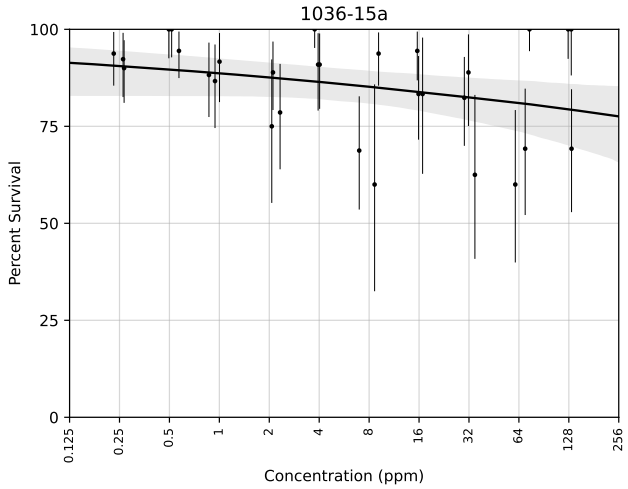
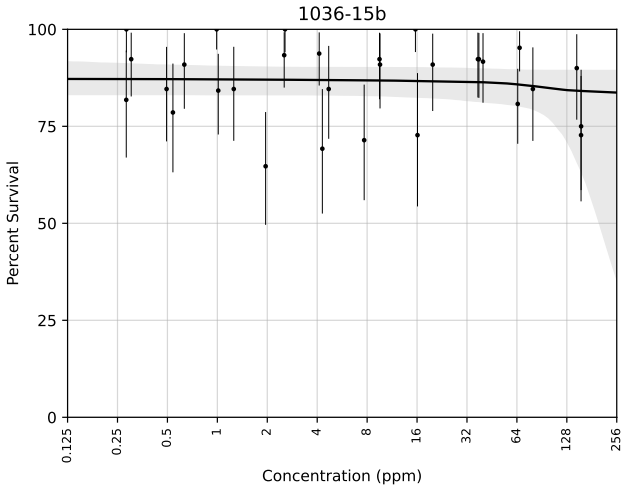
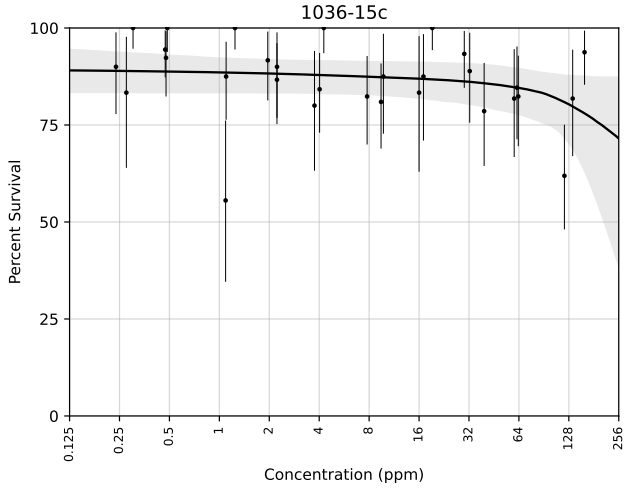


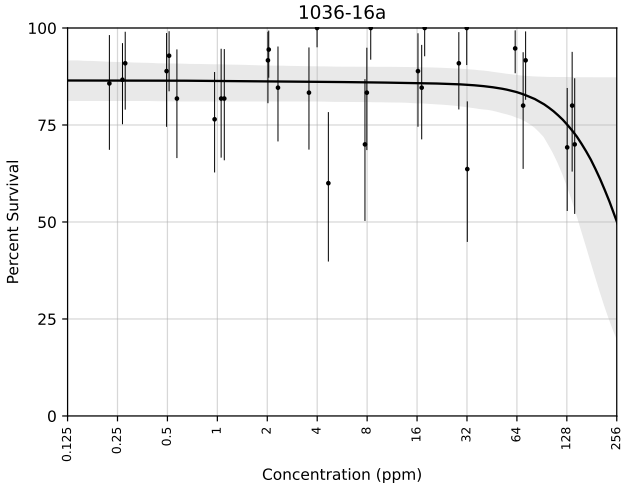
1036-15a LC_{50} cannot be estimated with the given data.
3 biol. reps; 3 tech. reps; R^2: 0.0901



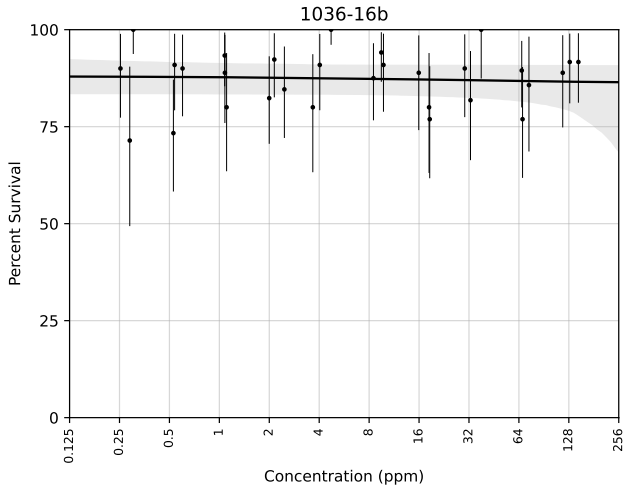
1036-15b LC_{50} cannot be estimated with the given data.
3 biol. reps; 3 tech. reps; R^2: 0.0298



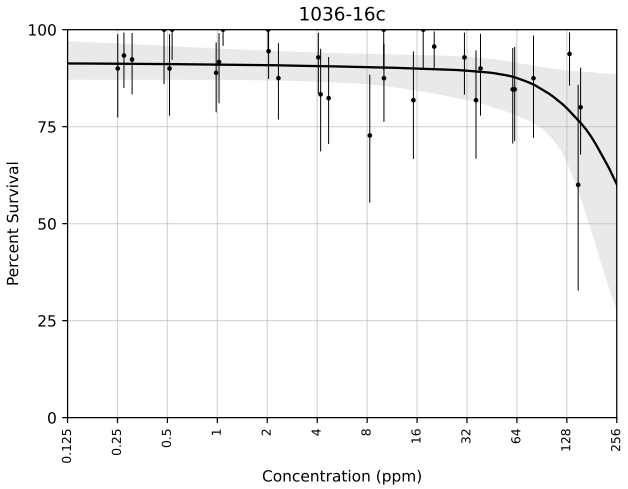
1036-15c LC_{50}: 1.55e3 ppm [16.1, 2.49e36]
3 biol. reps; 3 tech. reps; R^2: 0.0962



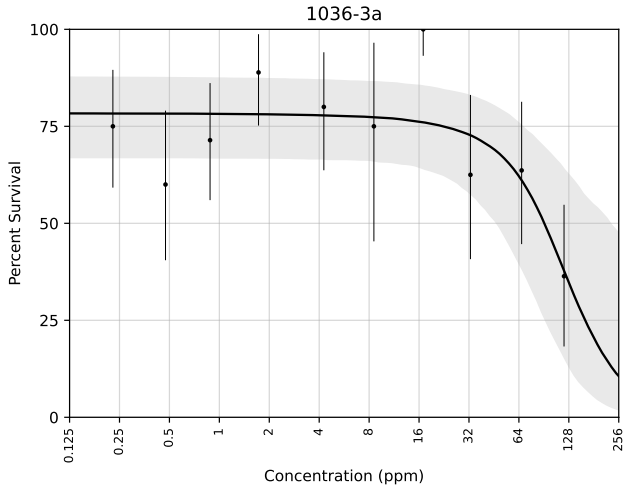
1036-16a LC_{50}: 440 ppm [56.5, 3.05e90]
3 biol. reps; 3 tech. reps; R^2: 0.118



