Testosterone 6-beta hydroxylase
TT7A	Testosterone 7-alpha hydroxylase
TTRH	Testosterone hydroxylase
TUOX	Thiourea Oxygenase
UDGT	UDP Glucuronosyltransferase
UDPT	Uridine diphosphate glucuronyl transferase, UDP glucuronyl transferase
URON	Uronolactonase
URSE	Urease Activity
VAAM	Valine Aminopeptidase
XBME	Xenobiotic metabolizing enzymes

HRM HORMONE EFFECT	
Measurement Code	**Measurement Name**
5HST	5-Hydroxyindole acetic acid: Serotonin ratio
6BTT	6 Beta-Testosterone
7ATT	7 Alpha-Testosterone
11DC	11-Deoxycortisol
16AT	16 Alpha-Testosterone
18HD	18-Hydroxy-11-Deoxycorticosterone
ABSA	Abscisic Acid
AHPG	17 Alpha-Hydroxyprogesterone
ACTH	Adrenocorticotropic Hormone
ALDS	Aldosterone

HRM HORMONE EFFECT	
ANDR	Androgen
ADDL	Androstanediol
ADDN	Androstenedione
AMSH	Alpha-Melanocyte Stimulating Hormone
AUXN	Auxin
BDPG	17, 20 beta–Dihydoxy-4-pregnen-3-one
CORT	Corticosterone
CRCT	Cortisol and Cortisone
CRTS	Cortisol
CTCL	Catecholamine
CYTK	Cytokinin
DECL	11-Dexoycortisol Glucuronide
DHTR	Dihydrotestosterone
DITS	Diiodotyrosine
DOCS	Deoxycorticosterone
DOPA	Dopamine
ELTR	17beta-Estradiol to Testosterone Ratio
EPIN	Epinephrine
ESDL	17-beta Estradiol
ESTR	Estrogen
FOSH	Follicle Stimulating Hormone
GCRT	Glucocorticoid
GHRM	Hormone, General Changes in
GIBB	Gibberellin
GNTP	Gonadotropin
GRHM	Gonadotropin releasing hormone
GTHH	Growth Hormone
INHI	Inhibin
INSL	Insulin
IPTH	Immunoreactive Parathyroid Hormone
KTST	11-Ketotestosterone

HRM HORMONE EFFECT	
LUTH	Luteinizing Hormone
MITS	Monoiodotyrosine
NORD	Noradrenaline
NORE	Norepinephrine
PNMT	Phenylethanolamine –Methyl Transferase
PRGS	Progesterone
PRLC	Prolactin
SMTC	Somatomedin C
SRIF	Somatostatin
SRTN	Serotonin
STRD	Steroids
T3T4	Triidothyronine to Thyroxine Ratio
T4T3	Thyroxine to Triidothyronine Ratio
TGLD	Testosterone glucuronide
THYR	Thyroxine
TRII	Triidothyronine
TSHT	Thyrotropin
TSTR	Testosterone

GRO GROWTH GROUP

DVP DEVELOPMENT EFFECT	
Measurement Code	**Measurement Name**
68CL	6-8 Cell Stage
ABNM	Abnormal
BSCY	Blastocyst Stage
CCLV	Cell Cleavage
COLR	Color
DFRM	Deformation
DVLP	Development, General (Slowed, Retarded, Delayed or Non-development)
EMRG	Emergence
EVFO	Envelope Formation

DVP DEVELOPMENT EFFECT	
EYOP	Eye Opening
FLDG	Fledged/Female or Brood
FORM	Formation of Organ/tissue
GDVP	Development changes, General
GRRT	Growth Rate
GSTL	Gastrulation
LRCF	Loricae Formation
MATR	Maturation (Maturity)
MMPH	Metamorphosis
MOLT	Molting
MRLA	Morula Stage
NORM	Normal
PHRN	Post Harvest Character No Effect
PHRV	Post Harvest Character Influenced
PUPA	Pupation
RSPN	Resorption (e.g., Tail Resorption in Frogs)
STGE	Stage
SXDP	Sexual Development
TEMR	Time to First Emergence
TERA	Teratogenic Effects
TFLW	Time to Flower
THED	Time to Heading
TRRA	Transformation Ratio
WEAN	Weaned
WGHT	Weight

GRO GROWTH EFFECT	
Measurement Code	**Measurement Name**
ABNM	Abnormal
AREA	Area

GRO GROWTH EFFECT	
BDBN	Body Burden
BMAS	Biomass (Includes harvest yield, fruit or seed yield, mass of organism, mass of population, standing crop, productivity.)
COND	Condition Index
DIST	Distance
DMTR	Diameter
DNSY	Density
DWGT	Dry Weight
EBCN	Effect Body Concentrations
GAIN	Weight Gain
GGRO	Growth, General
GGRT	General Growth Rate
GRRT	Growth Rate
HGHT	Height
LGTH	Length
LINT	Lint (cotton seed coat)
NLEF	Number of Leaves
NNOD	Dry Mass/Plant Roots Non-Nodulated
NODE	Nodules/Nodulated Plant Roots
RADI	Radius
RGNR	Regeneration, Limb/ Body Parts
RLGR	Relative Growth Rate
SIZE	Size
SPGR	Specific Growth Rate (Individual growth measurement calculated by using the net weight divided by time)
STNT	Stunting
THIK	Thickness
THRV	Time to Harvest
VOLU	Volume
WDTH	Width
WGHT	Weight

GRO GROWTH EFFECT	
WWGT	Wet Weight

MPH MORPHOLOGY EFFECT	
Measurement Code	**Measurement Name**
ABNM	Abnormal
AREA	Area
COND	Condition Index
COSC	Caudal Ossification Center
CRCM	Circumference
DEPO	Shell Deposition
DMTR	Diameter
DNSY	Density
GMPH	General Morphological Changes
HGHT	Height
IMPS	Imposex, Intersex Conditions
INTS	Intussusception
IPOS	Inter-Parietal Ossification
LGTH	Length
MOSC	Metacarpal Ossification Center
NORM	Normal
OSSC	Ossification
POSC	Parietal Ossification
RATO	Ratio
RIBS	Rib, Number of
SHPE	Shape
SIZE	Size
SMIX	Somatic Index (Organ Weight in Relationship to Body Weight)
SOSC	Sternal Ossification Center
SRIB	Supernumerary Ribs
STBD	Seminiferous Tubule Diameter
STRC	Structural Changes

MPH MORPHOLOGY EFFECT	
STTO	Strength and Tone
THIK	Thickness
TKWD	Thickness: Width Ratio
VOLU	Volume
WDTH	Width
WGHT	Weight

CEL CELLULAR GROUP

CEL CELLULAR EFFECT	
Measurement Code	**Measurement Name**
AGGR	Aggregation/Adhesion
AREA	Area
ARGY	Argyophilic Cells
BASO	Basophil
BPCL	Bipolar cell
CCHG	Cell Changes
CIRC	Choline Acetyltransferase (ChAT) Immunoreactive Cells
CLCE	Chloride Cell
CRCM	Circumference
CTRV	Cell Turnover
CYTO	Cytotoxicity
DEND	Dendrite receptors
DMTR	Diameter
DIVC	Dividing Cells
DNSY	Density
DPTH	Depth
EOSN	Eosinophil
ERTH	Erythroblasts
ESRS	Estradiol Receptor Sites
GBLT	Goblet Cells

