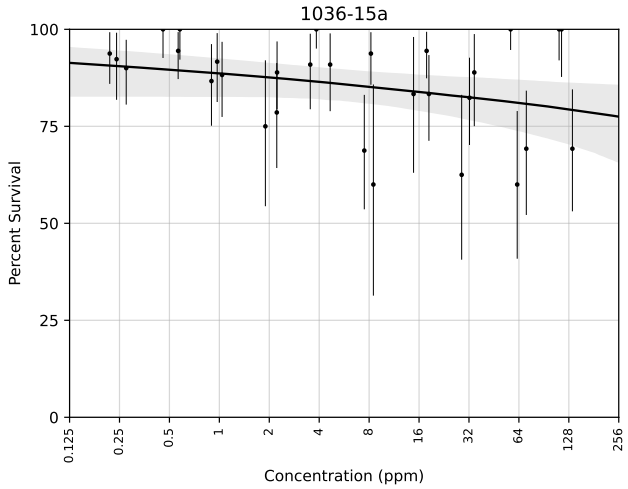
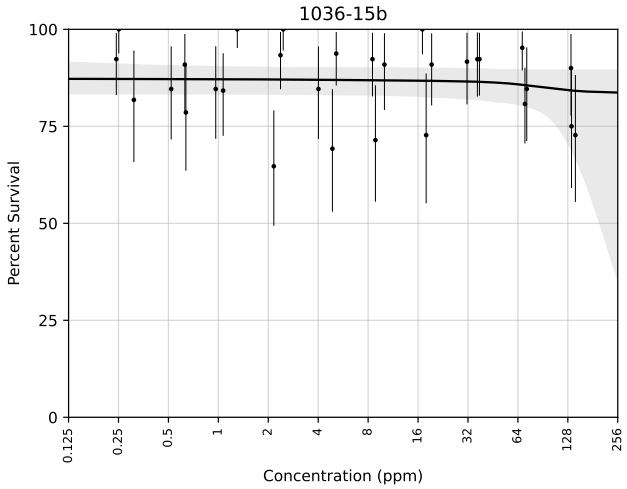
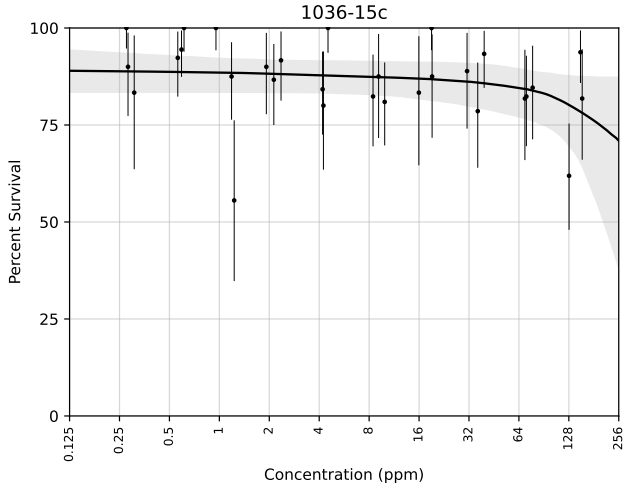


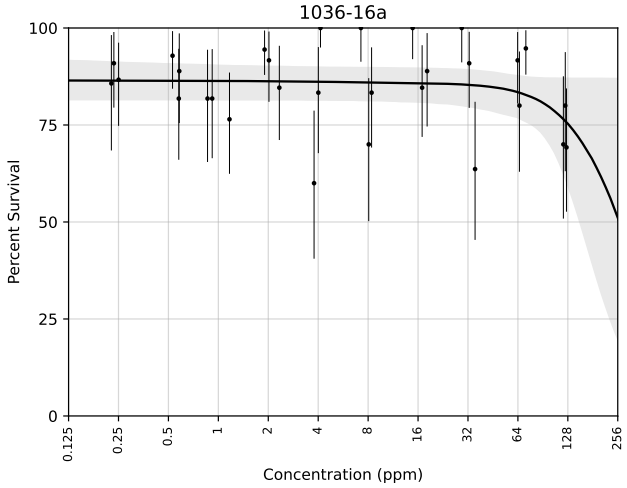
1036-15a LC_{50} cannot be estimated with the given data.
3 biol. reps; 3 tech. reps; R^2: 0.0887



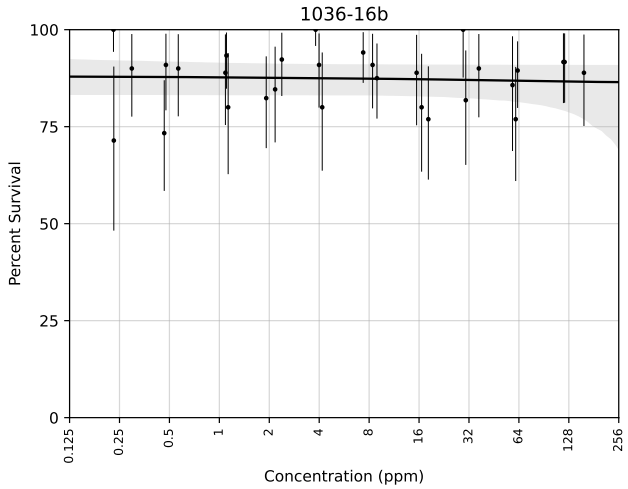
1036-15b LC_{50} cannot be estimated with the given data.
3 biol. reps; 3 tech. reps; R^2: 0.0309



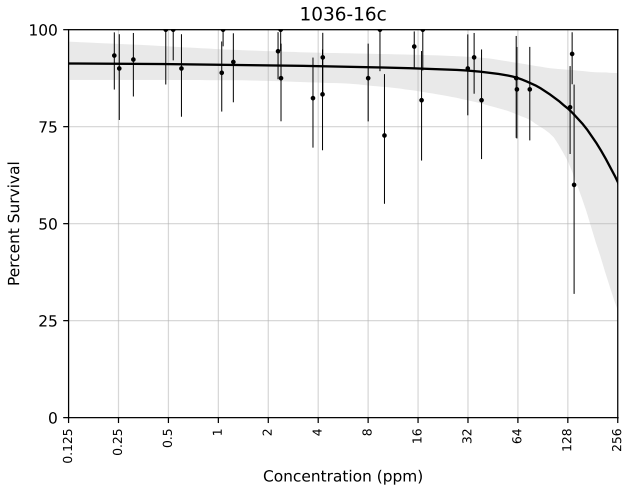
1036-15c LC_{50}: 1.35e3 ppm [14.6, 6.62e35]
3 biol. reps; 3 tech. reps; R^2: 0.0955



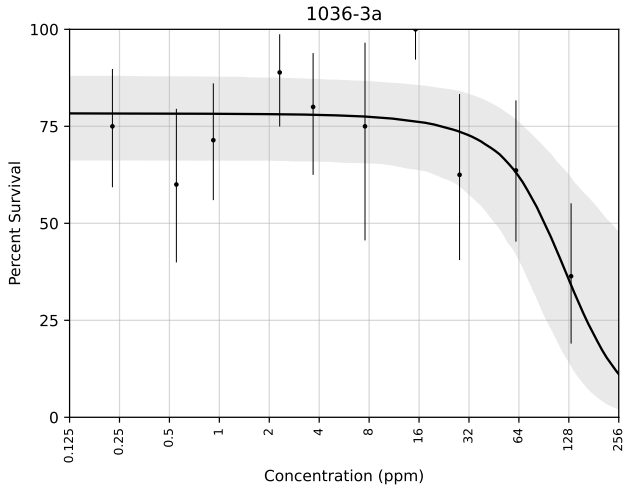
1036-16a LC_{50}: 465 ppm [53.7, 3.05e90]
3 biol. reps; 3 tech. reps; R^2: 0.117



