



New synonymies in the bee genus *Nomada* from North America (Hymenoptera: Apidae)

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Abstract

We provide diagnostic morphological characters to help distinguish males and females of the following species of *Nomada*: *N. augustiana* Mitchell, *N. bethunei* Cockerell, *N. fervida* Smith, *N. fragariae* Mitchell, *N. lehighensis* Cockerell, *N. texana* Cresson, and *N. tiftonensis* Cockerell. Based on morphological and DNA barcoding evidence we newly synonymize the following species: *N. heligbrodtii* Cresson (under *N. texana*), *N. indusata* Mitchell (under *N. augustiana*), *N. kingstonensis* Mitchell (under *N. lehighensis*), *N. pseudops* Cockerell (under *N. bethunei*), and *N. wisconsinensis* Graenicher (under *N. fervida*). We provide full descriptions of the female of *N. fragariae* and the male of *N. lehighensis*, both of which were not previously known, and newly designate the lectotype of *N. wisconsinensis*. We additionally provide comments on the distribution, flight times, and host associations for the treated species.

Key words: Nomadinae, Nomadini, DNA barcoding, taxonomy