

Dictyophorodelphax praedicta sp. nov.
(Homoptera, Delphacidae)

BY JOHN COLBURN BRIDWELL.

Length 5.6-6.4 mm.; length of prolongation of head in front of eyes 2.5-2.8; length of tegmen 1.3-1.6.

Very much like *D. mirabilis* Swezey but darker. The prolongation of the head is shorter, only about the length of the body and the apical depressed portion is much shorter and compressed, the space between the dorsal carinae being acuminate at apex. Lateral carinae confluent at about two-thirds of their length from the base.

The tegmina are shorter than in the other species, the four apical segments of the abdomen being visible beyond them instead of through, as in the case of the other two species. The black dots along the veins are much reduced, in comparison with the other species.

The nymphs closely resemble those of *D. swezeyi* Bridwell but the prolongation of the head is slightly deflexed instead of straight.

♂ The genital styles are more elongate than those of *D. swezeyi* and only gently curved, the slender points not being clawlike as are those of *D. mirabilis*. The extreme apices are slightly blunt and recurved.



Fig. 1. *Dictyophorodelphax praedicta*, eedeagus (highly enlarged).

The eedeagus has the slender apical portion nearly in a straight line with the not greatly stouter basal portion. The ventral surface of the slender apical portion is covered with many small reflexed teeth and there are two groups of stouter

The figure is the work of Mr. W. R. R. Potter, illustrator for the H. S. P. A. Experiment Station.

teeth on the dorsal surface, one basal and the other at the origin of the apical processes. At about two-thirds the distance from the base, the apical slender portion is divided into two apical processes, of which the ventral is stouter and only about two-thirds the length of the dorsal and is dorsally curved. The dorsal process is ventrally curved and somewhat strap-shaped.

In *D. swezeyi* the dorsal teeth are in a single group at the base of the slender portion while the ventral teeth are larger and the teeth are much the same in *D. mirabilis*.

Described from 13 ♀♀, 9 ♂♂ and one nymph, August 8, 1918 (O. H. Swezey) 21 ♀♀, 10 ♂♂ and 5 nymphs, Aug. 13 and Sept. 8, 1918 (J. C. Bridwell), collected on *Euphorbia hookeri integrifolia* in Iao Valley, Maui, Hawaiian Islands, at elevations of 600-800 feet on the lower slopes of the ridges rising out of the valley.

Type ♂ and allotype ♀, nymphs and paratypes deposited in the collection of the Hawaiian Entomological Society. Paratypes in the collections of the Hawaiian Sugar Planters' Association, the Bernice Pauahi Bishop Museum, and in the private collections of J. C. Bridwell, O. H. Swezey, and P. H. Timberlake.

My thanks are due to Mr. Frederick Muir for the preparation of the drawing of the eedeagus accompanying and to Mr. P. H. Timberlake for the dissections upon which the descriptions of this species and *D. swezeyi* were based.

NOTES AND EXHIBITIONS.

Maui Delphacids.—Mr. Giffard exhibited 6 species of Delphacidae collected on Maui in August by Mr. J. F. Rock, viz.:

From Mt. Eeke, 5,000 feet elevation, West Maui:

1 specimen *Nesorestias* n. sp., or *Ilburnia* n. sp.

If the latter, probably a variety of *I. fullawayi*.

Small series of *Ilburnia fullawayi* var. All off *Argyroxiphium* sp.

From Waikamoi, East Maui, approximately 4,000 feet elevation:

Large series of *Ilburnia* sp. off *Gunnera petaloidea*.

Large series of *Ilburnia* sp. off *Pipturus*.

Small series of *Ilburnia* sp. off *Cyanea aculeatiflora*.

Small series of *Ilburnia* sp. close to *I. blackburni*, off *Cyanea hammatiflora*.

Both sexes and nymphs were represented.

Hawaii Delphacids.—Mr. Giffard exhibited a collection of Delphacidae collected by himself on the Island of Hawaii during the months of July and August. With the exception of a few hours collecting in a remote district, the whole collection was taken within a radius of 5 or 6 miles from his residence in Olaa near the Volcano Kilauea. The exhibit included the following:

Series of all the 3 known species of *Nesodryas* from that Island, with the addition of a small series of one new species from *Artidesma platyphyllum*.

A large series of *Nesodryas munroi* from *Dodonea viscosa* var. *spathulata*, which hitherto has only been taken sparsely on the Island of Lanai on the same food-plant.