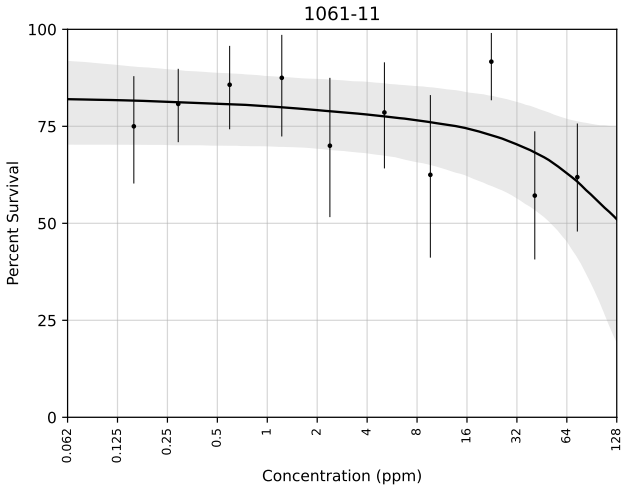
1036-16b LC_{50} cannot be estimated with the given data.
3 biol. reps; 3 tech. reps; R^2: -1.14e-2



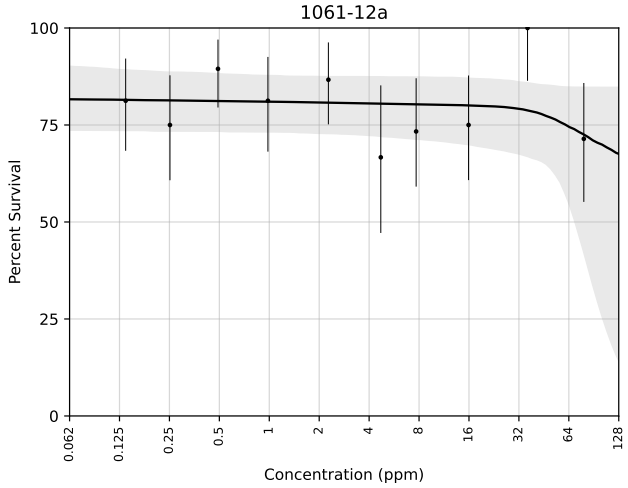
1036-16c LC_{50}: 390 ppm [76.2, 5.55e10]
3 biol. reps; 3 tech. reps; R^2: 0.238



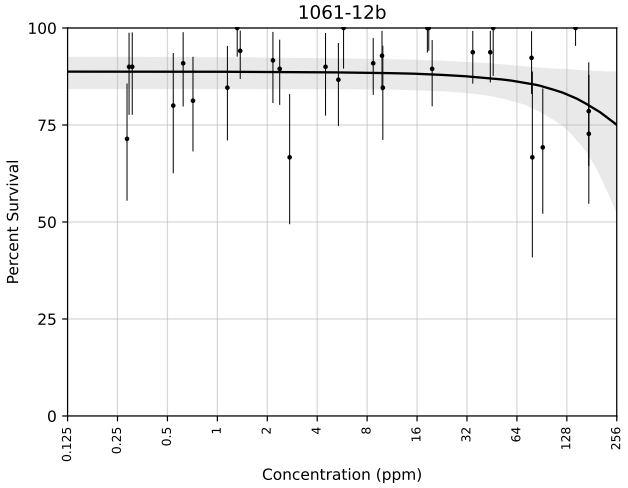
1036-3a LC_{50}: 119 ppm [56.3, 306]
1 biol. rep; 1 tech. rep; R^2: 0.561



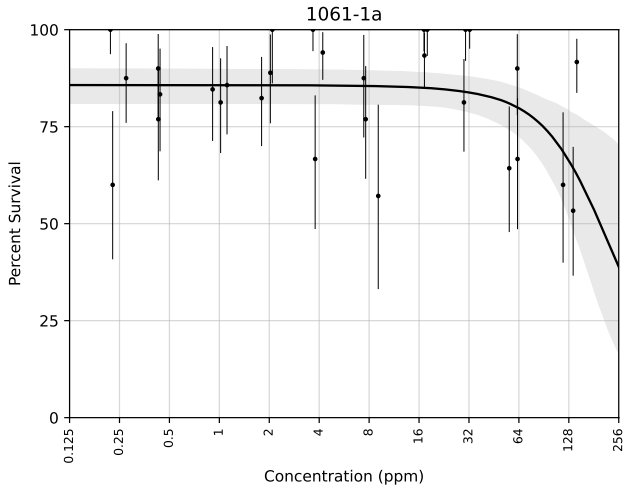
1061-11 LC_{50}: 204 ppm [24.3, 4.43e6]
1 biol. rep; 1 tech. rep; R^2: 0.323



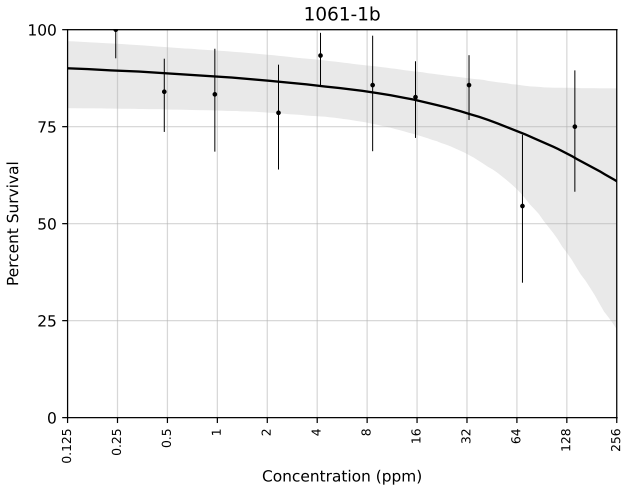
1061-12a LC_{50} cannot be estimated with the given data.
1 biol. rep; 1 tech. rep; R^2: 0.0246



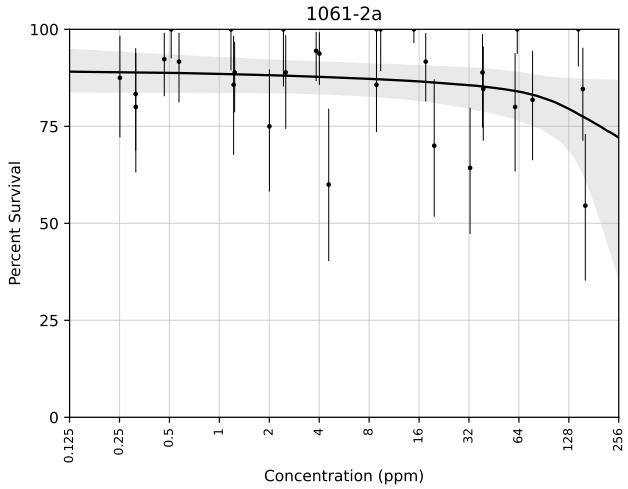
1061-12b LC_{50}: 942 ppm [282, 2.36e90]
3 biol. reps; 3 tech. reps; R^2: 0.0401



