Appendix D

TRAP ANALYSIS GRAPHS AND ECx VALUES

Badger Technical Services, LLC

Graphs produced by TRAP. Corresponding tables display author reported NOEC and LOEC values, ECx estimations as well as TRAP model and assessment notes.

Regression Analysis of Chlorpyrifos, Diazinon and Malathion Chronic Exposure Response Data

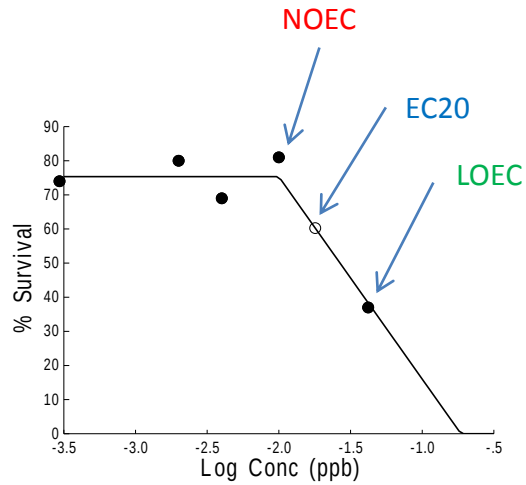
Test species: *Americamysis bahia, Cyprinodon variegatus, Daphnia magna, Jordanella floridae, Leuresthes tenuis, Menidia beryllina, Menidia menidia, Menidia peninsulae, Opsanus beta, Pimephales promelas*

Chlorpyrifos

Figure 2a and 2b

Mysid (*Americamysis bahia*)

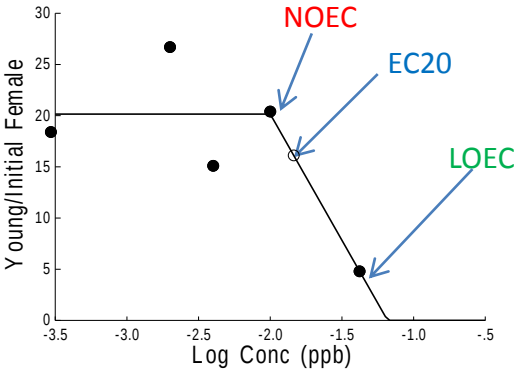
Ecotox Reference # 3750



% Survival

a

TRAP Model Used	Piecewise Linear
TRAP Quality Value	2
AquaChronTox ID	210
NOEC (ug/L)	0.010
LOEC (ug/L)	0.042
EC05 (conf. limits)	0.012 ug/L (0.001 - 0.155)
EC10 (conf. limits)	0.013 ug/L (0.001 - 0.137)
EC20 (conf. limits)	0.018 ug/L (0.003 - 0.111)
EC50 (conf.limits)	0.043 ug/L (0.013 - 0.148)
Comments:	% Survival, 3 parameter model used



Young per Initial Female

b

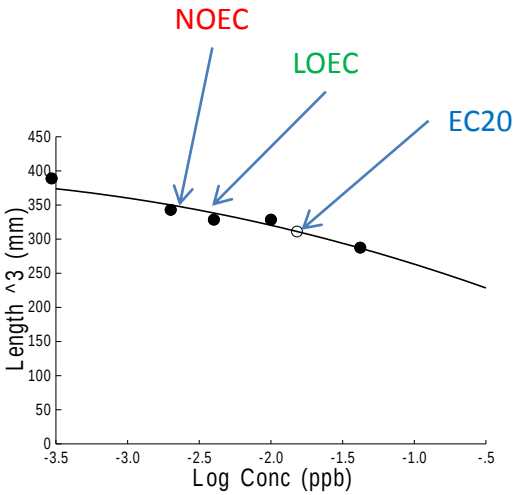
TRAP Model Used	Piecewise Linear
TRAP Quality Value	2
AquaChronTox ID	210
NOEC (ug/L)	0.010
LOEC (ug/L)	0.042
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	0.015 ug/L (no conf. limits)
EC50 (conf.limits)	0.026 ug/L (no conf. limits)
Comments:	Young/ Initial Female, 3 parameter model used

Chlorpyrifos

Figure 3a and 3b

Mysid (*Americamysis bahia*)

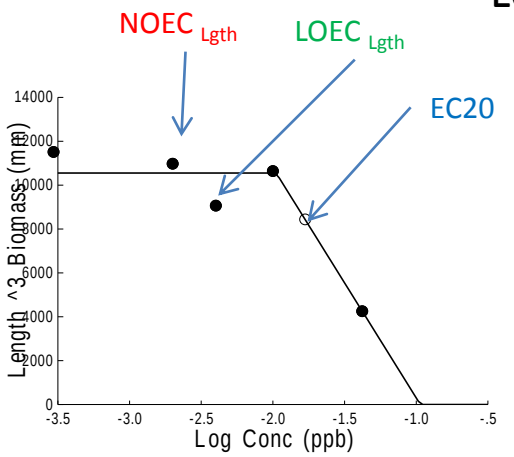
Ecotox Reference# 3750



Length ^3 (mm)

a

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	210
NOEC (ug/L)	0.002
LOEC (ug/L)	0.004
EC05 (conf. limits)	0.0005 ug/L (0.00007 - 0.003)
EC10 (conf. limits)	0.002ug/L (0.0006 - 0.007)
EC20 (conf. limits)	0.015 ug/L (0.007-0.035)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Length^3, used as a surrogate growth measurement when weight was not measured, 2 parameter model used



Length ^3 Biomass (mm)

b

TRAP Model Used	Piecewise Linear
TRAP Quality Value	2
AquaChronTox ID	210
NOEC (ug/L)	0.002
LOEC (ug/L)	0.004
EC05 (conf. limits)	0.012 ug/L (no conf. limits)
EC10 (conf. limits)	0.013ug/L (no conf. limits)
EC20 (conf. limits)	0.017 ug/L (no conf. limits)
EC50 (conf.limits)	0.033 ug/L (no conf. limits)
Comments:	Length ^3 Biomass, NOEC and LOEC values based on length NOEC and LOEC values, 3 parameter model used

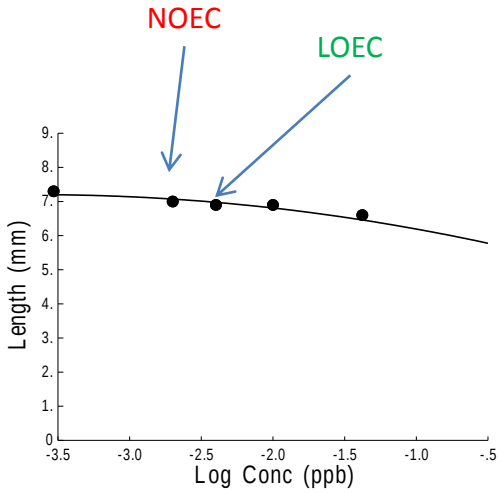
Chlorpyrifos

Mysid (*Americamysis bahia*)

Ecotox Reference # 3750

Length (mm)

a



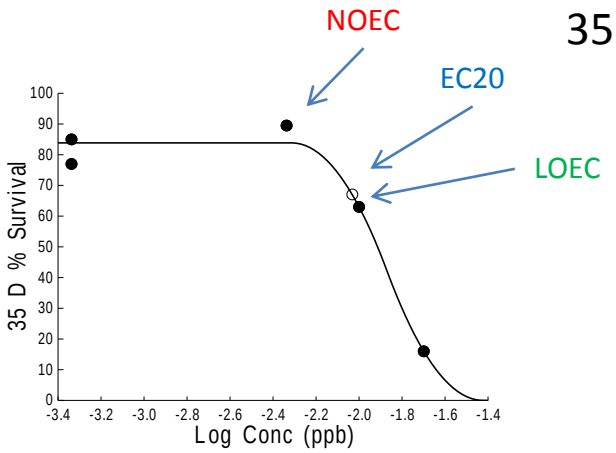
TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	3
AquaChronTox ID	210
NOEC (ug/L)	0.002
LOEC (ug/L)	0.004
EC05 (conf. limits)	0.009 ug/L (0.0002 - 0.477)
EC10 (conf. limits)	0.039ug/L (0.002 - 0.813)
EC20 (conf. limits)	Analysis does not support the estimation of this ECx
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Length, small difference between NOEC, LOEC length values, 3 parameter model used

Chlorpyrifos

Figure 5a and 5b

Mysid (*Americamysis bahia*)

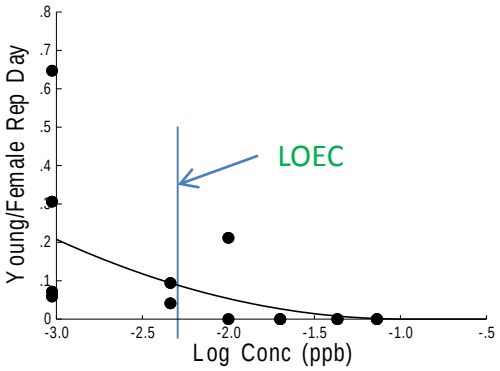
MRID # 42264901



35 Day % Survival

a

TRAP Model Used	Threshold sigmoid
TRAP Quality Value	1
AquaChronTox ID	403
NOEC (ug/L)	0.0046
LOEC (ug/L)	0.0100
EC05 (conf. limits)	0.0067 ug/L (0.0024 - 0.0184)
EC10 (conf. limits)	0.0077 ug/L (0.0036 - 0.0166)
EC20 (conf. limits)	0.0092 ug/L (0.0052 - 0.0164)
EC50 (conf.limits)	0.0135 ug/L (0.0092 - 0.0198)
Comments:	35 D % Survival, 14 day survival also reported, 3 parameter model used



Young per Female Reproductive Day

b

TRAP Model Used	Threshold sigmoid
TRAP Quality Value	3
AquaChronTox ID	403
NOEC (ug/L)	< 0.0046
LOEC (ug/L)	0.0046
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	Analysis does not support the estimation of this ECx
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Yg/Female Rep Day, insufficient reproduction to analyze, possible solvent effects noted in publication, 3 parameter model used

Figure 6a and 6b

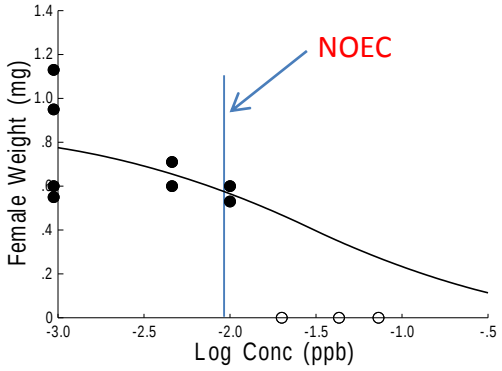
Chlorpyrifos

Mysid (*Americamysis bahia*)

MRID # 42664901

Female Weight (mg)

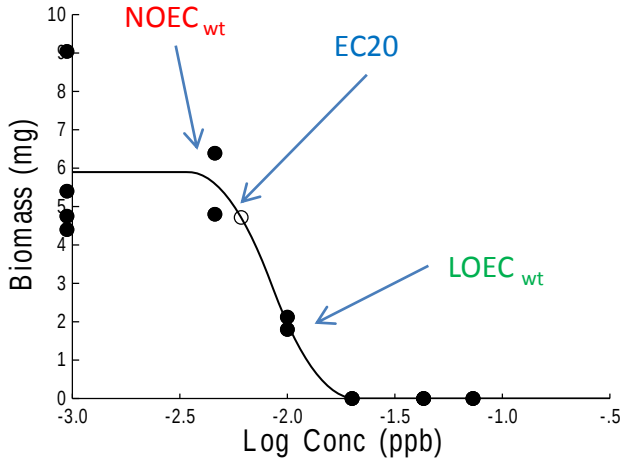
a



TRAP Model Used	Threshold sigmoid
TRAP Quality Value	2
AquaChronTox ID	403
NOEC (ug/L)	0.0100
LOEC (ug/L)	>0.0100
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	Analysis does not support the estimation of this ECx
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Female Weight, insufficient effects, possible solvent effects were noted in publication, 3 highest concentrations not included in analysis because of mortality 3 parameter model used

Female Biomass (mg)

b



TRAP Model Used	Threshold sigmoid
TRAP Quality Value	2
AquaChronTox ID	403
NOEC (ug/L)	0.0046
LOEC (ug/L)	0.0100
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	Analysis does not support the estimation of this ECx
EC50 (conf.limits)	0.0085 ug/L (0.0058 - 0.0123)
Comments:	Female Biomass, possible solvent effects were noted in publication, NOEC and LOEC values were based on weight NOEC and LOEC values because of incomplete survival analysis, 3 parameter model used

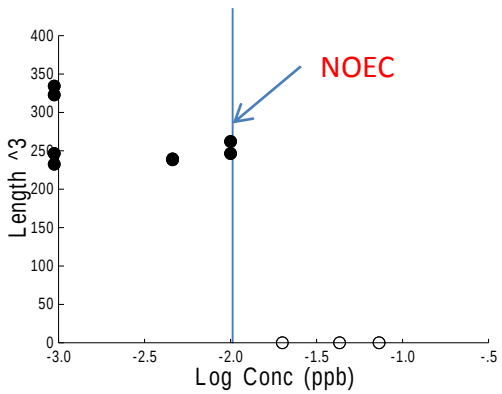
Chlorpyrifos

Mysid (*Americamysis bahia*)

MRID # 42664901

Female Length^3 (mm)

a

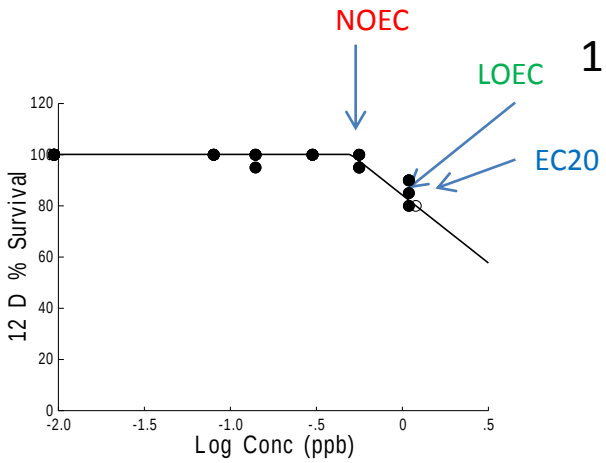


TRAP Model Used	None
TRAP Quality Value	3
AquaChronTox ID	403
NOEC (ug/L)	0.010
LOEC (ug/L)	>0.100
EC05 (conf. limits)	Not Calculable
EC10 (conf. limits)	Not Calculable
EC20 (conf. limits)	Not Calculable
EC50 (conf.limits)	Not Calculable
Comments:	Female Length^3, insufficient effects, possible solvent effects were noted in publication, 3 highest concentrations not included in analysis because of mortality, Data does not support regression analysis

Chlorpyrifos

Fathead Minnow (*Pimephales promelas)*

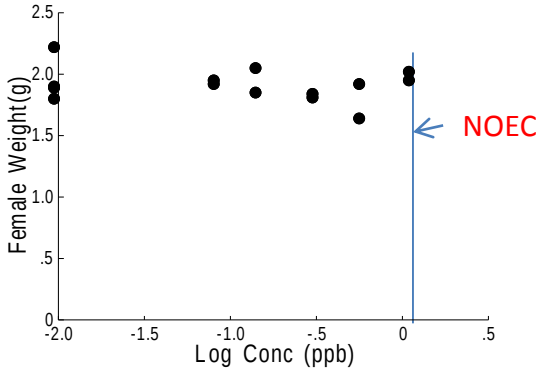
MRID# 42834401



12 Day % Survival

a

TRAP Model Used	Piecewise Linear
TRAP Quality Value	2
AquaChronTox ID	402
NOEC (ug/L)	0.57
LOEC (ug/L)	1.09
EC05 (conf. limits)	0.62 ug/L (0.55 - 0.7)
EC10 (conf. limits)	0.77 ug/L (0.7 - 0.85)
EC20 (conf. limits)	1.20 ug/L (1.03 - 1.38)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx value
Comments:	12 D % Survival, used to estimateEC20 or lower only, 195 day survival also reported but with insufficient effects, 3 parameter model used



