Three new *Habralictellus* bee species from the Caribbean  
(Hymenoptera: Halictidae)

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ABSTRACT. Three new species of the endemic West Indian bee lineage *Habralictellus* are described. *Habralictellus rufopanticis* sp. nov. occurs on Puerto Rico, Mona Island and the British Virgin Islands while *H. eickwortellus* sp. nov. is known only from Puerto Rico. *Habralictellus eleutherensis* sp. nov. is described from the Bahamas and Cuba. Available floral records for *H. rufopanticis* are provided.

Key words: Bees, Halictidae, *Habralictellus*, new species, Puerto Rico, Mona Island, British Virgin Islands, Bahamas, Cuba.

INTRODUCTION

The endemic West Indian bee genus *Habralictellus* consists of two uncommonly encountered species (Moure and Hurd, 1982). Although originally proposed and tentatively retained herein as a distinct genus, *Habralictellus* is certainly a monophyletic derivative of the more widely distributed genus *Dialictus*. Once the relationships among subgroups of *Dialictus* have been resolved *Habralictellus* should be considered as a subgenus of the former (or even recognized as merely a species-group within *Dialictus*, if this group is placed within an expanded *Lasioglossum*: as has been done by Michener, 2000).

Herein I provide descriptions for three closely related species of *Habralictellus*. The species are described here to make their names available for use by other authors studying the Caribbean bee fauna. The format for the descriptions roughly follows that used by Engel *et al.*, (1997) and Engel (2000). Measurements were made using an ocular micrometer on a WILD-M5a microscope. Those values presented in the descriptions are for the holotype with ranges of variation given in parentheses. Sternum and tergum are abbreviated as “S” and “T” respectively.

SYSTEMATICS

**Habralictellus rufopanticis**, sp. nov.  
(Fig. 1)

**Diagnosis.** Face brilliant metallic copper. Mesoscutum strongly shining, faintly imbricate, well-defined punctures scattered over central disc, punctures smaller and more tightly packed outside parapsidal lines. Two submarginal cells. Basal area of propodeum imbricate, without rugae. Female T2 without transverse medial band of brown, brown pigmentation restricted to lateral margins, metasoma rarely entirely brown.

**Description.** Female: Total body length 5.62 mm (5.10-5.94; n=5); forewing length 3.56 mm (3.36-3.56; n=5). Head broader than long, length 1.26 mm (1.22-1.30; n=5), width 1.44
mm (1.40-1.50; n=5). Mandible with weak subapical tooth. Lower half of clypeus extending below lower tangent of compound eyes. Epistomal suture obtuse. Ocelli above upper tangent of compound eyes. Eyes weakly emarginate above level of antennae; weakly convergent below. Mesoscutal anterior border broadly rounded. Intertegular distance 1.06 mm (0.98-1.20; n=5). Basal area of propodeum approximately as long as scutellum; metanotum approximately half length of scutellum. Basitibial plate with all borders well-defined; inner hind tibial spur pectinate. Two submarginal cells; distal wing venation weakened; distal hamuli arranged 2-1-2.

Labiomaxillary complex dark brown except palpi amber. Labrum reddish brown. Mandible black at base, apex reddish-brown, remainder amber. Clypeus dark brown on apical half, remainder brilliant metallic copper with strong metallic green highlights on lateral margins. Antennae brown except amber on basal third of scape, inner surface of scape, and inner surface of flagellomeres 3-10. Remainder of face brilliant metallic copper with metallic green highlights, blending to completely metallic green on vertex. Gena brilliant metallic green. Postgena mostly metallic copper. Mesosoma brilliant metallic green except pronotal lobe amber and integument near lobe dark brown. Tegula amber. Legs dark brown except amber on protibia, protarsus, and inner surface of mesotarsus; procoxa with some metallic green highlights. Wings hyaline; veins brown except pterostigma and Sc+R dark brown. Metasoma reddish-orange except on the following areas: dark brown on anterior surface of T1 excluding the basal margin, reddish brown on laterally on T2, reddish brown transverse band mediially on T3, T4-6 dark brown; dark brown areas with strong metallic blue-green highlights. Wings hyaline; veins brown except pterostigma and Sc+R dark brown. Metasoma reddish-orange except on the following areas: dark brown on anterior surface of T1 excluding the basal margin, reddish brown on laterally on T2, reddish brown transverse band mediially on T3, T4-6 dark brown; dark brown areas with strong metallic blue-green highlights.

Pubescence generally white to yellow. Face with scattered hairs, those at and below level of antennae with many minute branches, those above with relatively fewer minute branches and seeming less numerous. Gena with hairs like those of lower half of face. Postgena with widely scattered, long mostly simple hairs. Pronotal dorsal surface with appressed, short, branched hairs except along a transverse, medial band hairs absent. Mesoscutum with scattered hairs similar to those of vertex; hairs becoming nearly twice as long on scutellum.
ENGEL: New bees of the genus Habralictellus

and metanotum. Pleura with hairs like scutellum and metanotum except metepisternum lacking long hairs instead with a few minute hairs. Propodeal lateral surface with hairs like metanotum on upper border, remainder of hairs simple but of same length; posterior surface with hairs like those of metanotum. Terga with scattered simple hairs, a few with minute branches; hairs becoming progressively more numerous and longer on more distal terga. Sternal hairs long and branched, confined to apical half to third of sterna.

