

Suggestions for Manuscripts

Manuscripts intended for publication should be submitted in duplicate (original and one carbon), typewritten in double or triple space with ample margins on one size of standard sized (8 1/2 by 11 inches) white bond paper. Pages should be numbered consecutively. Fragmentary sheets and slips pinned or pasted on are not acceptable. Footnotes should be numbered consecutively and inserted in the manuscript immediately below the citation, separated from text by lines; they should be used only where necessary. Correct names and references are the responsibility of the author and should be checked for accuracy.

Illustrations should be drawn to allow for one-half or one-third reduction to page size (4 1/2 by 7 inches). Maps and sketches drawn to scale should have the scale plainly indicated. A complete list of figures and a duplicate print of each plate or figure are required to be submitted with the manuscript.

Tables and graphs should be used only where necessary and omitted if essentially the same information is given in the paper. Graphs and figures should be drawn in India ink on white paper, tracing cloth, or light blue cross-hatched paper.

Proof should be corrected as soon as received and returned to the editor with an abstract on forms provided. Additional costs to the Society for author's corrections in proof may be charged to the author. An order for reprints should be placed with the editor when proofs are returned. Fifty copies of reprints will be supplied by the Society to each author under certain circumstances.

Examination of articles in this issue will help to confirm to the style of presentation desired.

PROCEEDINGS of the Hawaiian Entomological Society

VOL. XVIII, No. 2

FOR THE YEAR 1962

JULY, 1963

JANUARY 15, 1962

The 673rd meeting of the Hawaiian Entomological Society was called to order by President Rainwater at 2:05 p.m., Monday, January 15, 1962, at the Experiment Station, HSPA.

Members present: Anderson, Beardsley, Bess, Bianchi, Carter, Chock, Chong, Clagg, Davis, Fullaway, Habeck, Hardy, Joyce, Kajiwara, Kim, Krauss, Loifgren, Look, Matsumoto, Miyatake, Nakao, Nakata, Namba, Nishida, Pemberton, Phillips, Rainwater, Suehiro, Sugarman, Thistle, and Woolford.

Visitors: Dr. Emil Bogen and Mr. Melvin Abramovitz.

Dr. Carter, representing the Society at the State Park Conference, reported on the activities of that group.

Mr. Thistle reported on the amendment of air pollution regulations proposed by the Environmental Health Division of the State Department of Health. After some discussion of the proposed regulations, a committee was appointed to study the proposed amendment and take whatever action it deemed necessary on behalf of the Society.

NOTES AND EXHIBITIONS

Mr. Krauss presented the following notes:

Hypena strigata Fabricius: The Commonwealth Institute of Entomology, London, advises that further study of the noctuid moth known in Hawaii as *H. jussalis* Walker shows it to be *H. strigata* Fabricius. This species was introduced into Hawaii from southern Rhodesia and Kenya in 1957, and is now well established and causing severe defoliation of *Lantana camara aculeata*.

Aceria lantanae (Cook): Eriophyid galls causing severe damage to flower heads of *Lantana camara mista* at Boca del Rio, Veracruz, Mexico, November 21, 1962, and *L. camara* flower heads at Cali, Colombia, November 10, 1961 were exhibited by Mr. Krauss. This mite is widely distrib-

pronotum. It is also figured and described (in Japanese) by Chûjô (1936, pp. 123-124, fig. 71).

Size: Measurements, in millimeters, of the 11 undissected specimens at hand (seven from Hawaii and four from Japan), length, 2.74-3.54 (mean 3.20); maximum pronotal width, 1.22-1.52 (mean 1.39).

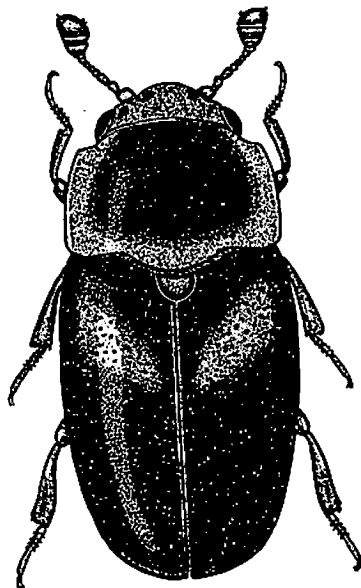


FIGURE 1.—*Dacne picta* Crotch (Waianae Mts., Oahu).