Female Weight (g)

b

TRAP Model Used	None
TRAP Quality Value	3
AquaChronTox ID	402
NOEC (ug/L)	1.09
LOEC (ug/L)	>1.09
EC05 (conf. limits)	Not Calculable
EC10 (conf. limits)	Not Calculable
EC20 (conf. limits)	Not Calculable
EC50 (conf.limits)	Not Calculable
Comments:	Female Weight, insufficient effects, Data does not support regression analysis

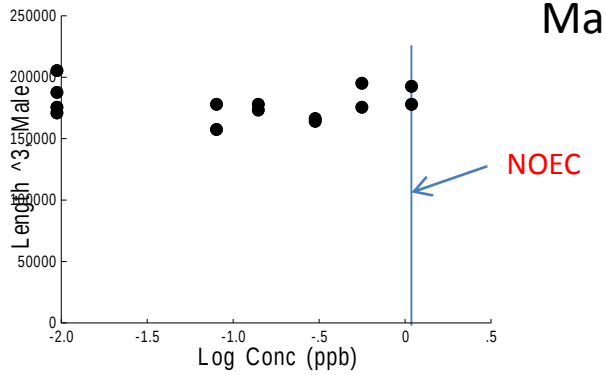
Chlorpyrifos

Fathead Minnow (*Pimephales promelas)*

MRID# 42834401

Male Length^3 (mm)

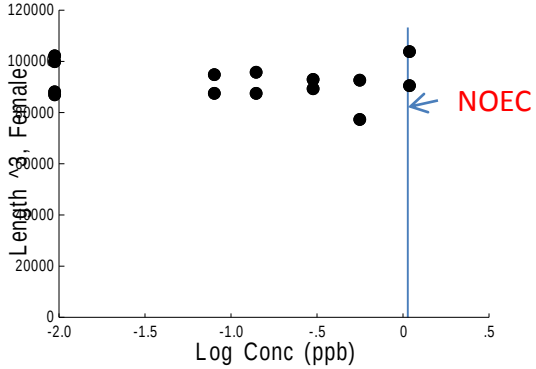
a



TRAP Model Used	None
TRAP Quality Value	3
AquaChronTox ID	402
NOEC (ug/L)	1.09
LOEC (ug/L)	>1.09
EC05 (conf. limits)	Not Calculable
EC10 (conf. limits)	Not Calculable
EC20 (conf. limits)	Not Calculable
EC50 (conf.limits)	Not Calculable
Comments:	216 D Length^3 Male, insufficient effects, Data does not support regression analysis

Female Length^3 (mm)

b



TRAP Model Used	None
TRAP Quality Value	3
AquaChronTox ID	402
NOEC (ug/L)	1.09
LOEC (ug/L)	>1.09
EC05 (conf. limits)	Not Calculable
EC10 (conf. limits)	Not Calculable
EC20 (conf. limits)	Not Calculable
EC50 (conf.limits)	Not Calculable
Comments:	216 D Length^3 Female, insufficient effects, Data does not support regression analysis

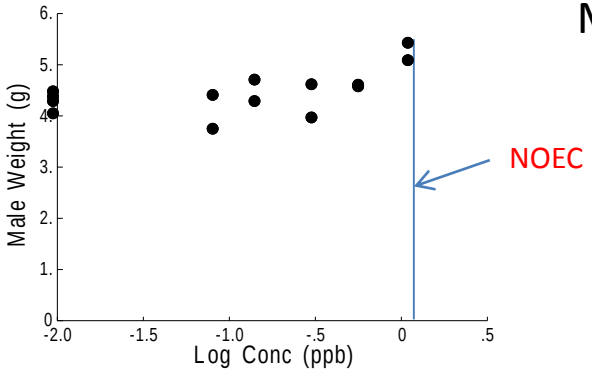
Chlorpyrifos

Fathead Minnow (*Pimephales promelas)*

MRID# 42834401

Male Weight (g)

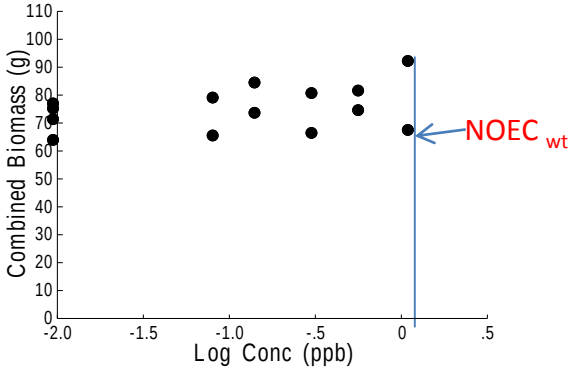
a



TRAP Model Used	None
TRAP Quality Value	3
AquaChronTox ID	402
NOEC (ug/L)	1.09
LOEC (ug/L)	>1.09
EC05 (conf. limits)	Not Calculable
EC10 (conf. limits)	Not Calculable
EC20 (conf. limits)	Not Calculable
EC50 (conf.limits)	Not Calculable
Comments:	Male Weight, insufficient effects, Data does not support regression analysis

Combined Biomass (g)

b



TRAP Model Used	None
TRAP Quality Value	3
AquaChronTox ID	402
NOEC (ug/L)	1.09
LOEC (ug/L)	>1.09
EC05 (conf. limits)	Not Calculable
EC10 (conf. limits)	Not Calculable
EC20 (conf. limits)	Not Calculable
EC50 (conf.limits)	Not Calculable
Comments:	Combined Biomass based on survival at 195 days, weight at 216 days, insufficient effects, NOEC value was based on weight at 216 days NOEC value, Data does not support regression analysis

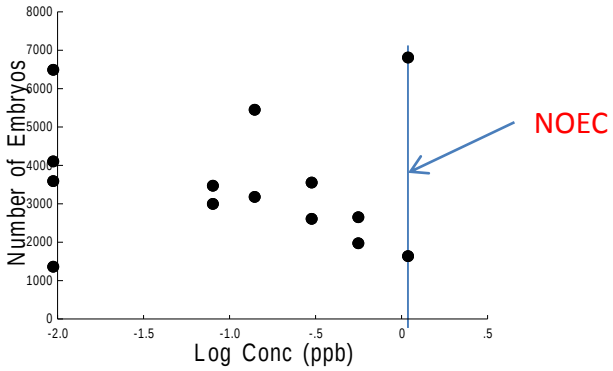
Chlorpyrifos

Fathead Minnow (*Pimephales promelas)*

MRID# 42834401

Number of Embryos

a

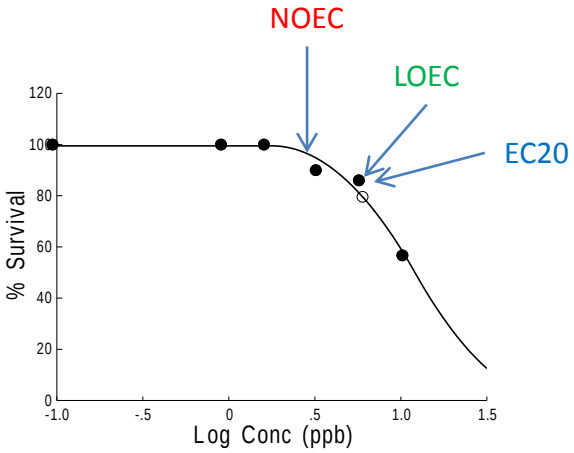


TRAP Model Used	None
TRAP Quality Value	3
AquaChronTox ID	402
NOEC (ug/L)	1.09
LOEC (ug/L)	>1.09
EC05 (conf. limits)	Not Calculable
EC10 (conf. limits)	Not Calculable
EC20 (conf. limits)	Not Calculable
EC50 (conf.limits)	Not Calculable
Comments:	Number of Embryos, insufficient effects, data does not support regression analysis

Chlorpyrifos

Fathead Minnow (*Pimephales promelas)*

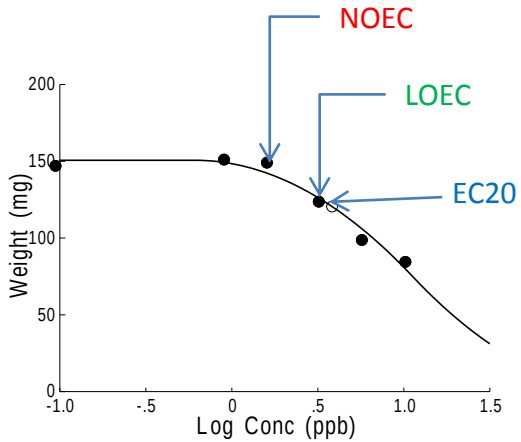
Ecotox Reference #15462



% Survival

a

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	458
NOEC (ug/L)	3.2
LOEC (ug/L)	5.7
EC05 (conf. limits)	3.3 ug/L (1.6 - 6.5)
EC10 (conf. limits)	4.2 ug/L (2.4 - 7.2)
EC20 (conf. limits)	6.0 ug/L (4.2 - 8.5)
EC50 (conf.limits)	12.1 ug/L (8.6 - 17.1)
Comments:	% Survival, 3 parameter model used



Weight (mg)

b

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	458
NOEC (ug/L)	1.6
LOEC (ug/L)	3.2
EC05 (conf. limits)	1.5 ug/L (0.4 - 5.5)
EC10 (conf. limits)	2.2 ug/L (0.8 - 6.3)
EC20 (conf. limits)	3.8 ug/L (1.9 - 7.7)
EC50 (conf.limits)	11.2 ug/L (7.2 - 17.4)
Comments:	Weight, 3 parameter model used

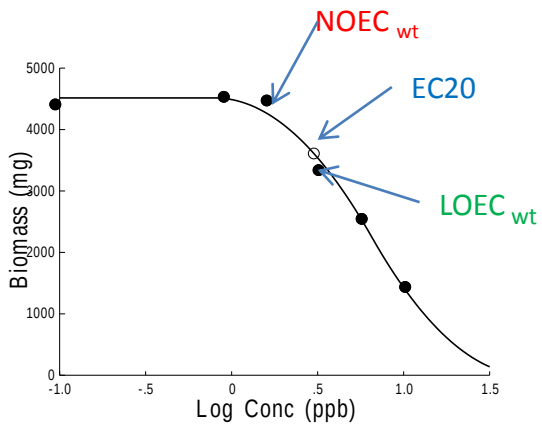
Chlorpyrifos

Fathead Minnow (*Pimephales promelas)*

Ecotox Reference #15462

Biomass (mg)

a



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	458
NOEC (ug/L)	1.6
LOEC (ug/L)	3.2
EC05 (conf. limits)	1.5 ug/L (0.8 - 3.2)
EC10 (conf. limits)	2.0ug/L (1.1 - 3.6)
EC20 (conf. limits)	3.0 ug/L (2.0 - 4.5)
EC50 (conf.limits)	6.5 ug/L (5.2 - 8.1)
Comments:	Biomass, NOEC and LOEC values were based on weight NOEC and LOEC values 3 parameter model used

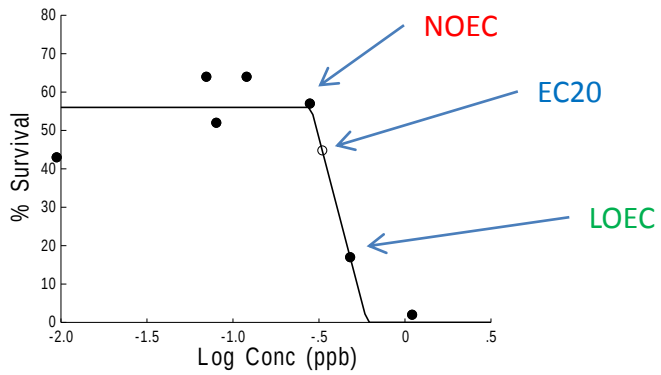
Chlorpyrifos

Atlantic Silverside (*Menidia menidia*)

Ecotox Reference # 4225

% Survival

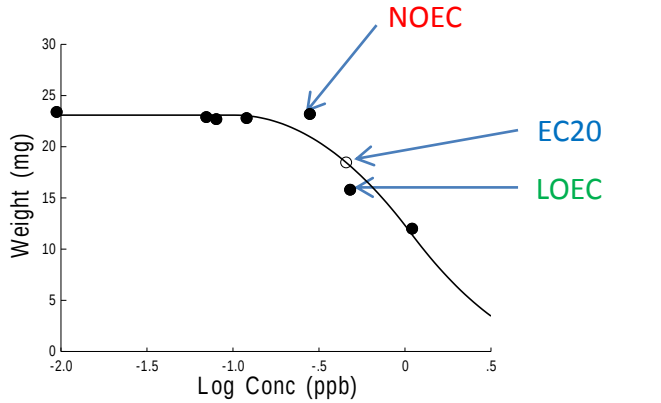
a



TRAP Model Used	Piecewise Linear
TRAP Quality Value	2
AquaChronTox ID	610
NOEC (ug/L)	0.28
LOEC (ug/L)	0.48
EC05 (conf. limits)	Analysis does not support the estimation of this ECx value
EC10 (conf. limits)	Analysis does not support the estimation of this ECx value
EC20 (conf. limits)	Analysis does not support the estimation of this ECx value
EC50 (conf.limits)	0.41 ug/L (no conf. limits)
Comments:	% Survival, 3 parameter model used

Weight (mg)

b



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	610
NOEC (ug/L)	0.28
LOEC (ug/L)	0.48
EC05 (conf. limits)	0.22 ug/L (0.06 - 0.72)
EC10 (conf. limits)	0.29 ug/L (0.11 - 0.76)
EC20 (conf. limits)	0.45 ug/L (0.24 - 0.87)
EC50 (conf.limits)	1.08 ug/L (0.68 - 1.7)
Comments:	Weight, 3 parameter model used

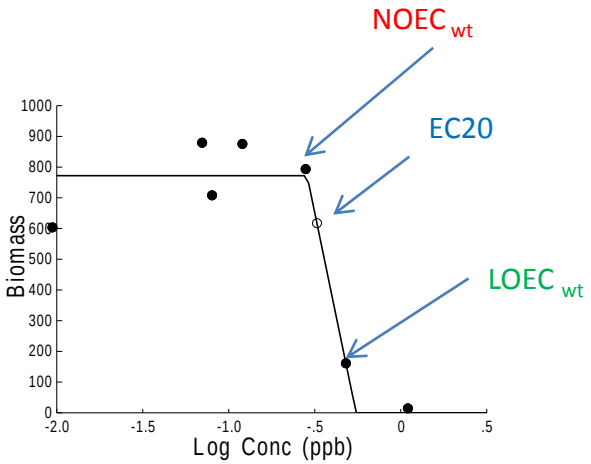
Chlorpyrifos

Atlantic Silverside (*Menidia menidia*)