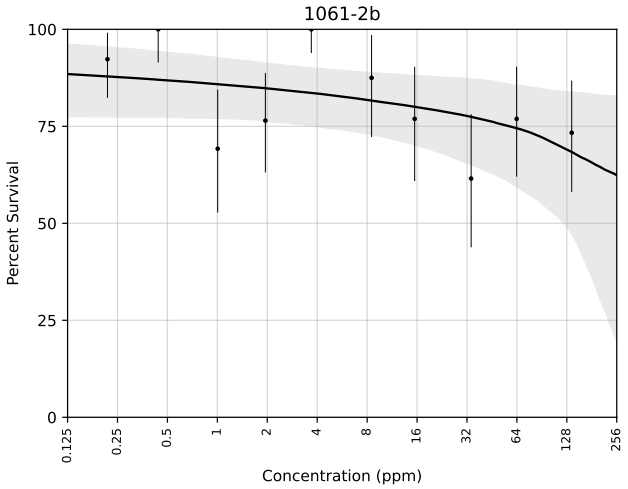
1061-1a LC_{50}: 235 ppm [134, 681]
3 biol. reps; 3 tech. reps; R^2: 0.153



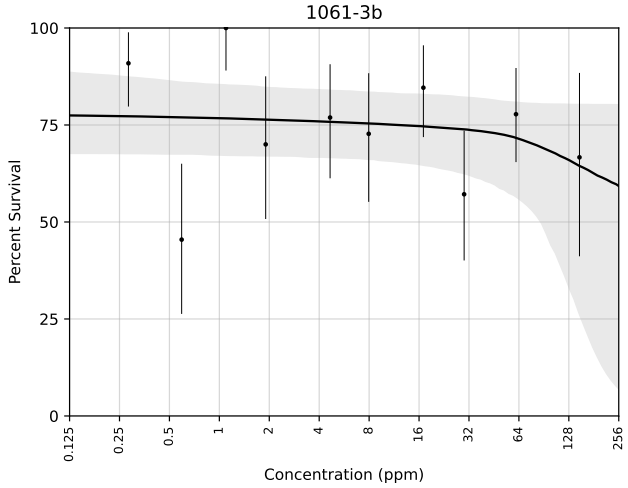
1061-1b LC_{50}: 919 ppm [28, 7.85e32]
1 biol. rep; 1 tech. rep; R^2: 0.416



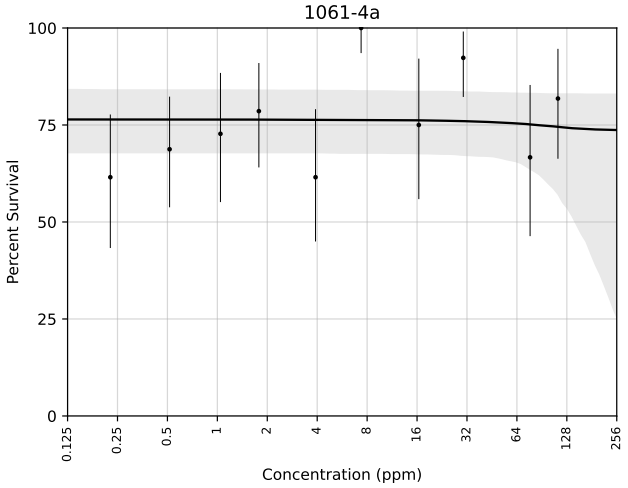
1061-2a LC_{50}: 1.91e3 ppm [25.3, 5.63e18]
3 biol. reps; 3 tech. reps; R^2: 0.0508



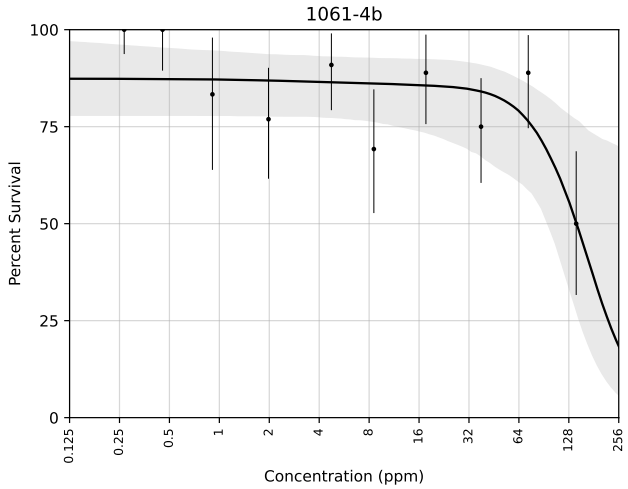
1061-2b LC_{50}: 1.46e3 ppm [28.7, 2.02e34]
1 biol. rep; 1 tech. rep; R^2: 0.25



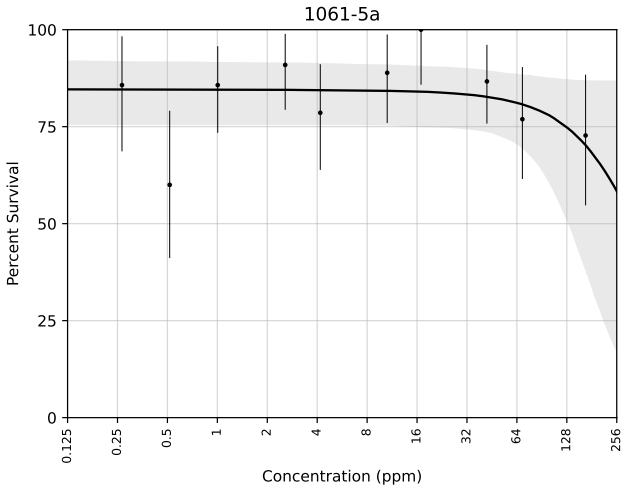
1061-3b LC_{50}: 1.15e4 ppm [0.263, 1.08e92]
1 biol. rep; 1 tech. rep; R^2: 0.0351



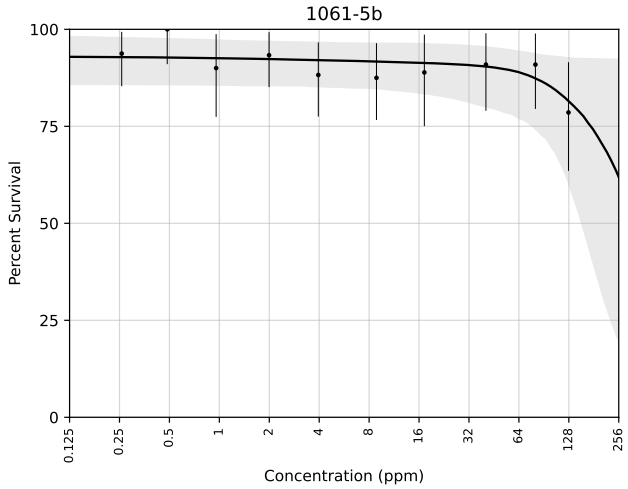
1061-4a LC_{50} cannot be estimated with the given data.
1 biol. rep; 1 tech. rep; R^2: -2.06e-2



