**Supp. file 3.** Supplementary figures.   
https://doi.org/10.5852/ejt.2021.754.1393.4427

Text, letter

Description automatically generated

**Fig. S1.** A rooted neighbor-joining tree of *Brachymelecta* COI sequences >300 bp in length (with *Melecta thoracica* Cresson, 1875 selected as the outgroup), generated in Geneious and based on the Tamura-Nei genetic distance model. For each sample, the length of the barcode sequence is given, with the number of ambiguous bases appearing in square brackets. Scale bar = 5% pairwise distance.

A insect on the ground

Description automatically generated

**Fig. S2.** Mesosoma, dorsal view, of female *Zacosmia maculata* (Cresson, 1879) (PCYU).

A insect on a branch

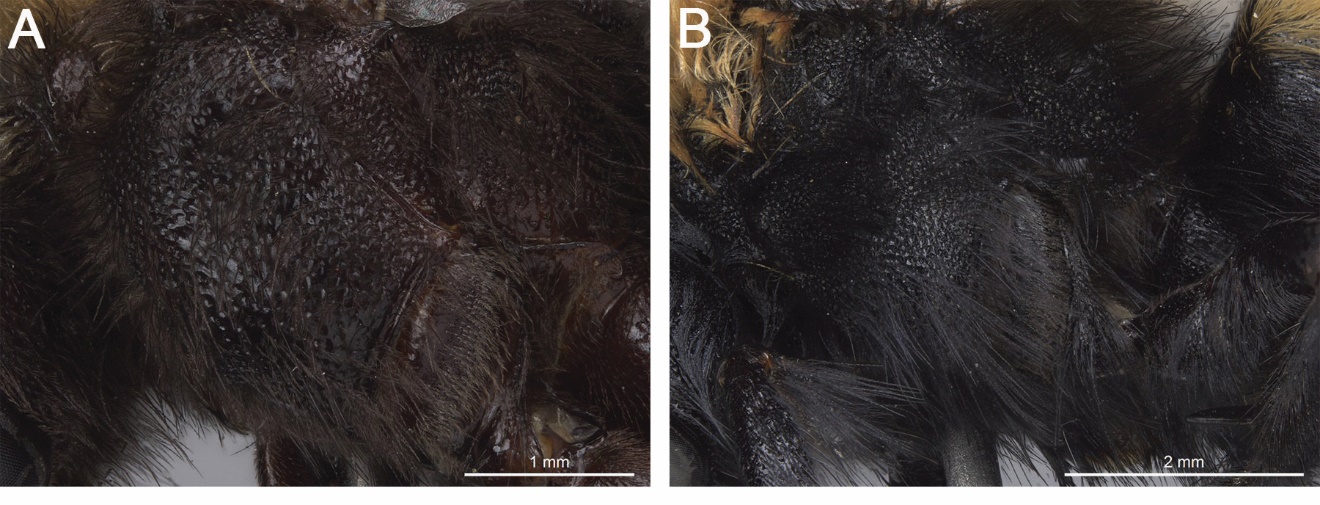
Description automatically generated

**Fig. S3.** Female *Melecta thoracica* Cresson, 1875 (BOLD sample ID: LRBBC986; PCYU LRB09-2548), habitus, dorsal view.

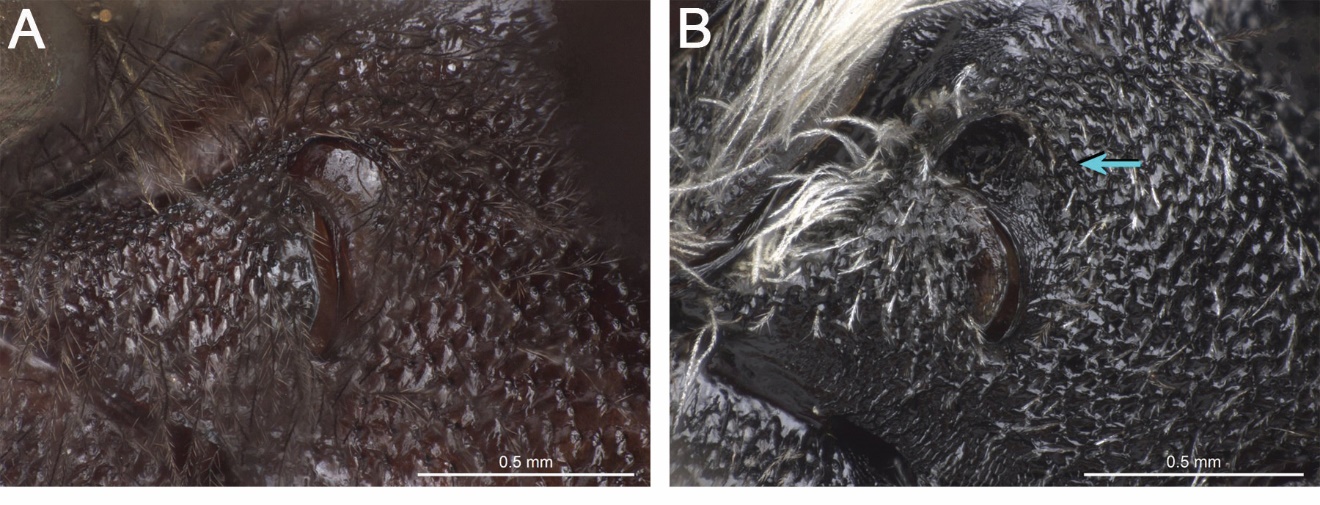
A close up

Description automatically generated

**Fig. S4.** Metanotum of male, posterior view. **A**. *Brachymelecta alayoi* (Michener, 1988) (USNM). **B**. *B. tibialis* (Fabricius, 1793) (UPRM).



**Fig. S5.** Mesopleuron of female, lateral view. **A**. *Brachymelecta larreae* (Cockerell, 1900) (CAS). **B**. *Melecta thoracica* Cresson, 1875 (BOLD sample ID: LRBBC986; PCYU LRB09-2548).



**Fig. S6.** Propodeal spiracle of female, lateral view. **A**. *Brachymelecta larreae* (Cockerell, 1900) (CAS). **B**. *B. tibialis* (Fabricius, 1793) (UPRM) (blue arrow indicates rugose crescent ridge extending from anterior lip of spiracle).

A bird flying in the sky

Description automatically generated

**Fig. S7.** Metadistitarsus, dorsal view, of female *Zacosmia maculata* (Cresson, 1879) (PCYU).