Ecotox Reference # 4225

Biomass (mg)

a



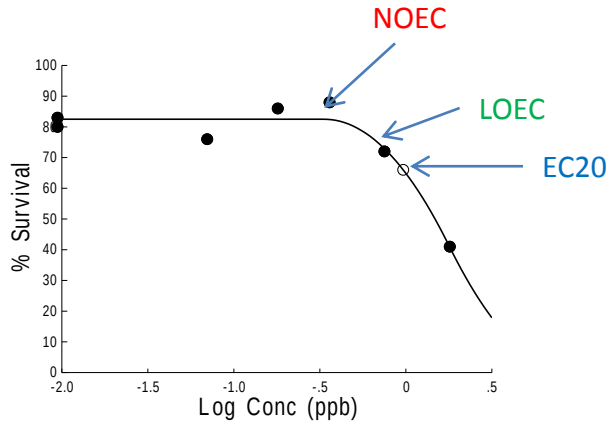
TRAP Model Used	Piecewise Linear
TRAP Quality Value	2
AquaChronTox ID	610
NOEC (ug/L)	0.28
LOEC (ug/L)	0.48
EC05 (conf. limits)	Analysis does not support the estimation of this ECx value
EC10 (conf. limits)	Analysis does not support the estimation of this ECx value
EC20 (conf. limits)	Analysis does not support the estimation of this ECx value
EC50 (conf.limits)	0.40 ug/L (no conf. limits)
Comments:	Biomass, NOEC and LOEC values were based on weight NOEC and LOEC values 3 parameter model used

Figure 16a and 16b

Chlorpyrifos

Inland Silverside (*Menidia beryllina*)

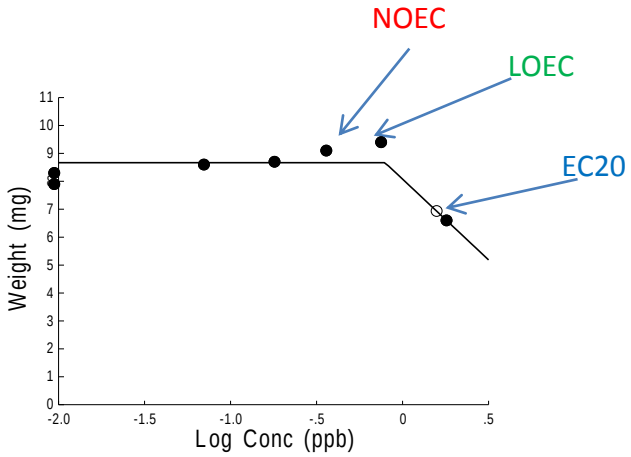
Ecotox Reference # 4225



% Survival

a

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	180
NOEC (ug/L)	0.36
LOEC (ug/L)	0.75
EC05 (conf. limits)	0.57 ug/L (0.257 - 1.28)
EC10 (conf. limits)	0.71 ug/L (0.37 - 1.36)
EC20 (conf. limits)	0.97 ug/L (0.61 - 1.52)
EC50 (conf.limits)	1.78 ug/L (1.35 - 2.35)
Comments:	% Survival, 3 parameter model used



Weight (mg)

b

TRAP Model Used	Piecewise Linear
TRAP Quality Value	2
AquaChronTox ID	180
NOEC (ug/L)	0.36
LOEC (ug/L)	0.75
EC05 (conf. limits)	0.94 ug/L (no conf. limits)
EC10 (conf. limits)	1.12 ug/L (no conf. limits)
EC20 (conf. limits)	1.58 ug/L (no conf. limits)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Weight, significant increase In weight at 0.75 ppb, used for EC20 or lower, 3 parameter model used

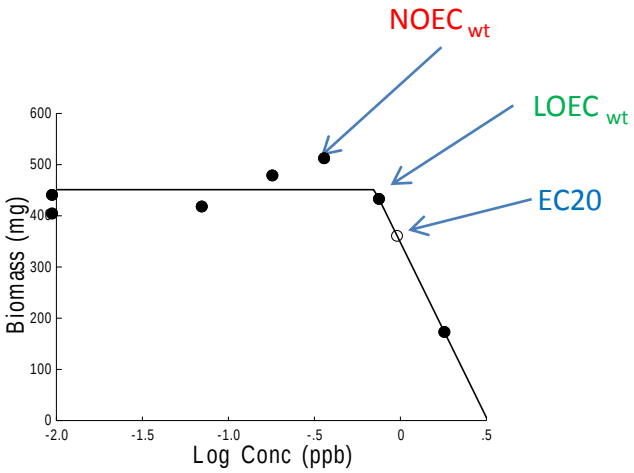
Chlorpyrifos

Inland Silverside (*Menidia beryllina*)

Ecotox Reference # 4225

Biomass (mg)

a

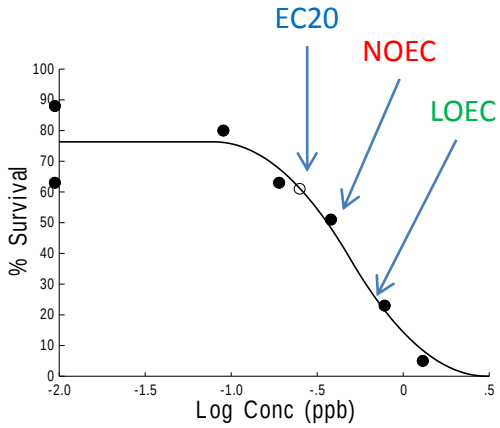


TRAP Model Used	Piecewise Linear
TRAP Quality Value	2
AquaChronTox ID	180
NOEC (ug/L)	0.36
LOEC (ug/L)	0.75
EC05 (conf. limits)	0.76 ug/L (0.49 - 1.17)
EC10 (conf. limits)	0.82 ug/L (0.55 - 1.22)
EC20 (conf. limits)	0.96 ug/L (0.68 - 1.35)
EC50 (conf.limits)	1.50 ug/L (1.07 - 2.12)
Comments:	Biomass, NOEC and LOEC values were based on weight NOEC and LOEC values 3 parameter model used

Chlorpyrifos

Tidewater Silverside (*Menidia peninsulae*)

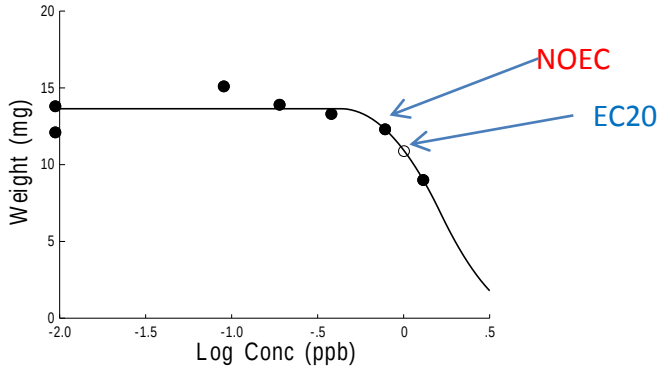
Ecotox Reference # 4225



% Survival

a

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	181
NOEC (ug/L)	0.38
LOEC (ug/L)	0.78
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	0.25 ug/L (0.10 - 0.65)
EC50 (conf.limits)	0.49 ug/L (0.28 - 0.87)
Comments:	% Survival, 3 parameter model used



Weight (mg)

b

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	181
NOEC (ug/L)	0.78
LOEC (ug/L)	>0.78
EC05 (conf. limits)	0.66 ug/L (0.25 - 1.71)
EC10 (conf. limits)	0.78 ug/L (0.38- 1.60)
EC20 (conf. limits)	1.00 ug/L (0.66 - 1.53)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Weight, used to estimate EC20 or lower only, highest conc not included in NOEC/LOEC determinations due to small sample size, 3 parameter model used

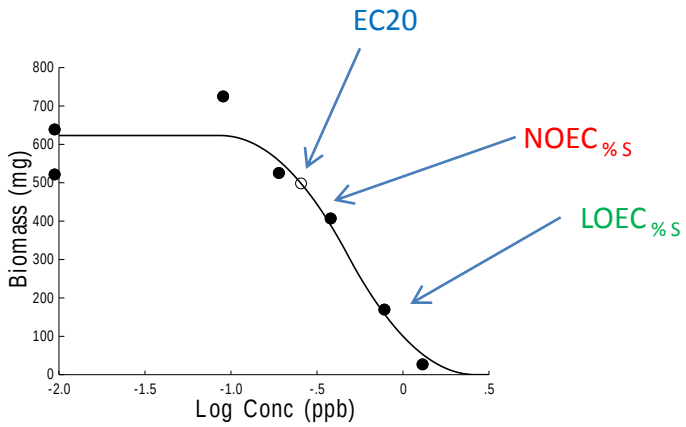
Chlorpyrifos

Tidewater Silverside (*Menidia peninsulae*)

Ecotox Reference # 4225

Biomass (mg)

a



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	181
NOEC (ug/L)	0.38
LOEC (ug/L)	0.78
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	0.26 ug/L (0.11 - 0.59)
EC50 (conf.limits)	0.48 ug/L (0.29 - 0.81)
Comments:	Biomass, NOEC and LOEC values based on % survival NOEC and LOEC values, 3 parameter model used

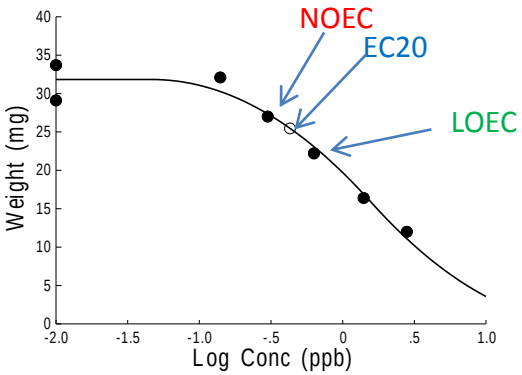
Chlorpyrifos

Figure 20a and 20b

California Grunion (*Leuresthes tenuis)*

Ecotox Reference # 12881

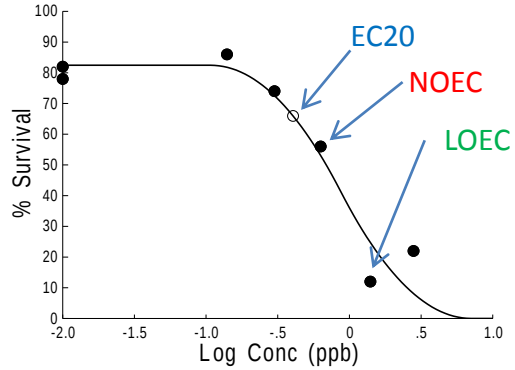
Test 1 of 2



Weight (mg)

a

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	92
NOEC (ug/L)	0.30
LOEC (ug/L)	0.63
EC05 (conf. limits)	0.14 ug/L (0.03 - 0.62)
EC10 (conf. limits)	0.22 ug/L (0.07 - 0.74)
EC20 (conf. limits)	0.43 ug/L (0.18 - 1.00)
EC50 (conf.limits)	1.57 ug/L (0.96 - 2.56)
Comments:	Weight, 3 parameter model used



% Survival

b

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	92
NOEC (ug/L)	0.63
LOEC (ug/L)	1.4
EC05 (conf. limits)	0.21 ug/L (0.03 - 1.31)
EC10 (conf. limits)	0.27 ug/L (0.07 - 1.15)
EC20 (conf. limits)	0.40 ug/L (0.14 - 1.15)
EC50 (conf.limits)	0.87 ug/L (0.46 - 1.64)
Comments:	% Survival, 3 parameter model used

Figure 21a

Chlorpyrifos

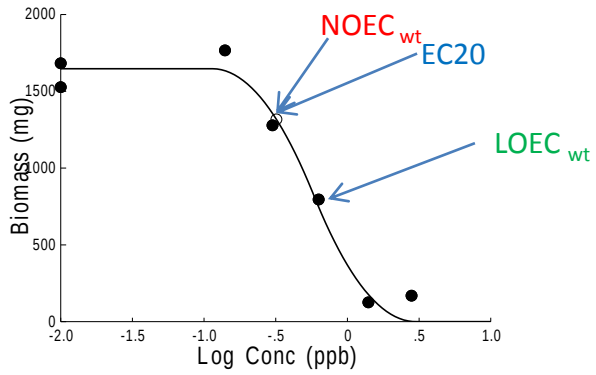
California Grunion (*Leuresthes tenuis)*

Ecotox Reference # 12881

Test 1 of 2

Biomass (mg)

a



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	92
NOEC (ug/L)	0.30
LOEC (ug/L)	0.63
EC05 (conf. limits)	0.19 ug/L (0.08 - 0.45)
EC10 (conf. limits)	0.24 ug/L (0.11 - 0.52)
EC20 (conf. limits)	0.32 ug/L (0.17 - 0.58)
EC50 (conf.limits)	0.58 ug/L (0.41 - 0.83)
Comments:	Biomass, NOEC and LOEC values were based on weight NOEC and LOEC values, 3 parameter model used

Chlorpyrifos

Figure 22a and 22b

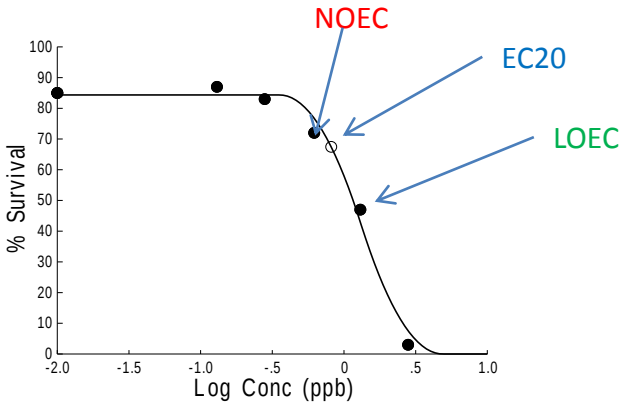
California Grunion (*Leuresthes tenuis)*

Ecotox Reference # 12881

Test 2 of 2

% Survival

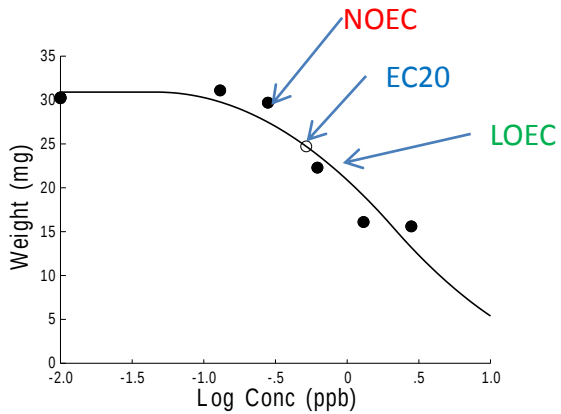
a



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	93
NOEC (ug/L)	0.62
LOEC (ug/L)	1.3
EC05 (conf. limits)	0.54 ug/L (0.32 - 0.91)
EC10 (conf. limits)	0.64 ug/L (0.43 - 0.96)
EC20 (conf. limits)	0.81 ug/L (0.62 - 1.07)
EC50 (conf.limits)	1.31 ug/L (1.12 - 1.56)
Comments:	% Survival, 3 parameter model used

Weight (mg)

b



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	93
NOEC (ug/L)	0.28
LOEC (ug/L)	0.62
EC05 (conf. limits)	0.16 ug/L (0.02 - 1.27)
EC10 (conf. limits)	0.26 ug/L (0.05 - 1.36)
EC20 (conf. limits)	0.52 ug/L (0.16 - 1.65)
EC50 (conf.limits)	2.10 ug/L (1.02 - 4.33)
Comments:	Weight, 3 parameter model used

Chlorpyrifos

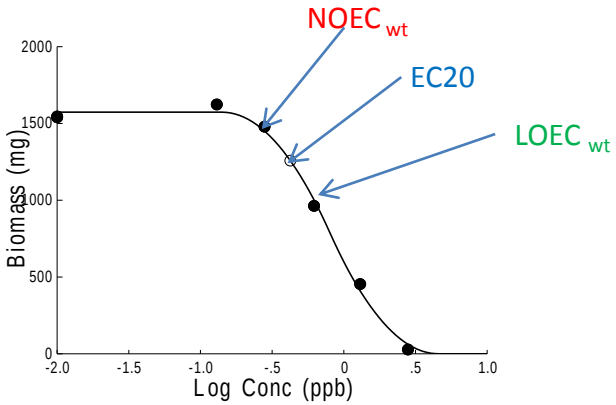
California Grunion (*Leuresthes tenuis*)