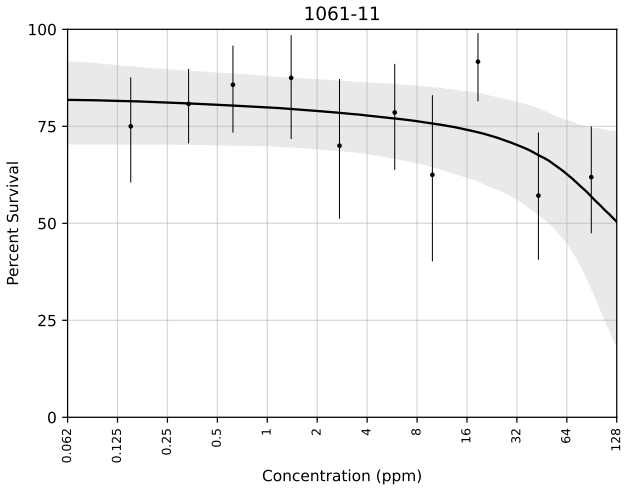
1036-16b LC_{50} cannot be estimated with the given data.
3 biol. reps; 3 tech. reps; R^2: -1.17e-2



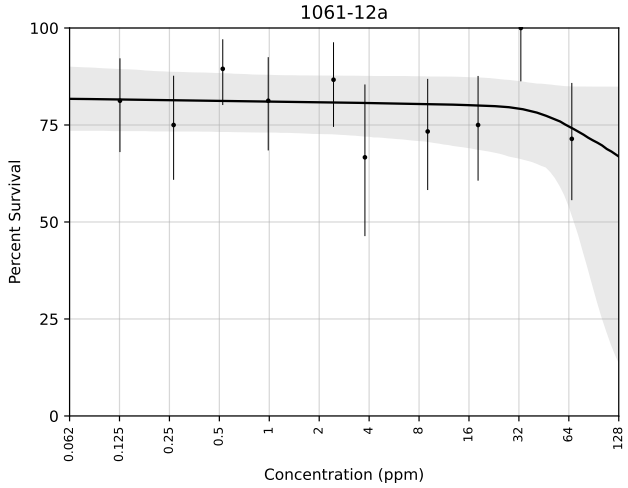
1036-16c LC_{50}: 381 ppm [89.8, 3.12e9]
3 biol. reps; 3 tech. reps; R^2: 0.238



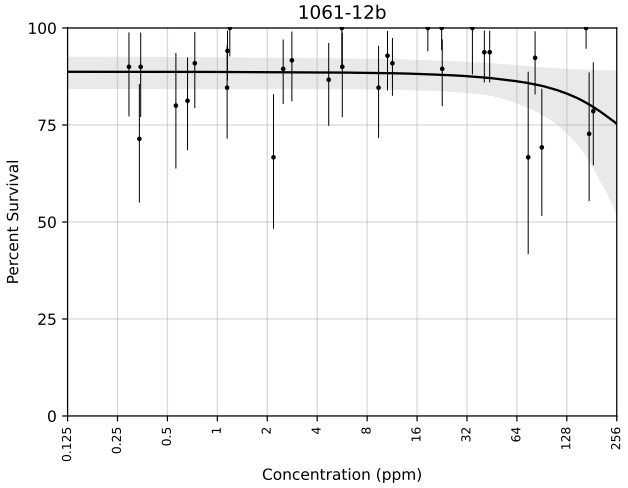
1036-3a LC_{50}: 117 ppm [56.3, 306]
1 biol. rep; 1 tech. rep; R^2: 0.56



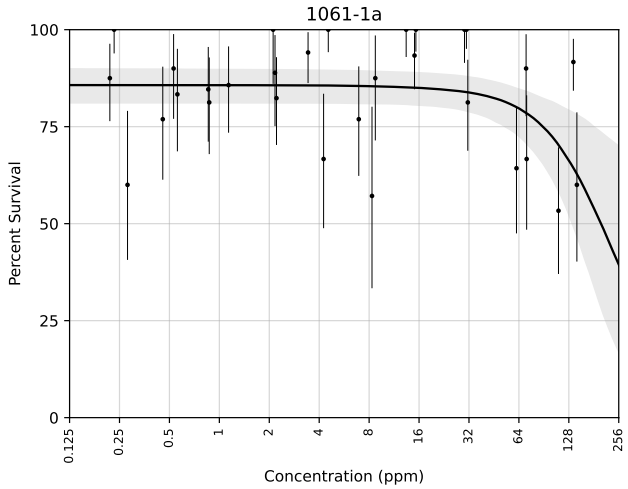
1061-11 LC_{50}: 198 ppm [32.2, 1.02e6]
1 biol. rep; 1 tech. rep; R^2: 0.321



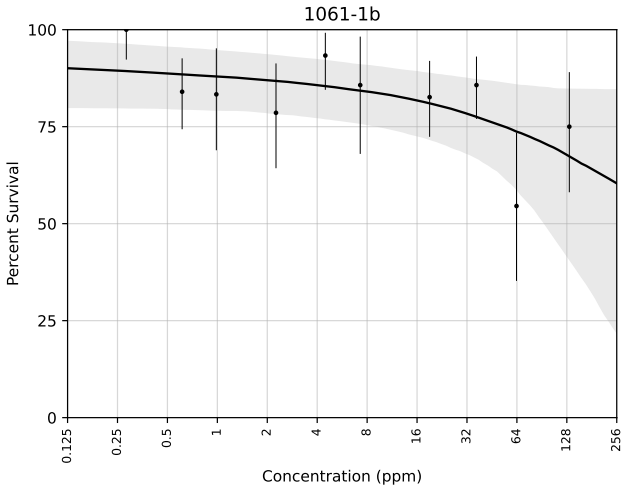
1061-12a LC_{50} cannot be estimated with the given data.
1 biol. rep; 1 tech. rep; R^2: 0.0231



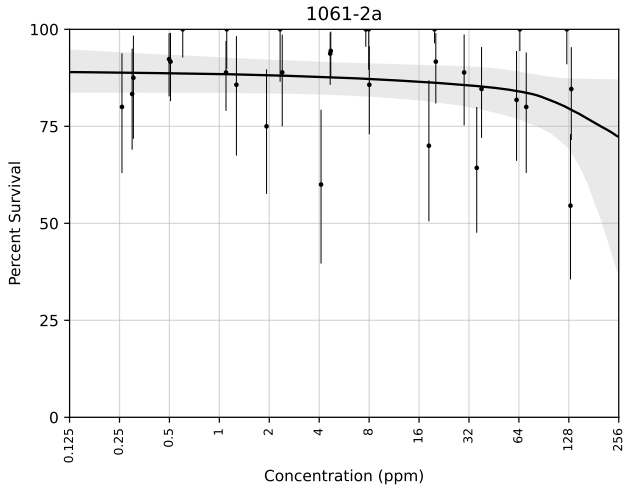
1061-12b LC_{50}: 963 ppm [270, 2.40e90]
3 biol. reps; 3 tech. reps; R^2: 0.0419



