

Miscellaneous Notes and Exhibits of Insects Collected at
Puuwaawaa, North Kona, and Kilauea, Hawaii.*

BY W. M. GIFFARD.

The following exhibits were collected on a short visit to Puuwaawaa, North Kona, Hawaii, August, 1917.

Rhyncogonus sp.—One specimen collected on *Acacia koa* in the mountains at an elevation of approximately 3800 feet. It is the first specimen of this genus to be collected on the Island of Hawaii. It was sent to Dr. Sharp who has described it as new under the name *R. giffardi*. (See page 80 of this issue of the Proceedings).

Clytarlus nodifer.—Four perfect specimens collected on *Acacia koa*.

Calandra oryzae.—Two specimens of this common domestic grain weevil collected on *Acacia koa*. This is apparently the first record of this insect being taken in the high forest regions. Possibly it may attack the seeds of *Acacia koa* but the trees in this locality were not noticed to be in fruit at the time.

From a few seeds and seed pods with stalks attached of the rare *Hibiscadelphus hualalaiensis* collected on this visit by Mr. J. F. Rock, I bred out the following aggregation of insects:

Lepidoptera.—Four specimens of the pink boll-worm (*Pectinophora gossypiella*).

Parasitic Hymenoptera.—One specimen of *Spalangia* sp., probably *simplex* which parasitizes small Diptera.

One specimen of *Angitia blackburni*.

Diptera.—One specimen (undetermined).

Neuroptera.—Two Psocids (undetermined).

Hemiptera.—One *Nysius* sp. (undetermined).

Coleoptera.—Two specimens of Anobiids (2 undetermined species).

*These notes were presented by Mr. Giffard at the October, 1917, meeting, but were inadvertently omitted from the records and thus missed being printed in the Proceedings for 1917. As considerable importance is attached to some of them, they are printed at this time. —[Ed].

Eleven *Proterhinus* (2 undetermined species).

NOTE:—It is interesting to note that *Pectinophora gossypiella* attacks the seeds of *Hibiscadelphus* and is not confined (as Mr. Busck has stated) to *Gossypium*. The *Hibiscadelphus* are indigenous but exceedingly rare in our native forests, and whilst a species of so-called "red cotton" (*Kokia Rockii*) is sparsely distributed in the forests of one section of North Kona, yet it is not the true cotton and Mr. Rock informs me that on many visits to the region he has never noticed that the "red cotton" bolls were ever attacked by anything approaching *Pectinophora*. Mr. Busck however records the fact that Lefroy has bred it from *Hibiscus* (an ally of *Hibiscadelphus*) in India.

It was also interesting to note that one can breed out of the stalks and seed pods of *Hibiscadelphus* so many insects of various Orders, although it may be taken for granted that some of these are more particularly attached to other trees than the particular one referred to.

From the flower heads of *Baillardia ciliolata* collected at Kilauea, October, 1917, a good series of the following insects were bred:

Diptera.—*Tephritis* sp., a good series of an undetermined species.

Homoptera.—*Nesosydne raillardiae*, one nymph.

Parasitic Hymenoptera.—Eight *Phanurus vulcanus* Perk. This is probably parasitic on the eggs of a bug (*Nysius* sp.), as Mr. Swezey in examining the flower heads found several empty bug eggs similar to *Nysius* eggs previously found by him in the flower heads of *Bidens*.

Two Eulophids (*Tetrastichus* sp.). These issued from puparia of the *Tephritis* as Mr. Swezey found, on later examination, two puparia having exit holes made by some parasite. Mr. Timberlake examined these *Tetrastichus* specimens and pronounced them as belonging to an undetermined species. It is apparently a native insect, and the first native species of the genus to be recorded in the Hawaiian Islands.