Ecotox Reference # 12881

Test 2 of 2

Biomass (mg)

a



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	93
NOEC (ug/L)	0.28
LOEC (ug/L)	0.62
EC05 (conf. limits)	0.25 ug/L (0.17 - 0.36)
EC10 (conf. limits)	0.31 ug/L (0.23 - 0.42)
EC20 (conf. limits)	0.42 ug/L (0.34 - 0.53)
EC50 (conf.limits)	0.80 ug/L (0.70 - 0.92)
Comments:	Biomass, NOEC and LOEC values were based on weight NOEC and LOEC values, 3 parameter model used

Chlorpyrifos

Figure 24a and 24b

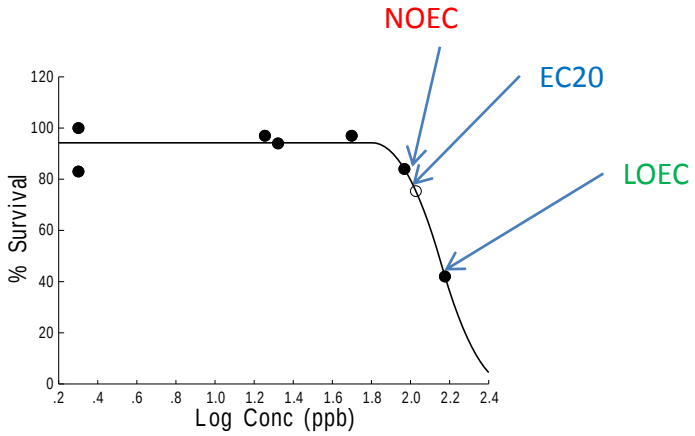
Gulf Toadfish (*Opsanus beta)*

Ecotox Reference # 11709

Test 1 of 2

% Survival

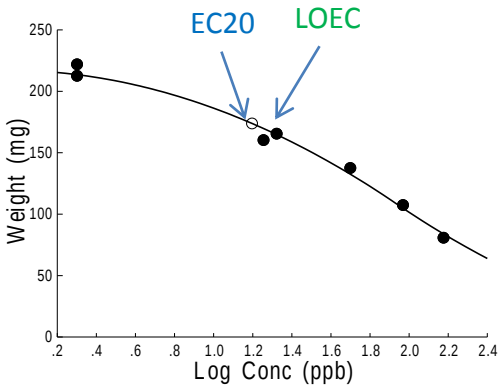
a



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	172
NOEC (ug/L)	93
LOEC (ug/L)	150
EC05 (conf. limits)	82 ug/L (52 - 130)
EC10 (conf. limits)	92 ug/L (63 - 133)
EC20 (conf. limits)	106 ug/L (81 - 140)
EC50 (conf.limits)	143 ug/L (122 - 168)
Comments:	% Survival, 3 parameter model used

Weight (mg)

b



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	172
NOEC (ug/L)	< 18
LOEC (ug/L)	18
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	16 ug/L (11 - 22)
EC50 (conf.limits)	86 ug/L (70 - 105)
Comments:	Weight, 3 parameter model used

Figure 25a

Chlorpyrifos

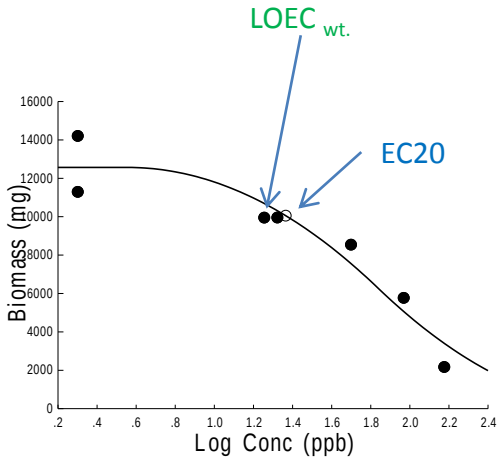
Gulf Toadfish (*Opsanus beta)*

Ecotox Reference # 11709

Test 1 of 2

Biomass (mg)

a



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	172
NOEC (ug/L)	< 18
LOEC (ug/L)	18
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	23 ug/L (7 - 78)
EC50 (conf.limits)	68 ug/L (34 - 139)
Comments:	Biomass, LOEC value was based on weight LOEC value, 3 parameter model used

Chlorpyrifos

Gulf Toadfish (*Opsanus beta*)

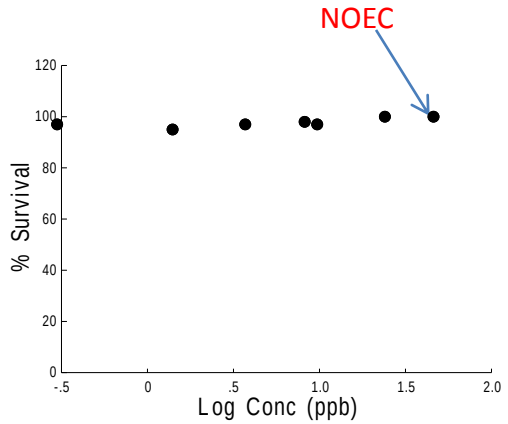
Ecotox Reference # 11709

Test 2 of 2

Figure 26a and 26b

% Survival

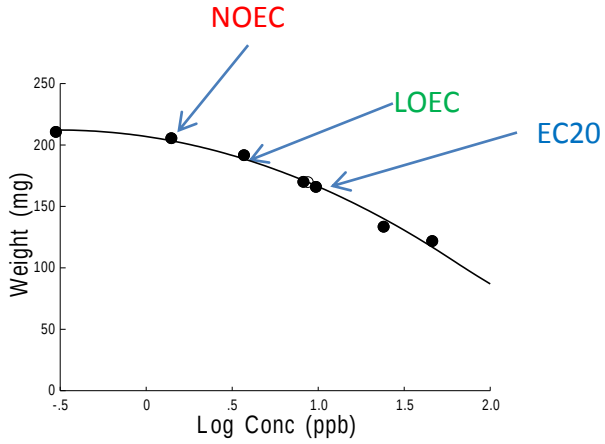
a



TRAP Model Used	None
TRAP Quality Value	3
AquaChronTox ID	173
NOEC (ug/L)	46
LOEC (ug/L)	>46
EC05 (conf. limits)	Not Calculable
EC10 (conf. limits)	Not Calculable
EC20 (conf. limits)	Not Calculable
EC50 (conf.limits)	Not Calculable
Comments:	% Survival, insufficient effects, Data does not support regression analysis

Weight (mg)

b



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	173
NOEC (ug/L)	1.4
LOEC (ug/L)	3.7
EC05 (conf. limits)	1.6 ug/L (0.7 - 4.0)
EC10 (conf. limits)	3.3 ug/L (1.6 - 6.7)
EC20 (conf. limits)	8.7 ug/L (5.3 - 14.3)
EC50 (conf.limits)	60.6 ug/L (43.2 - 85.0)
Comments:	Weight, 3 parameter model used

Chlorpyrifos

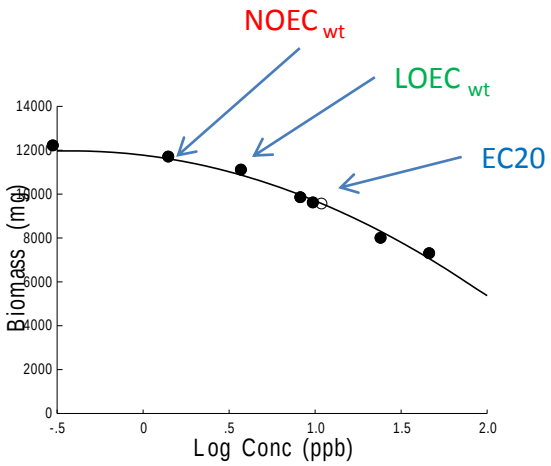
Gulf Toadfish (*Opsanus beta*)

Ecotox Reference # 11709

Test 2 of 2

Biomass (mg)

a



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	173
NOEC (ug/L)	1.4
LOEC (ug/L)	3.7
EC05 (conf. limits)	2.0 ug/L (1.3 - 3.3)
EC10 (conf. limits)	4.1 ug/L (2.9 - 5.8)
EC20 (conf. limits)	10.9 ug/L (8.8 - 13.4)
EC50 (conf.limits)	75.7 ug/L (53.9 - 106.4)
Comments:	Biomass, NOEC and LOEC values were based on weight NOEC and LOEC values 3 parameter model used

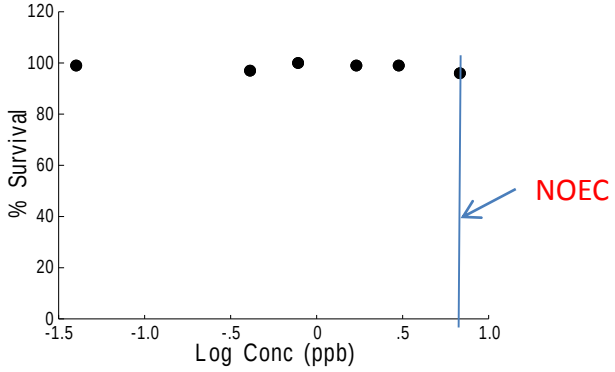
Figure 28a and 28b

Chlorpyrifos

Sheepshead Minnow (*Cyprinodon variegatus)*

Ecotox Reference # 7769

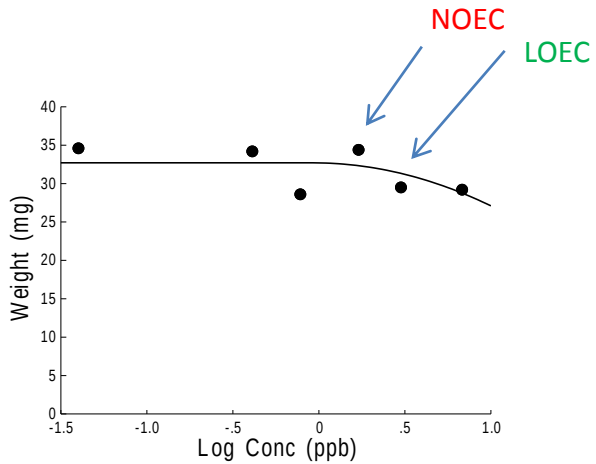
Test 1 of 2



% Survival

a

TRAP Model Used	None
TRAP Quality Value	3
AquaChronTox ID	174
NOEC (ug/L)	6.8
LOEC (ug/L)	> 6.8
EC05 (conf. limits)	Not Calculable
EC10 (conf. limits)	Not Calculable
EC20 (conf. limits)	Not Calculable
EC50 (conf.limits)	Not Calculable
Comments:	% Survival, insufficient effects, Data does not support regression analysis



Weight (mg)

b

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	3
AquaChronTox ID	174
NOEC (ug/L)	1.7
LOEC (ug/L)	3.0
EC05 (conf. limits)	3.3 ug/L (0.1 - 167)
EC10 (conf. limits)	5.7 ug/L (0.4 - 86)
EC20 (conf. limits)	Analysis does not support the estimation of this ECx
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Weight, , used to estimate EC20 or lower only, 3 parameter model used, * conf.limits could not be reasonably estimated

Chlorpyrifos

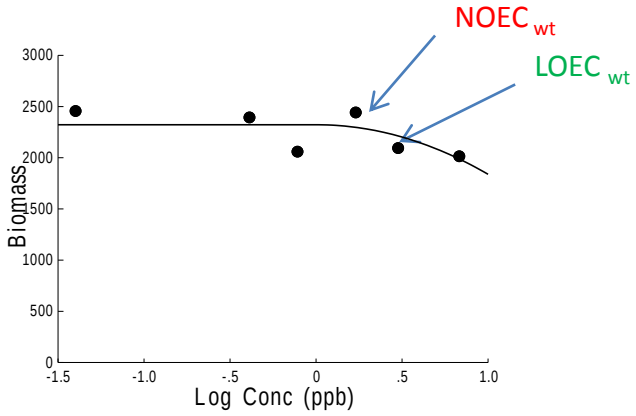
Sheepshead Minnow (*Cyprinodon variegatus)*

Ecotox Reference # 7769

Test 1 of 2

Biomass (mg)

a



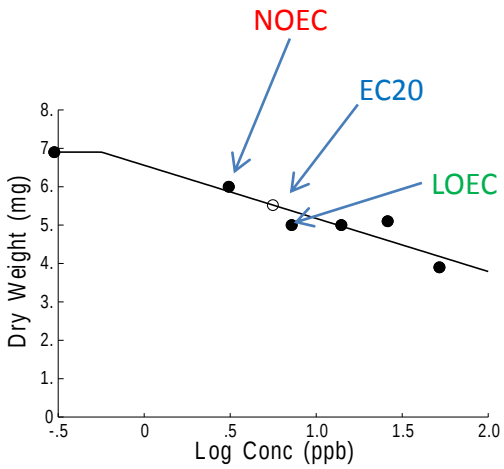
TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	3
AquaChronTox ID	174
NOEC (ug/L)	1.7
LOEC (ug/L)	3.0
EC05 (conf. limits)	3.1 ug/L (0.1 - 78.0)
EC10 (conf. limits)	4.9 ug/L (0.6 - 40.2)
EC20 (conf. limits)	Analysis does not support the estimation of this ECx
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Biomass, insufficient effects, NOEC and LOEC values were based on weight NOEC and LOEC values, 3 parameter model used

Chlorpyrifos

Sheepshead Minnow (*Cyprinodon variegatus*)

Ecotox Reference # 7769

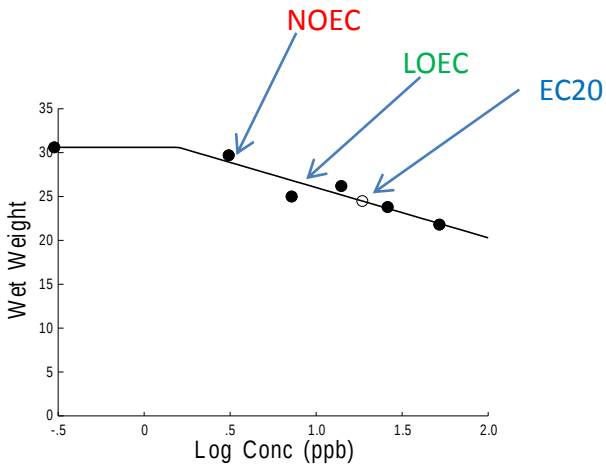
Test 2 of 2



Dry Weight (mg)

a

TRAP Model Used	Piecewise Linear
TRAP Quality Value	3
AquaChronTox ID	177
NOEC (ug/L)	3.1
LOEC (ug/L)	7.2
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	5.6 ug/L (0.7 - 46.9)
EC50 (conf.limits)	176 ug/L (9.9 - 3140)
Comments:	Dry Weight, 3 parameter model used



Wet Weight (mg)

b

TRAP Model Used	Piecewise Linear
TRAP Quality Value	2
AquaChronTox ID	177
NOEC (ug/L)	3.1
LOEC (ug/L)	7.2
EC05 (conf. limits)	2.9 ug/L (0.4 - 24)
EC10 (conf. limits)	5.4 ug/L (0.9 - 33)
EC20 (conf. limits)	18.6 ug/L (4 - 87)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Wet Weight, 3 parameter model used

