

CORRECT NAME FOR THE NEOTROPICAL SQUASH-VINE
BORER (SESIIDAE: *MELITTIA*)

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ABSTRACT. The identity of the species of squash-vine borer occurring in Central and South America on cultivated Cucurbitaceae is established as *Melittia pulchripes*, not *M. satyriniformis*, which is a junior synonym of the Eastern squash-vine borer, *M. cucurbitae*. A lectotype is designated for *M. riograndensis*, a name which is then synonymized under *M. pulchripes*.

For more than a century the *Melittia* species whose larvae are commonly found boring in stems of many cultivated species of Cucurbitaceae in Central and South America has been referred to in the literature as *M. satyriniformis* Hübner. In a study by Duckworth and Eichlin (1973) it was found that in the Western Hemisphere these borers belong to a complex of three closely related species: *cucurbitae* (Harris), *satyriniformis* Hübner, and a third which they described and named *calabaza*. According to these authors (1973:154), the three species of the complex are easily distinguished by their external features and genitalia. A fourth species, *pauper* LeCerf, apparently occurs only in the vicinity of Lima, Peru. Both *cucurbitae* and *calabaza* are restricted to the United States and Mexico and are sympatric in the southern part of their range. The species distributed from Guatemala through Central and South America was regarded by them as *satyriniformis*, following the use of earlier authors.

Heppner and Duckworth (1981:26) established that *satyriniformis* is a junior synonym of *cucurbitae*. This was based mainly on the fact that Hübner stated that the type locality of *satyriniformis* was "Georgia" and therefore, must be conspecific with *cucurbitae*, the only squash-vine borer from the region.

We have examined the syntypes of *riograndensis* Brèthes (1920:284) and found that they are the same species as the Central and South American species previously and currently misnamed as *satyriniformis*. Two male syntypes of *riograndensis* were located in the Museo Argentino de Ciencias Naturalis (MACN), Buenos Aires, both bearing identical labels in Brèthes' hand-writing: "17"; "E. Ronna, vi. 1919, Pelotas"; "Type"; "Melittia riograndensis Breth."; (red rectangle). The

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male specimen which had been dissected is here designated as the lectotype; the second male becomes a paralectotype. These two specimens are covered by mold, and their external features are somewhat obscured; however, the genitalia are identical to those of *satyriniformis* (*sensu* authors, including Duckworth and Eichlin, 1973:fig. 3c), bearing the peculiar quadrate expanded process at the center of the valva. They also agree with the genitalia of a specimen reared by the senior author from stems of *Cucurbita* sp. at Turrialba, Costa Rica.

However, the oldest available name for this species is *Melittia pulchripes* Walker (1856:67). Syntypes in the British Museum (Natural History) were examined and a lectotype designated (Duckworth and Eichlin, 1978:21). At this time it was determined to be conspecific with the Central and South American squash-vine borer. The previous references to *satyriniformis* for the Neotropical squash-vine borer should in fact be applied to *pulchripes*. Also, *riograndensis* now becomes a synonym of *pulchripes* (NEW SYNONYMY).

The following is a summary of the species comprising the squash-vine borer complex:

Melittia cucurbitae (Harris)—eastern half of United States, Gulf Coastal areas of Texas and Mexico to near Guatemala.

Melittia calabaza Duckworth and Eichlin—Arizona, central and western Texas, interior areas of Mexico to west coast.

Melittia pulchripes Walker—Guatemala south throughout Central and South America to southern Brazil.

Melittia pauper LeCerf—currently recorded only from Peru.

LITERATURE CITED

- BRÈTHES, J. 1920. Insectos útiles y dañinos del Rio Grande do Sul y de La Plata. Anales de la Sociedad Rural Argentina 54:281–290.
- DUCKWORTH, W. D. & T. D. EICHLIN. 1973. New species of clearwing moths (Lepidoptera: Sesiidae) from North America. Proc. Entomol. Soc. Wash. 75:150–159.
- . 1978. The type-material of Central and South American clearwing moths (Lepidoptera: Sesiidae). Smithson. Contr. Zool. 261:1–28.
- HEPPNER, J. B. & W. D. DUCKWORTH. 1981. Classification of the superfamily Sesiioidea (Lepidoptera: Ditrysia). Smithson. Contr. Zool. 314:1–144.
- WALKER, F. 1856. List of the Specimens of Lepidopterous Insects in the British Museum. Part 8, 271 pages. London: British Museum.