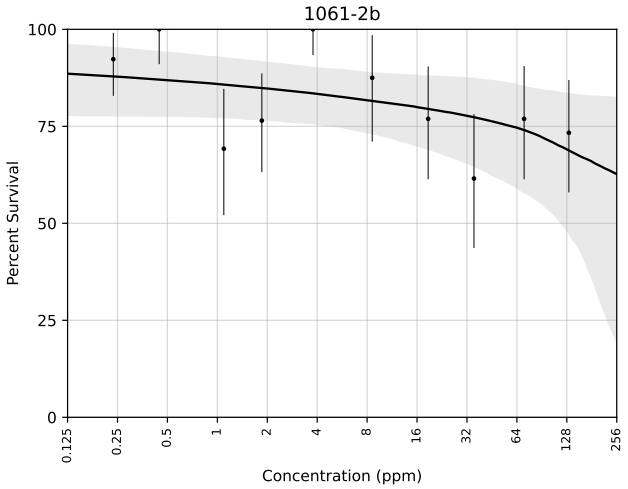
1061-1a LC_{50}: 236 ppm [135, 673]
3 biol. reps; 3 tech. reps; R^2: 0.153



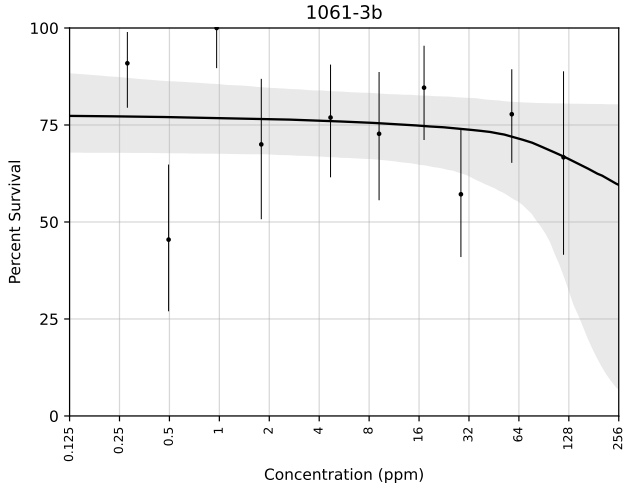
1061-1b LC_{50}: 833 ppm [21.4, 4.90e23]
1 biol. rep; 1 tech. rep; R^2: 0.413



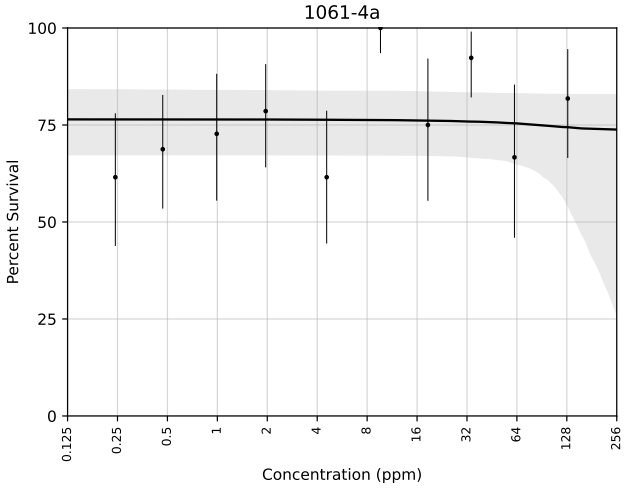
1061-2a LC_{50}: 2.06e3 ppm [21.6, 1.73e18]
3 biol. reps; 3 tech. reps; R^2: 0.0511



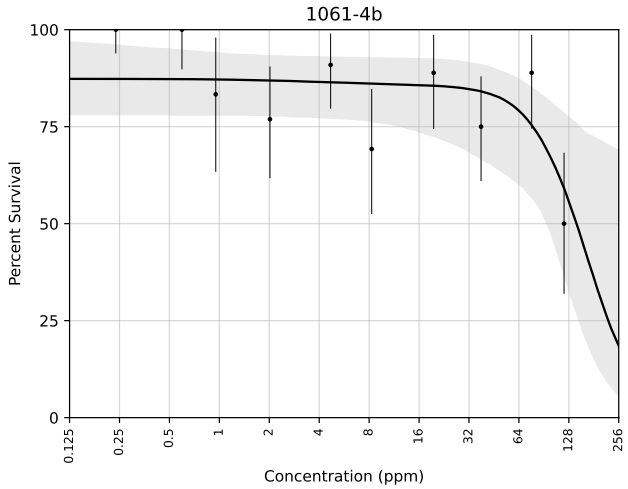
1061-2b LC_{50}: 1.51e3 ppm [18.2, 1.45e22]
1 biol. rep; 1 tech. rep; R^2: 0.248



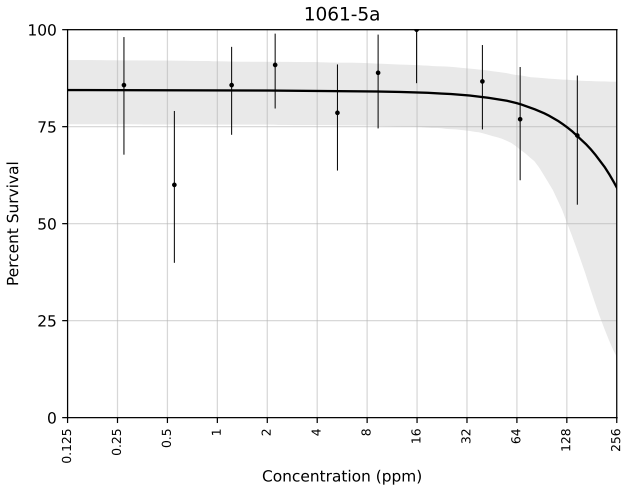
1061-3b LC_{50}: 2.60e4 ppm [0.0662, 6.65e92]
1 biol. rep; 1 tech. rep; R^2: 0.0347



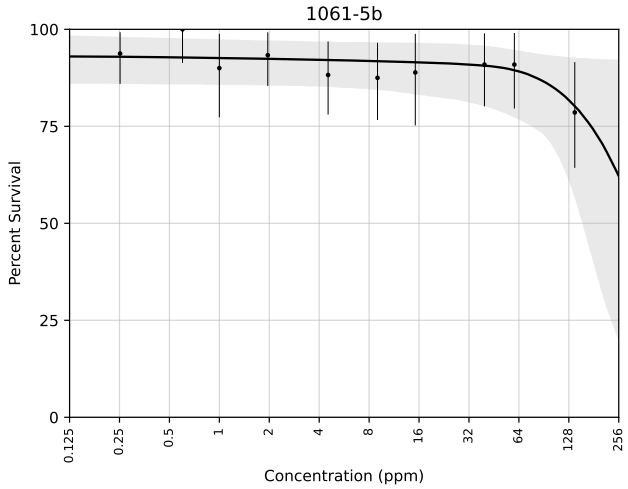
1061-4a LC_{50} cannot be estimated with the given data.
1 biol. rep; 1 tech. rep; R^2: -2.15e-2