Chlorpyrifos

Figure 31a and 31b

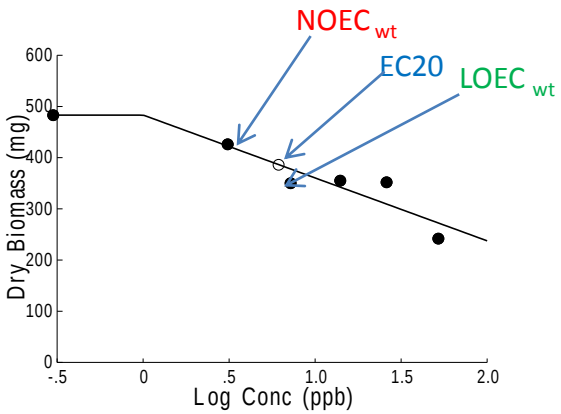
Sheepshead Minnow (*Cyprinodon variegatus)*

Ecotox Reference # 7769

Test 2 of 2

Dry Wt Biomass (mg)

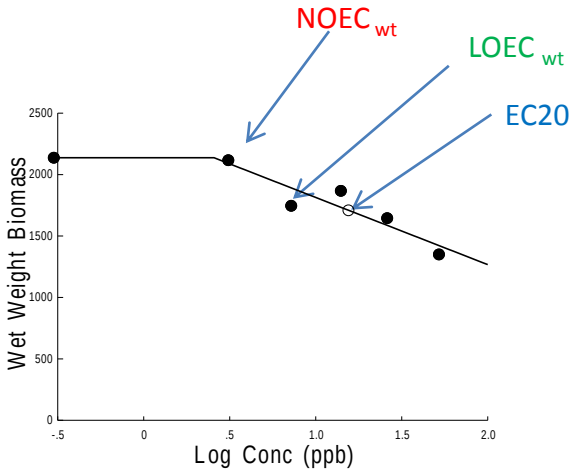
a



TRAP Model Used	Piecewise Linear
TRAP Quality Value	3
AquaChronTox ID	177
NOEC (ug/L)	3.1
LOEC (ug/L)	7.2
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	6.1 ug/L (0.8 - 47.9)
EC50 (conf.limits)	92.7 ug/L (9.1 - 944.1)
Comments:	Dry Weight Biomass, NOEC and LOEC values were based on dry weight NOEC and LOEC values , 3 parameter model used

Wet Wt Biomass (mg)

b



TRAP Model Used	Piecewise Linear
TRAP Quality Value	1
AquaChronTox ID	177
NOEC (ug/L)	3.1
LOEC (ug/L)	7.2
EC05 (conf. limits)	4 ug/L (0.5 - 30)
EC10 (conf. limits)	6.3 ug/L (1 - 38)
EC20 (conf. limits)	15.5 ug/L (3.2 - 74)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Wet Weight Biomass, NOEC and LOEC values were based on wet weight NOEC and LOEC values , 3 parameter model used

Chlorpyrifos

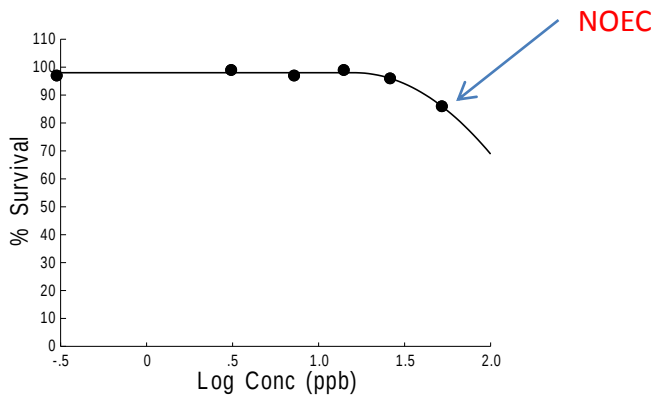
Sheepshead Minnow (*Cyprinodon variegatus)*

Ecotox Reference # 7769

Test 2 of 2

% Survival

a



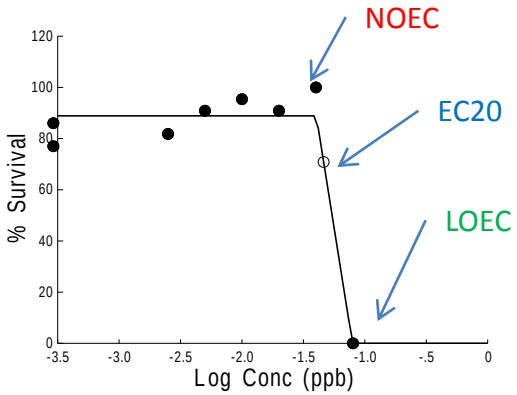
TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	3
AquaChronTox ID	177
NOEC (ug/L)	52
LOEC (ug/L)	>52
EC05 (conf. limits)	34 ug/L (25 - 47)
EC10 (conf. limits)	47 ug/L (38 - 56)
EC20 (conf. limits)	Analysis does not support the estimation of this ECx
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	% Survival, 3 parameter model used

Chlorpyrifos

Daphnia magna

MRID # 41073401

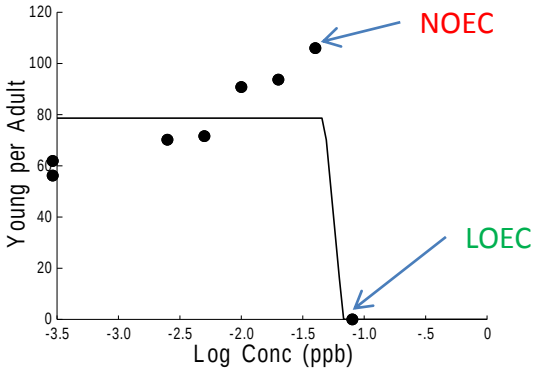
Figure 33a and 33b



% Survival

a

TRAP Model Used	Piecewise Linear
TRAP Quality Value	2
AquaChronTox ID	454
NOEC (ug/L)	0.04
LOEC (ug/L)	0.08
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	0.05 ug/L (no conf. limits)
EC50 (conf.limits)	0.06 ug/L (no conf. limits)
Comments:	% Survival, 3 parameter model used



Young per Adult

b

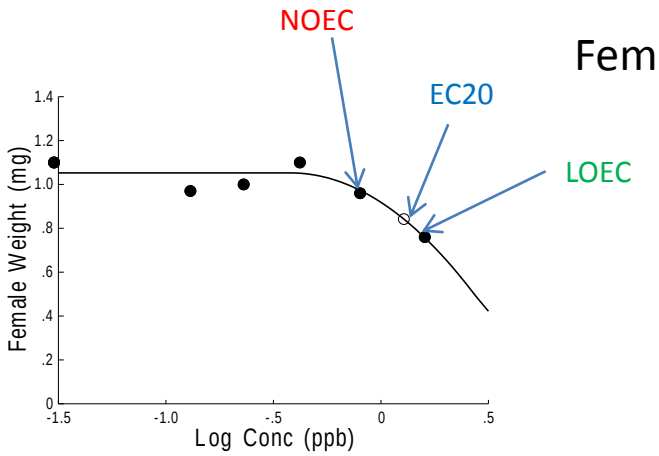
TRAP Model Used	Piecewise Linear
TRAP Quality Value	3
AquaChronTox ID	454
NOEC (ug/L)	0.04
LOEC (ug/L)	0.08
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	Analysis does not support the estimation of this ECx
EC50 (conf.limits)	0.06 ug/L (no conf. limits)
Comments:	Young/Adult, insufficient dose response 3 parameter model used

Diazinon

Figure 34a and 34b

Mysid (*Americamysis bahia*)

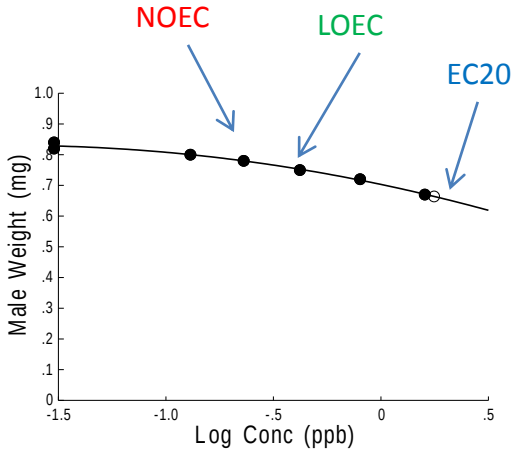
MRID # 44244801



Female Weight (mg)

a

TRAP Model Used	Threshold sigmoid
TRAP Quality Value	1
AquaChronTox ID	479
NOEC (ug/L)	0.8
LOEC (ug/L)	1.6
EC05 (conf. limits)	0.7 ug/L (0.2 - 2.1)
EC10 (conf. limits)	0.9 ug/L (0.4 - 2.0)
EC20 (conf. limits)	1.3 ug/L (0.8 - 2.0)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Female Weight, 3 parameter model used



Male Weight (mg)

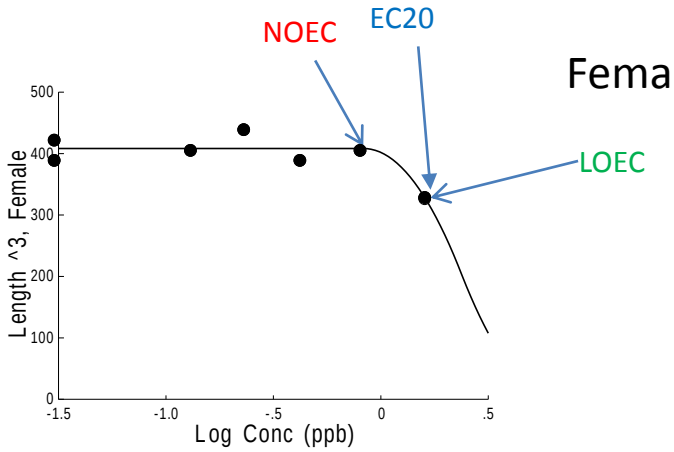
b

TRAP Model Used	Threshold sigmoid
TRAP Quality Value	2
AquaChronTox ID	479
NOEC (ug/L)	0.23
LOEC (ug/L)	0.42
EC05 (conf. limits)	0.2 ug/L (0.1 - 0.3)
EC10 (conf. limits)	0.5 ug/L (0.3 - 0.7)
EC20 (conf. limits)	1.8 ug/L (1.3 - 2.4)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Male Weight, use to estimate EC20 or lower only, 3 parameter model used

Diazinon

Mysid (*Americamysis bahia*)

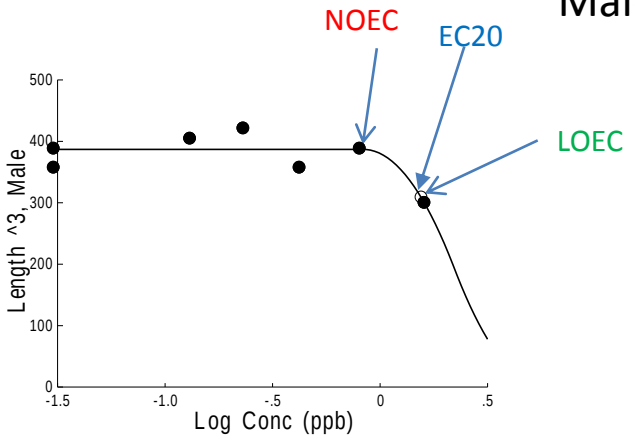
MRID # 44244801



Female Length^3 (mm)

a

TRAP Model Used	Threshold sigmoid
TRAP Quality Value	3
AquaChronTox ID	479
NOEC (ug/L)	0.8
LOEC (ug/L)	1.6
EC05 (conf. limits)	1.2 ug/L (no conf. limits)
EC10 (conf. limits)	1.3 ug/L (no conf. limits)
EC20 (conf. limits)	1.6 ug/L (no conf. limits)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Female Length^3, 3 parameter model used



Male Length^3 (mm)

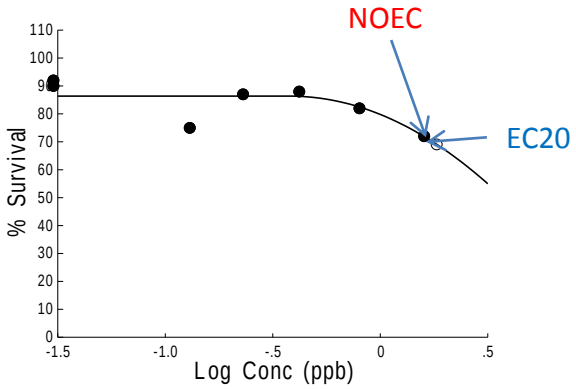
b

TRAP Model Used	Threshold sigmoid
TRAP Quality Value	3
AquaChronTox ID	479
NOEC (ug/L)	0.8
LOEC (ug/L)	1.6
EC05 (conf. limits)	1.1 ug/L (no conf. limits)
EC10 (conf. limits)	1.3 ug/L (no conf. limits)
EC20 (conf. limits)	1.6 ug/L (no conf. limits)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Male Length^3, 3 parameter model used

Diazinon

Mysid (*Americamysis bahia*)

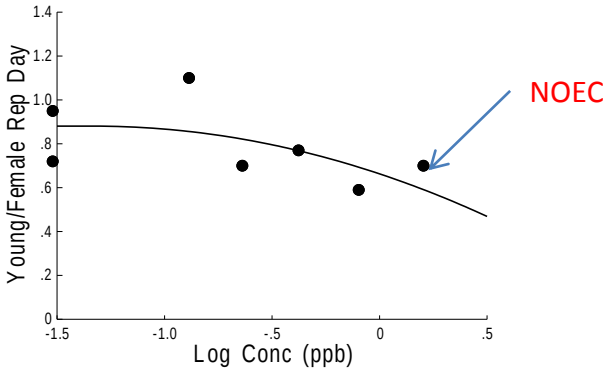
MRID # 44244801



% Survival

a

TRAP Model Used	Threshold sigmoid
TRAP Quality Value	2
AquaChronTox ID	479
NOEC (ug/L)	1.6
LOEC (ug/L)	>1.6
EC05 (conf. limits)	0.8 ug/L (0.1 - 5)
EC10 (conf. limits)	1.2 ug/L (0.4 - 4)
EC20 (conf. limits)	1.8 ug/L (0.6 - 6)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	% Survival, use to estimate EC20 or lower only, 3 parameter model used



Young per Female Reproductive Day

b

TRAP Model Used	Threshold sigmoid
TRAP Quality Value	3
AquaChronTox ID	479
NOEC (ug/L)	1.6
LOEC (ug/L)	>1.6
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	Analysis does not support the estimation of this ECx
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Young/Female Rep Day, use to estimate EC20 or lower only, 3 parameter model used

Figure 37a and 37b

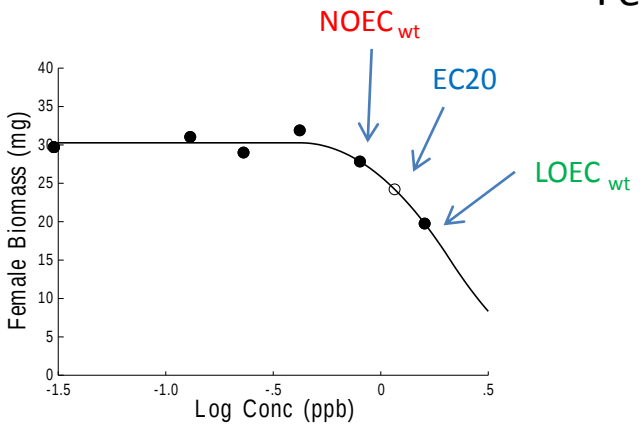
Diazinon

Mysid (*Americamysis bahia*)

MRID # 44244801

Female Biomass (mg)