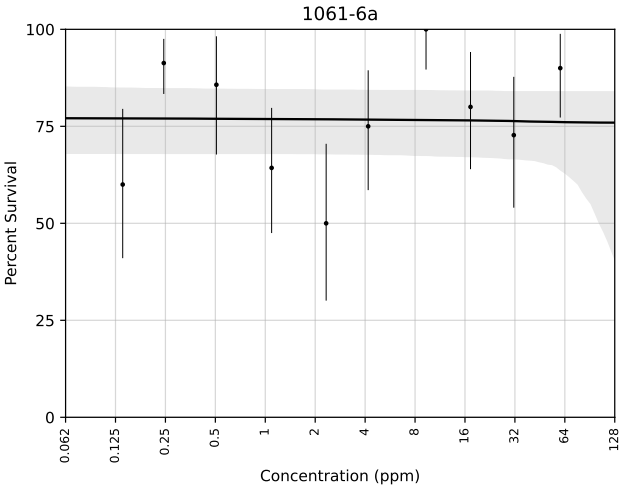
1061-4b LC_{50}: 160 ppm [86.7, 1.23e3]
1 biol. rep; 1 tech. rep; R^2: 0.534



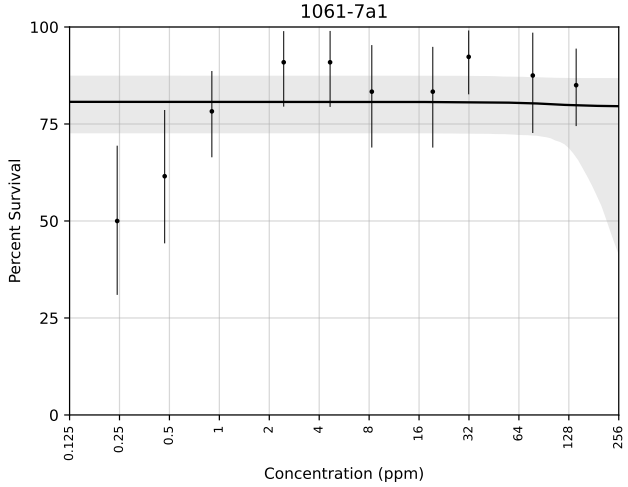
1061-5a LC_{50}: 428 ppm [116, 2.89e90]
1 biol. rep; 1 tech. rep; R^2: 0.108



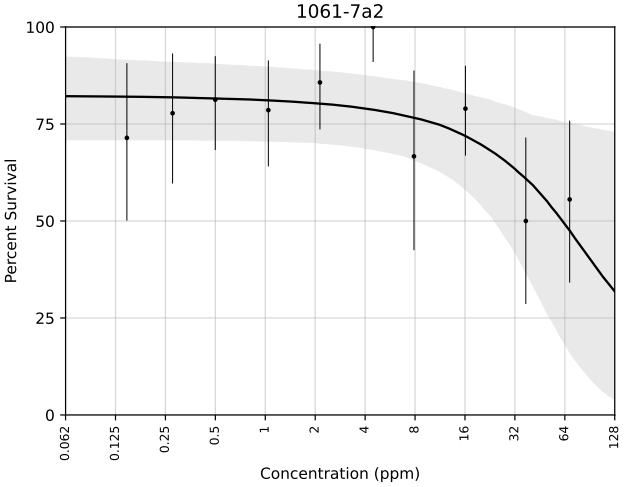
1061-5b LC_{50}: 433 ppm [78.4, 1.85e90]
1 biol. rep; 1 tech. rep; R^2: 0.601



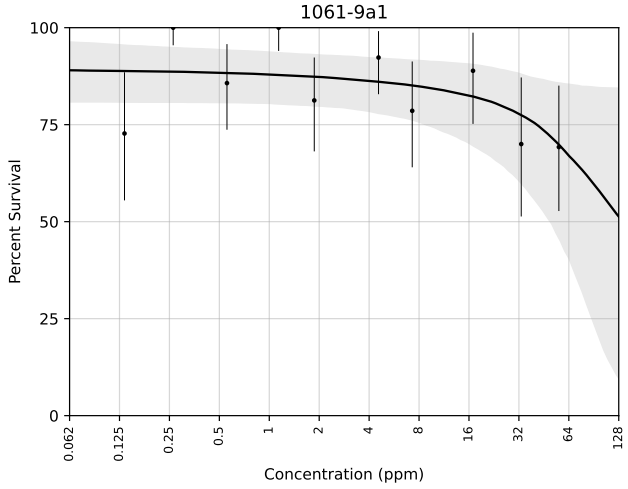
1061-6a LC_{50} cannot be estimated with the given data.
1 biol. rep; 1 tech. rep; R^2: -1.26e-2



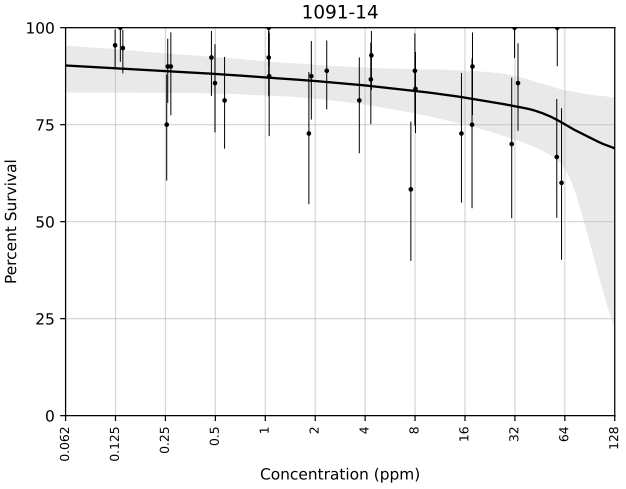
1061-7a1 LC_{50} cannot be estimated with the given data.
1 biol. rep; 1 tech. rep; R^2: -9.41e-3



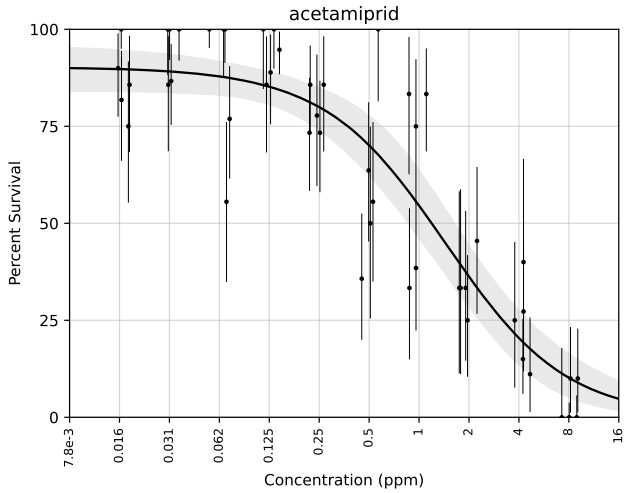
1061-7a2 LC_{50}: 87.3 ppm [20.4, 3.05e3]
1 biol. rep; 1 tech. rep; R^2: 0.486