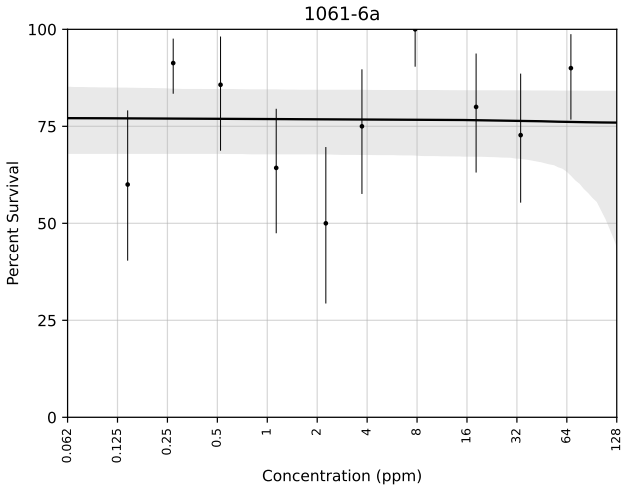
1061-4b LC_{50}: 160 ppm [75, 1.12e3]
1 biol. rep; 1 tech. rep; R^2: 0.537



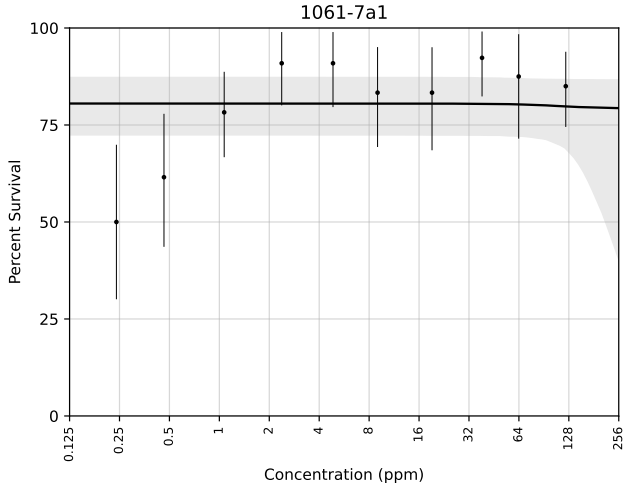
1061-5a LC_{50}: 450 ppm [114, 3.10e90]
1 biol. rep; 1 tech. rep; R^2: 0.106



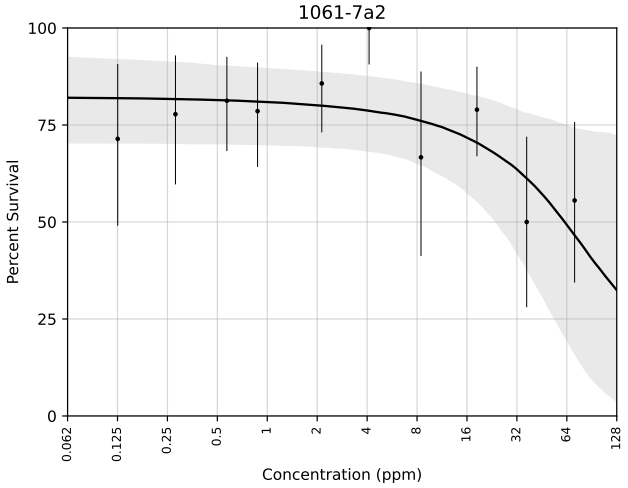
1061-5b LC_{50}: 440 ppm [79.3, 1.93e90]
1 biol. rep; 1 tech. rep; R^2: 0.597



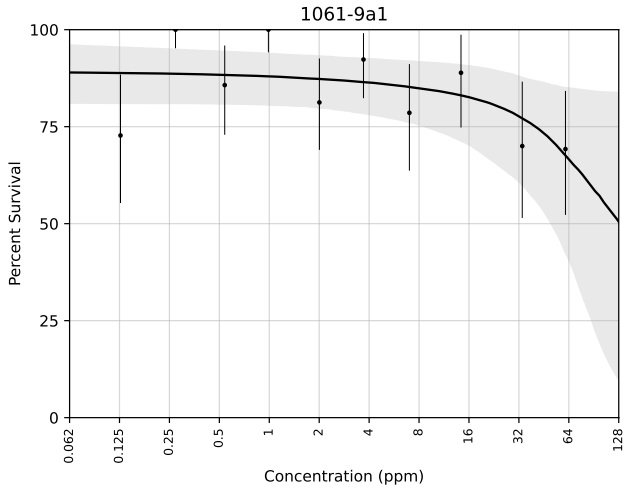
1061-6a LC_{50} cannot be estimated with the given data.
1 biol. rep; 1 tech. rep; R^2: -1.14e-2



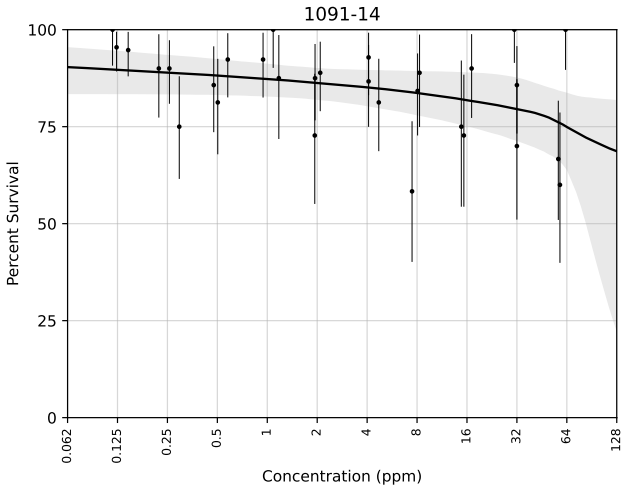
1061-7a1 LC_{50} cannot be estimated with the given data.
1 biol. rep; 1 tech. rep; R^2: -8.21e-3



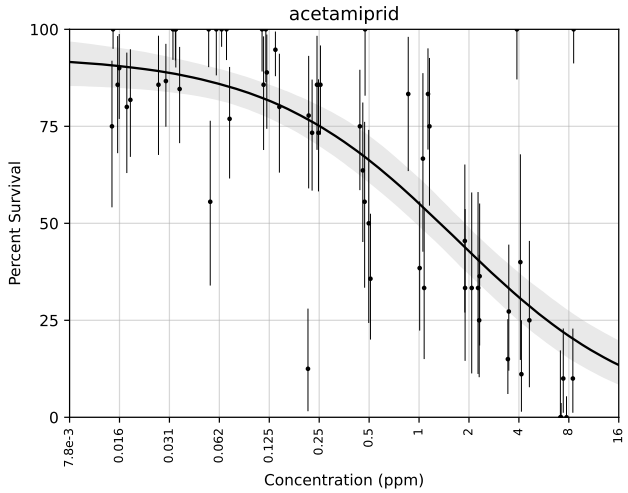
1061-7a2 LC_{50}: 88.6 ppm [20.3, 3.80e3]
1 biol. rep; 1 tech. rep; R^2: 0.482



