

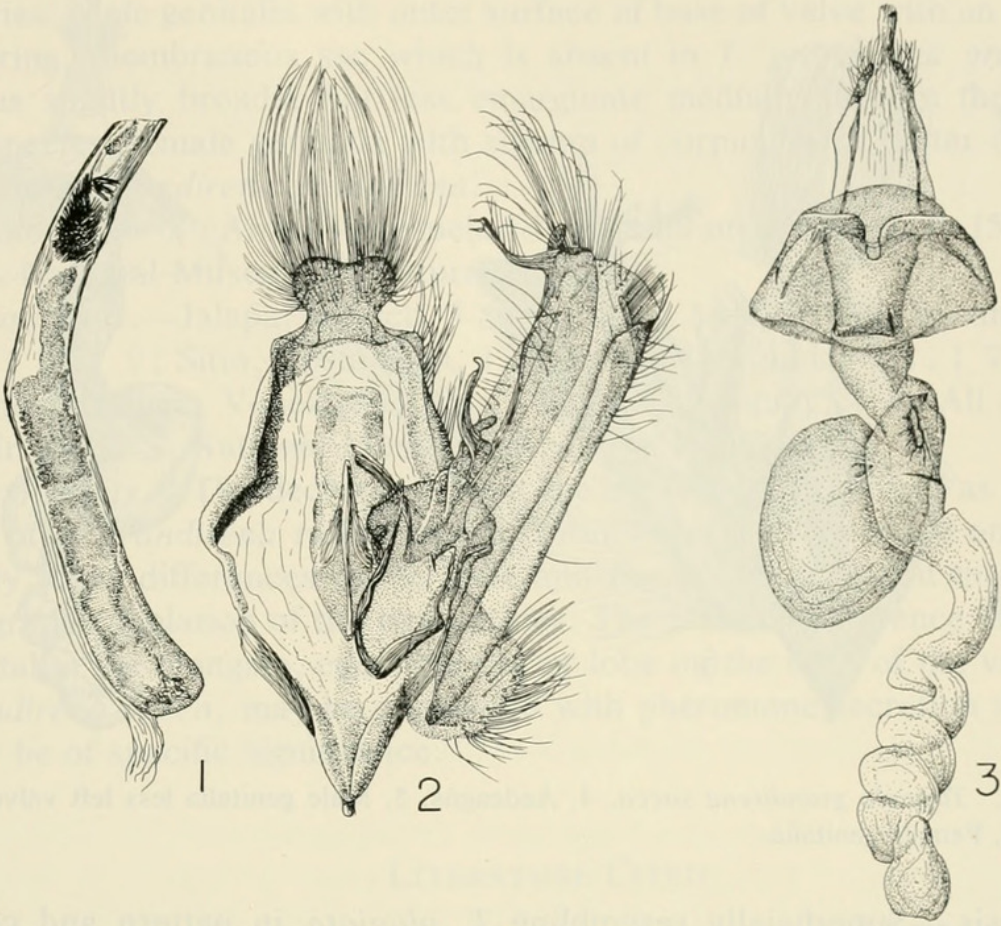
THE AMERICAN SPECIES OF THE *TIRACOLA PLAGIATA* WALKER
COMPLEX (LEPIDOPTERA: NOCTUIDAE: HADENINAE)

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Abstract.—The New World species of the *Tiracola plagiata* complex is shown to be distinct from the Old World *T. plagiata* (Walker), and the name *T. grandirena* (Herrich-Schaeffer) is resurrected for it. *Tiracola grandirena grandirena* is shown to apply to the Antillean populations of the species, and a new subspecies, *T. grandirena sacca*, is described for the Central and South American populations.

Tiracola plagiata (Walker) was for many years considered to be a cosmopolitan species. Warren (1912a: 10) described *T. rufimargo* from New Guinea, the primary specific character being the coloration of the fringe of the forewing. In the same year, Warren (1912b: 73-74) described a number of subspecies and aberrations of *plagiata* and *rufimargo*. Draudt (1924: 124) proposed form names, *mediosuffusa* and *magniplaga*, presumably for American examples of the species he called *T. plagiata* (Walker). He failed to cite *grandirena* Herrich-Schaeffer which had been listed as a synonym of *plagiata* by Hampson (1905: 258), Warren (1912b: 73), and others. In the course of a study of the Noctuidae of the Antilles, the senior author discovered that, on a basis of the genitalic structures, the America species is not conspecific with the Old World species of *Tiracola*, and that, in fact, there are two distinct races of the American species, one undescribed. John G. Franclemont of Cornell University, working on the identity of Philippine material, had independently discovered that there appeared to be a complex of species in the Eastern Hemisphere based on genitalic structures. Recently Holloway (1979: 406-409) described two species of *Tiracola* from New Caledonia and New Hebrides. The purpose of the present paper is to correctly assign the name *T. grandirena* (Herrich-Schaeffer) and to describe the other American race of the species. Two other American species presently standing in *Tiracola* Walker, *T. nonconformens* Dyar (1918: 343) and *T. lilacena* Dognin (1914: 6), are not congeneric with *Tiracola*. They have been left in