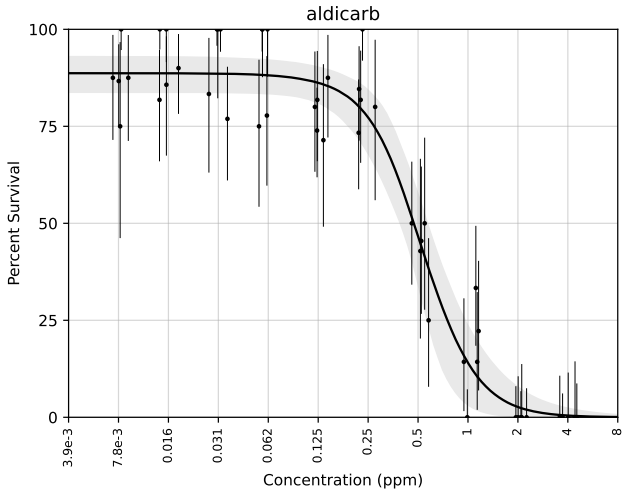
1061-9a1 LC_{50}: 172 ppm [28.1, 1.15e6]
1 biol. rep; 1 tech. rep; R^2: 0.36



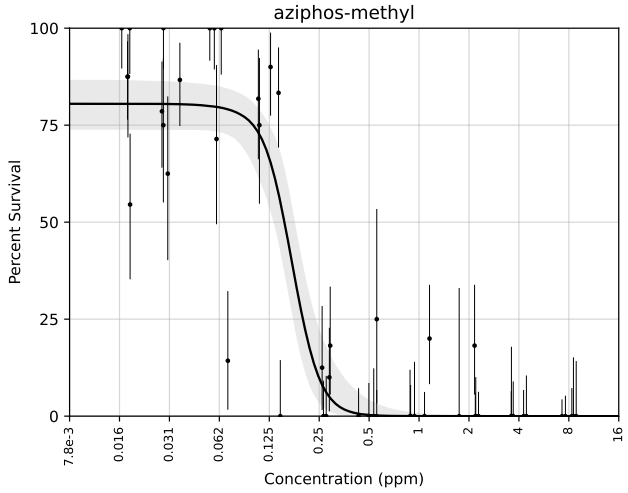
1091-14 LC_{50}: 2.29e3 ppm [17.3, 9.27e7]
3 biol. reps; 3 tech. reps; R^2: 0.156



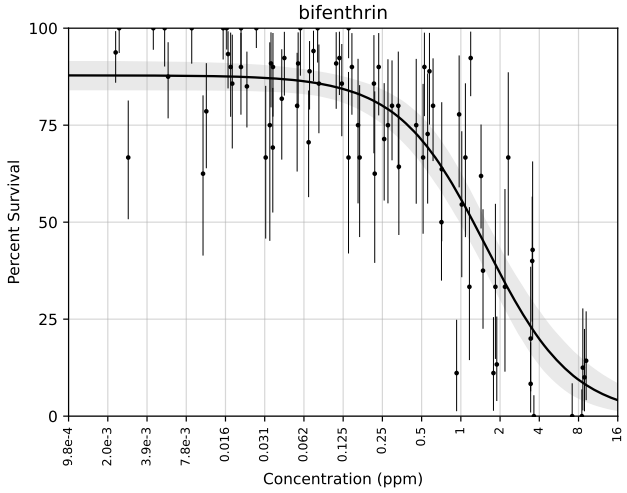
Acetamiprid LC_{50}: 1.43 ppm [0.981, 2.04]
4 biol. reps; 5 tech. reps; R^2: 0.82



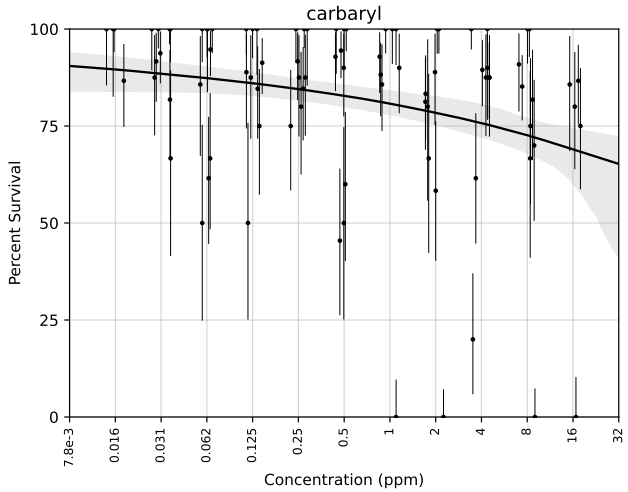
Aldicarb LC_{50}: 0.521 ppm [0.429, 0.636]
4 biol. reps; 5 tech. reps; R^2: 0.944



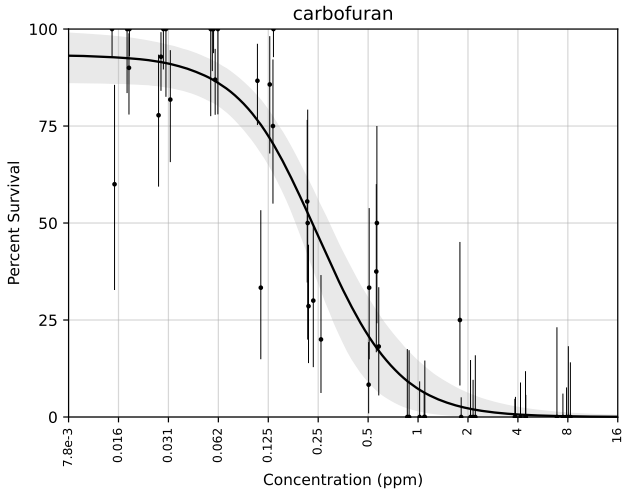
Aziphos-methyl LC_{50}: 0.17 ppm [0.149, 0.195]
4 biol. reps; 5 tech. reps; R^2: 0.815



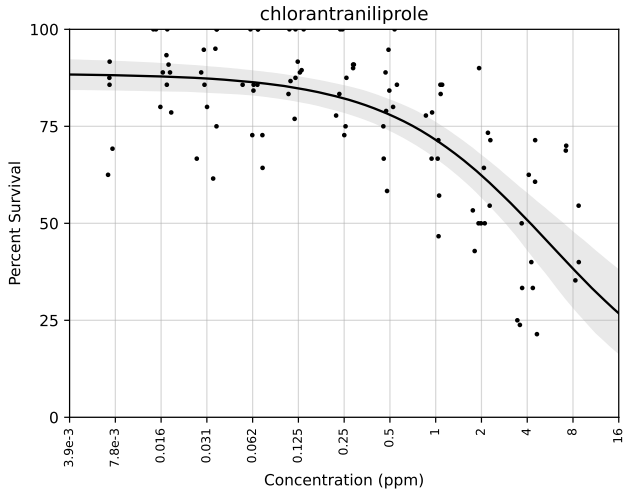
Bifenthrin LC_{50}: 1.55 ppm [1.2, 1.97]
7 biol. reps; 8 tech. reps; R^2: 0.764