Genitalia: Male genitalia not distinctly different from those of *Dacne* (*D.*) *quadrimaculata* (Say) (Boyle, 1956, pp. 79-80, 82, figs. 17-18). Female genital tube also generally similar (*op. cit.*, pp. 80-82, figs. 30-32) except the proctigeral lobe is more acuminate, and lateral comb rows are entirely absent. The heavily sclerotized seminal receptacle is about three times as long as wide and faintly sigmoid or banana-shaped.

The absence of lateral comb rows in the female genital tube of *D. picta* suggests a phylogenetic affinity to the subgenus *Xenodacne*, limited to western North America, which also lacks these structures. Before important inferences can be drawn regarding such relationships within the genus *Dacne*, however, the genitalia of other species must be studied.

LITERATURE CITED

- BOYLE, W. WAYNE. 1956. A Revision of the Erotylidae of America North of Mexico (Coleoptera). BULL. AMERICAN MUS. NAT. HIST. 110 (art. 2):67-172, plate 2, figs. 1-141.
- CHÛJÔ, MICHIO. 1936. Family Erotylidae, Class Insecta, Coleopteroidea-Coleoptera. FAUNA NIPPONICA 10 (fasc. 8, no. 5):1-193, 92 figs.
- CROTCH, G. R. 1873. A Descriptive List of Erotylidae Collected by Geo. Lewis, Esq., in Japan (with Addenda to the Genus Languria by E. W. Janson and C. O. Waterhouse). ENT. MON. MAG. 9:184-189.
- FORD, EVERETT J., JR. 1955. Notes and Exhibitions. PROC. HAWAIIAN ENT. SOC. 15 (3):388.

Insects and Other Arthropods from Kure Island

GEORGE D. BUTLER, JR.¹ AND ROBERT L. USINGER
UNIVERSITY OF ARIZONA, TUCSON, ARIZONA AND
UNIVERSITY OF CALIFORNIA, BERKELEY, CALIFORNIA.

(Submitted for publication December, 1962)

Kure Island, sometimes called Ocean Island and located 1,200 miles to the northwest of Honolulu, 56 miles west of Midway Islands, is the northernmost island of the Hawaiian Archipelago. It is an atoll, circular in outline with a reef surrounding a lagoon approximately 6 miles in diameter. In the southeast portion of the lagoon lies Green Island, the only land mass of any consequence, which is about a mile long and less than a half mile wide, rising to a height of 20 feet above the ocean. An airstrip now runs almost the entire length of the island.

The vegetation of Kure consists mainly of dense thickets of *Scaevola*. The dominant plant in the open areas within these thickets and around the margins is *Boerhavia*, with some *Solanum nelsoni*. In addition to these three plants, *Lepidium*, *Achyranthes*, *Eragrostis*, *Tribulus*, *Ipomoea*, *Verbesina*, *Gnaphalium*, and *Erigeron* grow in the disturbed areas around the camp and under the 625-foot radio tower. Various cultivated plants and seeds, flown to the island during March 1961, were planted in the clearings around the buildings; a number of weed species were obviously introduced with the 1500 plants; and other weed species probably came in with the heavy construction equipment.

The Tanager Expedition visited Green Island in April 1923. With D. T. Fullaway as entomologist, 35 species of insects were collected (Bryan, 1926), the only record of insects from the island. The present authors collected 96 species of insects and other terrestrial arthropods and failed to find 15 species collected by Fullaway. Nearby Midway Atoll had 205 species recorded by Suehiro (1960); Laysan had approximately 140 species (Butler, 1961) to which subsequent collecting in 1961 and 1962 (Butler and Usinger, in manuscript) made a total of approximately 190 species.

The authors visited Kure Island from September 12-14, 1961 through the courtesy of the United States Coast Guard and Dr. H. J. Coolidge. Appreciation for determining the specimens is expressed to P. A. Adams, P. D. Ashlock, W. T. Ateyo, R. S. Beal, Jr., J. W. Beardsley, J. C. Bequaert, F. A. Bianchi, O. L. Cartwright, D. A. Chant, E. A. Chapin, R. L. Doult, H. Dybas, R. G. Fennah, W. J. Gertsch, A. B. Gurney, D. F. Hard-

¹Journal Paper no. 781, University of Arizona, Agricultural Experiment Station.