Of the species of the *Leialoha* and *Aloha* groups, all were collected with a view to sorting out variations in color. A small series of one new species of *Aloha*(?) taken on the sand desert at the Volcano off the common fern, *Nephrolepis exaltata*, will make the fourth of the genus so far taken on the Island of Hawaii.

The genus *Ilburnia* was also well represented by all the species with the exception of one species from Kona (which place was not visited) and two other old species which have not as yet been verified by the capture of males. The common species of this large genus were taken on this occasion

because of variations in color or because of these being attached in numbers to food-plants so far not recorded.

Of the genus *Ilburnia*, the collection also included 3 new species in series of both sexes, viz.:

One species off *Coprosma ernodeoides*, taken in Olaa.

One species off *Smilax sandwicensis*, taken in Olaa.

One species off *Lipochaeta subcordata*, taken in the a-a flows at Kahuku, Kau.

Samoan insects.—Mr. Giffard exhibited a second consignment of insects received from Dr. H. C. Kellers, U. S. N., collected at various elevations on the Island of Tutuila of the Samoan group. Of particular interest was the large series of a number of species of Fulgoridae and Jassidae.

Ilburnia koae.—Mr. Swezey exhibited a series of this Delphacid collected on koa at Kaiwiki, Hawaii, some of which had shorter tegmina than usual and lacked wings. This form was thought not to have been previously recorded.

Insects from Kaiwiki, Hawaii.—Mr. Swezey exhibited a miscellaneous collection of insects made on a one-day trip to Kaiwiki, Hawaii, in the forest about 9 miles above Hilo. There were 260 specimens, representing about 75 species.

Trypoxylon sp.—Mr. Swezey reported the capture in Hilo of the small undetermined *Trypoxylon* common in Honolulu. This species had not been previously reported from Hawaii. However, when brought to the attention of Brother Matthias Newell, he said he had known of its presence in Hilo for several years but had not recognized it as being distinct from the larger species *T. bicolor*.

Nesodryas eugeniae.—Mr. Timberlake exhibited specimens of this Delphacid taken on *Straussia kaduana*, which constitutes a new host for the species. It was taken on it at different times during the past month.

Nesodryas n. sp.—Mr. Timberlake exhibited specimens of a new species of *Nesodryas* taken on *Kadua*.

Oechalia.—Mr. Bridwell presented notes on this genus of

bugs of which he considered there were five distinct species or sub-species from the different Islands.

Calandra remota.—Mr. Bridwell reported that this Curculionid which he has found in banana stumps at several different places in the mountains and foot hills back of Honolulu, he has recently distinguished in the Experiment Station, H. S. P. A. collections, collected by Mr. Muir in China, Malay Peninsula, Java, Borneo and Amboina. This demonstrated it to be an immigrant in Hawaii.

Alphitobius diaperinus.—Mr. Bridwell reported finding this Tenebrionid beetle in a bag of spoiled mixed feed at Haiku, Maui.

Rhyncogonus lahainae.—Mr. Bridwell exhibited a Curculionid beetle captured by him on Maui, which agrees fairly well with the description of this species.

Maui Delphacids.—Mr. Bridwell exhibited 11 species of Delphacidae recently collected on Maui. They will be worked up by Mr. Muir in a forthcoming paper along with other Maui material.

Jassids from Maui.—Mr. Bridwell exhibited 6 species of Jassidae collected on Maui: 3 species in Iao Valley on *Euphorbia*, *Pipturus*, and *Dodonea viscosa* respectively; 3 species on Haleakala at 6,000 feet, one on *Dodonea* and two on *Eragrostis atropioides* respectively.

Capsid resembling Reduviolus.—Mr. Bridwell exhibited a peculiar Capsid bug resembling *Reduviolus* captured by him on a grass (*Deyeuxia*) at the summit of Haleakala, Maui.

Proterhinus sp.—Mr. Bridwell reported capturing a peculiar species of *Proterhinus* in dead wood of *Cyrtandra* in the mountains back of Tantalus. The species has long spinous setae and is evidently an undescribed form, but the specimen unfortunately is defective, having lost its head. The species differs from *P. blackburni* Sharp in having the subsutural ridges produced forward in front of the anterior margin of the elytra much as in *P. deinops* Perkins, which is otherwise very different.

NOVEMBER 7TH, 1918.

The one hundred fifty-eighth meeting of the Society was held in the usual place. Members present: Messrs. Bridwell, Ehrhorn, Giffard, Mant, Muir, Rosa, Swezey and Timberlake. As none of the officers were present at the opening hour, Mr. Giffard was chosen as chairman of the meeting, and he appointed Mr. Swezey as secretary.

Minutes of previous meeting were read and approved with corrections.