TWO NEW DICHROMARPHA
(LEPIDOPTERA: TORTRICIDAE) FROM FLORIDA

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ABSTRACT

Dichromarpha sapodilla, new species, and Dichromarpha manilkara, new species, are described from Florida. The former species feeds as a larva on flowers of sapodilla (Manilkara zapota (Linnaeus) Van Royen) and the latter species feeds on flowers of wild dilly (Manilkara bahamensis (Baker) Lamarck & Meuse).
Fig. 1-4. Adults of * Dichrorampha* species: 1, *D. sapodilla* Heppner, new species, paratype ♂ ; 2, same, paratype ♀ ; 3, *D. manilkara* Heppner, new species, paratype ♂ ; 4, same, paratype ♀ [all from Florida].

bend at radius, surrounded by yellow except at tornus where a large dark fusceous mark has yellow only on distal side of mark; 5 small black subdistal (speculum) spots in yellow field; fringe fusceous; ventral side lustrous bronze fusceous. *Hindwing*: fusceous; fringe pale fusceous; ventral side lustrous bronze fusceous.

*Abdomen*: Fusceous; venter tan-white. *Male genitalia*: tegumen stout, arched to acute point; gnathos a narrow band across membrane at center; vinculum reduced; anellus a small semi-circular plate; valva elongate with setaceous dorsally directed cucullus, rounded along ventral margin; a narrow neck prior to broad base of valva; aedeagus small, wedge-shaped, with numerous (ca. 40) cornuti. *Female genitalia*: ovipositor with setaceous papilla analis; apophyses with anterior pair somewhat longer than posterior pair; ostium a cup-shaped sclerotized area posterior to 7th sternite, with a pointed fold extended over ostium; ductus bursae sclerotized to near a sclerotized area at bursa, with ductus seminalis emerging from near bursa; bursa copulatrix ovate, rugose interior walls; one large thorn-like signum.


Host: Manilkara zapota (Linnaeus) Van Royen (Sapotaceae) flowers [plant is sometimes referred to as Manilkara zapotilla (Jacq.) Gilly and in other genera].

Fig. 5-8. Dichrorampha sapodilla Heppner, new species (Florida): 5, paratype ♂ genitalia; 6, same aedeagus (enlarged); 7, paratype ♀ genitalia; 8, same, ductus bursae.
REMARKS: This and the following new species are superficially rather similar but the genitalia are markedly different. The maculation of *D. sapodilla* is distinguished by the dark forewing mark near the wing base and the lack of the silvery tornal line of the hindwing which is present in males of *Dichrorampha manilkara*, new species. The genitalia will distinguish the species from other *Dichrorampha*.

Bacheler and Baranowski (1975) noted that *D. sapodilla* (as "*Hemimene sp.*") competes with the anthocorid *Paratrichleps laevisculus* Bacheler and Baranowski on flowers of *sapodilla*.

*Dichrorampha manilkara* Heppner, NEW SPECIES

Fig. 3-4, 9-12

SIZE: Forewing length 3.5-4.5 mm.

HEAD: Gray with tan frons; labial palpus tan-white, apical segment gray; antenna fuscous.

THORAX: Fuscous; patagia tan; venter tan-white; legs tan with fuscous on distal sides. Forewing: gray with 7 dark fuscous strigulae bordered by orange (white on costal margin) from costal margin angled toward tornus; anal margin dark fuscous; 5 dark fuscous strigulae from basal 1/3 of anal margin angled toward apex and bordered by orange; distal 1/3 of wing orange with extensions of dark strigulae intruding and large silvery line from tornus straight to radius, then sharply angled away from apex to 4th strigula along costal margin; apical margin dark fuscous; fringe dark fuscous; ventral side lustrous dark fuscous. Hindwing: uniform dark fuscous becoming darker along anal margin in both sexes; males with a silver iridescent line along tornal margin; ventral side as forewing.

ABDOMEN: Fuscous; venter tan-white. Male genitalia: tegumen with a dorsal point; vinculum reduced; gnathos a broad band; anellus a large semi-circular plate; valva elongate and curved upwards, with a large setaceous cucullus and a mesally directed stoutly setaceous lobe midway along ventral margin; valval neck almost absent; ventral valvae margin with several stout setae; aedeagus small, curved, with numerous (ca. 40) small spine-like cornuti. Female genitalia: ovipositor setaceous on papilla anales; apophyses subequal, of average stoutness; ostium a small sclerotized entrance behind an asymmetrical circular sternal plate; ductus bursae partially sclerotized near bursa, with ductus seminalis diverging from near bursa; bursa copulatrix ovate, rugose, with one large thorn-like signum.

Fig. 9-12. *Dichrorampha manilkara* Heppner, new species (Florida): 9, paratype ♂ genitalia; 10, same, aedeagus (enlarged); 11, paratype ♀ genitalia; 12, same, sternal plate.

**Host**: *Manilkara bahamensis* (Baker) Lamarck & Meeuse (Sapotaceae) flowers [called “wild dilly” locally].

**Remarks**: The remarks for the previous species will serve to distinguish the 2 species. *Dichrorampha manilkara* superficially also resembles a more northern species, *Dichrorampha leopardana* (Busck), but is smaller and has less orange on the forewings in addition to very different genitalia. Both the male and female genitalia are very unusual for the genus *Dichrorampha*. This species appears to be common locally wherever wild dilly bushes are found.

**Acknowledgments**

The following collections, with their respective abbreviations, were consulted: Charles P. Kimball Collection, West Barnstable, Massachusetts
ADULT ACTIVITY OF GROUND-SURFACE SPIDERS
IN ARID-GRASSLAND AND PINYON JUNIPER
ASSOCIATIONS IN SOUTHWESTERN NEW MEXICO1,2

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ABSTRACT

Maturity and adult activity data were accumulated for 21 species of
ground-surface spiders from 2 locations in the pinyon-juniper life zone and
2 in the arid-grasslands of southwestern New Mexico. Web-building Pseilo-
chorus species were found to be the most dominant ground-surface adult
spiders in both associations. The 2 species concerned were not strongly
seasonal in maturity and adult activity indicating that they either matured
erratically or the adults were long lived. Except for Herpillus provinicus
Keyserling, other less dominant or prevalent species were found to vary
seasonally in periods of maturity and adult activity. Some were also re-
stricted to 1 or the other of the 2 plant associations. A few were restricted to
1 plot.

RESUMEN

Se acumularon datos sobre la madurez y la actividad adulta de 21 especies
de arañas de la superficie del suelo en 2 localidades en la zona de piñon-
junípero y en 2 localidades en los terrenos pasturales áridos del suroeste de

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