

HALICTINE BEES FROM ROTA ISLAND

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I am indebted to O. H. Swezey for a series of *Halictus* (females), collected by H. G. Hornbostel on Rota Island, July 1925. There are two species in his collection.

1. *Halictus swezeyi* Cockerell.

I cannot clearly separate these from *H. swezeyi* which occurs on Guam. On the average, the abdomen is a darker, bluer green, but it is variable. They are less robust than *H. saffordi*, the area of metathorax has denser plicae, and the first recurrent nervure joins the third cubital cell (in *H. saffordi* it joins the second). In both sexes of *H. swezeyi* from Guam, I find the first recurrent nervure meeting the intercubitus.

Rota Island, July 23, eleven specimens.

2. *Halictus rotaënsis*, new species.

Head ordinary, face rather narrow (head smaller and face much narrower than in *H. saffordi*); apical part of flagellum variably reddish beneath; tongue short and pointed; head dull dark green, supraclypeal area shining; face, cheeks, sides of thorax and metathorax with thin white hairs; mesothorax and scutellum peacock green, not distinctly polished; metathorax (propodeum) very dark bluish, the basal area with fine plicae, tegulae shining red; wings grayish, with large dark stigma; outer intercubitus very pale; first recurrent nervure joining second cubital cell well before the end; legs dark brown, abdomen broad, without hair bands, dark purplish, with the hind margins of the tergites more or less pallid; as in related species, there is a ventral scopa of curled hairs, collecting pollen. Under the microscope the mesonotum and area of metathorax are seen to be minutely tessellate; mesonotum with very minute punctures, area of metathorax with irregular plicae. Length, about 5.5 mm.; anterior wing, 4.3 mm.

Rota Island, July 20, three specimens.

Halictus rotaënsis var. *hornbosteli*, new variety.

Clypeus and supraclypeal area with rosy tints, mesonotum and scutellum rosy pink, the scutellum brightly colored.

One specimen, Rota Island, July 1925. I give this a name as it has a very distinctive appearance. Typical *H. rotaënsis*, seen from in front, looks almost exactly like *H. crotalariae* Cockerell from New Caledonia, which however has a shining, olive-green abdomen.

KEY TO HALICTINES OF PACIFIC ISLANDS

- A. Abdomen black, or not at all metallic, or very slightly so (*H. samoae*, *H. semicyaneus*) 1
- B. Abdomen distinctly, or very faintly metallic (*H. samoae*, *H. semicyaneus*)..... 5
1. Head and thorax black, not metallic (New Caledonia).....**H. polygoni** Cockerell.
Thorax brilliantly metallic..... 2
 2. Head greatly elongated (Samoa).....**H. samoae** Perkins and Cheesman.
Head brown 3
 3. Anterior femora and tibiae clear red; small species with purple mesonotum (Samoa)**Echthralictus extraordinarius** (Kohl), male.
Anterior femora dark..... 4
 4. Mesonotum and scutellum very rich purple (Samoa).....**H. mackieae** Cockerell.
Mesonotum and scutellum green, metathorax blue (Samoa).....
.....**H. semicyaneus** Cockerell.
 5. Head greatly elongated; mesonotum brilliant blue green (Samoa).....
.....**H. samoae** Perkins and Cheesman.
Head ordinary 6
 6. Legs clear red, including femora..... 7
Femora not thus red..... 8
 7. First two abdominal tergites entirely green (Samoa)....**H. perpessicius** Kohl, male.
First two tergites black at base, with broad green hind borders (Samoa).....
.....**H. perpessicius** Kohl, female.
 8. Thorax entirely brilliant shining purple blue (Samoa).....
.....**Echthralictus stevensoni** Cockerell, male.
Thorax not so colored..... 9
 9. Males 10
Females 13
 10. Abdomen olive green..... 11
Abdomen not olive green..... 12
 11. Larger; flagellum broadly red beneath apically (Samoa)....**H. zachlorus** Cockerell.
Smaller; flagellum black (Fiji).....**H. fijiensis** Perkins and Cheesman.
 12. Apical plate very large and broad (Guam).....**H. saffordi** Cockerell.
Apical plate relatively small; abdomen black with an obscure greenish luster,
varying to strongly purple (Guam).....**H. swezeyi** Cockerell.
 13. Small species from New Caledonia, and Rota (*H. rotaënsis*); thorax above
green, with no purple shades..... 14
Larger species, or if rather small (*H. suvaënsis*) thorax above largely purple
blue, or rosy pink (*H. rotaënsis hornbosteli*) 16
 14. Tegulae dark (New Caledonia).....**H. risbeci** Cockerell.
Tegulae clear red..... 15
 15. Abdomen dark purplish (Rota).....**H. rotaënsis** Cockerell.
Abdomen green (New Caledonia).....**H. crotalariae** Cockerell.
 16. Mesothorax and scutellum shining, with brilliant blue purple tints; front tibiae
and tarsi clear red (Fiji).....**H. suvaënsis** Cockerell.
Thorax not so colored..... 17
 17. Tibiae and tarsi red (Samoa).....**H. zachlorus** Cockerell.
Tibiae not thus red..... 18