CEL CELLULAR EFFECT	
GLCL	Gland Cells
GNDT	Gonodotrophs
HGHT	Height
HTCY	Heterocyst frequency
HTPL	Heterophiles
LEUK	Leukocytes
LMFI	Lamellar Fusion Index
LMPH	Lymphocyte
MONO	Monocyte
MUCR	Muscarinic Cholinergic Receptor
NCEL	Number/frequency of Cells
NEUT	Neutrophil
NLEI	Nuclei
NROD	Number of Rods
OGNL	Organelle
PKNJ	Purkinje cell
PKNS	Pyknosis
PLAS	Plasmolysis
PRKY	Perikarya
RATO	Ratio
RBCE	Red Blood Cell
RETI	Reticulocytes
RSBC	Receptor Site, Binding Capacity
SGDN	Signal Density
SIZE	Size
SPLO	Splenocytes
SRTL	Sertoli Cells
STCL	Stippled Cells
STRC	Structural Changes
THRM	Thrombocytes
TWBC	White Blood Cell Count, Total

CEL CELLULAR EFFECT	
UBWB	White Blood Cell, Undifferentiated Blasts
VOLU	Volume
WDTH	Width

GEN GENETIC EFFECT	
Measurement Code	**Measurement Name**
2KMR	Cyp2K mRNA
ACMR	Actin mRNA
AMRN	Cytochrome P450aromB mRNA (Aromatase mRNA, Estrogen Synthetase mRNA)
APOP	Apoptosis, programmed cell death, DNA fragmentation
BADF	Beta-Actin cDNA Fragments
BRAK	Chromosomal Breaks
CA1M	Cyp 1A1 mRNA
CA3M	Cyp 1A3 mRNA
CABR	Chromosomal Aberrations
CGAP	Chromosomal Gap
CHMR	Choriogenin H mRNA
CHDF	Choriogenin H cDNA Fragments
CLMR	Choriogenin L-mRNA
CPRN	Cytochrome P1A messenger RNA
DAMG	Damage
DNAB	DNA Binding
DNAC	DNA Concentration
DNAD	DNA Ducts
DNAS	DNA Synthesis Rate
DNRN	DNA to RNA Ratio
DPLT	Diplotene
EMRN	Estrogen mRNA
EMRR	Estrogen receptor : Estrogen mRNA ratio
ESRG	Estrogen receptor gene
FSMR	Follicle stimulating hormone beta mRNA
GEXP	Gene Expression

GEN GENETIC EFFECT	
GGEN	Genetics, General
GHMR	Growth Hormone mRNA
GTPF	Genotype Frequencies
LEPT	Leptotene
LHMR	Lutenizing hormone mRNA
LPDN	Lipid to DNA ratio
ME1M	Meiotic Abnormalities, 1st Metaphase
ME2M	Meiotic Abnormalities, 2nd Metaphase
MEDM	Meiotic Abnormalities, Diakinesis and 1st Metaphase
MEIA	Meiotic Abnormalities, General
MEIR	Meiosis Rate
MIAT	Mitotic Abnormalities, Ana-telophase
MIBC	Mitotic Abnormalities, Binucleate Cell
MIBG	Mitotic Abnormalities, Bridge
MICL	Mitotic Abnormalities, Clumping
MICY	Mitotic Abnormalities, Cytomixis
MIES	Mitotic Abnormalities, Early Separation
MIEX	Mitotic Abnormalities, Exclusion
MIFR	Mitotic Abnormalities, Fragment
MIIN	Mitotic Abnormalities, Interphase Cells
MILG	Mitotic Abnormalities, Laggard
MIMN	Mitotic Abnormalities, Micronuclei
MINB	Mitotic Abnormalities, Nuclear Budding
MINF	Mitotic Abnormalities, Nuclear Fusion
MIPO	Mitotic Abnormalities, Disturbed Polarity
MISK	Mitotic Abnormalities, Stickiness
MITA	Mitotic Abnormalities, General
MITI	Mitotic Index (#mitoses/total Cells)
MITR	Mitotic Rate
MRNA	Messenger RNA

GEN GENETIC EFFECT	
MMRN	Metallothionein mRNA
MRMT	Metallothionen mRNA: Metallothionein ratio
MNUC	Micronuclei
MTOS	Mitosis
MUTA	Mutation
NABN	Nuclear Abnormalities
NCPF	Nuclear Phase Frequency
PACH	Pachytene
PLMR	Prolactin mRNA
POLY	Chromosomal Polyploidy
PRDN	Protein to DNA Ratio
PSMR	Pituitary specific transcription factor mRNA
RASO	RAS Oncogene
RNAC	RNA Concentration
RNAS	RNA Synthesis Rate
RNDN	RNA to DNA Ratio
SEXE	Sex Expression Change
VMRN	Vitellogenin Messenger RNA
WTDN	Weight to DNA ratio
ZRMR	Zona radiata mRNA
ZYGO	Zygotene

HIS Histology Effect	
Measurement Code	**Measurement Name**
ACAP	Arterial Cuff Atrophy
ANSK	Anisokaryosis
ASCT	Ascites
ASLT	Alpha Islets
ATPH	Atrophy
ATRS	Atresia

HIS Histology Effect	
BSLT	Beta Islets
BODS	Bodies
CLFL	Collapsed Follicles
CRYT	Crystals
CSTD	Cestodiasis
CTRT	Cateracts
CTYP	Percent Cell Type
CYIN	Cytoplasmic Inclusions
CYTM	Cytomegaly
CYTP	Cytoplasm
CYVC	Cytoplasmic Vacuoles
DBRS	Debris
DEGN	Degeneration
DISO	Disorganization (Cellular)
DLAT	Dialation
EDMA	Edema
EHYP	Erythroid Hyperplasia
ENCP	Encephalopathy
ENDR	Endarteritis
ESPH	Esophagitis
EXCS	Extracellular Space
FBRS	Fibrosis
GHIS	Histological Changes, General
GLSN	Gross Lesions
HEMR	Hemorrhage
HYCE	Hypocellularity
HYCR	Hyperchromicity
HYPL	Hyperplasia
HYPT	Hypertrophy
IFLM	Inflammation

HIS Histology Effect	
IHGT	Increased Height
IMVL	Increased Medullary Volume
ININ	Intranuclear Inclusions
IPDY	Increased Portal Density
IPHM	Increased Perivenous Homogeneity
LESI	Lesions
LMLL	Lamellae
LPHD	Lymphoid Depletion
MHYP	Myeloid Hyperplasia
MYOP	Myopathy
NCRO	Necrosis
NCVS	Nuclear Vesiculation
NPHG	Nephrogenesis
NPHR	Nephrosis
PRLF	Proliferation
PRVN	Proventriculitis
RCVL	Reduced Corticle Volume
RFSZ	Reduced Follicle Size
RPCD	Reduced Periarteriolar Lymphocyte Sheath Cell Density
SCNG	Sinus Congestion
SHMT	Sinus Haematopoiesis
SHYP	Sinus Hyperplasia
SNAP	Synapses
SWEL	Swelling
TFLR	Tissue Fluorescence in Ultraviolet Light
USTR	Ultrastructural Changes
VCLZ	Vacuolization

MOR MORTALITY OR SURVIVORSHIP GROUP

MOR MORTALITY EFFECT

Measurement Code	Measurement Name
BDAY	Bird days
BDCN	Body Burden Concentration
EBCN	Effective Body Concentration
GMOR	Mortality/Survival, General
HTCH	Hatch
LBCN	Lethal Body Concentration
LFSP	Lifespan
LIFE	Life Expectancy
MDTH	Mean Time of Death
MORT	Mortality
SURV	Survival
SVVS	Survivorship
TDTH	Time to Death
TLET	Time to 100% Mortality

PHY PHYSIOLOGICAL GROUP

IMM IMMUNITY EFFECT

Measurement Code	Measurement Name
ABSC	Abscission
ABDT	Antibody Titres
DHYP	Delayed Type Hypersensivity
GIMM	Immunity, General
HEAL	Healing
HMRL	Humoral Immunity
HTPL	Heterophiles
IFCT	Infected
LYMP	Lymphocyte Activity
MCPG	Macrophage Activity