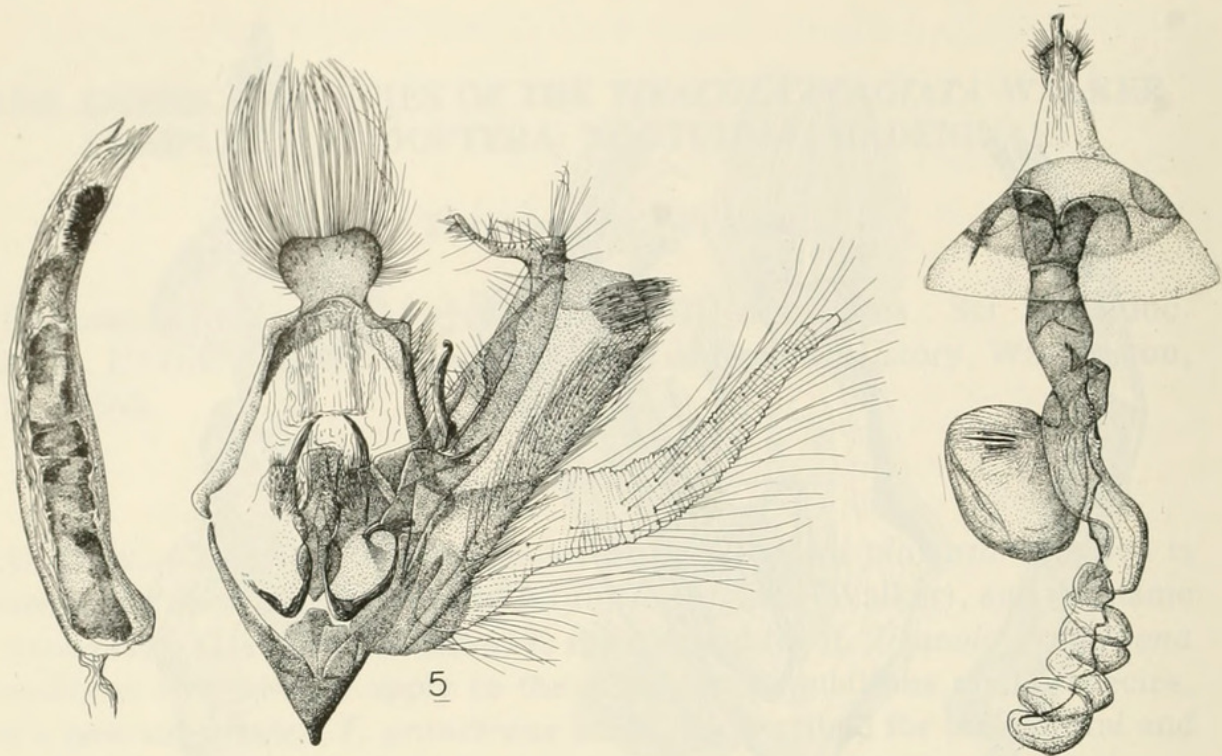


Figs. 1-3. *Tiracola grandirena grandirena*. 1, Aedeagus. 2, Male genitalia less left valve and aedeagus. 3, Female genitalia.

the same genus even though an examination of the male genitalia of the two types clearly indicates that they are not properly placed in *Tiracola* and that they are not congeneric with each other. We are presently unable to assign them to other genera.

Tiracola grandirena grandirena (Herrich-Schaeffer)
Figs. 1-3

Agrotis grandirena Herrich-Schaeffer, 1868: 149-150; Moeschler, 1890: 151, 350; Gundlach, 1891: 176; anonymous, 1895: 76; Ragues, 1914: 137.
Tiracola plagiata (Walker) [misidentifications]; Hampson, 1905: 257-259; Wolcott, 1936: 420; Wolcott, 1948: 584; Schaus, 1940: 183 [in part]; Brunner et al., 1945: 57.
Tiracola grandirena (Herrich-Schaeffer) [as synonym of *plagiata* Walker]; Schaus, 1940: 183.
Tiracola plagiata form *mediosuffusa* Draudt, 1924: 124, Fig. 18i.
Tiracola plagiata form *magniplaga* Draudt, 1924: 124, Fig. 18i.



