

A NEW *UNDULAMBIA* SPECIES ON LEATHER-LEAF
FERN IN FLORIDA, AND NOTE ON A CLOSELY
RELATED CENTRAL AMERICAN SPECIES
(LEPIDOPTERA: PYRAUSTIDAE, NYMPHULINAE)

HAHN W. CAPPS

Entomology Research Division, Agr. Res. Serv., U. S. Dept. Agr.,
Washington, D. C.

The purpose of this paper is to provide a name for an undescribed species which is of concern as a pest to the growers of leather-leaf fern in Florida, and to clarify the status of a Central American species closely related to it.

Undulambia polystichalis, new species
(Fig. 1-4)

MALE (Fig. 1): Alar expanse, 12-14 mm. Maculation as illustrated. Head: Frons brownish, margined with white. Labial palpus long, slender, upturned, sicklelike, extending above vertex; brownish dorsally and laterally, white below; second and third segments of about equal length. Scape of antenna white, remainder pale buff; weakly pubescent. Thorax brownish; patagia white. Abdomen: First segment white, remainder brownish with a few small irregular whitish patches. Wings: Upper surface ground color ochreous brown and occasionally with some fuscous; markings white. Forewing with fovea. Genitalia (Fig. 4): Gnathos well developed, weakly denticulate at apex. Aedeagus (Fig. 4a): A conspicuous dorsal, elongate, ringlike sclerotization present, with apex simple, rather sharply pointed, and basal termination of the ringlike structure distinctly anterior to base of aedeagus. Cornuti absent.

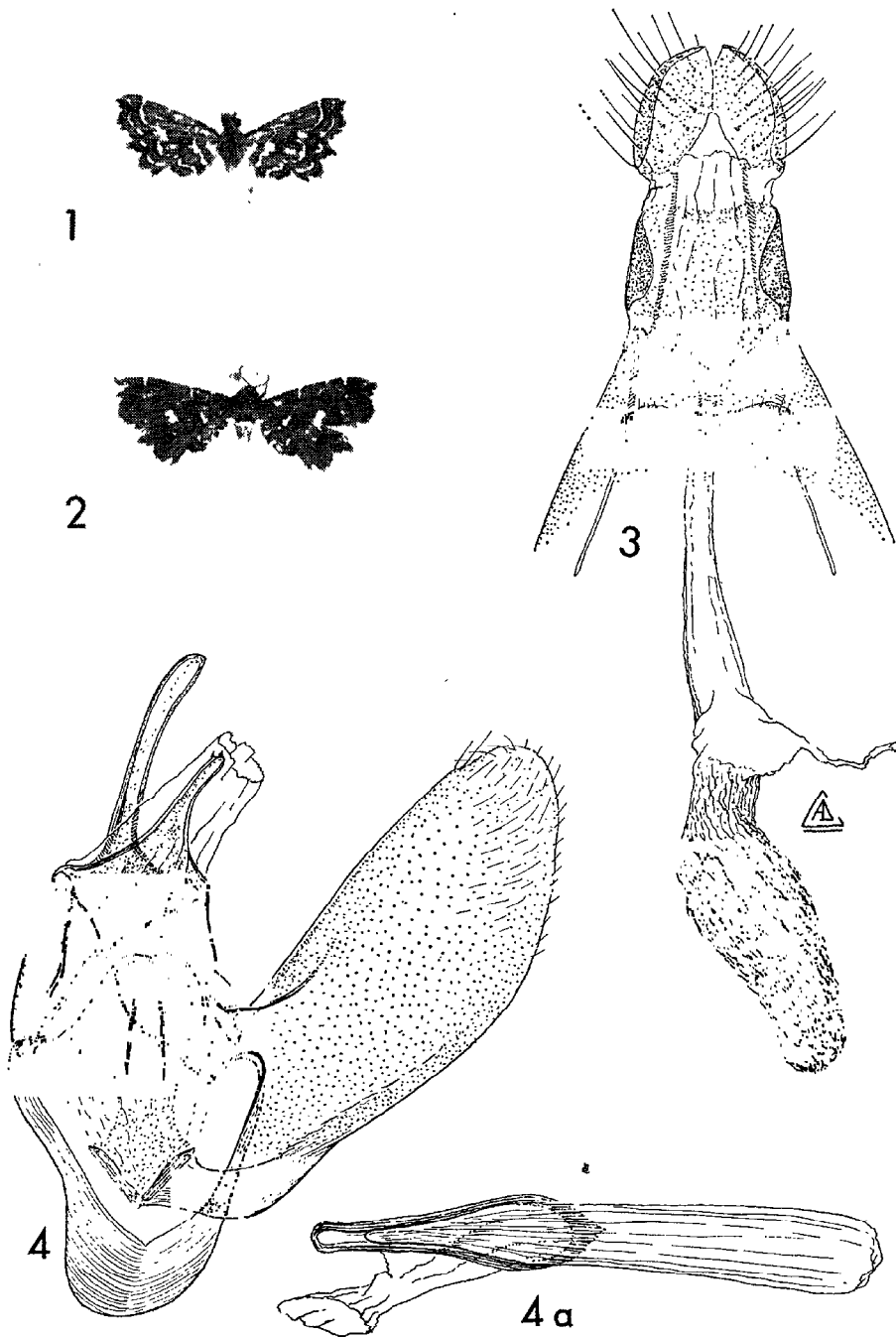
FEMALE (Fig. 2): Alar expanse, 12-15 mm. Head: Frons blackish, weakly margined with white; antenna simple, scape blackish above, whitish below; remainder brownish fuscous. Labial palpus long, slender, upturned, sicklelike, extending above the vertex; fuscous dorsally and laterally, brownish below; second and third segments of about equal length. Thorax, patagia, and abdomen fuscous or blackish above, paler below. Wings: Upper surface blackish or fuscous with markings white or ochreous white, somewhat variable in size. Genitalia (Fig. 3): Ductus bursae membranous at ostium; origin of ductus seminalis about midway between ostium and termination of the bursa copulatrix; bursa copulatrix densely and finely spinulate, without signum.

