

4-1-1908

Notes on the Bee-Genus Exaerete

T. D. A. Cockerell
University of Colorado

Follow this and additional works at: https://digitalcommons.usu.edu/bee_lab_ca



Part of the [Entomology Commons](#)

Recommended Citation

Cockerell, T. D. A., "Notes on the Bee-Genus Exaerete" (1908). *Ca*. Paper 399.
https://digitalcommons.usu.edu/bee_lab_ca/399

This Article is brought to you for free and open access by the Bee Lab at DigitalCommons@USU. It has been accepted for inclusion in Ca by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.



Psyche, 15:

NOTES ON THE BEE-GENUS EXAERETE.

BY T. D. A. COCKERELL, BOULDER, COLORADO.

THE parasitic or inquiline genus *Exaerete* Hoffmannsegg (*Chrysantheda* Perty) is placed by Ashmead and other authors in the vicinity of *Melissa*, *Mesochaira* etc., these and many other genera forming a family Nomadidae. That these genera represent several different stocks, is recognized by Ashmead himself (Trans. Amer. Ent. Soc., 1899, p. 65), and of all the discordant elements assigned to the "Nomadidae," the most discordant is *Exaerete*. The brilliantly colored bees of this genus were referred by Fabricius, Latreille, Lamarck, and other early authors to *Euglossa*, and this I believe was more nearly correct than their present position in the midst of the parasitic bees of Anthophorid stock. In structure and appearance they resemble *Euglossa*, and especially the closely related genus *Eufriesea*,¹ in which the pubescence is rather scanty, the mouth parts are dark, and the scutellum has no patch of black tomentum. It is also to be noted that they are parasitic in the nests of *Euglossa* and its immediate allies (cf. Ducke, Zeits. f. wiss. Insektenbiol., 1906, p. 58.). It seems evident that *Exaerete* is derived from the Euglossids, and is related to them as *Psithyrus* is to *Bombus*. Ashmead makes a distinct family, *Psithyridae*, following Schmiedeknecht; but it seems better to recognize only a subfamily, *Psithyrinae*, for *Psithyrus*, and similarly to refer *Exaerete* to a subfamily *Exaeretinae* of the *Euglossidae*.

The immediate occasion of these remarks was a specimen of *Exaerete dentata* (L.), received from the Museum of Comparative Zoology; the first member of the genus I had ever had occasion to study. I refer it to the Linnean *dentata*, but I find no really adequate description of that species, and it is not impossible that there are several forms in the great Amazonian region which would equally fit the Linnean diagnosis. The following particulars regarding the specimen before me may therefore be useful.

Exaerete dentata (L.)

♀. Length (the head somewhat extended) about 17½ mm.; entirely bright green, with strong purple tints on thorax and abdomen in certain lights, the color exactly like that of *Euglossa cordata townsendi* Ckll.; wings exceedingly dark fuliginous; mandibles and labrum without light marks; cheeks with short scanty white

¹ *Eufriesea* n. n. = *Eumorphia* Friese, Termés Füzetek, 1899, p. 126 (not Hübner, 1806). Type *Eufriesea pulchra* (*Euglossa pulchra* Smith.).

hair above, and long glittering white hair below; long black hairs project from below the mandibles, some of them shining brilliant coppery-red in certain lights; clypeus densely punctured, the median keel feeble; clypeus and front with some purple lustre amid the green, but vertex behind the ocelli, and sides of mesothorax, shining golden-green; mesothorax with strong punctures on a shining ground, and with short pubescence, mixed black and dull white, only easily seen in lateral view; hair of pleura and metathorax dull white; scutellum with a strong shining boss on each side; punctures of scutellum very strong, except on the anterior middle, when they are small and very few on a smooth brilliant surface; no longitudinal groove or ridge on scutellum, and of course no little patch of black hair; tegulae very large, with dense small punctures; second r. n. joining third s. m. a little before its end; legs with mostly light hair, but black bristles on basitarsi behind; outer face of hind tibiae coarsely tuberculate; abdomen shining, closely punctured, the punctures running together transversely; hair above pale, but very scanty, coarse black bristles beneath about apex; second dorsal segment with the apical margin broadly purple in the middle. The hind tibiae are convex without, and so coarsely punctured and cancellate as to be tuberculate. The broad hind basitarsus has a wide and rather deep groove, which is beset with yellowish hairs. On the middle of the hind femur beneath is a conspicuous tubercle. The second ventral segment is without any peculiar features. The labial palpi, directed posteriorly, reach just beyond the middle of the hind coxae.

Hab.—Teffe, Brazil (*Raulin*, Thayer Expedition).