this plant. It appears to be the same species of which Swezey obtained 2 specimens from *Raillardia* bushes on the summit of Haleakala, June 17, 1927. Larvae were also found in dead stems of the Raillardia, and a few exit holes where beetles had issued. Both lots of specimens have been sent to Dr. Perkins for study and description.

Proterhinus fuscicolor Perkins.

This small species was discovered on the greensword in a gulch mauka from Puu Nianiau, Maui, on August 29, 1918, by Swezey and Bridwell. At the same place a series of 34 beetles was collected by Swezey, June 15, 1927. No larvae were found, but the beetles were found amongst the numerous dead leaves at the base of stems and it is to be inferred that the larvae fed in these leaves or in the stems of the dead plants.

MISCELLANEOUS

Some incidental captures on the greensword by Swezey, June 15, 1927, were the following, which are not to be considered as attached or particularly belonging to this plant:

1 *Oodemas mauiense?*
2 *Lathridius nodifer?*
2 Green jassids, probably *Nesosteles* sp.
4 *Nysius* sp., probably 2 species.
1 *Ithamar hawaiiensis* Kirk.

Palm Seed Scolytids in Hawaii (Col.)

BY O. H. SWEZEY

(Presented at the meeting of November 4, 1927)

From specimens sent to Dr. E. C. Van Dyke, he has recently determined as *Coccotrypes dactyliperda* (Fabr.)* a brown scolytid that breeds abundantly in date seeds. So long ago as 1916, J. C. Bridwell found this insect feeding in date seeds lying on the ground where they had fallen from the trees. No attempt was made at

* *Bostrychus dactyliperda* Fabr., Syst. El. II, p. 387, 1801.

the time to have it determined, and little interest has been taken in it.

On noticing in the January, 1927, issue of the Pan-Pacific Entomologist a note by Dr. Van Dyke recording the occurrence of this beetle in seeds of *Phoenix canariensis* at Los Angeles, October 1, 1926, I surmised that the scolytid in date seeds in Honolulu might be the same species. Accordingly, I secured some fresh specimens and sent to Dr. Van Dyke, who immediately recognized it as the same that he had examined from Los Angeles.

Dr. Van Dyke says it is a native of Africa and Asia, and that it breeds in the betelnut also. It has become quite widely spread. That it is very abundant in Honolulu is shown by the count of beetles issuing from a few date seeds picked up under a palm tree in Kapiolani Park, September 22, 1927. Many of the dry seeds which were free of pulp, had a hole being bored in by a female beetle, as indicated by the extruded borings. Some seeds which had been longer occupied contained all stages of the beetle: eggs, various sizes of larvae, pupae and adults. From beneath one tree, 38 seeds with a single boring were collecting and retained in a jelly tumbler. Between October 25 and November 3, 3518 beetles issued from these seeds—an average of 92 beetles per seed. Since there are whole avenues of these date palms in the park and in other parts of Honolulu, there must be many thousands of these beetles breeding in the fallen seeds under the trees. This beetle is of no economic importance here as the date seeds are of no value. If they were of value they would be collected before being attacked by the beetles, as the latter attack the seeds as they are lying on the ground.

Another palm seed scolytid was sent to Dr. Van Dyke at the same time. A black species reared from seeds of *Livistona chinensis* at the Experiment Station grounds by J. S. Rosa, June 8, 1927. Dr. Van Dyke determined this as *Coccotrypes pygmaeus* (Eich.) (?). A large number of these issue from a single seed. It is of some economic importance when seeds of this palm are desired for planting.

Subsequent observations showed that both of these scolytids breed in other palm seeds as well. The appended list gives those that are at present known.

Coccotrypes dactyliperda reared from the following palm seeds:

Phoenix dactylifera: Kapiolani Park, September 22, 1927; Outrigger Club, September 24, 1927; Waialua, November 22, 1927; Pleasanton Hotel, November 28, 1927; Kamehameha Schools, December 8, 1927.

Livistona chinensis: Punahou Campus, November 28, 1927; Manoa Valley near Wodlawn, November 13, 1927.

Livistona rotundifolia: Honolulu, February 20, 1924 (H. L. Lyon).

Oreodoxa regia: Pleasanton Hotel, November 28, 1927.

Washingtonia filifera: Manoa Valley at the Pan-Pacific Scientific Research Institute, December 17, 1927.

Pritchardia pacifica: Kapiolani Park, December 18, 1927.

Coccotrypes pygmaeus (?) reared from the following palm seeds:

Phoenix dactylifera: Pearl City, about 1915.

Livistona chinensis: Experiment Station, H. S. P. A., June 8, 1927 (Rosa); Punahou Campus, December 18, 1927.

Sabal palmetto: Punahou Campus, December 9, 1927.

Sabal blackburniana: University of Hawaii, December 6, 1927.

Cocothrinax argentea: University of Hawaii, December 6, 1927.

Pritchardia thurstoni: University of Hawaii, December 6, 1927.

Some New Species of Lepidopterous Leaf-Miners in Hawaii

BY O. H. SWEZEY

(Presented at the Meeting of December 1, 1927)

The few leaf-miners included in this paper have been discovered in the last few years by the writer in his studies of the insect faunas of the native trees in the Hawaiian forests. In sending a considerable number of new species in various families to Mr. Meyrick for describing, these few leaf-miners were retained, as the writer having access to the types of close related species described by him a few years ago, considered that he could handle these later discovered ones to advantage.