IMM IMMUNITY EFFECT	
MPHG	Microphage Function, Activity
PARA	Amount or Percent Organisms Infested with Parasites
PFCR	Plaque Forming Cell Response
PHAG	Phagocytosis
PNMA	Pneumonia
PRNF	Parasitic Infection
PRTU	Proteuria
RSTT	Rosette Response, Rosette Forming Cell Concentration

INJ INJURY EFFECT	
Measurement Code	**Measurement Name**
AMLD	Amyloidosis
AUTO	Autotomy
CLRS	Chlorosis
CURV	Curvature
DAMG	Damage
DESI	Desiccation
GINJ	Injury, General
IFLM	Inflammation
IFRT	Infarction
LYPA	Lymphoma
MUTI	Mutigenesis
PLYP	Polyp
SYMP	Symptom Severity Index
THMB	Thrombosis
TUMR	Tumor Induction
VASC	Vascular Disruption

ITX INTOXIFICATION EFFECT	
Measurement Code	**Measurement Name**
ANOR	Anorexia

ITX INTOXIFICATION EFFECT	
ATAX	Ataxia
CONV	Convulsions
GITX	Intoxication, General
IMBL	Immobile
INCO	Incoordination
MBLT	Mobility
PARL	Paralysis
TINT	Time to Signs of Intoxication

PHY PHYSIOLOGICAL EFFECT	
Measurement Code	**Measurement Name**
ABSC	Abscission
ADPE	Adsorption Efficiency
ADPO	Oxidative Phosphorylation
AECG	Abnormal Electrocephalocardiogram (ECG)
AECH	Adenylate Energy Charges
AHIN	A-H Intervals
ALAE	Aminolevulinic Acid Excretion
ANBC	Aniline Binding Capability
ASML	Assimilation Efficiency
AVCD	Atrioventricular Conduction Delay
AXSS	Axis Shift
BLPR	Blood Pressure
BDVL	Blood Volume
BLUM	Bioluminescence
BTFT	Butter Fat
BTMP	Body Temperature
C14U	Carbon 14 Uptake
CAEX	Calcium Excretion
CANU	Calcium Not Excreted

PHY PHYSIOLOGICAL EFFECT	
CARE	Calcium Retained
CARU	Calcium Retention to Utilization Ratio
CATR	Calcium Transfer
CATU	Calcium Transfer to Utilization Ratio
CAUP	Calcium Uptake
CCCL	Coccolith Formation
CDIN	Cardiac Index
CDOP	Cardiac Output
CDUP	Cadmium Uptake
CEBS	Cytosolic Estrogen Binding Site
CFIX	Carbon Fixation
CFLW	Coronary Flow
CLRC	Caloric Content
CLFX	Chloride Flux
CLUP	Chloride Uptake
CMRB	Cholinergic Muscarinic Receptor Binding
COLD	Cold Hardiness
COUP	Cobalt Uptake
CRAT	Contraction Rate
CREX	Chromium Excretion
CRSP	Cellular Respiration
CRUP	Chromium Uptake
CTIM	Clotting Time
CUUP	Copper Uptake
CYSU	Cystine Uptake
DGST	Digestion
DORB	Dormancy Break
DORI	Dormancy Induction
DSPS	Diastolic Pressure
ECPT	Energy Charge Potential

PHY PHYSIOLOGICAL EFFECT	
ECYC	Estrous Cycle
EECG	Electrocardiogram
EFFC	Efficiency
ENST	Encystment
ERWA	Electronretinography Wave Amplitude
ERWV	Electronretinography Wave
ETSA	Electron Transfer System Activity
EXCR	Excretion Rate
FDCV	Food Conversion Efficiency
FEPP	Fecal Production
FEUP	Iron Uptake
FLUX	Flux, Across Membranes
FVOL	Fluid Volume
GAEX	Glycolic Acid Excretion
GCBN	Gap Charge Balance
GFRT	Glomerular Filtration Rate
GLUP	Glucose Uptake
GLYU	Glycine Uptake
GLSY	Glycogen Synthesis
GPHY	Physiology, General
GRAU	Granule/grain Creation
GYCU	Glycerol Uptake
H3BD	Hemicholium-3 Binding
H3UP	Hydrogen-3 Uptake
HCFX	Hydrogen Carbonate Flux
HGUP	Mercury Uptake
HPRR	Heat Production Rate
HPSR	High Pressure
HTDP	Heart Double Product (Heart Rate times Cardiac Output)
HTRT	Heart Rate

PHY PHYSIOLOGICAL EFFECT	
IOUP	Ion Uptake
IRRI	Irritation
IUPT	Iodine Uptake
IVCD	Intraventricular Conduction Defects
KUPT	Potassium Uptake
LDPX	Lipid Peroxidation
MBCR	Metallothionein Binding Capacity Ratio
MCCN	Microorganism Cenosis (A group of organisms in a self-sufficient community naturally occupying a small area with a uniform environment throughout).
MCUS	Mucus Production
MGUP	Magnesium Uptake
MILK	Milk
MNER	Minerialization
MNTL	Manganese Translocation
MNUP	Manganese Uptake
MYCO	Mycorrhizal Colonization
NAFX	Sodium Flux
NAUP	Sodium Uptake
NASM	Nitrogen Assimilation
NAST	Nastic Movements
NEXC	Nitrogen Excretion
NFIX	Nitrogen Fixation
NIUP	Nickel Uptake
NMYC	Non-mycorrhizal colonization
NPRA	Net Photosynthetic Rate
NRGA	Energy Assimilation
NRGF	Metabolic Efficiency
NRGI	Energy Intake
NRGM	Metabolized Energy
NRGX	Energy Excreted

PHY PHYSIOLOGICAL EFFECT	
NRSP	Neuroresponse
NTSL	Nitrogen Translocation
NUPT	Nitrogen Uptake
OSMO	Osmolality
OXYG	Oxygen Consumption
PAMP	P Amplitude
PBAL	Ponderal Balance
PBEX	Lead excretion
PBUP	Lead Uptake
PERM	Permeability, tissue, membrane
PEXC	Phosphorus Excretion
PIGM	Pigmentation
PNUT	Phosphorus Not Excreted
PPUP	Phosphate Uptake
PRET	Phosphorus Retention
PRIN	PR Intervals
PRSY	Protein Synthesis
PRUT	Phosphorus Retention to Utilization Ratio
PSII	Photosystem II (PsII) Electron Transport Activity
PSSR	Pressure
PSYN	Photosynthesis
PTRN	Phosphorus Transfer
PTUT	Phosphorus Transfer to Utilization Ratio
PUPT	Phosphorus Uptake
QAMP	Q Amplitude
QRSV	QRS Voltage (deflections in an electrocephalocardiographic tracing and represent ventricular activity of the heart)
QTIN	QT Interval
RAMP	R Amplitude
RBCD	Relative Bradycardia

PHY PHYSIOLOGICAL EFFECT	
RESP	Respiration, O2 Production, CO2 Production
RPRT	Respiratory Rate
SAMP	S Amplitude
SBNF	Swim Bladder Inflation
SCGR	Scope for Growth
SENI	Senescence Induced/accelerated
SENR	Senescence Retarded
SEUP	Selenium Uptake
SOXA	Sulfide Oxidation Activity
STAS	Stasis
STCG	S-T Changes (Related to EKG, S-T segment. The line between the end of the S wave and the beginning of the T wave)
STIN	ST Interval
STOM	Stomatal Aperture
STVL	Stoke Volume
STWK	Stroke Work
SUPT	Sulfur Uptake
SWEL	Swelling
SYPS	Systolic Pressure
T34C	T3: T4 Conversion Rate
TAMP	T Amplitude
TEXT	Texture Change
THBR	Thyroid Hormone Binding Ratio
THRG	Thermoregulation
TRAN	Transpiration
VENT	Ventilation, Opercular Movements, Undulatory Movements
VMRS	Vasomotor Response
VOLU	Volume
WLSS	Water Loss