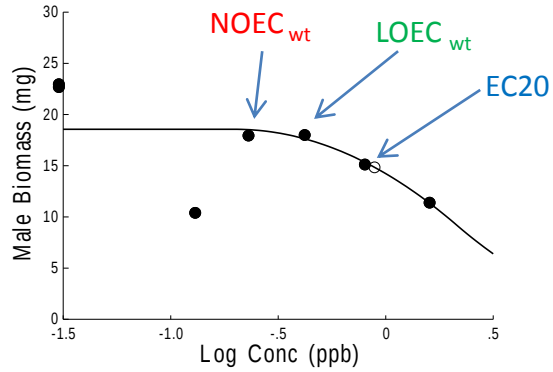
a



TRAP Model Used	Threshold sigmoid
TRAP Quality Value	1
AquaChronTox ID	479
NOEC (ug/L)	0.8
LOEC (ug/L)	1.6
EC05 (conf. limits)	0.7 ug/L (0.4 - 1.2)
EC10 (conf. limits)	0.9 ug/L (0.6 - 1.3)
EC20 (conf. limits)	1.2 ug/L (0.9 - 1.5)
EC50 (conf.limits)	2.1 ug/L (1.5 - 2.9)
Comments:	Female Biomass, NOEC and LOEC values based on female weight NOEC and LOEC values, 3 parameter model used

Male Biomass (mg)

b



TRAP Model Used	Threshold sigmoid
TRAP Quality Value	3
AquaChronTox ID	479
NOEC (ug/L)	0.23
LOEC (ug/L)	0.42
EC05 (conf. limits)	0.4 ug/L (3E -3 - 60)
EC10 (conf. limits)	0.6 ug/L (0.01 - 26)
EC20 (conf. limits)	0.9 ug/L (0.1 - 10)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Male Biomass, NOEC and LOEC values based on male weight NOEC and LOEC values, 3 parameter model used

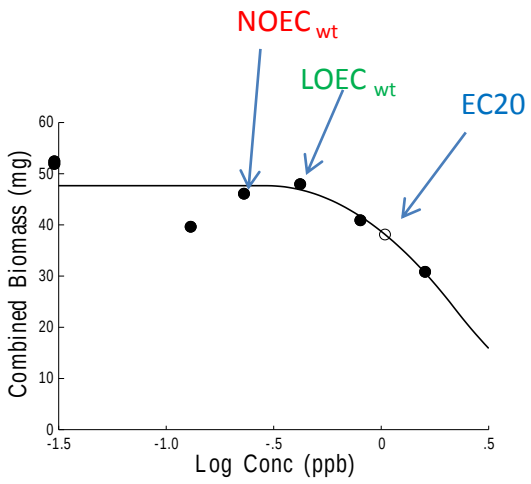
Diazinon

Mysid (*Americamysis bahia*)

MRID # 44244801

Combined Biomass (mg)

a



TRAP Model Used	Threshold sigmoid
TRAP Quality Value	2
AquaChronTox ID	479
NOEC (ug/L)	0.23
LOEC (ug/L)	0.42
EC05 (conf. limits)	0.6 ug/L (0.1 - 3.3)
EC10 (conf. limits)	0.7 ug/L (0.2 - 2.8)
EC20 (conf. limits)	1.0 ug/L (0.4 - 2.5)
EC50 (conf.limits)	2.2 ug/L (0.7 - 6.5)
Comments:	Combined Biomass, NOEC and LOEC values were based on male weight NOEC and LOEC values,(most sensitive), 3 parameter model used

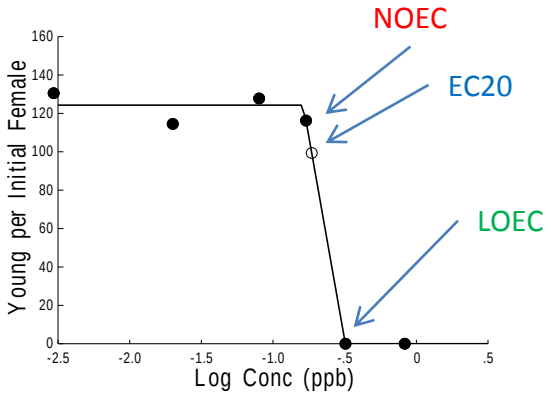
Diazinon

Daphnia magna

MRID # 40782302

Young per Initial Female

a

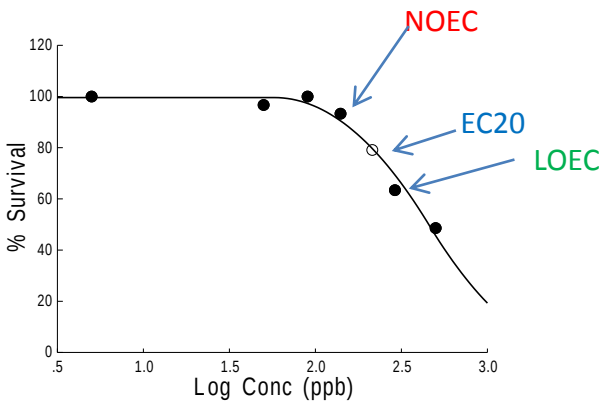


TRAP Model Used	Piecewise Linear
TRAP Quality Value	1
AquaChronTox ID	422
NOEC (ug/L)	0.17
LOEC (ug/L)	0.32
EC05 (conf. limits)	0.17 ug/L (no conf. limits)
EC10 (conf. limits)	0.17 ug/L (no conf. limits)
EC20 (conf. limits)	0.19 ug/L (no conf. limits)
EC50 (conf.limits)	0.23 ug/L (no conf. limits)
Comments:	Young/Initial Female, only variable with raw data reported, 3 parameter model used

Diazinon

Fathead Minnow (*Pimephales promelas)*

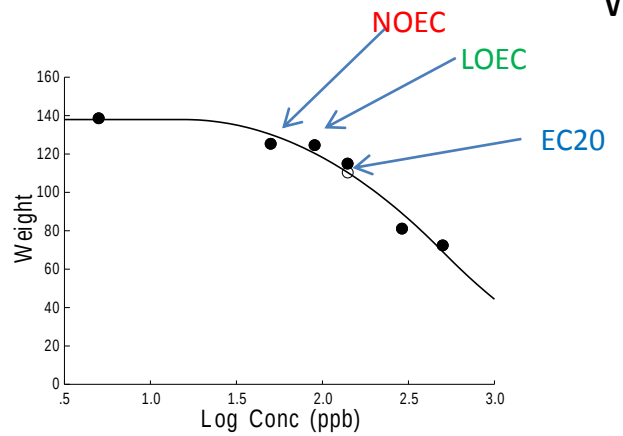
Ecotox Reference # 15462



% Survival

a

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	28
NOEC (ug/L)	140
LOEC (ug/L)	290
EC05 (conf. limits)	111 ug/L (46 - 268)
EC10 (conf. limits)	146 ug/L (72 - 294)
EC20 (conf. limits)	214 ug/L (131 - 349)
EC50 (conf.limits)	458 ug/L (341 - 615)
Comments:	% Survival, 3 parameter model used



Weight (mg)

b

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	28
NOEC (ug/L)	50
LOEC (ug/L)	90
EC05 (conf. limits)	47 ug/L (10 - 216)
EC10 (conf. limits)	74 ug/L (21 - 258)
EC20 (conf. limits)	140 ug/L (58 - 341)
EC50 (conf.limits)	502 ug/L (298 - 846)
Comments:	Weight, 3 parameter model used

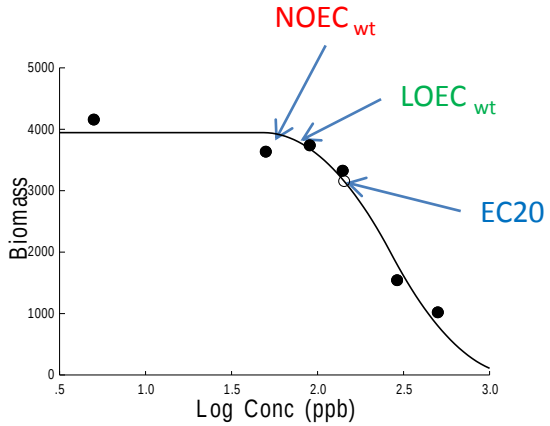
Diazinon

Fathead Minnow (*Pimephales promelas)*

Ecotox Reference # 15462

Biomass (mg)

a

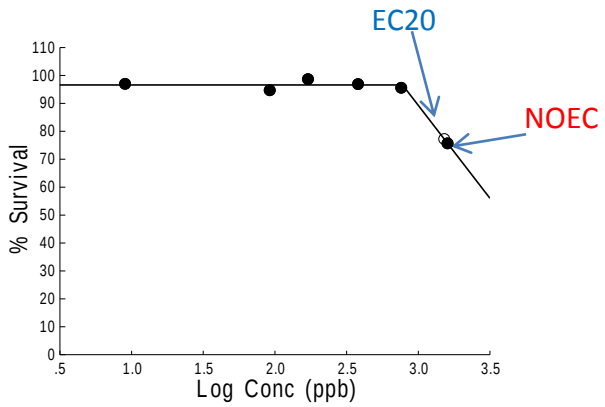


TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	28
NOEC (ug/L)	50
LOEC (ug/L)	90
EC05 (conf. limits)	83 ug/L (28 - 242)
EC10 (conf. limits)	104 ug/L (43 - 249)
EC20 (conf. limits)	143 ug/L (74 - 274)
EC50 (conf.limits)	268 ug/L (183 - 392)
Comments:	Biomass, NOEC and LOEC values were based on weight NOEC and LOEC values, 3 parameter model used

Diazinon

Fathead Minnow (*Pimephales promelas)*

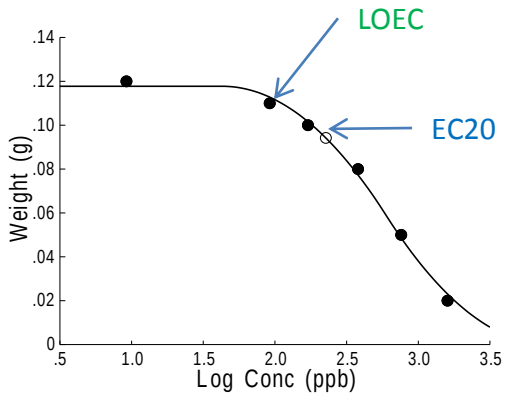
MRID# 40782301



% Survival

a

TRAP Model Used	Piecewise Linear
TRAP Quality Value	2
AquaChronTox ID	423
NOEC (ug/L)	1600
LOEC (ug/L)	>1600
EC05 (conf. limits)	1117 ug/L (no conf. limits)
EC10 (conf. limits)	1282 ug/L (no conf. limits)
EC20 (conf. limits)	1558 ug/L (no conf. limits)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx value
Comments:	% Survival, used to estimate EC20 or lower only, 3 parameter model used



Weight (g)

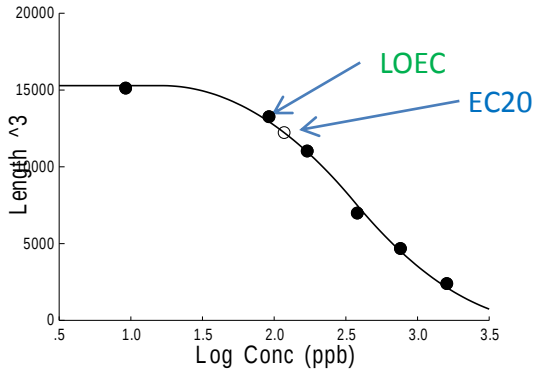
b

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	423
NOEC (ug/L)	< 92
LOEC (ug/L)	92
EC05 (conf. limits)	99 ug/L (50 - 190)
EC10 (conf. limits)	140 ug/L (81 - 240)
EC20 (conf. limits)	230 ug/L (150 - 340)
EC50 (conf.limits)	600ug/L (480 - 750)
Comments:	Weight, all treatments were significant relative to pooled controls, 3 parameter model used

Diazinon

Fathead Minnow (*Pimephales promelas)*

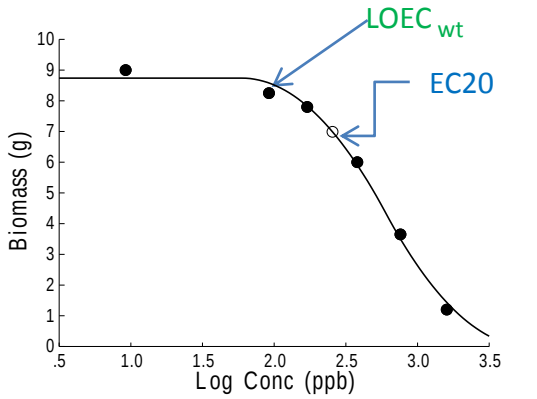
MRID# 40782301



Length^3 (mm)

a

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	423
NOEC (ug/L)	< 92
LOEC (ug/L)	92
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	66 ug/L (38 – 115)
EC20 (conf. limits)	117 ug/L (78-176)
EC50 (conf.limits)	369 ug/L (293-464)
Comments:	Length^3, all treatments were significant relative to pooled controls, 3 parameter model used



Biomass (g)

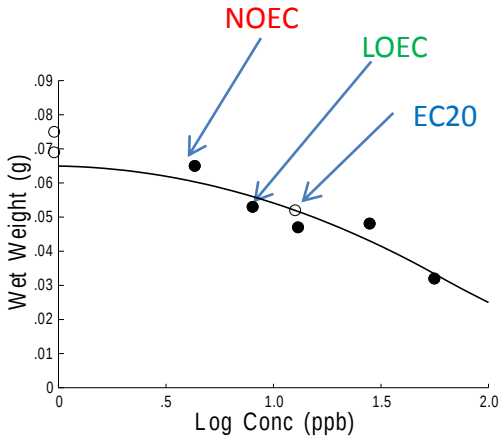
b

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	423
NOEC (ug/L)	< 92
LOEC (ug/L)	92
EC05 (conf. limits)	123 ug/L (60 - 250)
EC10 (conf. limits)	170 ug/L (90 - 300)
EC20 (conf. limits)	260 ug/L (170 - 390)
EC50 (conf.limits)	600 ug/L (470 - 750)
Comments:	Biomass, *LOEC value was based on weight LOEC value, all treatments were significant relative to pooled controls, 3 parameter model used

Diazinon

Sheepshead Minnow (*Cyprinodon variegatus)*

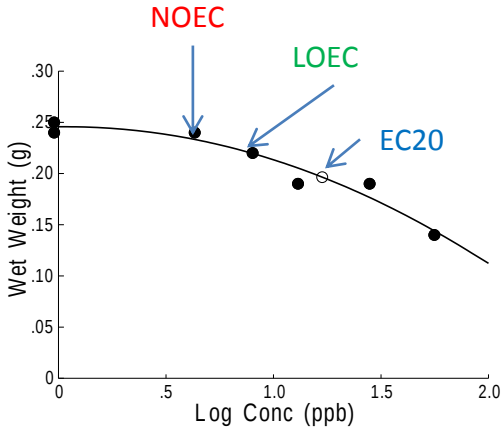
MR ID# 44244802



Dry Weight (g)

a

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	480
NOEC (ug/L)	4.3
LOEC (ug/L)	8.0
EC05 (conf. limits)	3.3 ug/L (0.5-20.8)
EC10 (conf. limits)	5.7 ug/L (1.4-23.7)
EC20 (conf. limits)	12.6 ug/L (5.1-30.8)
EC50 (conf.limits)	59.4 ug/L (22.1-159.8)
Comments:	Dry Weight, 2 parameter model used



Wet Weight (g)

b

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	480
NOEC (ug/L)	4.3
LOEC (ug/L)	8.0
EC05 (conf. limits)	4.3 ug/L (1.1 - 17.0)
EC10 (conf. limits)	7.5 ug/L (2.6 - 22.3)
EC20 (conf. limits)	16.8 ug/L (8.2 - 34.7)
EC50 (conf.limits)	82.8 ug/L (40.9 - 167.4)
Comments:	Wet Weight, 3 parameter model used

