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Climatic displacement exacerbates the negative impact of drought on plant performance and associated arthropod abundance

*Ecology*

**Appendix S3**: Additional details on statistical models

**Table S1.** Statistical results for *A. californica* biomass, percent survival, leaf area, and associated arthropod density and abundance. Bold indicates *P* < 0.05.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Dependent Variable | Statistical model |  | Age | | Garden | | Source Precipitation | | Annual Precipitation | | Source Precip. \* Annual Precip. | |
|  | test statistic (TS) | TS value | ß | TS value | ß | TS value | ß | TS value | ß | TS value | ß |
| ln(biomass) | linear mixed effects |  | **63.8** | **0.072** | -- | -- | **6.5** | **-0.0114** | **13.6** | **0.0182** | **8.5** | **-** **0.0003** |
| plant survival | linear regression | *F* | **44.5** | **-0.052** | 0.05 | -0.009 | **30.7** | **-0.0083** | **3.9** | **-0.0068** | **10.9** | **0.0002** |
| plant mortality | generalized linear mixed effects (link = binomial) |  | **132.1** | **1.003** | **10.1** | **-0.913** | **35.9** | **0.094** | **7.2** | **0.092** | **14.1** | **-0.003** |
| plant mortality | Cox proportional hazards | *z* | **--** | **--** | **-4.260** | **-1.125** | **5.236** | **0.060** | -0.74 | -0.028 | **-2.3** | **-0.0017** |
| ln(arthropod density) | linear mixed effects |  | **110.8** | **-0.155** | -- | -- | **5.6** | **0.008** | **14.62** | **0.032** | 1.4 | -0.0002 |
| ln(arthropod abundance) | linear mixed effects |  | **90.1** | **-0.142** | -- | -- | 3.6\* | -0.008\* | **30.4** | **0.046** | 0.8 | -0.0002 |

\*Marginally significant (*P* = 0.059)