PHY PHYSIOLOGICAL EFFECT	
WTUP	Water Uptake
WILT	Wilt
ZNUP	Zinc Uptake

POP POPULATION GROUP

POP POPULATION EFFECT	
Measurement Code	**Measurement Name**
ABND	Abundance (Number of Organisms/Area; Density)
BMAS	Biomass; Includes Harvest Yield, Fruit or Seed Yield, Mass of Organism, Mass of Population.
CHLA	Chlorophyll A Concentration
CHLO	Chlorophyll Content
CVER	Cover, Canopy
DBLT	Doubling Time, Population
DRFT	Drift
DVRS	Diversity, Evenness
EBCN	Effective Body Concentration
GENT	Generation Time
GPOP	Population Changes, General
INDX	Index to Population Size; Count, Number, Abundance
IRIN	Intrinsic Rate of Increase
LAGT	Lag Time
LCYC	Lifecycle
NCHG	Population Change (Change in N/Change in Time)
PBMS	Biomass or Weight for Total Population
PBRA	Biomass Turnover Ratio (Population/biomass)
PCCP	Population Carrying Capacity
PGRT	Population Growth Rate
PRPE	Predator/Prey Dynamics
PSYN	Photosynthesis

POP POPULATION EFFECT	
RCLN	Colonization Rate
RCPR	Recapture Ratio
SEXR	Sex Ratio
SRFA	Surface Area
STTL	Settling
SZDS	Size Distribution
THCH	Thatch Accumulation
WGHT	Weight

REP REPRODUCTION GROUP

REP REPRODUCTIVE EFFECT	
Measurement Code	**Measurement Name**
ABNM	Abnormal
ABRT	Abort
AFST	Atretic Follicle Stage
BMAS	Biomass; Includes Harvest Yield, Fruit or Seed Yield, Mass of Organism, Mass of Population.
BNDG	Pair Bonding Nesting Behavior
BRED	Bred, Breeding
CLLT	Clutch Length
CLNE	Cloning Efficiency
CLUB	Clubbing (hydra reproduction)
COUR	Courtship Behavior
CYNG	Care of Young, Nest Attentiveness
EBCN	Effective Body Concentrations
EGPN	Eggs per Nest
FCND	Fecundity
FERT	Fertile, Fertility
FERZ	Fertilization
FLOR	Floral Induction

REP REPRODUCTIVE EFFECT	
FTCC	Fertile Cocoons
GCCT	Germ Cell Count
GERM	Germination
GEST	Gestation Rate
GFST	Graafian Follicle Stage
GIDX	Gestation Index
GMEN	Germination Energy
GMET	Gamete Production
GREP	Reproduction, General
GSTT	Gestation Time
HDEP	Hen-day Egg Production
HHEP	Hen-housed Egg Production
IFCC	Infertile Cocoons
INFL	Inflorescence
INFT	Infertile
LACG	Lactating
LIDX	Lactation Index
MIDX	Mating Index
MONT	Mount
MOTL	Motility
NCLU	Corpus Lutea, Number of
NDAY	Number of Days Between Eggs Laid
NEGI	Number of Eggs Incubated
NOIM	Number of Implantations
NOPN	Number of Organisms per Nest
NPOD	Number of Pods
NPRG	Not Pregnant
NREP	Non-reproducing Organisms
NSNT	Successful Nests
NSPN	Number Spawning

REP REPRODUCTIVE EFFECT	
NSTI	Nest Initiation
NSTS	Number of Active Nests
NTSZ	Nest Size
NVIB	Non-viable
OBRD	Open Brood
OEGP	Onset of Egg Production
OOCY	Fully Developed Oocytes
PFST	Primary Follicle Stage
PILS	Post-Implantation Loss
PIPD	Pipped
PLBR	Pairs with Litter or Brood
PREG	Pregnant, Paris or Gravid
PRFM	Pregnant Females in a Population
PROG	Progeny (Includes Counts, Numbers, Clutch, Litter or Brood Size, Progeny Produced Within a Specified Time Period, Numbers of Progeny per Parent Organism)
PRPL	Pre-Implantation Loss
PRTH	Parthenocarpy
PSTG	Stage of Pregnancy
RBEH	Reproductive Behavior Changes
RPRD	Reproductive Capacity
RSEM	Resorbed Embryos
RSUC	Reproductive Success (General)
SBRD	Sealed Brood
SDIX	Seed Index
SEED	Seed Number
SEPD	Seed or Spore Production
SEXR	Sex Ratio
SFST	Secondary Follicle Stage
SPMC	Spermatocytes
SPMG	Spermatigonia

REP REPRODUCTIVE EFFECT	
SPNF	Spawning Frequency
SPRD	Sporophyte Production
SRTL	Sertoli Cells
STRL	Sterility
T50P	Time to 50% Reproduction
TFPG	Time to First Progeny
TPRD	Total Production
TPRG	Time to Pregnancy/Gravidity
TSPN	Time to Spawn
TTPR	Time to Peak Reproduction
TUPR	Tuber Production
VEGR	Vegetative Reproduction
VIAB	Viability

AEG AVIAN EGG EFFECT	
Measurement Code	**Measurement Name**
ALEG	Albumen: Eggshell Quality (Haugh Units)
CRAK	Cracking
ESIN	Eggshell Index
FERT	Fertile, Fertility
LGTH	Length
QUAL	Quality
SHLL	Shell, Percent
SIZE	Size
STGH	Strength
THIK	Thickness
VOLU	Volume
WDTH	Width
WGHT	Weight
YOLK	Yolk, Percent

SYS ECOSYSTEM GROUP

PRS SYSTEM PROCESSES EFFECT

Measurement Code	Measurement Name
BGCM	Biogeochemical
CMIN	Carbon Mineralization
CO2G	Carbon Dioxide Generation
CO2P	Carbon Dioxide Evolution
DCMP	Decomposition
GPPR	Gross Primary Productivity/respiration
GPRS	General Ecosystem Processes
NITR	Nitrification
OUPT	Oxygen Uptake
PPRO	Primary Productivity
SPRO	Secondary Productivity
SRES	System Respiration
TROP	Efficiency of Trophic Transfer Between Different Levels in the Food Chain; Assimilation Efficiency

NOC NO GROUP CODE

NOC NO GROUP CODE EFFECT

Measurement Code	Measurement Name
MULT	Multiple Effects Reported as One Result
NRNR	Endpoint Reported Without a Specific Effect
~XXX	Delayed Effect

Documentation Code Scoring

C = Complete = 86- 100 points
M = Moderate = 51- 85 points
I = Incomplete < 51 points

View Table 1 and 2 below to determine point values given for each data field.

Table 1. Documentation code scoring for aquatic and terrestrial laboratory /field data.

AQUATIC LAB OR NR		SCORE*		TERRESTRIAL LAB /FIELD		SCORE*	
EXPOSURE DURATION		20		EXPOSURE DURATION		20	
CONTROL TYPE		8		CONTROL TYPE		7	
ORGANISM COMMENT and / or LIFESTAGE		9		ORGANISM COMMENT, AGE OR LIFESTAGE		8	
CHEMICAL GRADE or PURITY or CHEMICAL COMMENT		5		CHEMICAL GRADE or PURITY or CHEMICAL COMMENT		5	
CHEMICAL ANALYSIS METHOD		5		CHEMICAL ANALYSIS METHOD		5	
EXPOSURE TYPE		10		EXPOSURE TYPE		10	
TEST LOCATION		5		TEST LOCATION		5	
STATISTICAL SIGNIFICANCE	ENDPOINT	10	20	STATISTICAL SIGNIFICANCE	ENDPOINT	10	20
SIGNIFICANCE LEVEL		10		SIGNIFICANCE LEVEL		10	
HARDNESS (FW)	SALINITY (SW)	2	4	APPLICATION FREQUENCY		5	
ALKALINITY (FW)		2		ORGANISM SOURCE		5	
DISSOLVED OXYGEN		4		ORGANISM NUMBER and/or SAMPLE NUMBER		5	
TEMPERATURE		4		DOSE NUMBER		5	
CONDUCTIVITY		2					
pH		4					
TOTAL		**100**		**TOTAL**		**100**	

* Score is assigned as long as the field is not empty or does not contain the code 'NR'

Table 2. Documentation code scoring for aquatic outdoor field data.

