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Key to the species of *Augochloropsis* Cockerell (Halictidae: Augochlorini) from Panama and Costa Rica

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**Abstract.** Provisional keys to 10 species of the sweat bee genus *Augochloropsis* Cockerell from Costa Rica and Panama are provided. A set of habitus pictures for all species is also given.

**BACKGROUND.** The purpose of this contribution is to provide a provisional key to the species of the sweat bee genus *Augochloropsis* Cockerell occurring in Costa Rica and Panama. This genus comprises approximately 150 species distributed throughout much of the Western Hemisphere, from Canada to Argentina (Michener, 2007). To date, 11 species have been recorded from Costa Rica and Panama (Ascher & Pickering, 2026), of which at least 6 are known from Costa Rica (Sánchez-Ocampo & Gomez-Moreno, 2024). We developed this key by examining specimens deposited in the Snow Entomological Collection at the University of Kansas, Lawrence, Kansas, as well as at the USDA-ARS Pollinating Insects Research Unit, Utah State University, Logan, Utah. Some of the diagnostic features used in the key were previously recognized by Michener (1954) in his treatment of the Panamanian species.

**TAXONOMIC SCOPE.** Species

TAXONOMIC CONCEPT. We followed Portman *et al.* (2022) in recognizing *A. fulvofimbriata* Friese and *A. metallica* Friese as separate species.

GEOGRAPHIC SCOPE. Costa Rica and Panama.

INTENDED USERS. Specialists, students, and collection staff.

KNOWN EXCLUDED TAXA. Two species, *A. cyanescens* (Friese) and *A. johanna*e (Friese), recorded from Costa Rica (Moure & Melo, 2022), are not included in the key because specimens were unavailable for study.

KNOWN LIMITATIONS. In addition to the two species excluded from the key, we only had access to males of *A. pallitarsis*; therefore, the characters provided in the key may not apply to females of this species. We are also aware of several specimens that do not match any of the species included in the key, which may represent other named or undescribed species.

AUTHOR CONTRIBUTIONS. All authors examined specimens, prepared the draft key, and edited the manuscript.