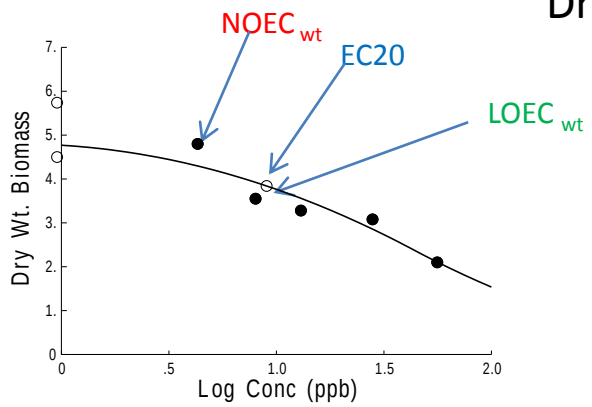
Diazinon

Sheepshead Minnow (*Cyprinodon variegatus)*

MR ID# 44244802

Dry Wt Biomass (g)

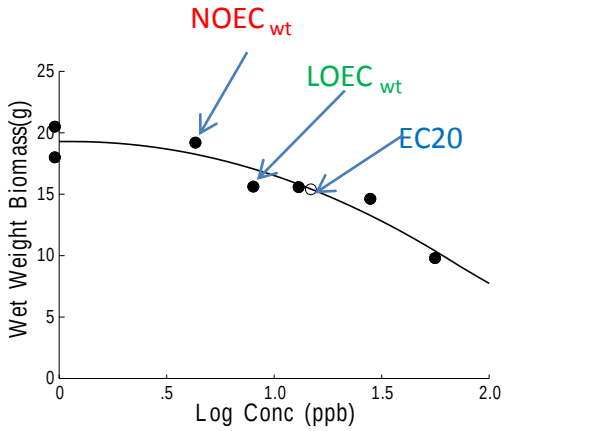
a



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	480
NOEC (ug/L)	4.3
LOEC (ug/L)	8.0
EC05 (conf. limits)	2.3 ug/L (0.3 - 20.8)
EC10 (conf. limits)	4.1 ug/L (0.8 - 21.3)
EC20 (conf. limits)	9.0 ug/L (3.2 - 25.6)
EC50 (conf.limits)	42.8 ug/L (17.4 - 105)
Comments:	Dry Weight Biomass, NOEC and LOEC values were based on dry weight NOEC and LOEC, 2 parameter model used

Wet Wt Biomass (g)

b



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	480
NOEC (ug/L)	4.3
LOEC (ug/L)	8.0
EC05 (conf. limits)	4.1 ug/L (0.6 - 30.5)
EC10 (conf. limits)	7.0 ug/L (1.4 - 34.8)
EC20 (conf. limits)	14.8 ug/L (4.9 - 44.3)
EC50 (conf.limits)	65.6 ug/L (27.1 - 158.9)
Comments:	Wet Weight Biomass, NOEC and LOEC values were based on wet weight NOEC and LOEC values,3 parameter model used

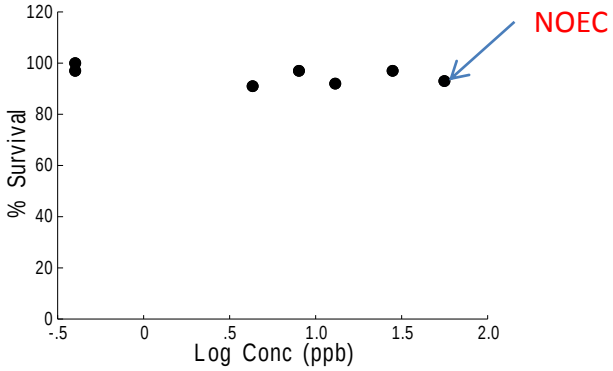
Diazinon

Sheepshead Minnow (*Cyprinodon variegatus)*

MR ID# 44244802

% Survival

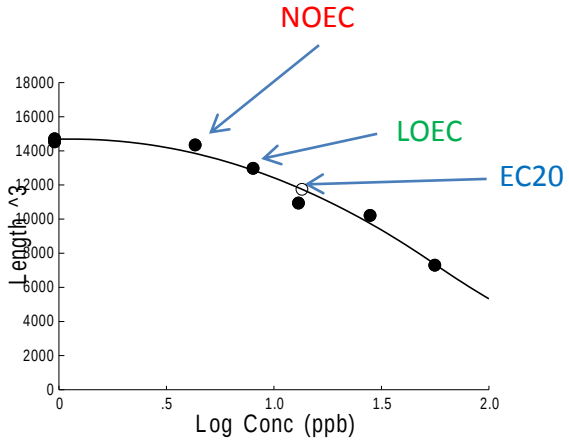
a



TRAP Model Used	None
TRAP Quality Value	3
AquaChronTox ID	480
NOEC (ug/L)	56
LOEC (ug/L)	>56
EC05 (conf. limits)	Not Calculable
EC10 (conf. limits)	Not Calculable
EC20 (conf. limits)	Not Calculable
EC50 (conf.limits)	Not Calculable
Comments:	% Survival, insufficient effects, Data does not support regression analysis

Length^3 (mm)

b

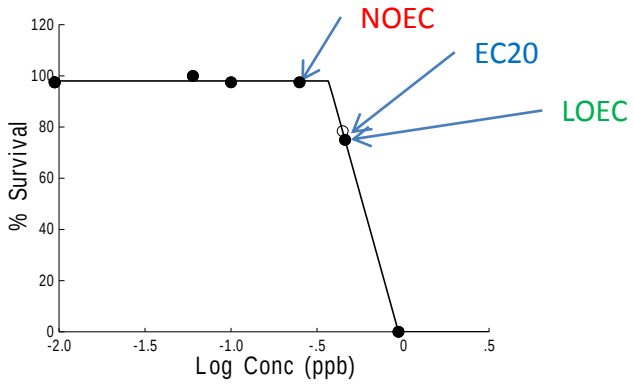


TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	480
NOEC (ug/L)	4.3
LOEC (ug/L)	8.0
EC05 (conf. limits)	4.0 ug/L (1.5-10.6)
EC10 (conf. limits)	6.6 ug/L (3.0-14.6)
EC20 (conf. limits)	13.5 ug/L (7.8-23.5)
EC50 (conf.limits)	56.2 ug/L (37.9-83.5)
Comments:	Length^3, 3 parameter model used

Malathion

Daphnia magna

MRID # 41718401



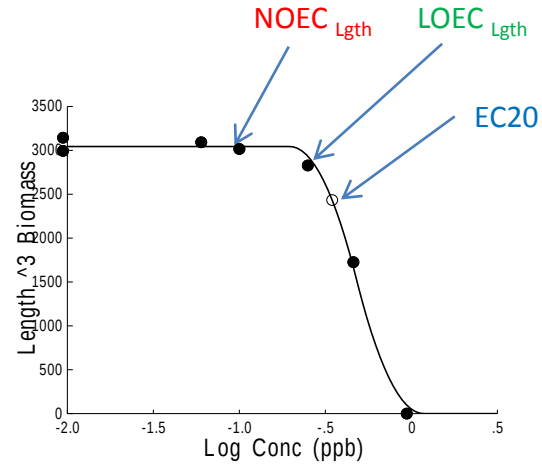
% Survival

a

TRAP Model Used	Piecewise Linear
TRAP Quality Value	1
AquaChronTox ID	404
NOEC (ug/L)	0.25
LOEC (ug/L)	0.46
EC05 (conf. limits)	0.39 ug/L (no conf. limits)
EC10 (conf. limits)	0.41 ug/L (no conf. limits)
EC20 (conf. limits)	0.45 ug/L (no conf. limits)
EC50 (conf.limits)	0.59 ug/L (no conf. limits)
Comments:	% Survival, 3 parameter model used

Length ^3 Biomass (mm)

b

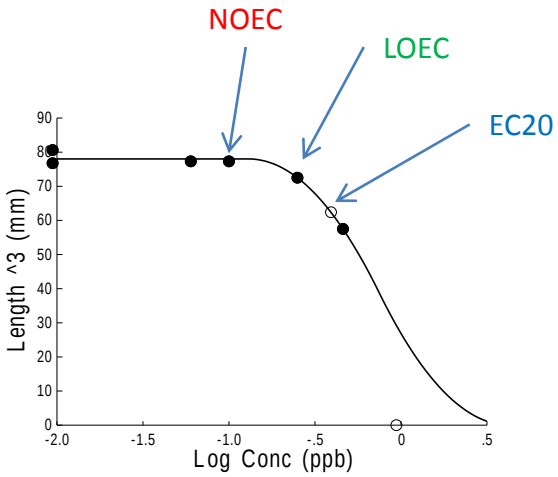


TRAP Model Used	Threshold sigmoid
TRAP Quality Value	1
AquaChronTox ID	404
NOEC (ug/L)	0.10
LOEC (ug/L)	0.25
EC05 (conf. limits)	0.26 ug/L (0.19 - 0.35)
EC10 (conf. limits)	0.29 ug/L (0.23 - 0.38)
EC20 (conf. limits)	0.35 ug/L (0.30 - 0.40)
EC50 (conf.limits)	0.48 ug/L (0.44 - 0.52)
Comments:	Length ^3 Biomass, NOEC and LOEC values were based on length NOEC and LOEC values, 3 parameter model used

Malathion

Daphnia magna

MRID # 41718401



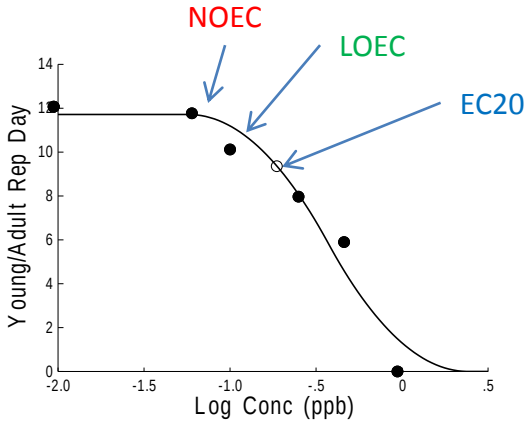
Length ^3 (mm)

a

TRAP Model Used	Threshold sigmoid
TRAP Quality Value	1
AquaChronTox ID	404
NOEC (ug/L)	0.10
LOEC (ug/L)	0.25
EC05 (conf. limits)	0.23 ug/L (0.15 - 0.35)
EC10 (conf. limits)	0.28 ug/L (0.21 - 0.38)
EC20 (conf. limits)	0.39 ug/L (0.33 - 0.47)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Length ^3, used as a surrogate growth measurement when weight was not reported, 3 parameter model used

Young per Adult Reproductive Day

b



TRAP Model Used	Threshold sigmoid
TRAP Quality Value	1
AquaChronTox ID	404
NOEC (ug/L)	0.06
LOEC (ug/L)	0.10
EC05 (conf. limits)	0.10 ug/L (0.03 - 0.42)
EC10 (conf. limits)	0.13 ug/L (0.04 - 0.40)
EC20 (conf. limits)	0.19 ug/L (0.08 - 0.41)
EC50 (conf.limits)	0.37 ug/L (0.24 - 0.58)
Comments:	Young/ Adult Rep Day, 3 parameter model used

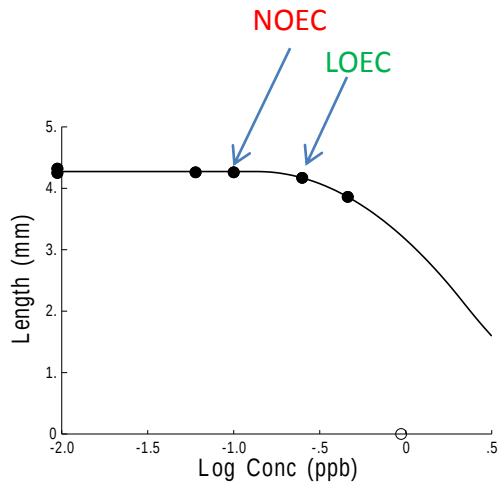
Malathion

Daphnia magna

MRID # 41718401

Length (mm)

a



TRAP Model Used	Threshold sigmoid
TRAP Quality Value	3
AquaChronTox ID	404
NOEC (ug/L)	0.10
LOEC (ug/L)	0.25
EC05 (conf. limits)	0.33 ug/L (0.26 - 0.40)
EC10 (conf. limits)	0.47 ug/L (0.40 - 0.56)
EC20 (conf. limits)	Analysis does not support the estimation of this ECx
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Length, 3 parameter model used

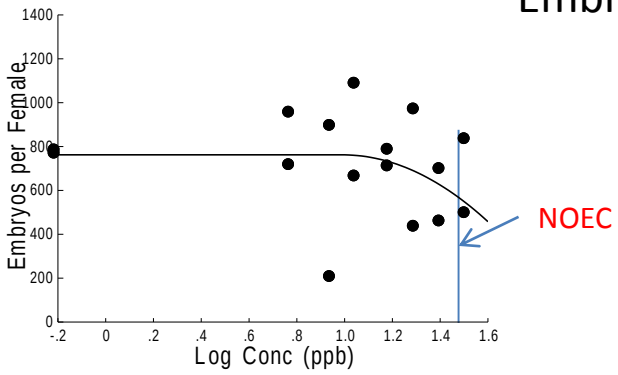
Malathion

Flagfish (*Jordanella floridae)*

Ecotox Reference # 995

Embryos per Female

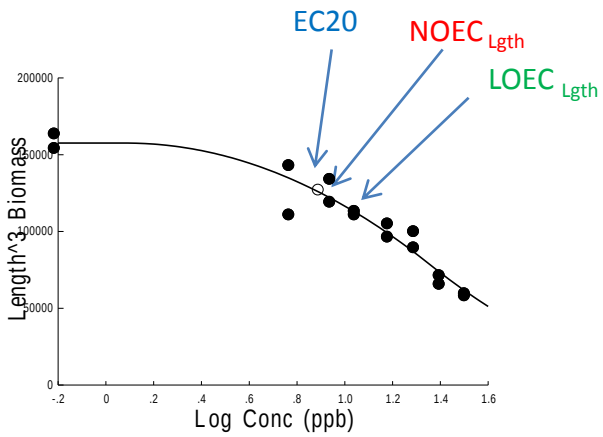
a



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	3
AquaChronTox ID	87
NOEC (ug/L)	31.5
LOEC (ug/L)	>31.5
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	Analysis does not support the estimation of this ECx
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Embryos/Female, insufficient effects, 3 parameter model used

Length ^3 Biomass

b



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	87
NOEC (ug/L)	8.6
LOEC (ug/L)	10.9
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	7.7 ug/L (5.1 - 11.6)
EC50 (conf.limits)	22.6 ug/L (18.4 - 27.7)
Comments:	Length ^3 Biomass, NOEC and LOEC values were based on Length NOEC and LOEC values, 3 parameter model used

