

## Supplemental Figure Legends

1) Gene trees of reduced data set for all loci. Asterisk at nodes represents ML bootstrap support value  $\geq 70$ . Samples belonging to Frazier (F) and Sierra (S) highlighted.

2) Species delimitations for each region estimated with validation approaches. a,c,e) Results from spedeSTEM, represented on species trees estimated with STEM. Scale bar represents  $4N_e$  generations. b,d,f) Results from BPP, represented on species tree estimated with \*BEAST. Numerical values above nodes represent *pp* values; asterisks below nodes denote presence of split in BPP analyses. Scale bar represents substitutions per site.

3) Results from species tree-based discovery approach implemented in BPP, represented on species tree estimated with \*BEAST. Numerical values above nodes represent *pp* values; scale bar represents substitutions per site. Bars to right of tree indicate lineages recovered from BPP analysis for round 1 (tree divided into three BPP runs) and round 2 (all samples combined). Diagonal bars at root of tree indicate where tree was subdivided for round 1 analysis.

4) Results from bGMYC analysis on reduced COI dataset. a) COI gene tree. Nodal support corresponds to *pp* values from BEAST analysis, with an asterisk signifying  $> 0.95$  value. Terminal numbers correspond to sample site. Colors next to numbers correspond with *pp* for recovered coalescent unit. b) Histogram represents recovered species distribution in bGMYC, reflecting range of uncertainty in coalescent unit estimates.

**5)** *A. roxxiae* - male holotype, Mt Pinos Road (MY4040). A- carapace; B – leg I (retrolateral view); C – Palp (retrolateral view); D – sternum. All scale bars = 1 mm.

**6)** *A. roxxiae* - female paratype from Cuddy Valley Road (MY1742). A- carapace; B – sternum; C – leg I (retrolateral view); D – leg IV (retrolateral view); All scale bars = 1 mm.

**7)** Palpal bulbs, ventral view. A - *A. roxxiae* - male holotype, Mt Pinos Road (MY4040); B - *A. starretti* - male holotype, Poso Flat Road (MY4061); C – *A. thompsoni*, CA: Kern Co., Tehachapi Mtn County Park (MY4353). All scale bars = 0.5 mm.

**8)** Spermathecal variation. *A. roxxiae*: A - Antelope Canyon (MY4333); B - female paratype, Cuddy Valley Road (MY1742); C - Mt Pinos Road (MY4038); D - east of Frazier Park (MY472); *A. starretti*: E - Cook Peak Lookout Road (MY4096); F - east of Glenville (MY486); G - near Lake Isabella dam (MY479); H - Poso Flat Road (MY1747). All scale bars = 0.5 mm.

**9)** *A. starretti* - male holotype, Poso Flat Road (MY4061). A- carapace; B – leg I (retrolateral view); C – Palp (retrolateral view); D – sternum. All scale bars = 1 mm.

**10)** *A. starretti* - female paratype from east of Glenville (MY485). A- carapace; B – sternum; C – leg I (retrolateral view); D – right leg IV (retrolateral view). All scale bars = 1 mm.