BEES OF GUAM

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The bees in this list were collected in Guam in 1936 by O. H. Swezey, E. H. Bryan, Jr., and R. L. Usinger. Distribution and other notes were supplied by Mr. Swezey.

FAMILY APIDAE

1. **Apis mellifera** Linnaeus, Syst. Nat., 10th ed., 576, 1758.

"A large colony was observed hanging beneath a large branch of a *Pithecolobium* tree by the roadside near Piti. It was at an elevation of 15 to 20 feet, and continued there for five months after we discovered it. A smaller colony was similarly situated higher up in the tree. Sometimes the bees nest in cliffs of the coral limestone.

"The honeybee, introduced into Guam from the Hawaiian islands in 1907, seems to readily take to open air life there. Little effort is made to produce honey on a commercial scale. Any convenient box is used for a hive. The universal kerosene case is commonly used, sometimes with a side open to the weather."—O. H. Swezey.

FAMILY MEGACHILIDAE

2. **Megachile laticeps** Smith, Cat. Hymenopt. British Mus. **1**: 183, 1853.

Ritidian Pt., April 16, Bryan; Agana, Aug. 13, Rowley; Barrigada, June, Swezey; Piti, May 12, July 7, 24, Sept. 16-20, Swezey, from trellised flowers of *Antigonon leptopus,* numerous males and females.

The female is *M. metallescens* Cockerell, which has been said to be identical with *M. robbii* Ashmead, though I did not think so when revising the Philippine *Megachile.* I now think that *M. mcgregori* Cockerell, based on the male, cannot be separated from *M. laticeps.* In the Philippine Journal of Science (**16**: 147, 1920), I wrote of *M. mcgregori:* "This may be the male of *Megachile metallescens,* which occurs in the same two localities. The abdomen is not at all metallic; but otherwise, aside from the usual sexual differences, the insects are very much alike." This species has undoubtedly been introduced into Guam from the Philippine Islands.

"This bee is widely distributed in Guam, but most of the specimens were collected at Piti. Evidence of its leafcutting activities was conspicuous throughout the island. Young kapok trees were often nearly completely defoliated by this bee, which cuts the circular and oblong bits of the leaves for the lining of

nests. Rose bushes, too, were often nearly defoliated similarly."—O. H. Swezey.

3. **Megachile fullawayi** Cockerell, Ann. Mag. Nat. Hist. VIII, **14**: 2, 1914.

This species described from Guam in the Fullaway collection of 1911 seems to have disappeared; at least, it was not met with in 1936. It occurs on Oahu, Hawaiian islands.

4. **Lithurgus guamensis** Cockerell, Ann. Mag. Nat. Hist. VIII, **14**: 1, 1914.

Taragüe Beach, on cotton flowers, May 17, Swezey; Machanao, June 30, community nest in large, partly rotten breadfruit stump, with dozens of bees nesting in easily excavated wood, Usinger, Swezey; Orote Peninsula, Sept. 27, Swezey; Yigo, May 19, Oct. 18, Swezey.

Family HYLAEIDAE

5. **Hylaeus guamensis** (Cockerell).

Prosopis guamensis Cockerell, Ann. Mag. Nat. Hist. VIII, **14**: 4, 1914.

Sumay Road, June 23, Swezey.

Both sexes were reared from nests in a soft-rotten branch of a red-flowered mangrove tree (*Lumnitzera pedicellata*) but this was the only occasion on which the species was found. My original male was headless; it may now be stated that the clypeus is nearly all yellow, but the yellow is strongly notched or bilobed above; the band-like lateral face marks, about twice as broad below as above, extend along the inner orbits halfway up sides of front; labrum brown with a small yellowish mark; mandibles black with some red sub-apically; scape yellow in front; flagellum dull ferruginous beneath. In one of the females, the face lacks the lateral marks.

Family ANDRENIDAE

6. **Halictus saffordi** Cockerell, Ann. Mag. Nat. Hist. VIII, **14**: 2, 1914.

Orote Peninsula, April 7, on coconut blossoms, Bryan; Ritidian Pt., April 16, Bryan; Mt. Alifan, April 20, Bryan; Santa Rosa Peak, May 19, Swezey; Merizo, June 11, Swezey; Barrigada, Nov. 26, on sunflower, Swezey.

Both sexes collected, about 20 specimens. The male has the mesothorax and scutellum dark purple varying to blue green; the apical plate of abdomen dark red, and very broadly truncate.

7. **Halictus swezeyi** Cockerell, B. P. Bishop Mus., Occ. Papers **15**(5): 66 (in table only), 1939.

Female, type. Similar to *H. saffordi* in many respects, but entirely distinct by the following characters: brassy green, with variable coppery or purple tints; area of metathorax short, boat shaped in outline (subtriangular in *saffordi*), with the hind margin straight or nearly so, and the whole surface covered with fine plicae which reach the mar-

gin and are connected by little lateral branches, forming a fine reticulation. The male of *swezeyi* is about 6 mm. long, considerably smaller and less robust than the male of *saffordi,* but very variable in coloration, and in the sculpture of the metathoracic area, which, however, is never of the *saffordi* pattern. The tibiae are usually bright red, but in one specimen, which has a brilliant purple abdomen and black tegulae, the middle and hind tibiae are black. The apical plate is hardly half the width of that in male *saffordi,* and the wings are much clearer. Length, 7 to nearly 8 mm.

Ritidian Pt., April 16, Bryan; Mt. Sasalaguan, April 25, Bryan; Yona, April 29, Bryan; Dededo, on flowers of unknown shrub, May 11, Swezey; Santa Rosa Peak, May 19, Swezey; Merizo, June 11, Swezey, Usinger; near Atao Beach, June 25, Usinger; Machanao, on tobacco flowers, June 30, Swezey; Dandan, on *Glochidion* flowers, July 17, Swezey; Piti, Aug. 24, Sept. 27, Swezey.

P. H. Timberlake, looking over Swezey's collection, had already recognized that this was a distinct species. Judging from the number of specimens, this would seem to be the commoner species.