Butler & Usinger, 1963

Coccinellidae

- Coelophora inaequalis* (Fabricius), determined by E. A. Chapin. 1961.
Scymnus (Pullus) *loewii* Mulsant [*Pullus kinbergi* (Boheman)], determined by E. A. Chapin. 1923, 1961. On *Scaevola*.
Scymnus (Pullus) sp., 1961.

Cucujidae

- Cryptamorpha desjardinsi* Guerin, determined by H. Dybas. 1923, 1961.

Dermestidae

- Dermestes ater* DeGeer, determined by R. S. Beal, Jr. 1961.
Dermestes maculatus DeGeer, determined by R. S. Beal, Jr. 1961.

Elateridae

- Conoderus pallipes* (Eschscholtz), determined by R. H. Van Zwaluwenburg. 1961.

Tenebrionidae

- Undetermined. 1923.
Gonocephalum adpressiformis Kaszab, determined by H. Kulzer. 1961.

Scarabaeidae

- Pleurophorus micros* (Bates) (*Psammodyus nanus* DeGeer), determined by O. L. Cartwright. 1961.
Saprosites sp.
Saprosites sp. [*dilutus* (Fairmaire)], determined by O. L. Cartwright. 1961.
Saprosites pygmaeus Harold. 1923.

Scolytidae

- Hypothenemus eruditus* Westwood, determined by S. L. Wood. 1961.
 On *Cyperus laevigatus*.

Corylophidae

- Sericoderus minutus* Matthews, determined by R. D. Pope. 1961.

Curculionidae (determined by E. C. Zimmerman)

- Pentarthrum halodorum* Perkins. 1923, 1961.
Dryotribus wilderi Perkins. 1923, 1961.
Araecerus fasciculatus (DeGeer). 1923, 1961.
Dryophthorus distinguendus Perkins. 1961.

DIPTERA

Mycetophilidae

- Neosciara molokaiensis* (Grimshaw). 1923.

Scenopinidae

- Lucidomphrale lucida* (Becker), determined by D. E. Hardy. 1961.

Dolichopodidae

- Chrysosoma fraternum* Van Duzee, determined by D. E. Hardy. 1961.
Psilopus patellifer Thompson. 1923.
 Undetermined species. 1923.

Syrphidae

- Ischiodon scutellaris* (Fabricius), determined by D. E. Hardy. 1961.

Ephydriidae

- Hecamede persimilis* Hendel, determined by D. E. Hardy. 1961.

Asteiidae

- Bryania bipunctata* Aldrich, determined by D. E. Hardy. 1961.

Agromyzidae

- Liriomyza* sp. 1961.

Milichiidae

- Milichiella lacteipennis* Loew, determined by D. E. Hardy. 1961.

Chloropidae

- Hippelates collusor* (Townsend), determined by C. W. Sabrosky. 1961.
 This single specimen may have come from a contaminated collecting tube.
Hippelates nigricornis var. *flavus* Thompson. 1923.
Cadrema pallida Loew, determined by D. E. Hardy. 1961.

Sarcophagidae

- Parasarcophaga* (Thomsonae) *argyrostoma* (R. D.), determined by D. E. Hardy. 1961.

Calliphoridae (determined by D. E. Hardy)

- Chrysomya megacephala* (Fabricius), 1961.
Lucilia graphita Shannon, 1923, 1961.
Phaenicia cuprina (Wiedemann), 1961.

Muscidae (determined by D. E. Hardy)

- Ophyra chalcogaster* (Wiedemann). 1961.
Musca domestica L. 1961.

Anthomyidae

- Fannia canicularis* L. 1923.

Hippoboscidae

- Olfersia aenescens* Thompson, determined by J. C. Bequaert. 1961.

HYMENOPTERA

Braconidae (determined by C. F. W. Muesebeck)

- Apanteles marginiventris* (Cresson). 1961.
Chelonus blackburni Cameron. 1961.

Ichneumonidae

- Diplazon laetatorius* Fabricius, determined by H. Townes. 1961.
Devorgilla n. sp. 1961. Swarming about *Scaevola* at two high points on the island.

Mymaridae

- Polynema reduvioli* Perkins. 1923.
Stephanodes near *similis* (Foerster), determined by R. L. Doutt. 1961.