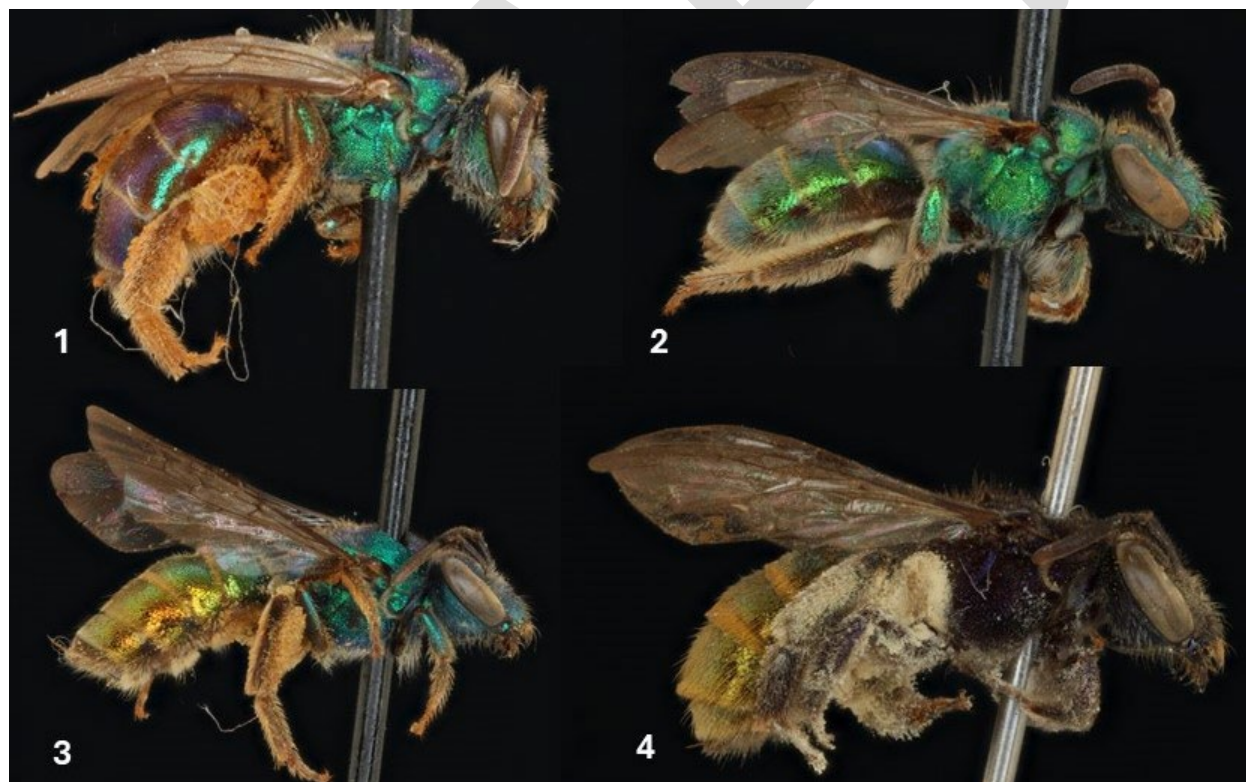
### PROVISIONAL KEY

key to the species of *Augochloropsis* Cockerell (Halictidae: Augochlorini) from Panama and Costa Rica

1. Base of propodeum pitted or strongly striate basally (Subgenus *Augochloropsis*) .....2
- Base of propodeum smooth or irregularly roughened, not pitted or strongly striate basally (Subgenus *Paraugochloropsis*) .....5
- 2(1). Metasoma green, concolour with head and mesosoma or metasoma dark brown with weak green to bluish metallic highlights ..... 3
- Metasoma red or gold, not concolour with head and mesosoma ..... 4
- 3(2). Hypostomal carinae almost uniformly low, not elevated anteriorly; metasoma largely dark brown with weak green to bluish metallic highlights, somewhat contrasting with metallic green head and mesosoma ..... *A. fairchildi* Michener, 1954
- Hypostomal carinae elevated anteriorly; metasoma metallic green, as distinct as on head and mesosoma ..... *A. anquisita* (Cockerell, 1913)
- 4(2). Metasoma red, head and thorax (including outer surfaces of legs) metallic green .....  
..... *A. ignita* (Smith, 1861)
- Metasoma reddish or greenish gold, head and thorax black with purple highlights .....  
..... *A. auriventris* (Friese, 1921)
- 5(1). Head and mesosoma black with weak green, blue or purple highlights .....6
- Head and mesosoma green or greenish blue ..... 7
- 6(5). Metasoma black, concolorous with head and mesosoma; terga with integument dulled among punctures; forewing dusky along anterior margin .....  
.....*A. fuscocyanea* (Michener, 1954)

- . Metasoma reddish to greenish gold, not concolorous with head and mesosoma; terga with integument smooth and shiny among punctures; forewing uniformly yellowish .....  
.....*A. auriferina* (Michener, 1954)
- 7(5). Metasoma with coppery red sheen, thus contrasting with head and mesosoma metallic green ..... *A. vesta* (Michener, 1954)
- . Metasoma green, concolorous with head and mesosoma .....8
- 8(7) Metanotum with large, irregularly shaped punctures, similar to mesoscutellum.....  
.....*A. pallitarsis* (Friese, 1917)
- . Metanotum noticeably smoother and less punctate than mesoscutellum .....9
- 9(8) T1 and T2 with fimbriae on distal margins golden yellow .....  
.....*A. fulvofimbriata* (Friese, 1917)
- . T1 and T2 with fimbriae on distal margins white .....*A. metallica* (Fabricius 1973)

**Figures 1–4.** Lateral habitus of females of *Augochloropsis* s.str. **1.** *A. fairchildi* Michener. **2.** *A. anquisita* (Cockerell). **3.** *A. ignita* (Smith). **4.** *A. auriventris* (Friese). Species are arranged in the same order as they appear in the key.



**Figures 5–10.** Lateral habitus of females of *Augochloropsis* (*Paraugochloropsis*), except fig. 8 that shows a male. **5.** *A. fuscocyanea* (Michener). **6.** *A. auriferina* (Michener). **7.** *A. vesta* (Michener). **8.** *A. pallitarsis* (Friese). **9.** *A. fulvofimbriata* (Friese). **10.** *A. metallica* (Fabricius). Species are arranged in the same order as they appear in the key.



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