AQUATIC FIELD DATA RECORDS		SCORE*	
EXPOSURE DURATION		20	
CONTROL TYPE		6	
ORGANISM COMMENT, and /or LIFESTAGE		6	
CHEMICAL GRADE		3	
CHEMICAL ANALYSIS METHOD		3	
EXPOSURE TYPE		10	
STATISTICAL SIGNIFICANCE	ENDPOINT	10	20
SIGNIFICANCE LEVEL		10	
HARDNESS (FW)	SALINITY (SW)	2	4
ALKALINITY (FW)		2	
DISSOLVED OXYGEN		4	
TEMPERATURE		4	
pH		4	
CONDUCTIVITY		2	
ORGANIC CARBON		1	
CHEMICAL HALF-LIFE		1	
HABITAT CODE		4	
GEOGRAPHIC LOCATION		2	
APPLICATION TYPE		2	
APPLICATION FREQUENCY		2	
APPLICATION DATE / SEASON		2	
TOTAL		**100**	

* Score is assigned as long as the field is not empty or does not contain the code ‘NR’

Sample Unit Codes

AB	Above Ground Portion (plants)
AD	Adult
BH	Both male and female organisms exposed or observed
BR	Brood
C1	Clutch, First
C2	Clutch, Second
CB	Combs
CC	Cocoons
CL	Cells
CT	Containers
DC	Deceased organism
EG	Egg
EM	Embryo
EU	Experimental Unit
F1	First Generation
F1/F1	First generation cross
F2/F2	Second generation cross
F3/F3	Third generation cross
F2	Second Generation
F3	Third Generation
FB	Mature, full-bloom (fruit trees)
FET	Fetus
FG	Female gametophyte
FL	Flowers
FM	Female organisms
FX	Multiple generations
G1	Females, first generation
G2	Females, second generation
G3	Females, third generation
GR	Grains
GS	Germinated seed
HT	Hatchling
JV	Juvenile
KR	Kernel
LE	Leaf
LE1	Leaf, 1st stage
LE2	Leaf, 2nd stage
LE3	Leaf, 3rd stage
LE4	Leaf, 4th stage
LE5	Leaf, 5th stage
LE6	Leaf, 6th stage
LE7	Leaf, 7th stage
LE8	Leaf, 8th stage
LT	Litters
LV	Larvae
M1	Males, first generation
M2	Males, second generation
M3	Males, third generation
MD	Mature dormant
MG	Male gametophyte
ML	Male organisms
MT	Mature, no specified stage
MU	Multiple sample unit types
MX	Multiple male generations
OR	Organism
PB	Mature, post-bloom (fruit trees)
PH	Mature, pit-hardening (fruit trees)
PL	Plots
PR	Pair
RB	Mature reproductive, 2nd generation
RO	Root
RP	Mature reproductive
RS	Root segments
SA	Subadult
SD	Seed
SG	Mature, side-green (fruit trees)
SHL	Shell
SL	Seedling
TC	Tissue culture callus
TU	Tubers
VC	Vegetative clone
VG	Mature vegetative

Trend

CHG	No clear trend, results are variable (i.e., any combination of above trends listed)
DEC	Decrease
INC	Increase
NEF	No observed effect

Significance

ANOSIG	Not significant at all concentrations
ASIG	All concentrations statistically significant
MULT	Multiple statistical, no clear dose-response effect results (e.g., significant as some measured results, but not significant at other measurements).
NOSIG	Statistically no significant result
SIG	Statistically significant result

Reviewer Assigned Endpoint

P Publication reported endpoint
R Reviewer assigned endpoint

Response Site

AB	Aboveground Portion,
GO	Gonad
GR	Grain
RLP	Root, Primary Lateral
RLS	Root, Second Lateral

	Plant
ABD	Abdomen
ABP	Abdominal Process
AD	Adipose Tissue
AF	Amniotic Fluid
AG	Accessory Gland
AL	Albumen (egg white)
AM	Adductor Muscle
ANT	Antenna (antennae)
AP	Appendages
AR	Adrenal Gland
ART	Artery
AS	Air Sac
AT	Alimentary Tract
ATH	Abdomen and Thorax
ATM	Atrium
AX	Axons
BA	Bark
BB	Bulb
BC	Buccal mass
BD	Bud
BDT	Bile Duct
BDW	Body Wall
BI	Bile
BIL	Bill
BL	Blood
BLC	Blood Cell
BM	Bone Marrow
BO	Bone
BOD	Body, Whole
BOL	Boll (cotton)
BR	Brain
BRN	Branches
BRS	Brain stem
BT	Breast
BU	Bursa
BV	Blood Vessel
BW	Bee's Wax
BY	Byssus
CA	Cartilage
CAN	Canopy
CAP	Cap, mushroom
CB	Cob
CBC	Cerebral Cortex
CBH	Cerebral Hemisphere
CC	Cocoon
CDB	Caudal Bone
CDV	Caudal Vertebrae
CE	Coelomic fluid
CEL	Cell
CGG	Coagulating Gland
CH	Cord, Spinal
CHP	Choroid plexus
CL	Claw
CLM	Coelomocytes
GT	Gastrointestinal Tract
GU	Gut
GZ	Gizzard
HA	Hair
HC	Hypocotyl callus cells
HD	Head
HE	Heart
HIP	Hippocampus
HK	Heart and Kidney
HL	Hemolymph
HM	Humerus
HMC	Hemoctyes
HO	Honey
HP	Hepatopancreas
HKG	Husk and grain
HL	Hemolymph
HLB	Hindlimb
HSK	Husk
HTC	Heterocyst
HY	Hypothalamus
HYP	Hypocotyl
IB	Interparietal bone
IE	Ileum
IL	Ilium
IN	Intestinal Tract
IR	Interrenal Gland
IT	Internode
JA	Jaw
JE	Jejunum
JV	Juvenile
KI	Kidney
KR	Kernal
LAM	Laminae
LC	Leaf chloroplast
LD	Lipid, Fat
LE	Leaf, Needle
LEI	Leaf Index
LEO	Leaf, Old
LEY	Leaf, Young
LG	Leg
LI	Liver
LIN	Large Intestine
LIP	Lip
LIT	Litters
LM	Limb
LMP	Lymphocyte
LMV	Lumbar Vertebrae
LU	Lungs
LV	Left ventricle
LYS	Lysosome
MA	Mantle
MB	Muscle and Bone
MC	Microsome
ME	Meristem (apical or axillary)
MES	Mesentery
RO	Root
ROC	Root Cortex
ROE	Root Epidermis
ROI	Root, Inner cortex
ROO	Root, Outer cortex
ROS	Root, Stele
RP	Root, Primary
RR	Residual, Remnant, Carcass
RS	Root + Stem
RT	Reproductive Tissue
RTC	Root tip cells
RTP	Root tips
RU	Radius-Ulna
RZ	Root + Rhizome
SAC	Striatum-Accumbens
SAP	Sap
SB	Shell, Membrane
SB2	Stem/Stalk, Lower Half
SC	Scale
SCP	Scapula
SCV	Sacral Vertebrae
SD	Seed
SDL	Seedling
SDM	Subdermis
SE	Sensory Organs
SEM	Semen
SB	Shell Membrane
SG	Shell Gland
SH	Stomach
SI	Siphon
SK	Skin, Epidermis
SKL	Skull
SKM	Skeletal Muscle
SL	Shell, Eggshell
SLK	Silk
SLV	Stem to Leaves
SM	Sperm
SN	Skeleton
SO	Shoot
SP	Spleen
SPK	Spikelet
SPI	Spine
SPR	Sporophyte
SQ	Shell
SR	Serum
SRB	Strobilus
SRC	Secretory Cell
SS	Stem/Stalk
SSP	Stems + Petioles
ST	Soft Tissue
STB	Semeniferous Tubules
STE	Sternum or sternebrae
STG	Straw and Grain
STH	Stalk + Husk