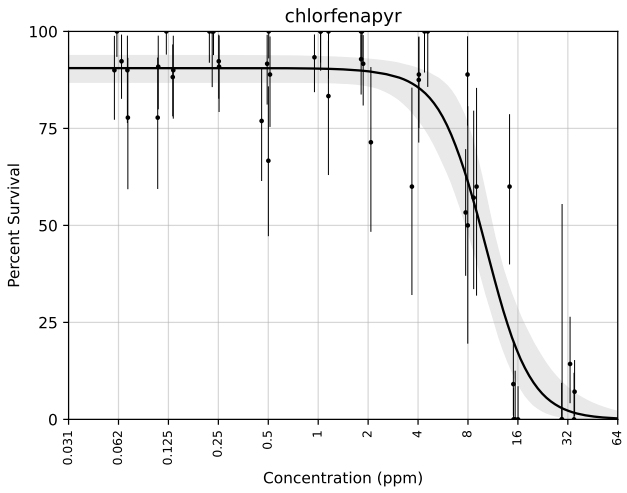
Carbaryl LC_{50}: 553 ppm [23.2, 1.83e4]
8 biol. reps; 9 tech. reps; R^2: 0.0775



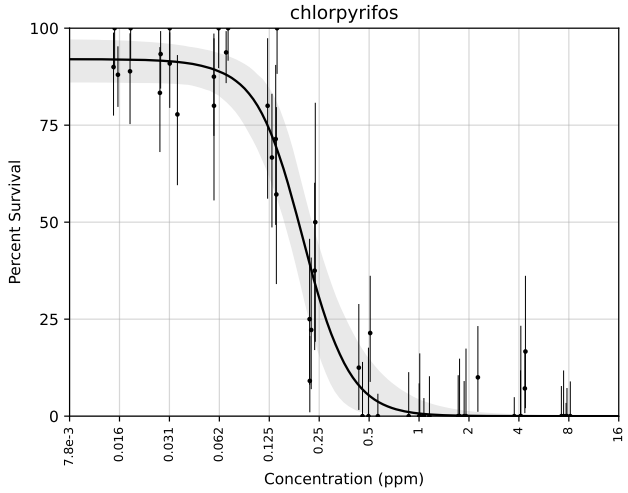
Carbofuran LC_{50}: 0.249 ppm [0.195, 0.323]
4 biol. reps; 5 tech. reps; R^2: 0.898



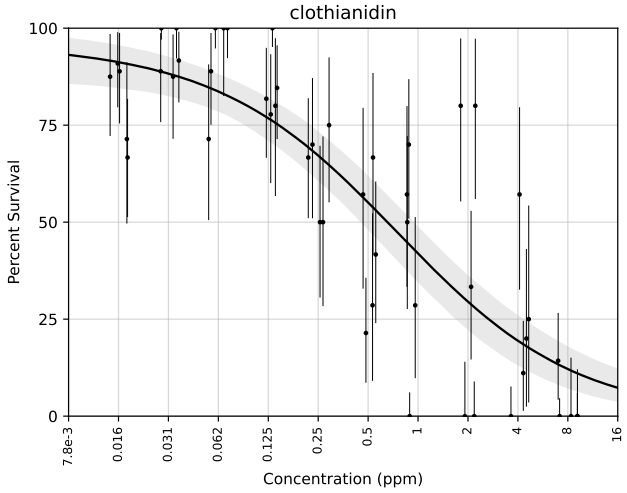
Chlorantraniliprole LC_{50}: 5.73 ppm [3.71, 9.9]
9 biol. reps; 10 tech. reps; R^2: 0.542



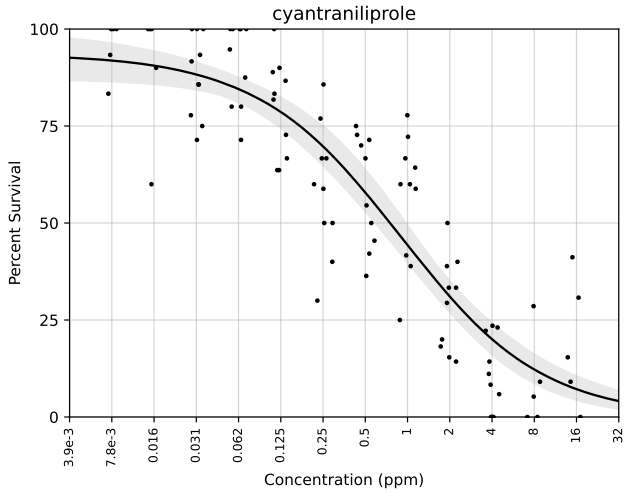
Chlorfenapyr LC_{50}: 10.1 ppm [8.39, 12]
4 biol. reps; 5 tech. reps; R^2: 0.874



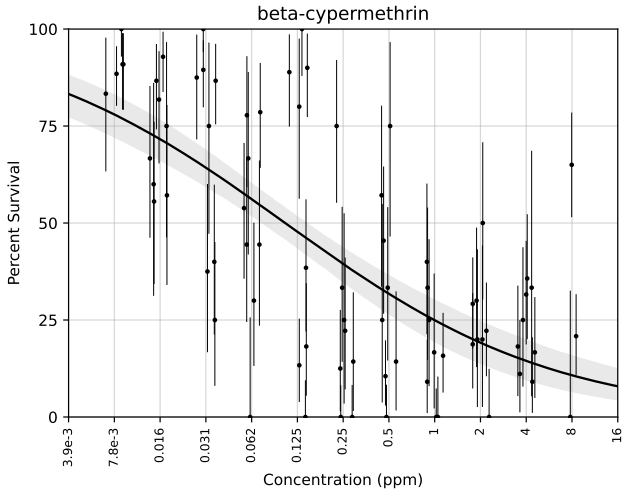
Chlorpyrifos LC_{50}: 0.199 ppm [0.164, 0.24]
4 biol. reps; 5 tech. reps; R^2: 0.956



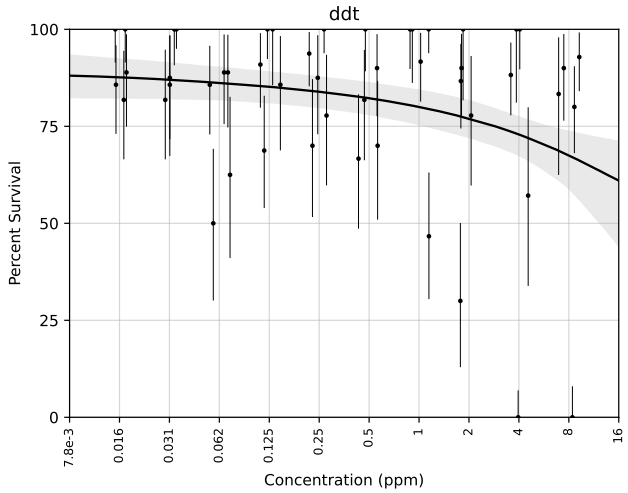
Clothianidin LC_{50}: 0.73 ppm [0.465, 1.17]
4 biol. reps; 5 tech. reps; R^2: 0.694



