**Table S4.** The effects of ENSO, shields, their interactions with mortality, and the environmental covariate that best explained larval mortality by different predatory agents in the shield removal experiment.

Co-variate Shield Interaction

Agent Co-variate X2 P X2 P X2 P AIC

ants **ENSO** 2.6 0.040 1.4 \*\* 6.5 \*\*\* 849

ants sunlight Q2 13.8 \*\*\* 5.5 \*\*\* n.s. 825

ants Ta Q2 19.2 \*\*\* 4.3 0.037 31.0 \*\*\* 839

ants Ta Q1 8.1 \*\* 4.2 0.041 25.3 \*\*\* 855

ants rainfall Q1 0.0 0.86 3.9 0.049 5.6 0.018 880

wasps **ENSO** 4.4 \*\*\* 18.4 \*\*\* 8.0 \*\*\* 484

wasps sunlight Q2 10.5 \*\*\* 23.6 \*\*\* 2.5 \* 471

wasps Ta Q2 16.9 \*\*\* 74.3 \*\*\* 28.7 \*\*\* 475

wasps Ta Q1 19.6 \*\*\* 79.6 \*\*\* 32.5 \*\*\* 476

wasps rainfall Q2 31.7 \*\*\* 96.4 \*\*\* 13.4 \*\* 489

bugs **ENSO** 0.1 0.78 2.6 \*\* 1.3 0.048 467

bugs rainfall Q2 0.7 0.20 2.7 0.010 2.7 \* 458

bugs sunlight Q2# 0.3 0.57 7.8 \* 11.4 \*\* 460

bugs sunlight Q1 3.9 0.049 8.0 \*\* 2.1 0.146 465

parasitoids **ENSO** 5.7 \*\*\* 39.6 \*\*\* 7.8 \*\*\* 155

parasitoids Ta Q2 8.9 \*\*\* 38.2 \*\*\* 7.5 \*\*\* 150

parasitoids rainfall Q2 10.1 \*\* 162.4 \*\*\* 23.9 \*\*\* 162

#environmental covariate yielding a model within 2 AIC of model with lowest AIC

\*P<0.01; \*\*P<0.001 \*\*\*P<0.0001; Covariate abbreviations: ENSO=El Niño Southern Ocean Oscillation; Ta=ambient temperature; Q2=second quarter (April-June)