CM	Crown to Rump
CN	Cotyledon
COL	Coleoptile
COR	Corm
CP	Capat
CPS	Carpus
CR	Crop
CRB	Cerebellum
CRG	Cerebral Ganglion
CBM	Cerebrum
CRP	Carapace
CRR	Cerebellar region
CSF	Cerebrospinal fluid
CU	Culture Cells
CGG	Coagulating Gland
CX	Caudex
CY	Cytosol
DG	Digestive Gland
DN	Diencephalon
DO	Duodenum
DT	Digestive Tract
EA	Ear (Corn)
EAL	Ear Leaf
EC	Excreta
EG	Egg
EL	Elytrom
EM	Embryo
EPD	Epididymis
ER	Erythrocyte
ES	Esophagus
ET	Edible Tissue
EV	Exuviae
EX	Exoskeleton
EY	Eye
EZ	Enzyme
F1	First Offspring Generation
FB	Frontal Bone
FBR	Forebrain
FC	Feces
FET	Fetus
FD	Frond
FG	Foregut
FE	Feathers
FI	Fin
FL	Fillet
FLB	Flower Bud
FLW	Flower/Inflorescence
FM	Femur
FO	Foot
FOD	Fodder
FOL	Foliage
FOR	Forage
FP	Fatpad
FR	Fruit
FRL	Forelimb
MK	Milk, lactating females
MI	Midgut and Midgut Gland
MM	Mammary Tissue
MO	Mucous
MOB	Medulla Oblongata
MOM	Mother cells, pollen
MP	Metanephridium
MRC	Motor Cortex
MS	Mesenteric Lymph Node
MT	Multiple Tissue/Organs
MTC	Metacarpus
MIT	Mitochondria
MU	Muscle
MUL	Multiple Sites
MYC	Mycellium
NB	Nasal Bone
ND	Nodule, root
NE	Nervous Tissue
NG	Nasal Gland
NK	Neck
NL	Needle
NY	Nymph
OC	Oocyte
OD	Oviduct
OG	Organ
OL	Olfactory
OPR	Operculum
OR	Organelle
OV	Ovaries
PAN	Panicle
PB	Pseudobranch
PC	Pyloric Ceca
PD	Pod
PE	Penis
PEP	Pecten Epipharyngis
PES	Petiole and Stem
PG	Prostrate Gland
PGL	Preening Gland
PHG	Pheromone Gland
PHL	Phalanges
PI	Pituitary Gland
PL	Plasma
PLC	Placenta
PLN	Popliteal Node
PLP	Pulp
PLT	Palate
PLV	Pelvis
PO	Pollen, Pollen Grain
POS	Pod + Seed
PPG	Preputial Gland
PRG	Progeny
PRT	Peritoneum
PS	Pancreas
PT	Petiole
PTB	Parietal Bone
STL	Stolon
STM	Striatum, muscle
STR	Straw
STV	Stover (mature cured stalks of grain with the ears removed)
SU	Stalk/Stem, Upper Half
SV	Seminal Vesicle
SVG	Salivary Gland
SWB	Swim Bladder
SX	Submaxillary Gland
TA	Tail
TB	Tibia
TBC	Tubercles
TCV	Thoracic Vertebrae
TD	Transudate
TE	Testes
TF	Tuber Flesh
TG	Thigh Muscle
TH	Thorax
THA	Thorax and Abdomen
TI	Tissue
TIL	Tillers
TK	Trunk
TLE	Trifoliate Leaves
TLI	Thalli
TLM	Thalamus
TLN	Telencephalon
TN	Tentacles
TO	Tongue
TOP	Tops (Plant)
TP	Tuber Peeling
TR	Tarsus
TS	Thymus
TSL	Tassel
TT	Tibiotarsus
TTH	Tooth, Teeth
TU	Tuber
TY	Thyroid
UB	Urinary Bladder
UG	Uropygial Gland
UL	Ulna bone
ULE	Unifoliate Leaves
UNT	Urinary Tract
UR	Urine
UT	Uterus
VA	Vagina
VAS	Vasculature
VD	Vas Deferens
VE	Vertebra
VG	Vegetative Portion
VI	Viscera
VL	Villi
VN	Vine
VNT	Ventricle

FT	Fetus	PTG	Parotid Gland	WI	Wings
GB	Gall Bladder	PTU	Plant, Unspecified	WL	Wall, Body
GC	Gland Complex	PX	Pharynx	WM	White Matter (brain)
GF	Green Forage	RA	Radius bone	WO	Whole Organism
GG	Green Gland	RAC	Rachis	WR	Wrist
GI	Gill	RB	Rib	YO	Yolk
GL	Ganglion	RBC	Erythrocyte	YS	Yolk Sac
GMT	Germ Tube	RC	Rectum		
GNP	Genital papillae	RD	Radicle		
		RH	Rhizome		
		RL	Root, Lateral		

AQUATIC WATER CHEMISTRY FIELDS

* denotes value is the dilution water chemistry

Water Chemistry Units

%	Percent
% Sat	Percent saturation
C	Celsius
cm	Centimeters
dH	Degrees German hardness
F	Fahrenheit
ft	Feet
g CaCO3	Grams Calcium carbonate
g/kg	Grams per kilogram
g/L	Grams per liter
g/m3	Grams per cubic meter
HCO3	Hydrogen carbonate
in	Inches
K	Kelvin
M	Meters
meq/L	Milli equivalents per liter
mg/L	Milligrams per liter
mg/L C	Milligrams per liter Carbon
mg/L CaCO3	Milligrams/liter Calcium carbonate
mg/L HA	Milligrams per liter Humic acid
mg/L MO	Milligrams per liter Methyl Orange
mg/dm3	Milligram per cubic decimeter
ml N/100 HCl	Milliliters nitrogen per 100 Hydrochloric acid
ml/L	Milliliter per liter
mM	Millimolar
MM	Millimeters
mm Hg	Millimeters mercury
mmhos	Milli ohms
mmol/L	Millimoles per liter
mOsm	Milliosmoles
mS	Milli Siemens
mS/m	Milli Siemens per meter
N	Normal
ohm/cm	Ohm per centimeter
ppm	Parts per million
ppm CaCO3	Parts per million Calcium carbonate
ppm MO	Parts per million Methyl Orange
ppt	Parts per thousand
PSU	Practical salinity units
S	Seimens
SAT	Saturated
ueq/L	Micro equivalents per liter
ug/L	Micrograms per liter
uM	Micromolar
umhos	Micro ohms
umhos/cm	Micro ohms per centimeter
umol/L	Micromoles per liter
uS	Micro Siemens
uS/cm	Micro Siemens per centimeter
uS/cm3	Micro Siemens per cubic centimeter

Organic Carbon Type
D Dissolved
P Particulate
T Total

AQUATIC OUTDOOR FIELD CODES

Habitat Code
E Estuarine
L Lacustrine (lakes)
M Marine
P Palustrine (ponds)
R Riverine