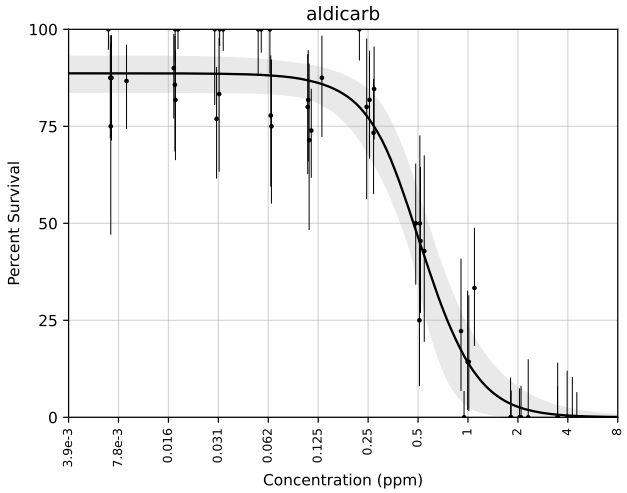
1061-9a1 LC_{50}: 163 ppm [31.4, 2.32e5]
1 biol. rep; 1 tech. rep; R^2: 0.361



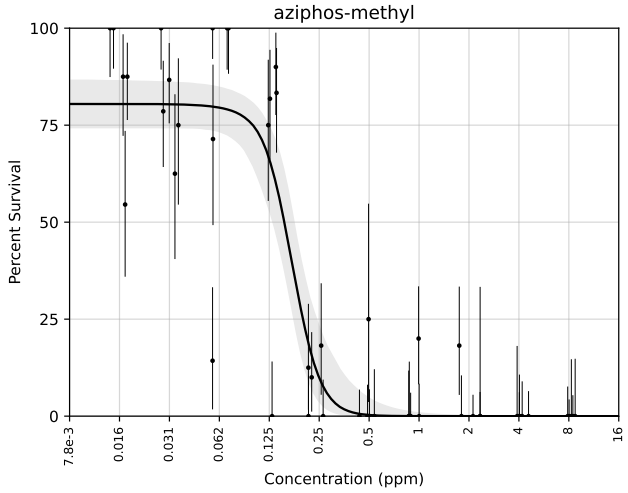
1091-14 LC_{50}: 2.26e3 ppm [21.7, 6.06e7]
3 biol. reps; 3 tech. reps; R^2: 0.156



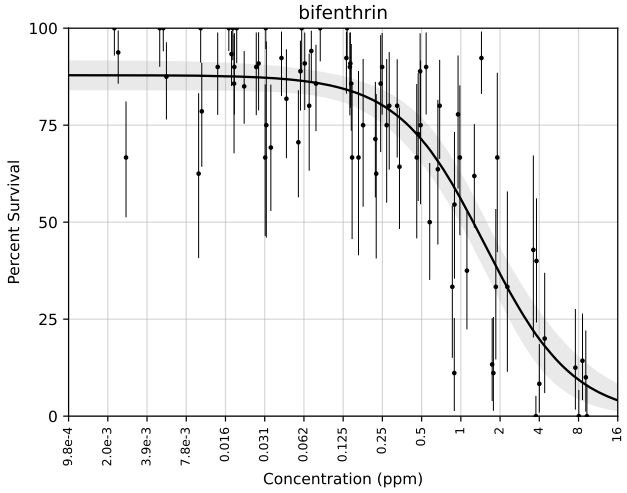
Acetamiprid LC_{50}: 1.61 ppm [1.04, 2.48]
5 biol. reps; 6 tech. reps; R^2: 0.564



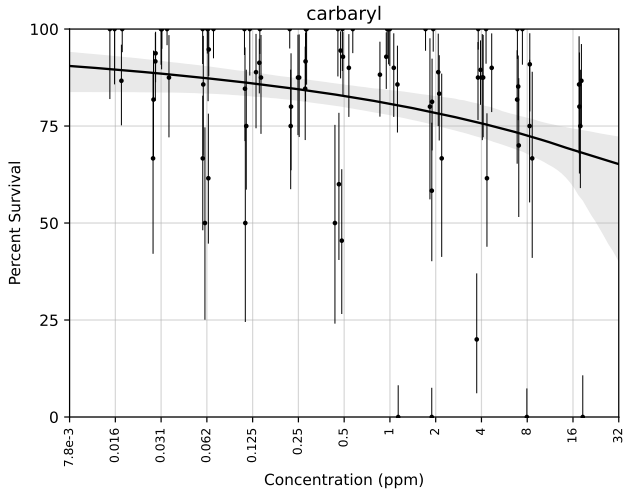
Aldicarb LC_{50}: 0.518 ppm [0.431, 0.636]
4 biol. reps; 5 tech. reps; R^2: 0.944



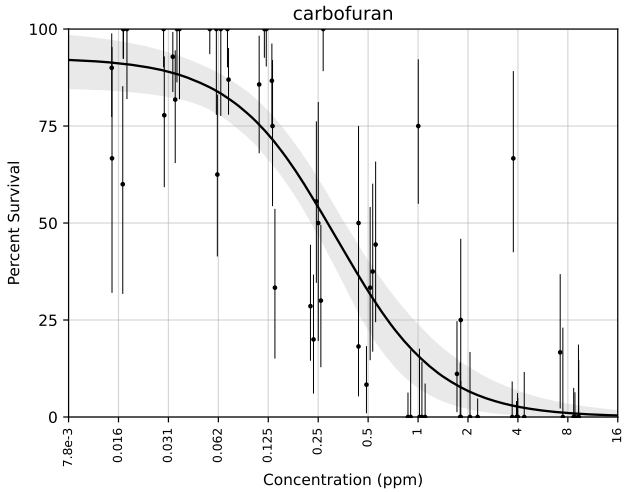
Aziphos-methyl LC_{50}: 0.17 ppm [0.148, 0.197]
4 biol. reps; 5 tech. reps; R^2: 0.815



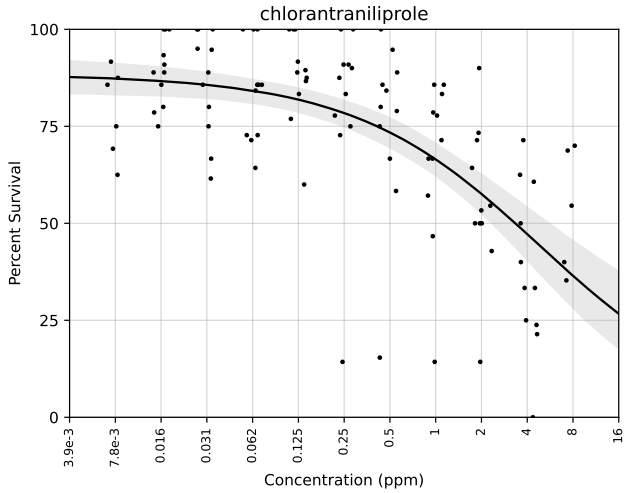
Bifenthrin LC_{50}: 1.54 ppm [1.21, 1.97]
7 biol. reps; 8 tech. reps; R^2: 0.764