18. Mesothorax and scutellum violet, contrasting with the blue-green metathorax, legs partly red (Guam).....**H. saffordi** Cockerell.
 Mesothorax and scutellum rosy, contrasting with the dark blue green of metathorax; legs dark brown; a smaller species (Rota).....
**H. rotaënsis hornbosteli** Cockerell.
 Mesothorax and scutellum not at all violet or rosy..... 19
19. Legs black, without red..... 20
 Legs partly red..... 22
20. Mesonotum dull green; abdomen broad, tergites dark bluish with black margins (Solomon Islands).....**H. viridiscitus** Cockerell.
 Mesonotum shining 21
21. Larger, face broader; abdomen dark bluish green.....**H. saffordi** Cockerell, var.
 Smaller, face narrower; abdomen olive green, varying to more bluish green (Guam and Rota).....**H. swezeyi** Cockerell.
22. Mesonotum dull peacock green; abdomen not distinctly metallic (Samoa).....
**H. semicyaneus** Cockerell.
 Mesonotum and scutellum shining brilliant green (Fiji).....
**H. fijiensis** Perkins and Cheesman.

The above key is based on the species which I have at present in my collection. *Halictus semicyaneus* was first named *H. mesocyaneus*, but that name was preoccupied.

The following species are recorded from Pacific islands. (A) indicates types in American Museum of Natural History.

Samoa

- Echthralictus stevensoni* (Cockerell), 1924
Echthralictus extraordinarius (Kohl), 1908
Echthralictus latro Perkins and Cheesman, 1928
Halictus zachlorus (Cockerell), 1929 (A)
Halictus perpessicus Kohl, 1908
Halictus upoluensis Perkins and Cheesman, 1928
Halictus upoluensis savaiënsis Perkins and Cheesman, 1928
Halictus upoluensis tutuilae Perkins and Cheesman, 1928
Halictus samoae Perkins and Cheesman, 1928
Halictus mackieae Cockerell, 1929 (A)
Halictus semicyaneus Cockerell, 1929 (A)

Tonga

- Halictus tonganus* Perkins and Cheesman, 1928

Fiji

- Halictus fijiensis* Perkins and Cheesman, 1928
Halictus versifrons Perkins and Cheesman, 1928
Halictus suvaënsis Cockerell, 1929

New Hebrides*

- Halictus aponi* Cheesman and Perkins, 1939
Halictus aponi erromangana Cheesman and Perkins, 1939
Halictus tamaënsis Cockerell, 1916 (also Banks Island)
Halictus oumuensis Cheesman and Perkins, 1939
Halictus epiensis Cockerell, 1916 (also Banks Island)
Halictus wilsoni Cheesman and Perkins, 1939
Halictus singowli Cheesman and Perkins, 1939

* Since this paper was written, an admirable paper on *Halictus* in the New Hebrides, by Miss Cheesman and Dr. Perkins, has been published (Roy. Ent. Soc. London, Trans. 88: 161-171, 1939).

New Caledonia

Halictus polygoni Cockerell, 1929

Halictus risbeci Cockerell, 1929

Halictus crotalariae Cockerell, 1929

(Vachal's record of *H. urbanus baudinensis* Cockerell is believed to be an error.)

Guam

Halictus saffordi Cockerell, 1914

Halictus swezeyi Cockerell, 1939

Rota

Halictus swezeyi Cockerell, 1939

Halictus rotaënsis Cockerell

Halictus rotaënsis hornbosteli, Cockerell

Solomon Islands

Halictus froggatti Cockerell, 1911

Halictus viridiscitus Cockerell, 1911

Halictus exterus Cockerell, 1911

Halictus lavoroensis Cockerell, 1929 (See Australian Mus. Rec. 17: 228, 1929).

‡ *Halictus dampieri* Cockerell (also Australia).