

Trait-dependent plasticity erodes rapidly with repeated intergenerational acclimation in an invasive agricultural pest

Electronic Supplementary material

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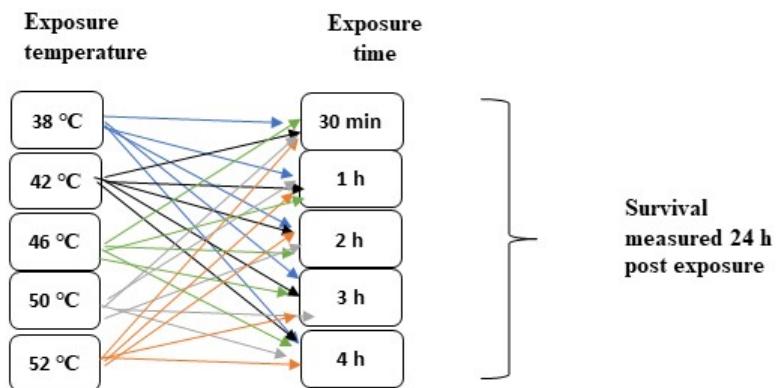


Figure S1. Exposure temperature \times time combinations assayed to determine survival of *P. truncatus* under high temperatures.

Table S1: A summary of correlations between adult weight (mg) of *P. truncatus* and CT_{min}, CT_{max} and HKDT ($n = 30$).

| Variables | r | r ² | p-value |
|--|----------------|-----------------|--------------|
| Adult weight (mg) vs CT _{max} (0.25 °C/min) | -0.0051 | 0.000026 | 0.950 |
| Adult weight (mg) vs CT _{max} (0.5 °C/min) | -0.0084 | 0.000071 | 0.918 |
| Adult weight (mg) vs CT _{min} (0.25 °C/min) | 0.0914 | 0.008353 | 0.266 |
| Adult weight (mg) vs CT _{min} (0.5 °C/min) | -0.1321 | 0.017459 | 0.107 |
| Adult weight (mg) vs HKDT (50 °C) | 0.0777 | 0.006039 | 0.345 |

Table S2: Survival of *P. truncatus* across different exposure temperature \times time combinations

| Effect | Degrees of freedom | | | F | P |
|---------------------------|--------------------|-----|-----------|-----------|------|
| | SS | MS | F | | |
| Intercept | 76183, 71 | 1 | 76183, 71 | 363, 5022 | 0.00 |
| Exposure temperature (°C) | 80482, 02 | 4 | 20120, 51 | 96, 0028 | 0.00 |
| Exposure time | 49307, 12 | 4 | 12326, 78 | 58, 8159 | 0.00 |
| Exposure temperature (°C) | 56496, 51 | 16 | 3531, 03 | 16, 8479 | 0.00 |
| *Exposure time | 20958, 25 | 100 | 209, 58 | | |
| Error | | | | | |