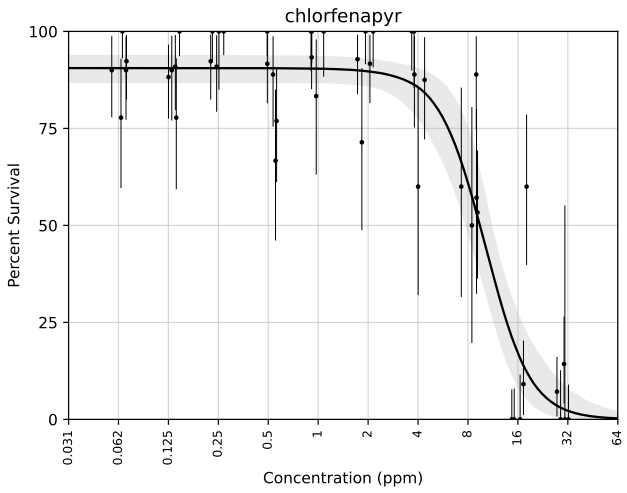
Carbaryl LC_{50}: 530 ppm [19.3, 1.51e4]
8 biol. reps; 9 tech. reps; R^2: 0.0774



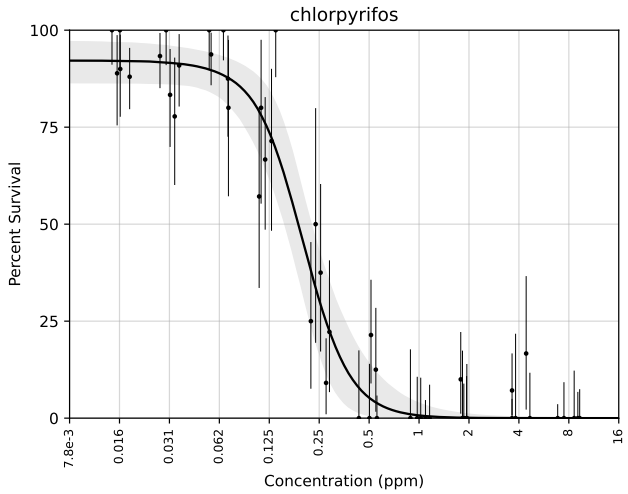
Carbofuran LC_{50}: 0.32 ppm [0.243, 0.415]
5 biol. reps; 6 tech. reps; R^2: 0.77



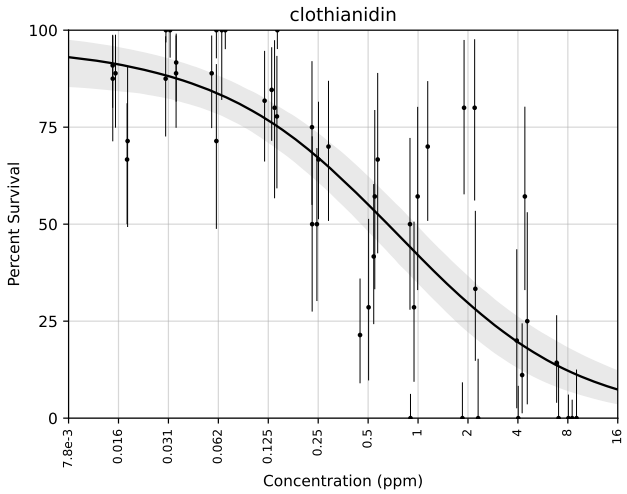
Chlorantraniliprole LC_{50}: 4.84 ppm [3.02, 8.25]
10 biol. reps; 11 tech. reps; R^2: 0.417



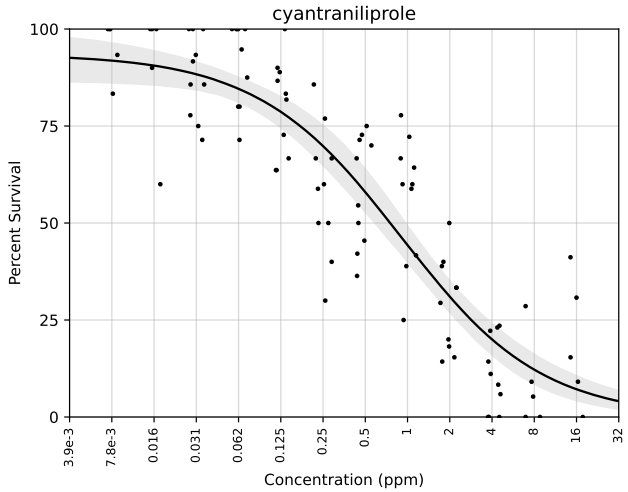
Chlorfenapyr LC_{50}: 10.1 ppm [8.47, 11.9]
4 biol. reps; 5 tech. reps; R^2: 0.874



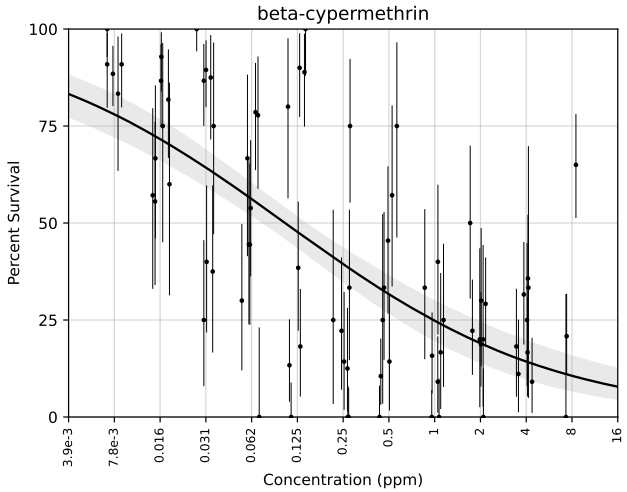
Chlorpyrifos LC_{50}: 0.198 ppm [0.163, 0.24]
4 biol. reps; 5 tech. reps; R^2: 0.956



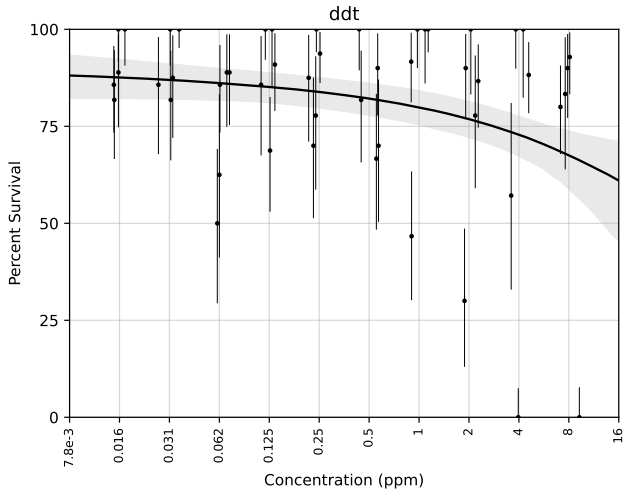
Clothianidin LC_{50}: 0.734 ppm [0.467, 1.21]
4 biol. reps; 5 tech. reps; R^2: 0.694