TYPE: Male, in collection of the U. S. National Museum. USNM Type No. 67633. Zellwood, Fla., 30 Mar. 1962, Dekle and Kuitert. Genitalia slide HWC 17070.

PARATYPES: Florida: Zellwood, 1 ♂, 2 ♀. Gainesville, 5 ♂, 2 ♀. Paratypes in collection of the U. S. National Museum and in Florida State Collection of Arthropods, Division of Plant Industry, Gainesville.

FOOD PLANT: *Polystichum adiantiforme* J. Smith, in stems.

REMARKS: *U. polystichalis* resembles the species described by Dyar as *Ambia fovecosta* which occurs in Panama, Guatemala, and Costa Rica. Differences in coloration and genitalia, however, distinguish the two spe-



Explanation of Illustrations

Fig. 1-4. *Undulambia polystichalis*, new species. 1. Male paratype. 2. Female paratype. 3. Female genitalia. 4. Male genitalia (one harpe omitted and aedeagus removed). 4a. Aedeagus. Delineations of the genitalia were prepared by A. D. Cushman, scientific illustrator, U. S. Dept. Agr. The genitalia are in ventral view and not drawn to scale. Photos of the adults, about twice natural size, are by J. Scott, staff photographer, Smithsonian Institution.

cies. The males of *fovecosta* are paler and more ochreous than those of *polystichalis*, and the ringlike structure of the aedeagus of *fovecosta* is trifid at the apex, with the basal termination of the ring at or near the base of the aedeagus. The white markings of the females are stronger in *fovecosta* than in *polystichalis*, and the bursa copulatrix of *fovecosta* is more oval-shaped, with the spinulation weaker and sparser than in *polystichalis*.

The larval and pupal stages and biology of *polystichalis* have been adequately treated in an earlier paper by G. W. Dekle and L. C. Kuitert, Florida Department of Agriculture, Division of Plant Industry, and University of Florida, Agricultural Experiment Station, respectively. I am indebted to them for their cooperation in supplying the reared adults on which the description of the species is based.

Undulambia fovecosta (Dyar), new combination

Ambia fovecosta Dyar, 1914, Proc. U. S. Nat. Mus. 47: 293.

Ambia fulvalis Dyar, 1914, l. c., p. 293. New synonymy.

Ambia fuscalis Dyar, 1914, l. c., p. 293. New synonymy.

TYPES. In collection of the U. S. National Museum: No. 16198, male, *fovecosta*; No. 16199, male, *fulvalis*; No. 16200, female, *fuscalis*.

TYPE LOCALITIES: Panama: Porto Bello, *fovecosta* and *fuscalis*; Trinidad River, *fulvalis*.

FOOD PLANTS: Unknown.

IMMATURE STAGES: Unknown.

REMARKS: *U. fulvalis* is known only from the type which is slightly larger in expanse than *fovecosta*, but the markings and genitalia are like those of *fovecosta* and are definitely conspecific with it.

LITERATURE CITED

Dekle, G. W., and L. C. Kuitert. 1962. Mysterious invader. Sunshine State Agr. Res. Rep., Agr. Exp. Sta., Univ. of Florida, 7(3): 10-12.

The Florida Entomologist 48(3) 1965