Figs. 4–6. *Tiracola grandirena sacca*. 4, Aedeagus. 5, Male genitalia less left valve and aedeagus. 6, Female genitalia.

Diagnosis.—Superficially resembling *T. plagiata* in pattern and coloration, including variations, but male genitalia distinctive. Apex of valve with a single dorsally directed process, not a clavate, heavily spined, distally directed lobe. This is the only known New World species of the complex.

Type.—The type has not been examined. It should be, if still existent, in the Gundlach collection now in the National Museum, Havana, Cuba, and should be marked “748/870.”

Distribution.—Cuba, Jamaica, Puerto Rico. 15 ♂ and 16 ♀ examined.

Host.—Brunner et al. (1945: 57) listed coffee (*C. arabica* L.) but that appears to be only an accidental association. The senior author has received larvae of one of the Old World species from *Erythrina*, a tree utilized to shade coffee in various parts of the world, from New Guinea. Accordingly, it seems likely that the normal host is some legume, possibly even *Erythrina* as that tree is also used to shade coffee in many places in the Western Hemisphere.

Tiracola grandirena sacca Todd and Poole, NEW SUBSPECIES
Figs. 4–6

Tiracola plagiata (Walker) [misidentifications]; Druce, 1889: 287; Hampson, 1905: 257–259; Draudt, 124, pl. 18; Schaus, 1940: 183.

Description.—Length of forewing from base to apex, male 26–28 mm, female 24–27 mm. Pattern of maculation and coloration as in nominal sub-

species. Male genitalia with outer surface of base of valve with an elongate, tapering, membranous sac which is absent in *T. grandirena grandirena*; uncus slightly broader but less emarginate medially than in the nominal subspecies; female genitalia with signum of corpus bursa better developed than in *T. grandirena grandirena*.

Holotype.—♂, Aroa, Venezuela, ♂ genitalia on slide E.L.T. 1506, in the U.S. National Museum of Natural History.

Paratypes.—Jalapa, Mexico, 3 ♂; Cordoba, Mexico, 1 ♂; Misantla, Mexico, 1 ♂, 1 ♀; Sitio, Costa Rica, 1 ♀; Aroa, Venezuela, 1 ♂, 1 ♀; Rancho Grande, Aragua, Venezuela, 1 ♂; Sapucay, Paraguay, 1 ♂. All paratypes are in the U.S. National Museum of Natural History.

Comments.—The decision to treat the entity here described as a subspecies of *T. grandirena* rather than a distinct species was based on the relatively slight differences in the male and female genitalia and the apparent geographic isolation of the two entities. The primary difference in the male genitalia, the elongate, eversible sac or lobe on the base of the valve of *T. grandirena sacca*, may be connected with pheromone secretion and, if so, may be of specific significance.

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NOTE

Notes on Palaearctic Syrphidae (Diptera)

During the preparation of a Catalog to the Syrphidae of the Palaearctic Region, the types of two syrphids misplaced by previous authors were examined. *Lasiophthicus coronata* Rondani (1857, Dipt. Ital. Prodr. 2: 143), usually considered a valid species of either *Lagenosyrphus* Mik (Mik, 1897, Wien. Entomol. Ztg. 16: 64) or *Ischyrosyrphus* Bigot (Verrall, 1901, Cat. Syrph. Europ.: 54; and all subsequent authors), is a species of *Dasysyrphus* Enderlein (N. COMB.). The holotype is a melanoid female (see Knutson, 1971, J. N.Y. Entomol. Soc. 79: 201-209 for discussion of the term), so, I am uncertain of its validity. The mesonotum is shiny, the wing is partially bare basally (basal $\frac{1}{2}$ of 2nd costal and 1st basal and antero-basal $\frac{1}{2}$ of 2nd basal cell), and with other characters as described by Rondani. These characters suggest that *coronata* is a synonym of *albostrigatus* Fallén (1817, Syrph. Svec.: 42). *Tropidia sinensis* Macquart (1855, Dipt. Exot., suppl. 5: 91) is a species of *Mesembrius* Rondani and a junior synonym of the type-species, *peregrinus* Loew (1846, Stettin. Entomol. Ztg 7: 118) (N. SYN.). Macquart described his species from an unspecified number of males from northern China in the Bigot Collection. There is a single male with the proper Macquart, Bigot, and museum labels in the British Museum (Natural History), London. This specimen is here designated LECTOTYPE and has been so labeled.

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