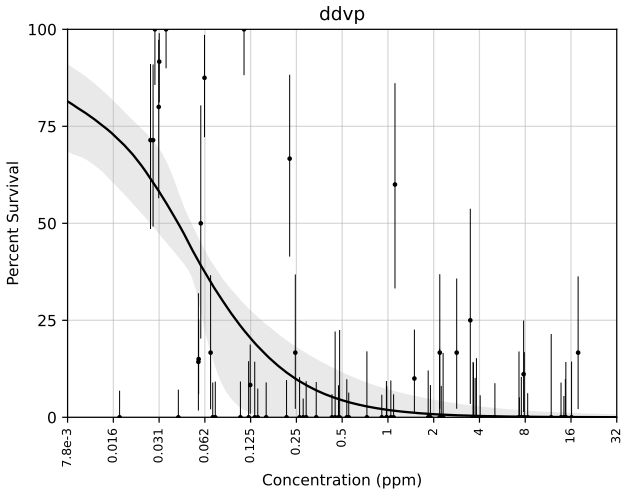
Cyantraniliprole LC_{50}: 0.882 ppm [0.606, 1.24]
9 biol. reps; 10 tech. reps; R^2: 0.801



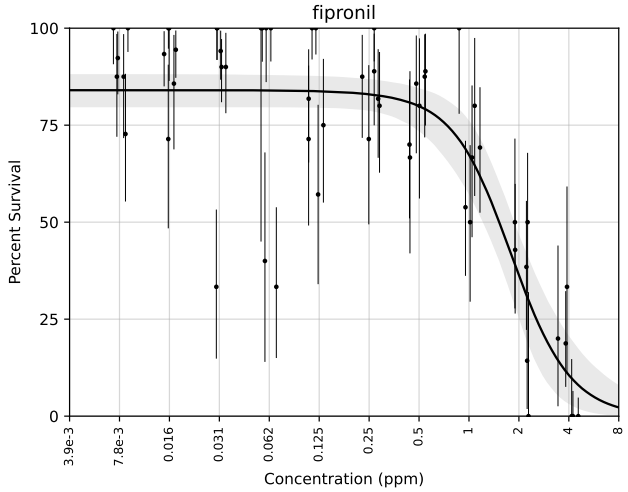
β-Cypermethrin LC_{50}: 0.104 ppm [0.0744, 0.143]
7 biol. reps; 8 tech. reps; R^2: 0.44



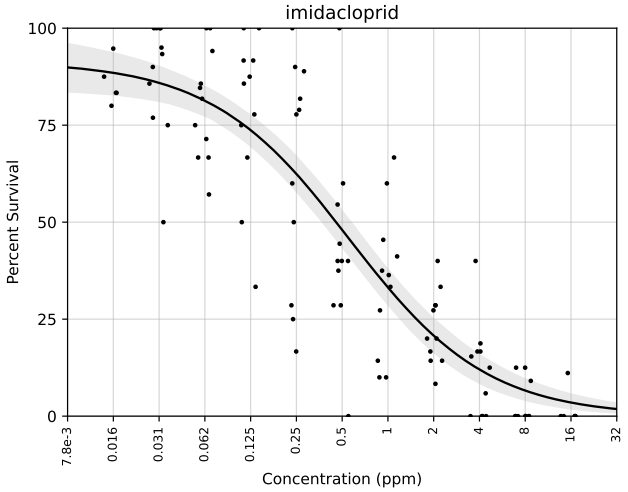
DDT LC_{50}: 70.3 ppm [11.7, 2.16e3]
4 biol. reps; 5 tech. reps; R^2: 0.0817



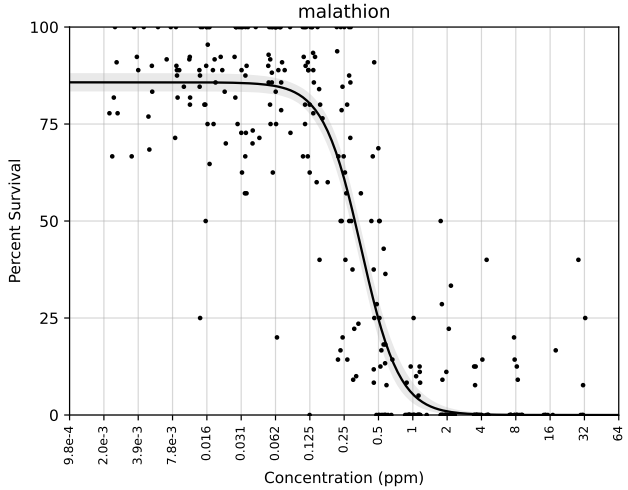
DDVP LC_{50}: 0.0456 ppm [0.0289, 0.0692]
6 biol. reps; 7 tech. reps; R^2: 0.395



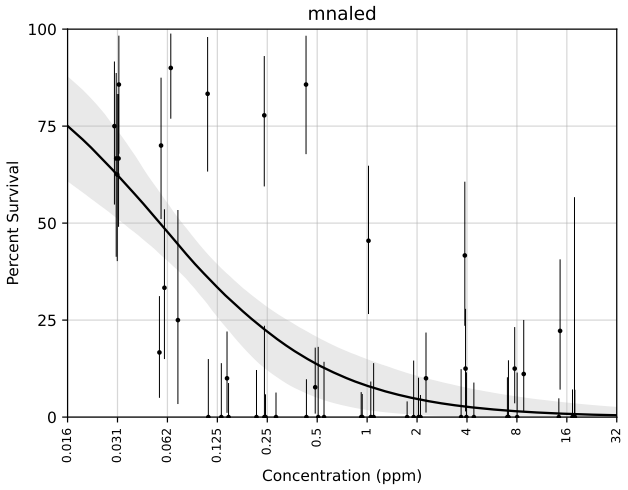
Fipronil LC_{50}: 1.78 ppm [1.46, 2.22]
5 biol. reps; 6 tech. reps; R^2: 0.677



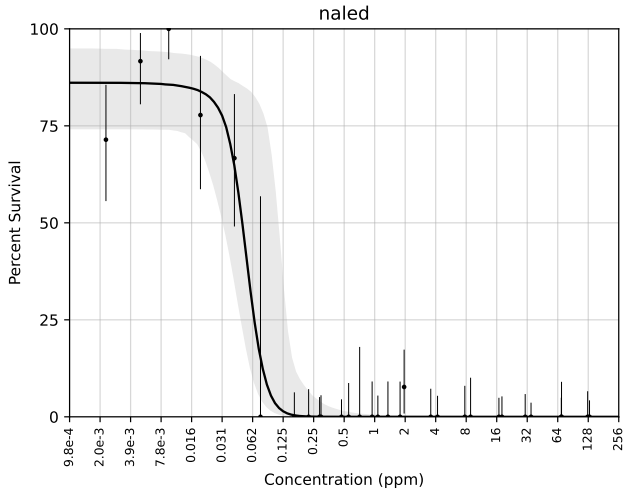
Imidacloprid LC_{50}: 0.554 ppm [0.403, 0.774]
9 biol. reps; 11 tech. reps; R^2: 0.776