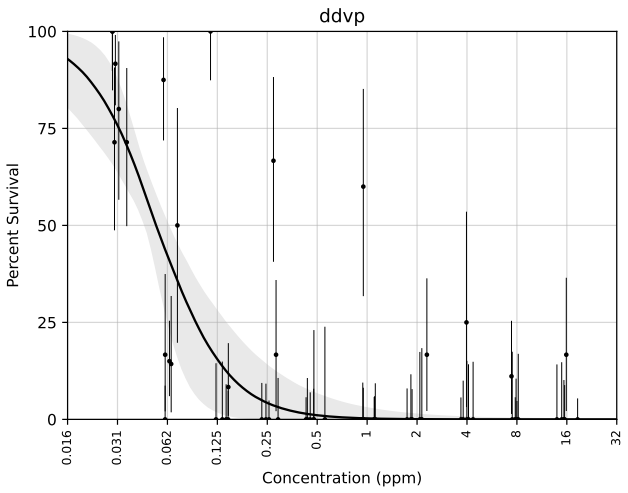
Cyantraniliprole LC_{50}: 0.879 ppm [0.618, 1.27]
9 biol. reps; 10 tech. reps; R^2: 0.801



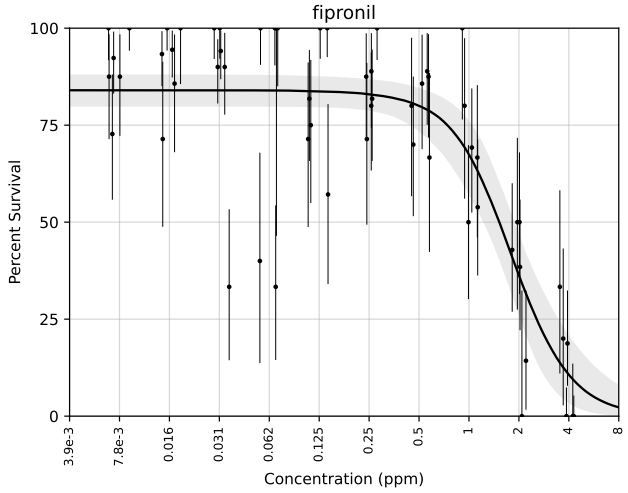
β-Cypermethrin LC_{50}: 0.104 ppm [0.074, 0.143]
7 biol. reps; 8 tech. reps; R^2: 0.441



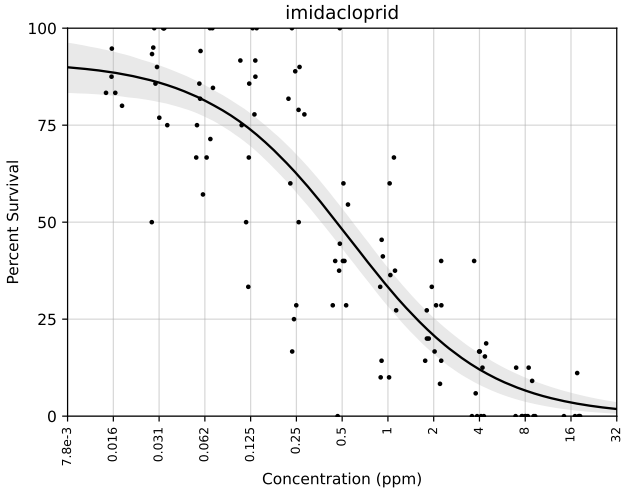
DDT LC_{50}: 67.4 ppm [10.5, 1.98e3]
4 biol. reps; 5 tech. reps; R^2: 0.0819



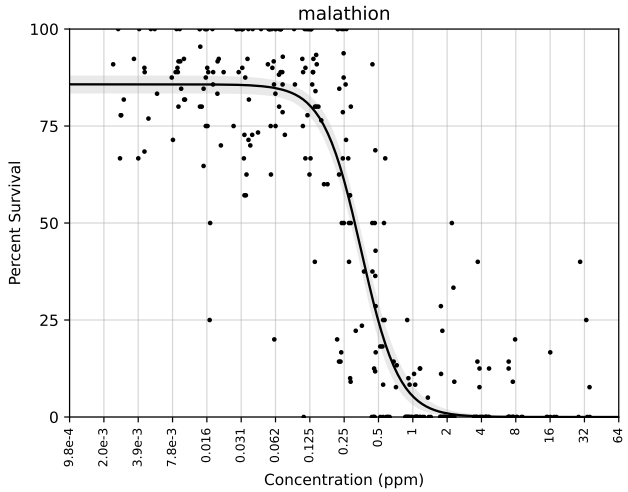
DDVP LC_{50}: 0.0534 ppm [0.0457, 0.0634]
5 biol. reps; 6 tech. reps; R^2: 0.576



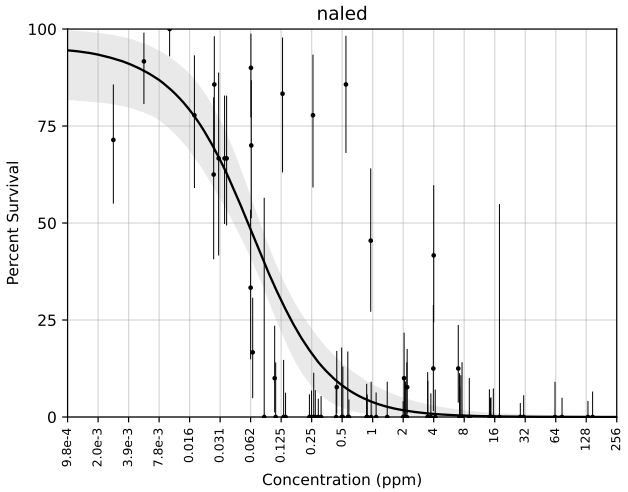
Fipronil LC_{50}: 1.79 ppm [1.47, 2.2]
5 biol. reps; 6 tech. reps; R^2: 0.677



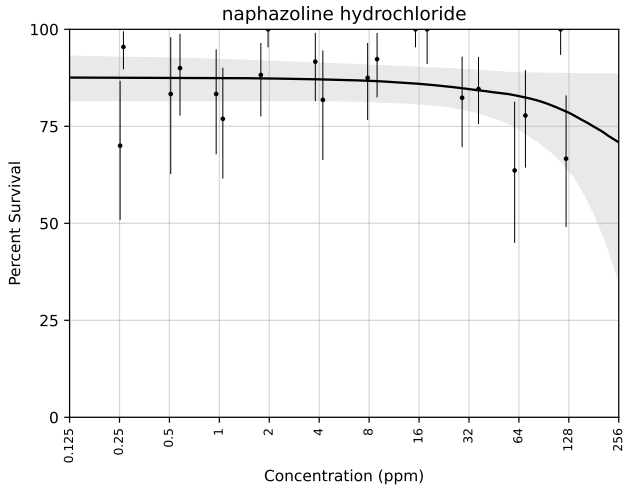
Imidacloprid LC_{50}: 0.557 ppm [0.404, 0.782]
9 biol. reps; 11 tech. reps; R^2: 0.776