Habitat Description	Riverine	Palustrine
	Creek	Acidic bog
Marine	River	Aquatic bed
Bay	Stream	Bog
Gulf	Tributary	Coniferous bog
Open ocean		Emergent wetland
Reef	Lacustrine	Emergent marsh
Seaweed bed	Aquatic bed	Fen
	Cove	Forested bog
Estuarine	Deepwater zone	Forested wetland
Bay	Impoundment	Marsh
Brackish marsh	Lake	Pond
Estuary	Lake shore	Scrub/shrub wetland
Open water	Shallow zone	Shrub swamp
Salt marsh		Swamp
Shrub swamp		Wetland
Tidal river		Wooded swamp
Tidal marsh		

Substrate Code		
CL Clay	MU Mud	SA Sand
GR Gravel	MX Mixed substrate	SI Silt
M Mineral	O Organic	

Water Depth Unit
CM Centimeter
FT Feet
IN Inches
M Meter
MM Millimeters

Geographic Code
View FIPS documentation at: http://www.nist.gov/itl/div897/pubs/fip10-4.htm

Application Type Codes		
AE Aerial (unknown type)	EN Environmental, Unspecified	MU Multiple
AG Aerial-granular	GG Ground-granular	PU Pump
AS Aerial-spray	GS Ground-spray	SP Spray (unknown type)
DA Direct application	HS Hand-spray	SS Soil slurry
	IS *In Situ*	

Application Frequency

CONT	Continuous
EOD	Every other day
L/ha	Liters per hectare
lb/acre	Pounds per acre
nM	NanoMolar (nanomoles per liter)
X/D	x times per day
X/HR	x times per hour
X/WK	x times per week
X/Study	x times per experimental study

Application Rate

AI %/L	Active ingredient percent per liter
AI g	Active ingredient gram
AI g/ac	Active ingredient grams per acre
AI g/cm	Active ingredient grams per centimeter
AI g/ha	Active ingredient grams per hectare
AI g/m2	Active ingredient grams per square meter
AI kg	Active ingredient kilogram
AI kg/ha	Active ingredient kilograms per hectare
AI lb/ac	Active ingredient pounds per acre
AI lb/ga	Active ingredient pounds per gallon
AI mg	Active ingredient milligram
AI mg/L	Active ingredient milligram per liter
AI ng/cm2	Active ingredient nanogram per square centimeter
AI oz/ac	Active ingredient ounces per acre
AI ug/L	Active ingredient micrograms per liter
ac/ft	Acre foot
g	Gram
g/L	Grams per liter
g/ac	Grams per acre
g/cm3	Grams per cubic centimeter
g/ha	Grams per hectare
g/km	Grams per kilometer
g/m2	Grams per square meter
g/m3	Grams per cubic meter
g/yr	Grams per year
gal	Gallon
gal/ac	Gallon per acre
gal/ac f	Gallon per acre foot
gal/gal	Gallon per gallon
kg	Kilograms
kg/ac	Kilograms per acre
kg/d	Kilograms per day
kg/ha	Kilograms per hectare
kg/m	Kilograms per meter
kg/m3	Kilograms per cubic meter
L	Liter
K/ha	Liter per hectare
L/m2	Liters per square meter
L/mi	Liter per minute
L/s	Liter per second
lb	Pound
lb/ac	Pounds per acre

lb/cwt s Pounds per hundred weight seed
lb/ft2 Pounds per square feet
mg Milligrams
mg/L Milligram per liter
mg/m2 Milligram per square meter
ml/ha Milliliters per hectare
ml/L Milliliter per liter
ml/m2 Milliliter per square meter
ml/mi Milliliter per minute
ng/cm2 Nanogram per square centimeter
oz/ac Ounces per acre
oz/gal Ounces per gallon
ppm Parts per million
ppm/mi Parts per million per minute
tons Tons
tons/ha Tons per hectare
ug/L Microgram per liter
ug/L/hr Microgram per liter per hour
ug/cm2 Microgram per square centimeter
ug/kg Microgram per kilogram
ug/ml Microgram per mililiter
ul/L Microliters per liter

Application Date /Season (Northern Hemisphere)
AU October - December
SP April - June
SU July - September
WI January - March

TERRESTRIAL SOIL PARAMETERS

Media Organic Matter Type and Unit
% Percent
ASH Ash Content
C Carbon
Cox Oxidized carbon
DOC Dissolved organic carbon
g Grams
g/100g Grams per 100 grams
g/kg Grams per kilogram
HUM Humus
LOI Loss on ignition
mg/kg soil Milligrams per kilogram soil
OC Organic carbon
OM Organic matter
PEAT Peat
TOC Total Organic Carbon
umol/g LIT Micromoles per gram litter

Media Cation Exchange Capacity Units

cmol/g	Centimoles per gram soil
cmol/kg	Centimoles per kilogram soil
cmol+/kg	Centimoles per kilogram soil
cmol P+/kg	Centimoles phosphorus ion per kilogram soil
me/100g	Milliequivalents per 100 grams soil
meq	Milliequivalents
meq/100g	Milliequivalents per 100 grams soil
meq A/100g	Milliequivalents ammonium (NH4) per 100 grams soil
meq/kg	Milliequivalents per kilogram
mg/100 g soil	Milligrams per 100 grams soil
mmol K+/kg	Millimoles phosphorus ion per kilogram soil
mmol/100g	Millimoles per 100 grams soil
mmol/kg	Millimoles per kilogram soil
mval/100 g	Parts per million ion charge/ion atomic weight per 100 grams

Media Measurement (wet/dry)

D Dry
W Wet

AQUATIC REPORT OUTPUT CODES

A forward slash (/) within a field refers to an associated comment in a separate field. General comments are not available for download. You will need to view the full publication for proper interpretation.

Web Page or Delimited Report Header	Field Name
Alkalinity	Alkalinity (7 fields) Alkalinity Mean Operator (OP), Alkalinity Mean, Alkalinity Minimum Operator, Alkalinity Minimum, Alkalinity Maximum Operator, Alkalinity Maximum, Alkalinity Units
Appl Rate	Application Rate
Appl Type	Application Type
Author	Authors
Date/Season	Application Season/date
Appl Freq.	Application Frequency
BCF	Bioconcentration Factor (12 fields) BCF1 Mean, BCF1 Mean Operator (OP), BCF1 Minimum, BCF1 Minimum Operator, BCF1 Maximum, BCF1 Maximum Operator, BCF2 Mean, BCF2 Mean Operator, BCF2 Minimum, BCF2 Minimum Operator, BCF2 Maximum, BCF2 Maximum Operator
CAS#	Chemical Abstract Services Registry Number
Chemical	Chemical Name
Chem Method	Chemical Analysis Method
Chem Comment	Chemical Characteristics
Grade	Chemical Grade
Conc	Concentration Type and Value (15 fields) Concentration1 Mean, Concentration1 operator (OP), Concentration1 minimum, Concentration1 minimum operator, Concentration1 maximum, Concentration1 maximum operator, Concentration2 Mean, Concentration2 operator (OP), Concentration2 minimum, Concentration2 minimum operator, Concentration2 maximum, Concentration2 maximum operator, Concentration units, Concentration Type1, Concentration type 2
Conduct. (umhos/cm)	Conductivity
Control Type	Control Type
DO	Dissolved Oxygen
Doc Code	Documentation Code
Effect Percent	Effect Percent (3 fields) Effect Percent Mean, Effect Percent Minimum, Effect Percent Maximum