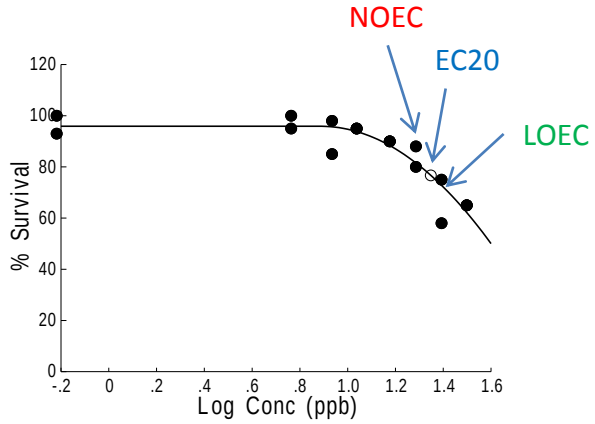
Malathion

Flagfish (*Jordanella floridae)*

Ecotox Reference # 995

% Survival

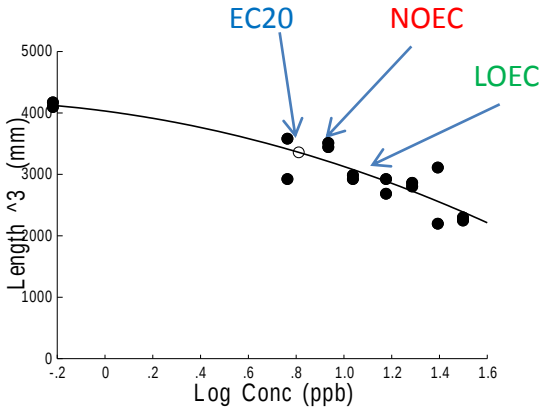
a



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	1
AquaChronTox ID	87
NOEC (ug/L)	19.3
LOEC (ug/L)	24.7
EC05 (conf. limits)	13.1 ug/L (8.6 - 19.9)
EC10 (conf. limits)	16.3 ug/L (11.9 - 22.4)
EC20 (conf. limits)	22.3 ug/L (18.3 - 27.1)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	% Survival, 3 parameter model used

Length ^3 (mm)

b



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	87
NOEC (ug/L)	8.6
LOEC (ug/L)	10.9
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	6.5 ug/L (1.3 - 33.2)
EC50 (conf.limits)	46.0 ug/L (26.1 - 81.1)
Comments:	Length ^3, used as a surrogate growth measurement when weight was not reported, 3 parameter model used,

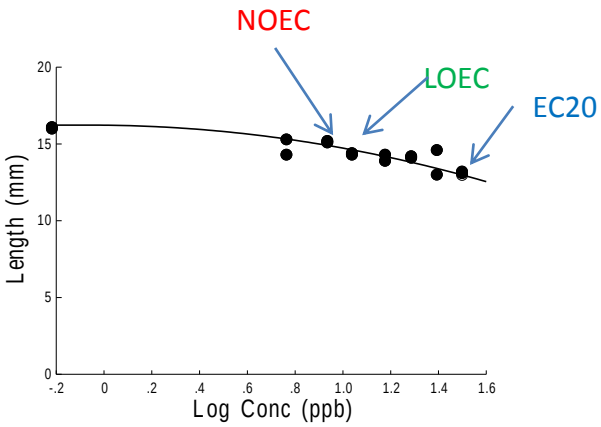
Malathion

Flagfish (*Jordanella floridae)*

Ecotox Reference # 995

Length (mm)

a



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	87
NOEC (ug/L)	8.6
LOEC (ug/L)	10.9
EC05 (conf. limits)	5.2 ug/L (2.1 - 13.0)
EC10 (conf. limits)	11.0 ug/L (5.9 - 20.7)
EC20 (conf. limits)	31.5 ug/L (20.1 - 49.4)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Length, used to estimate EC20 or lower only,3 parameter model used

Malathion

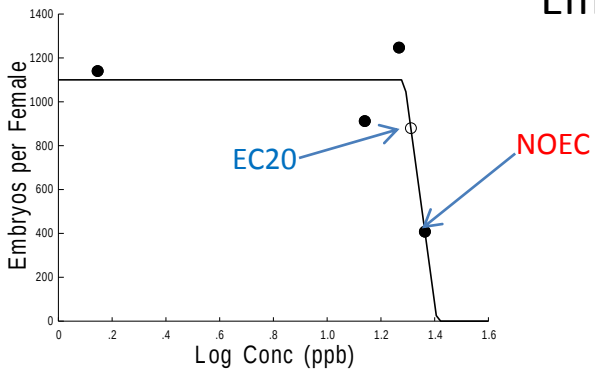
Figure 53a and 53b

Flagfish (*Jordanella floridae)*

Ecotox Reference # 10687

Embryos per Female

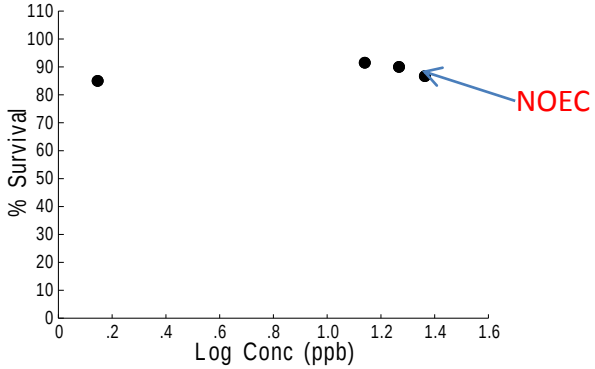
a



TRAP Model Used	Piecewise Linear
TRAP Quality Value	2
AquaChronTox ID	88
NOEC (ug/L)	23.1
LOEC (ug/L)	>23.1
EC05 (conf. limits)	Analysis does not support the estimation of this ECx
EC10 (conf. limits)	Analysis does not support the estimation of this ECx
EC20 (conf. limits)	20.5 ug/L (no conf. limits)
EC50 (conf.limits)	22.3 ug/L (no conf. limits)
Comments:	Embryos per Female, 3 parameter model

% Survival

b



TRAP Model Used	None
TRAP Quality Value	3
AquaChronTox ID	88
NOEC (ug/L)	23.1
LOEC (ug/L)	>23.1
EC05 (conf. limits)	Not Calculable
EC10 (conf. limits)	Not Calculable
EC20 (conf. limits)	Not Calculable
EC50 (conf.limits)	Not Calculable
Comments:	% Survival, insufficient effects, Data does not support regression analysis

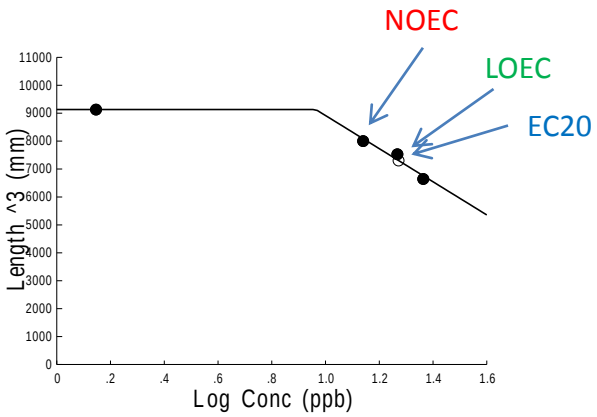
Malathion

Flagfish (*Jordanella floridae)*

Ecotox Reference # 10687

Length ^3 (mm)

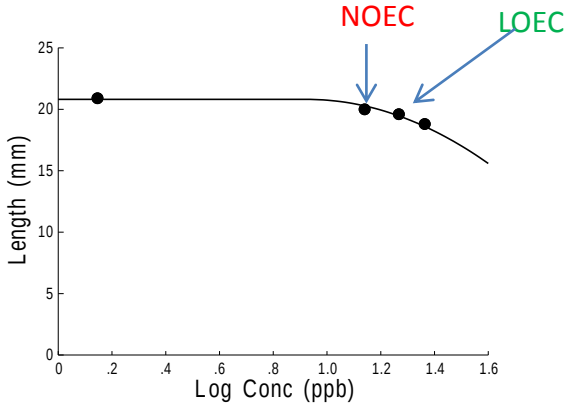
a



TRAP Model Used	Piecewise Linear
TRAP Quality Value	3
AquaChronTox ID	88
NOEC (ug/L)	13.8
LOEC (ug/L)	18.5
EC05 (conf. limits)	11.0 ug/L (1.3 - 91.5)
EC10 (conf. limits)	13.1 ug/L (2.5 - 69.5)
EC20 (conf. limits)	18.7 ug/L (5.7 - 61.8)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Length ^3, used as a surrogate growth measurement when weight was not reported, 3 parameter model used

Length (mm)

b



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	3
AquaChronTox ID	88
NOEC (ug/L)	13.8
LOEC (ug/L)	18.5
EC05 (conf. limits)	16.8 ug/L (2.3 - 123.6)
EC10 (conf. limits)	22.4 ug/L (5.6 - 90.1)
EC20 (conf. limits)	Analysis does not support the estimation of this ECx
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Length, used for EC20 or lower only, 3 parameter model used

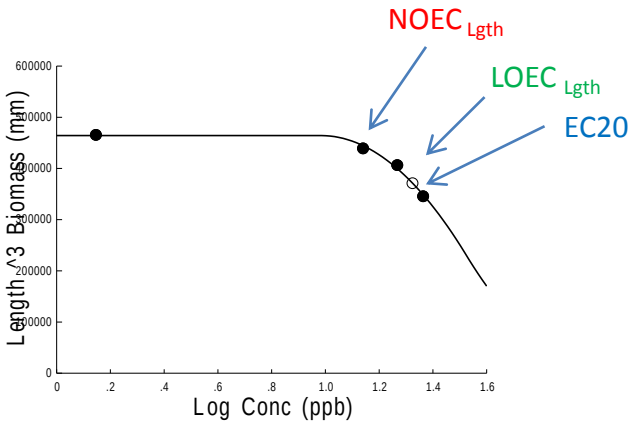
Malathion

Flagfish (*Jordanella floridae*)

Ecotox Reference # 10687

Length ^3 Biomass (mm)

a



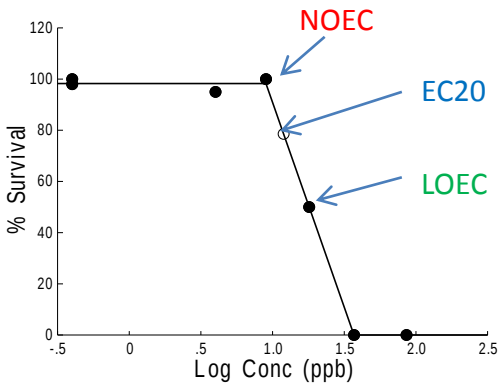
TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	88
NOEC (ug/L)	13.8
LOEC (ug/L)	18.5
EC05 (conf. limits)	14.2 ug/L (4.2 - 47.8)
EC10 (conf. limits)	16.8 ug/L (7.0 - 40.3)
EC20 (conf. limits)	21.1 ug/L (12.2 - 36.3)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Length ^3 Biomass, used to estimate EC20 or lower only, NOEC and LOEC values were based on length NOEC and LOEC values,3 parameter model used

Figure 56a and 56b

Malathion

Sheepshead Minnow (*Cyprinodon variegatus)*

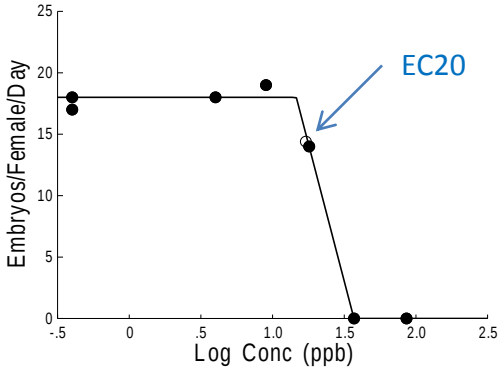
Ecotox Reference # 5074



% Survival

a

TRAP Model Used	Piecewise Linear
TRAP Quality Value	1
AquaChronTox ID	171
NOEC (ug/L)	9
LOEC (ug/L)	18
EC05 (conf. limits)	10 ug/L (9 - 11)
EC10 (conf. limits)	10 ug/L (9 - 12)
EC20 (conf. limits)	12 ug/L (11 - 13)
EC50 (conf.limits)	18 ug/L (17 - 20)
Comments:	% Survival , 3 parameter model used



Embryos /Female /Day

b

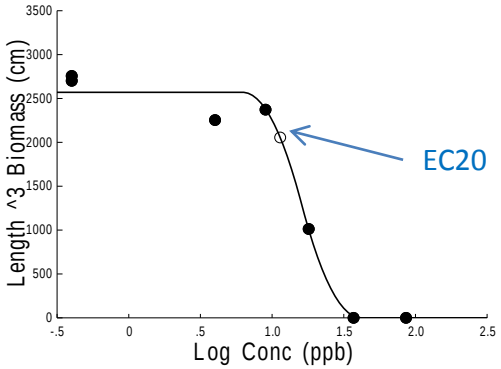
TRAP Model Used	Piecewise Linear
TRAP Quality Value	1
AquaChronTox ID	171
NOEC (ug/L)	Not Reported
LOEC (ug/L)	Not Reported
EC05 (conf. limits)	15 ug/L (no conf. limits)
EC10 (conf. limits)	16 ug/L (no conf. limits)
EC20 (conf. limits)	18 ug/L (no conf. limits)
EC50 (conf.limits)	23 ug/L (no conf. limits)
Comments:	Embryos/Female/Day, 3 parameter model used

Figure 57a and 57b

Malathion

Sheepshead Minnow (*Cyprinodon variegatus)*

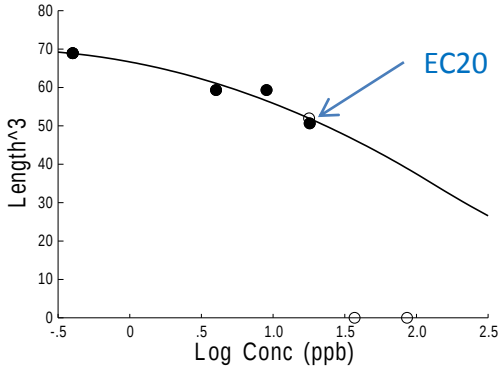
Ecotox Reference # 5074



Length ^3 Biomass (cm)

a

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	171
NOEC (ug/L)	Not Reported
LOEC (ug/L)	Not Reported
EC05 (conf. limits)	8 ug/L (5 - 15)
EC10 (conf. limits)	10 ug/L (6 - 16)
EC20 (conf. limits)	11 ug/L (8 - 17)
EC50 (conf.limits)	16 ug/L (13 - 20)
Comments:	Length ^3 Biomass, 3 parameter model used



Length ^3 (cm)

b

TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	2
AquaChronTox ID	171
NOEC (ug/L)	Not Reported
LOEC (ug/L)	Not Reported
EC05 (conf. limits)	15 ug/L (115 - 20)
EC10 (conf. limits)	16ug/L (13 - 21)
EC20 (conf. limits)	18 ug/L (15 - 22)
EC50 (conf.limits)	Analysis does not support the estimation of this ECx value
Comments:	Length ^3, used as a surrogate growth measurement when weight was not reported, used to estimate EC20 or lower only, 3 parameter model used

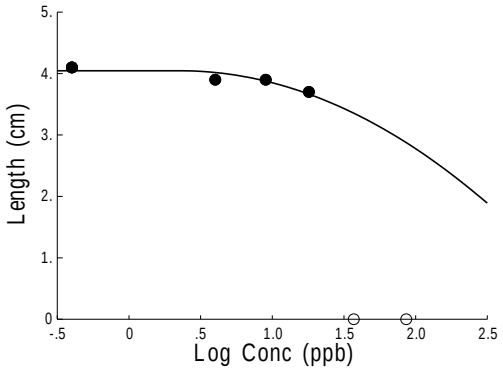
Malathion

Sheepshead Minnow (*Cyprinodon variegatus*)

Ecotox Reference # 5074

Length (cm)

a



TRAP Model Used	Threshold Sigmoid
TRAP Quality Value	3
AquaChronTox ID	171
NOEC (ug/L)	Not Reported
LOEC (ug/L)	Not Reported
EC05 (conf. limits)	10 ug/L (2-60)
EC10 (conf. limits)	19 ug/L (5-79)
EC20 (conf. limits)	Analysis does not support the estimation of this ECx
EC50 (conf.limits)	Analysis does not support the estimation of this ECx
Comments:	Length, insufficient effects, 3 parameter model used