



Digital supplementary material to

YELA, N.I., CALCATERRA, L.A. & ARANDA-RICKERT, A. 2020: Coping with temperature extremes: thermal tolerance and behavioral plasticity in desert leaf-cutting ants (Hymenoptera: Formicidae) across an altitudinal gradient. – Myrmecological News 30: 139-150.

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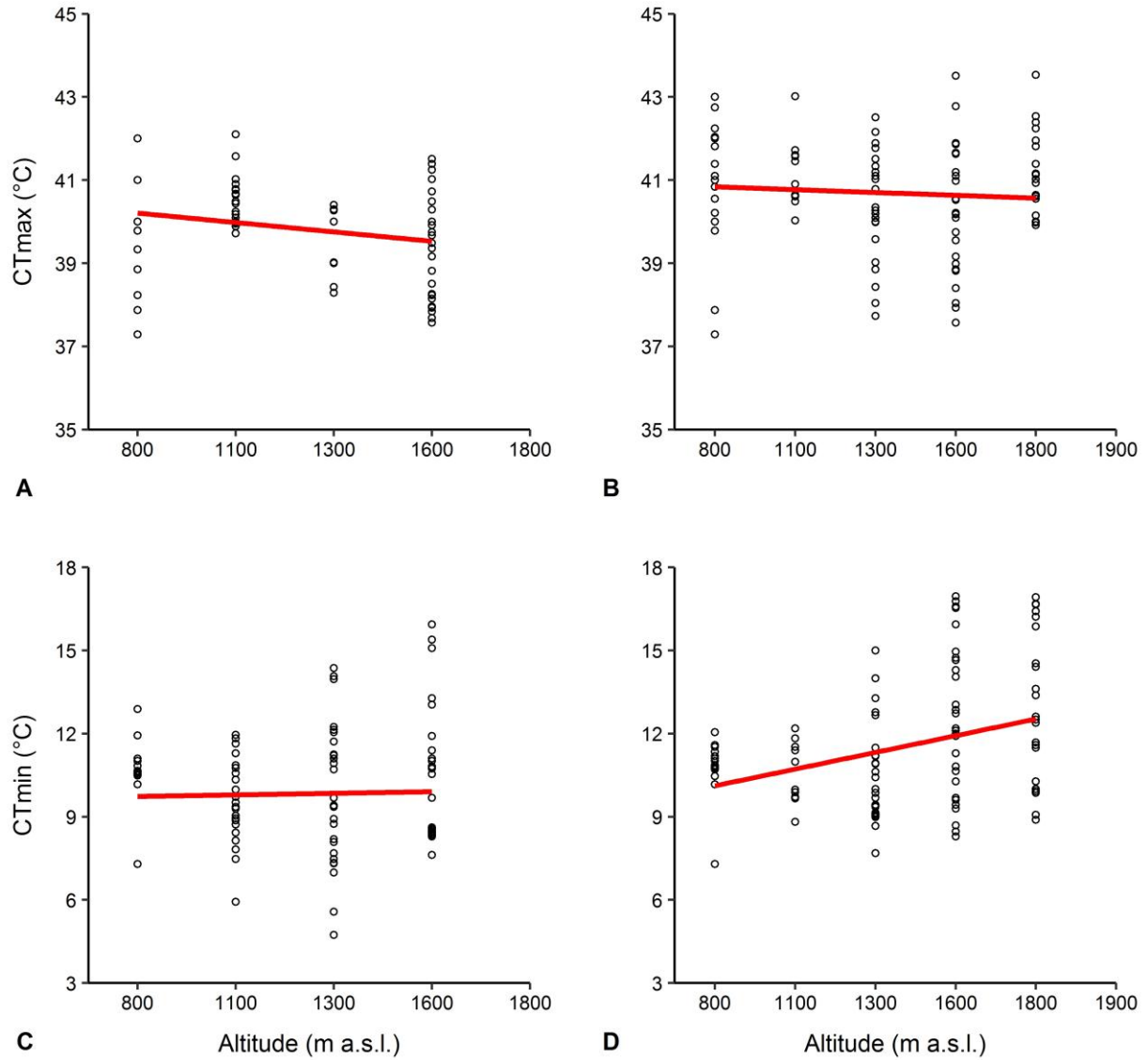


Figure S1. Critical thermal tolerance maximum and minimum by elevation for *Acromyrmex lobicornis* and *A. striatus*. Each point (open circle) is the critical temperature measured for a single individual ant, for a total of 30 individuals of each species for each elevation. (A) CT_{max} of *A. lobicornis*. (B) CT_{max} of *A. striatus* (C) CT_{min} of *A. lobicornis*. (D) CT_{min} of *A. striatus*.

Supplementary Material Table 1. Parameter estimates of the best fitting Generalized Linear Models analyzing the influence of ant size and elevation on the critical thermal maximum (A) and the critical thermal minimum (B) of each LCA species. Successful models were selected through comparisons of AICc values. Significant effects are highlighted bold.

A) CT_{max}				
Predictive variables	Estimate	SE	z	p
<i>Acromyrmex lobicornis</i>				
Elevation	-0.0006	0.0005	-1.127	0.276
<i>Acromyrmex striatus</i>				
Elevation	-0.0001	0.0003	-0.487	0.632
B) CT_{min}				
Predictive variable	Estimate	SE	z	p
<i>Acromyrmex lobicornis</i>				
Ant size	-0.094	0.366	-0.257	0.801
<i>Acromyrmex striatus</i>				
Elevation	0.002	0.0007	3.418	<0.01
Ant size	0.688	0.507	1.357	0.190



Figure S2. Nest structure and fungus chamber of the two LCAs species. A) *Acromyrmex lobicornis* nest with mound located beneath a shrub; B) *A. striatus* nest located on bare soil; C) Fungus chamber of *A. lobicornis*; and D, E) Fungus chambers of *A. striatus*. Approximate scale bars: (A, B and C) 20 cm; (D) 10 cm; (E) 1 cm. Arrows show nest entrances (A, B), fungus chambers (D) and fungus inside the chamber (C, E).