Web Page or Delimited Report Header	Field Name
Effect	Effect
Effect Measurement	Effect Measurement
Endpoint	Endpoint and Effect
Eff & Endpnt Comment	Effect Endpoint Comments
Exp. Design Comment	Experimental Design Comments
Dur	Exposure Duration
Exp Type	Exposure Type
Geo Locat	Geographic Location text
Geo Code	Geographic code
Habit Comment	Habitat Comment
Habit Code	Habitat Code
Half life	Half life value and unit
Hardness (mg/L)	Hardness (7 fields) Hardness Mean Operator (OP), Hardness Mean, Hardness Minimum Operator, Hardness Minimum, Hardness Maximum Operator, Hardness Maximum, Hardness Units
Lat/Long	Latitude/Longitude
Media Type	Media Type (FW /SW)
Observed Response Result Statistical Method	Observed Response Response Mean Operator, (OP), Observed Response Mean, Response Minimum Operator, Observed Response Minimum, Response Maximum Operator, Observed Response Maximum, Result Statistical Method Observed Response Value, Observed Response Units
Organic C (mg/L)	Organic Carbon type and value (8 fields) Organic Carbon Mean Operator (OP), Organic Carbon Mean, Organic Carbon Minimum Operator, Organic Carbon Minimum, Organic Carbon Maximum Operator, Organic Carbon Maximum, Organic Carbon Units, Organic Carbon Type
Org. Comment	Organism Characteristics
pH	pH (7 fields) pH Mean Operator (OP), pH Mean, pH Min Operator, pH Minimum, pH Maximum Operator, pH Maximum, pH Units
Ref #	Reference Number
Reference Citation	Reference Citation (4 fields) Author, Title, Year, Reference Source

Web Page or Delimited Report Header	Field Name
Salinity (ppth)	Salinity (7 fields) Salinity Mean Operator (OP), Salinity Mean, Salinity Minimum Operator, Salinity Minimum, Salinity Maximum Operator, Salinity Maximum, Salinity Units
Signif	Significance
Species #	Species Number
Scientific Name	Species Scientific Name
Common Name	Species Common Name
Source	Bibliographic Citation for Publication
Stat Level	Level
Study	Study Type
Substr Code	Substrate Code
Temp (C)	Temperature (7 fields) Temperature Mean, Temperature Minimum Operator (OP), Temperature Minimum, Temperature Maximum Operator, Temperature Maximum, Temperature Units
Test #	Test Number
Test Duration	Test Duration (7 fields) Test mean value, Test mean operator (OP), Minimum value, Minimum operator (OP), Maximum value, Maximum operator (OP), Duration unit
Test Loc	Test Location
Response Site	Response Site
Title	Title of the Publication
Trend	Trend
Water Depth	Water Depth and Unit
Year	Publication Year

TERRESTRIAL DELIMITED REPORT OUTPUT CODES

A forward slash (/) within a field refers to an associated comment in a separate field. You will need to view the full publication for proper interpretation.

Web Page or Delimited Report Header	Field Name
Application Frequency	Application Frequency
Assign	Reviewer Assigned Endpoint
Author	Author
CAS#	Chemical Abstract Services Registry Number (5 fields) CAS#, Positive Control CAS#, Carrier1 CAS#, Carrier2 CAS#, Carrier3 CAS#
Chemical Analysis Method	Chemical Analysis Method
Chemical	Chemical Name (5 fields) Chemical Name, Positive Control, Carrier1, Carrier2, Carrier3
Chemical Comment	Chemical Characteristics
Chemical Grade	Chemical Grade
Chemical Formulation	Chemical Formulation
Chemical Purity	Chemical Purity
Common Name	Species Common Name
Concentration/ Dose Dose Statistical Method	Concentration /Dose Type and Value (15 fields) Concentration/Dose Mean Operator (OP), Concentration/Dose Mean Concentration/Dose Minimum Operator, Concentration/Dose Minimum, Concentration/Dose Maximum Operator, Concentration/Dose Maximum, Dose Statistical Method, Concentration/Dose Value Operator, Concentration/Dose Value, Concentration/Dose Units
Control Type	Control Type
Doc Code	Documentation Code
Dose Number	Dose Number
Effect	Effect
Effect Measurement	Effect Measurement
Endpoint	Endpoint and Effect
Exp Type	Exposure Type
Exposure Comment	Exposure Comment

Web Page or Delimited Report Header	Field Name
Exposure Duration	Exposure Duration (7 fields) Exposure Mean Operator (OP), Exposure Mean, Exposure Minimum Operator, Exposure Minimum, Exposure Maximum Operator, Exposure Maximum, Exposure Duration Unit
Exposure Number	Exposure Number
Gender	Gender
Ion	Ionic Fraction
Level	Significance Level
Lifestage	Lifestage
Media Type	Media Type
Observed Duration	Observation Duration (7 fields) Observation Duration Mean Operator (OP), Observation Duration Mean, Observation Duration Minimum Operator, Observation Duration Minimum, Observation Duration Maximum Operator, Observation Duration Maximum, Observation Duration Unit
Org. Comment	Organism Comment
Organism Age	Organism Age (2 fields) Organism Age, Organism Age Units
Organism Source	Organism Source
Percent Lipid	Result Percent Lipid
Ref #	Reference Number
Reference Citation	Reference Citation (4 fields) Author, Title, Year, Reference Source
Response	Result Response/ Result Statistical Method (9 fields) Response Mean Operator (OP), Observed Response Mean, Response Minimum Operator, Observed Response Minimum, Response Maximum Operator, Observed Response Maximum, Result Statistical Method Observed Response Value, Observed Response Units
Response Site	Response Site
Result Record Number	Result Record Number
Result Comment	Result Comment
Results Set Number	Results Set Number
Sample Number	Sample Number (2 fields) Sample Number, Sample Unit
Scientific Name	Species Scientific Name

Web Page or Delimited Report Header	Field Name
Significant	Significant
Media CEC	Soil Cation Exchange Capacity (7 fields) Soil CEC Mean, Soil CEC Minimum Operator (OP), Soil CEC Minimum, Soil CEC Maximum Operator, Soil CEC Maximum, Soil CEC Units
Soil Dose Measured	Soil Dose Measured
Soil Type	Soil Type
Media Moisture	Media Moisture (6 fields) Soil Moisture Mean Operator (OP), Soil Moisture Mean, Soil Moisture Minimum Operator, Soil Moisture Minimum, Soil Moisture Maximum Operator, Soil Moisture Maximum
Media Organic Matter	Media Organic Matter (8 fields) Soil Organic Matter Mean Operator (OP), Soil Organic Matter Mean, Soil Organic Matter Minimum Operator, Soil Organic Matter Minimum, Soil Organic Matter Maximum Operator, Soil Organic Matter Maximum, Soil Organic Matter Units, Soil Organic Matter Type
Soil pH	Soil pH (6 fields) Soil pH Mean Operator (OP), Soil pH Mean, Soil pH Minimum Operator, Soil pH Minimum, Soil pH Maximum Operator, Soil pH Maximum
Soil Clay %	Soil Clay Percent (6 fields) Soil Clay % Mean Operator (OP), Soil Clay % Mean, Soil Clay % Minimum Operator, Soil Clay % Minimum, Soil Clay % Maximum Operator, Soil Clay % Maximum
Soil Sand %	Soil Sand Percent (6 fields) Soil Sand % Mean Operator (OP), Soil Sand % Mean, Soil Sand % Minimum Operator, Soil Sand % Minimum, Soil Sand % Maximum Operator, Soil Sand % Maximum
Soil Silt %	Soil Silt Percent (6 fields) Soil Silt % Mean Operator (OP), Soil Silt % Mean, Soil Silt % Minimum Operator, Soil Silt % Minimum, Soil Silt % Maximum Operator, Soil Silt % Maximum
Source	Bibliographic Source for Publication
Species #	Species Number
Study Duration	Study Duration (7 fields) Study Mean Operator (OP), Study Mean, Study Minimum Operator, Study Minimum, Study Maximum Operator, Study Maximum, Study Duration Unit
Test Comments	Test Comments
Test Duration	Test Duration (7 fields) Test mean value, Test mean operator (OP), Minimum value, Minimum operator (OP), Maximum value, Maximum operator (OP), Duration unit
Test Loc	Test Location

Web Page or Delimited Report Header	Field Name
Test Number	Test Number
Title	Title
Media Measurement (Wet Dry)	Basis of Measurement (wet/dry)
Year	Publication Year