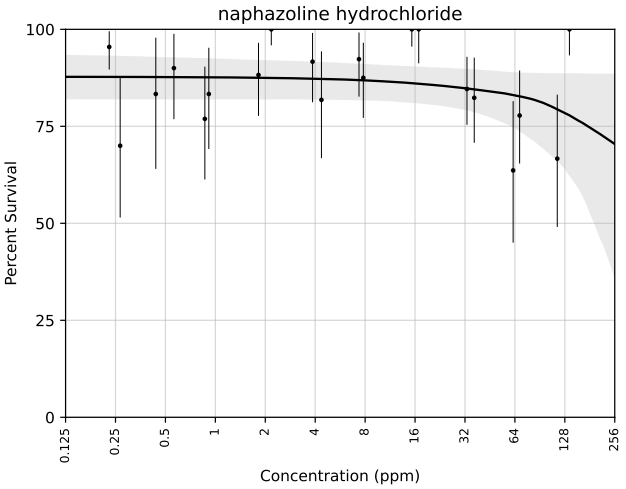
Malathion LC_{50}: 0.353 ppm [0.328, 0.382]
16 biol. reps; 31 tech. reps; R^2: 0.824



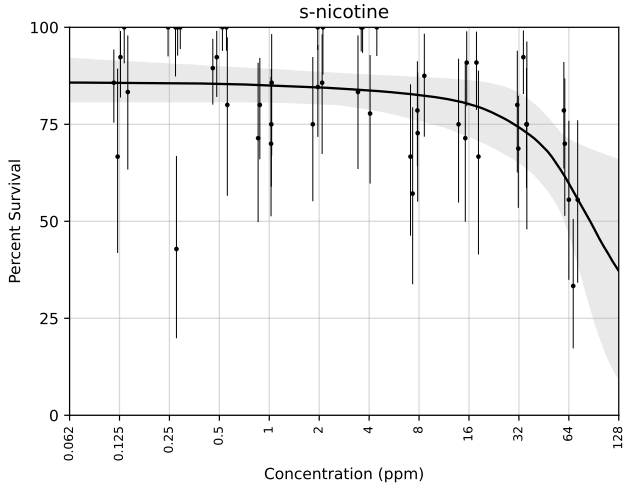
Mnaled LC_{50}: 0.0563 ppm [0.0355, 0.0785]
4 biol. reps; 5 tech. reps; R^2: 0.43



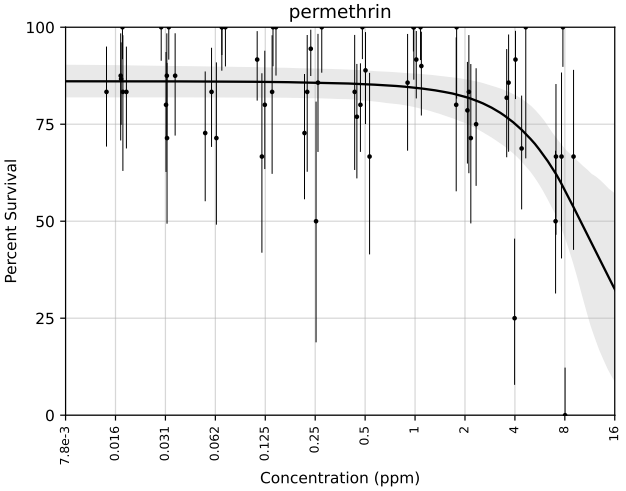
Naled LC_{50}: 0.0534 ppm [0.0369, 0.12]
3 biol. reps; 3 tech. reps; R^2: 0.976



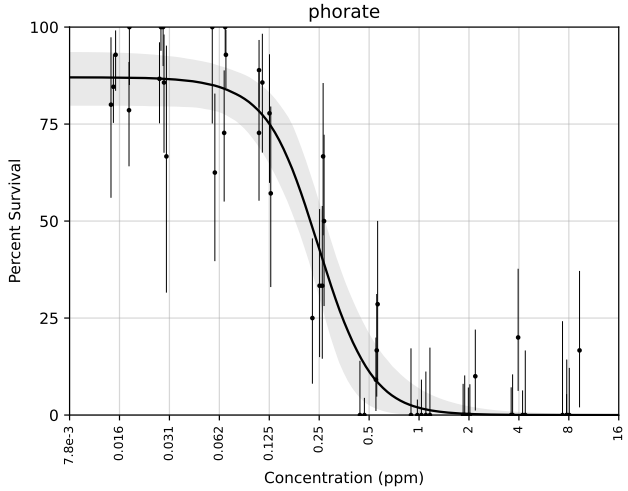
Naphazoline hydrochloride LC_{50}: 1.38e3 ppm [109, 3.26e90]
2 biol. reps; 2 tech. reps; R^2: 0.0553



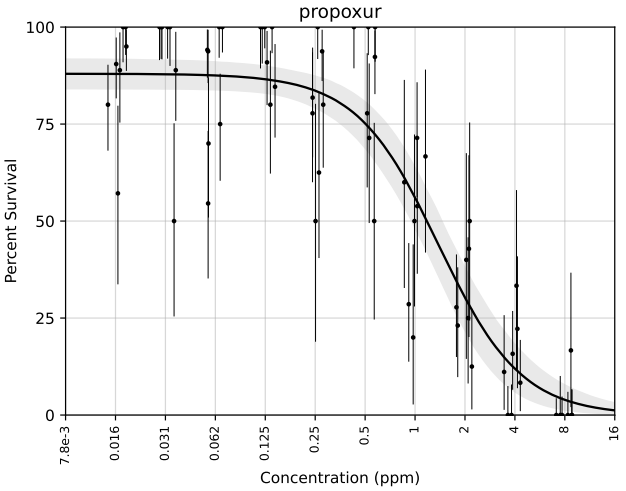
***S*-nicotine** LC_{50}: 108 ppm [55.2, 962]
4 biol. reps; 5 tech. reps; R^2: 0.271



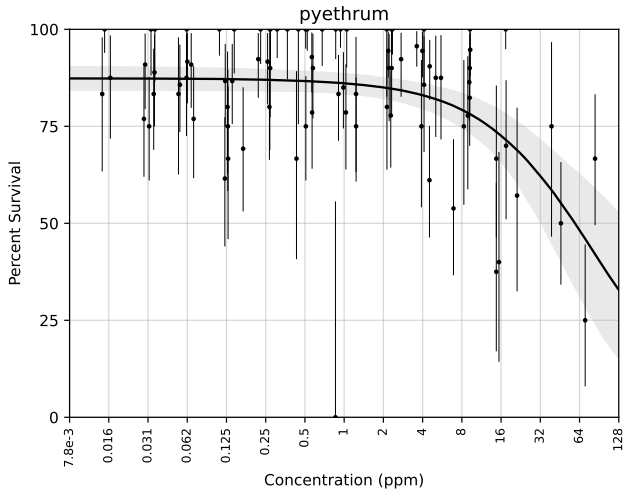
Permethrin LC_{50}: 12 ppm [7.81, 27.6]
5 biol. reps; 6 tech. reps; R^2: 0.223



Phorate LC_{50}: 0.247 ppm [0.2, 0.304]
4 biol. reps; 5 tech. reps; R^2: 0.93



Propoxur LC_{50}: 1.38 ppm [1.11, 1.74]
6 biol. reps; 7 tech. reps; R^2: 0.824



Pyethrum LC_{50}: 78.4 ppm [36.4, 198]
8 biol. reps; 9 tech. reps; R^2: 0.227

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.