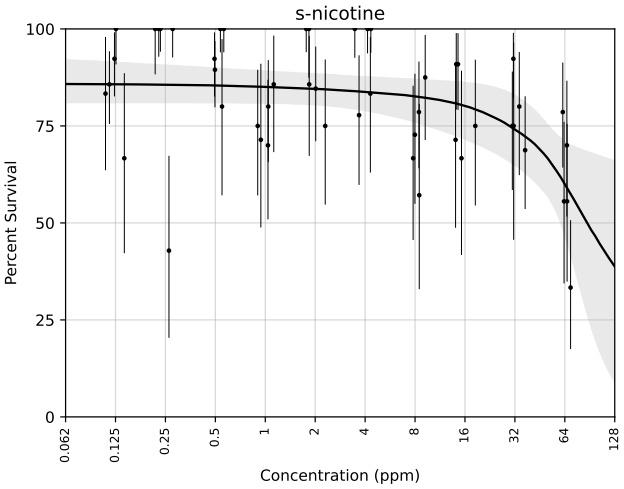
Malathion LC_{50}: 0.353 ppm [0.328, 0.38]
16 biol. reps; 31 tech. reps; R^2: 0.824



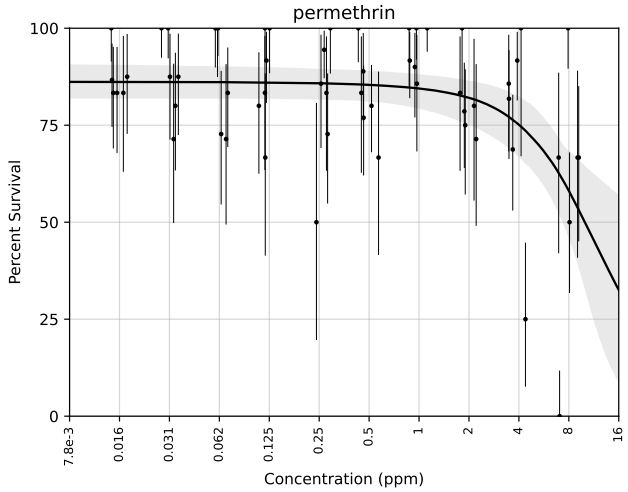
Naled LC_{50}: 0.0645 ppm [0.0449, 0.091]
7 biol. reps; 7 tech. reps; R^2: 0.605



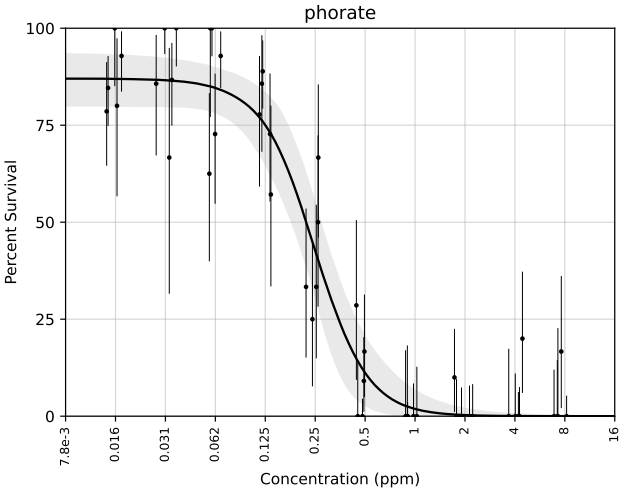
Naphazoline hydrochloride LC_{50}: 1.67e3 ppm [69.8, 3.91e90]
2 biol. reps; 2 tech. reps; R^2: 0.0591



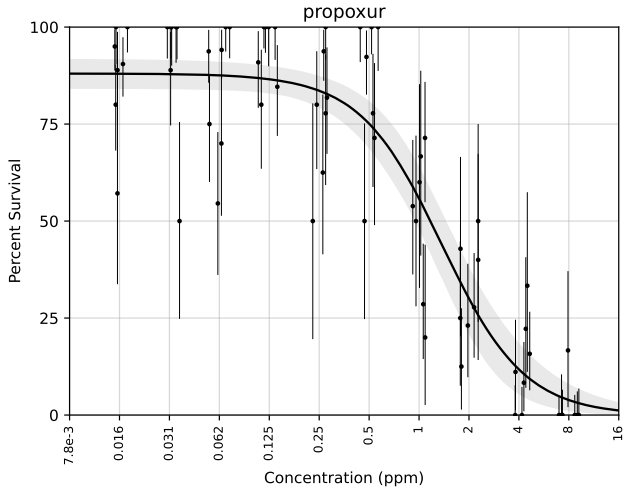
***S*-nicotine** LC_{50}: 111 ppm [54.4, 947]
4 biol. reps; 5 tech. reps; R^2: 0.271



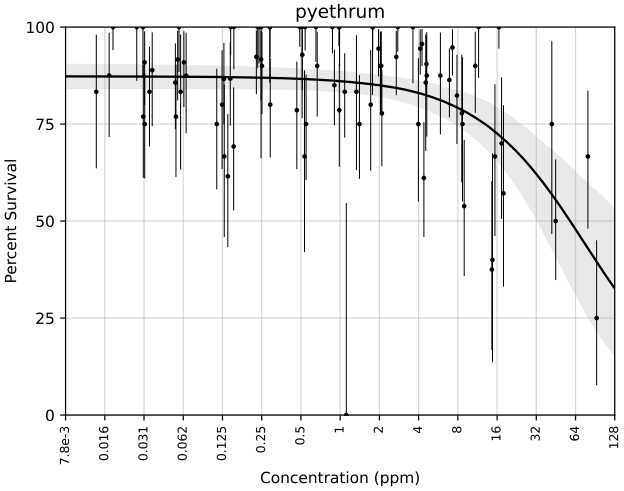
Permethrin LC_{50}: 12.1 ppm [7.66, 27]
5 biol. reps; 6 tech. reps; R^2: 0.224



Phorate LC_{50}: 0.246 ppm [0.201, 0.305]
4 biol. reps; 5 tech. reps; R^2: 0.93



Propoxur LC_{50}: 1.37 ppm [1.09, 1.71]
6 biol. reps; 7 tech. reps; R^2: 0.824



Pyethrum LC_{50}: 77.6 ppm [36.3, 205]
8 biol. reps; 9 tech. reps; R^2: 0.226

Data analysis was performed using the statistics module for the Merlin Data Analysis program. Live/dead counts from the bioassay were used to generate new survival probabilities using a Beta prior. The user-specified prior is Heldane's prior, the improper prior Beta$(0, 0)$, (set by `BETA_PRIOR`) and 3840 bootstrap iterations were used (set by `BOOTSTRAP_ITERS`).When either the live count or dead count was equal to 0, the prior the distribution Beta$(0.25, 0.25)$ (set by `BETA_PRIOR_0`) was used to avoid the sunrise problem. Correlation between wells in a replicate was modelled by generating multivariate normal random variables with correlation $\rho = 0.1$ (set by `RHO`), which were then converted to quantiles, and then back-converted to probabilities in the appropriate beta distribution.

Each iteration of bootstrapped dose-response data was fit to Least-squares fitting was performed using the Levenberg-Marquardt algorithm with geodesic acceleration algorithm using a C interface to the GNU Scientific Library.

Credible intervals for the data points are shown at the 80% level when fewer than 10 replicates are used. The best-fit line is calculated as the median value of all fitted curves at a given concentration. The error region for the curve respresents a 95% credible region, as determined by quantiles of predicted survivals at each concentration.