Male: As for the female except as follows: Total body length 4.78 mm; forewing length 3.24 mm. Head length 1.18 mm, width 1.34 mm. Mandible simple. Intergular distance 0.90 mm. Inner hind tibial spur serrate. Genital capsule as in Fig. 1. Amber on inner surface of flagellum running from first flagellomere to distal flagellomere. Pronotal lobe dark brown. Legs dark brown except amber on protibia, tarsi, and inner apical half of mesotibia. Metasoma dark brown.

Aside from usual sex differences (e.g., absence of a scopa) pubescence as in the female except sternal hairs much shorter.


Etymology. The specific epithet is derived from the Latin words rufus (meaning “reddish”) and pantex (meaning “abdomen”), and is a reference to the mostly reddish-orange metasoma of this species.

Floral associations. CAPPARACEAE: Capparis cynophallophora L. CELASTRACEAE: Schaefferia frutescens Jacq. and Cassine xylocarpa Vent. (probably variety caribea Urban). Two females are covered in pollen, but most specimens lack pollen.

Variation. The degree of coloration on the metasomal terga is variable. The darkness of the dark spots or bands on the reddish-orange terga can range from reddish-brown to dark brown. The size of these area also vary. In one female the terga are mostly brown.

Habralictellus eickwortellus, sp. nov.


Description. As for Habralictellus rufopantexis sp. nov. except as indicated. Female: Total body length 5.64 mm; forewing length 4.56 mm. Head length 1.52 mm, width 1.38 mm. Intergular distance 1.10 mm. Three submarginal cells. Labrum black. Mandible black with reddish-brown apex. Clypeus black on apical half, remainder brilliant metallic blue with a few weak copper highlights medially. Remainder of face brilliant metallic blue with a few faint purple highlights a metallic copper highlight surrounding frontal line. Antennae brown. Gena and postgena brilliant metallic blue-green with a few metallic copper highlights. Metasoma brilliant metallic blue with a few metallic...
purple highlights except dark brown on pronotal lobe. Tegula brown. Legs black except amber on distal tarsomeres. Wings hyaline; veins black. Metasoma dark brown except reddish-orange on T1-2, S1-2, and brown on S3-6; lacking metallic highlights.

Clapeus, suprapectal area, and face granular with a few small punctures above level of antennae, separated by a puncture width; granular integument becoming weaker by vertex. Scape not punctured. Gena imbricate. Pronotal dorsal surface smooth with small punctures separated by a puncture width or less; lateral surface granular. Mesoscutum granular with small punctures separated by less than a puncture width. Scutellum granular. Metanotum minutely roughened. Pleura granular. Basal area of propodeum strongly imbricate with short rugae along anterior margin extending only one-third of basal area length; lateral and posterior surfaces strongly imbricate.

Face with scattered hairs some with a few minute branches, hairs most numerous along inner margins of compound eyes and bordering epistomal sulcus. Fuscous hairs on outer surfaces of mesotibia, metatibia, metabasitarsus, and metatarsomere 2. Propodeal posterior surface with minute hairs surrounding pit, with scattered long branched hairs.

Male unknown.


Etymology. The specific epithet honors my late mentor and friend, Dr. George C. Eickwort who collected the only known specimen.

Habralictellus eleutherensis, sp. nov. (Fig. 2)

Diagnosis. Face brilliant metallic green. Mesoscutum strongly imbricate, faint punctures scattered over central disc, punctures not smaller nor tightly packed outside parapsidal lines. Two submarginal cells. Basal area of propodeum imbricate, without rugae. Female T2 with transverse medial band of brown; metasoma strongly banded.

Description. As for H. rufopanticis sp. n., except as indicated. Female: Total body length 4.96 mm (4.54-4.96; n=7); forewing length 3.40 mm (3.20-3.40; n=7). Head length 1.16 mm (1.14-1.24; n=7), width 1.28 mm (1.20-1.32; n=7). Intertegular distance 0.96 mm (0.92-1.02; n=7).

Clapeus dark brown on apical half, remainder brilliant metallic green. Remainder of head brilliant metallic green. Legs dark brown except amber on protibia, protarsus, and inner surface of distal mesotarsomeres. Basal area of propodeum metallic blue. T1-4 reddish-orange with transverse, medial dark brown bands, bands with metallic blue highlights; T5-6 dark brown with metallic blue highlights. Sterna amber except apical margin of S6 dark brown.

Clapeus weakly imbricate. Integument of pronotal dorsal surface faintly imbricate. Mesoscutum strongly imbricate with faint punctures separated by 3-5 times puncture width, not closely packed outside parapsidal lines. Scutellum imbricate with punctures separated by 2-5 times puncture width, punctures primarily restricted to posterior half. Preepisternum strongly imbricate with faint punctures separated by 1-3 times puncture width. Mesepisternum strongly imbricate.
ENGEL: New bees of the genus *Habralictellus* 37

Male: As for the female except as follows: Total body length 4.62 mm; forewing length 3.04 mm. Head length 1.06 mm, width 1.12 mm. Mandible simple. Intertegular distance 0.90 mm. Inner hind tibial spur serrate. Genital capsule as in Fig. 2.


Etymology. The specific epithet is derived from the type locality, Eleuthera Island, Bahamas.

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REFERENCES


