NOTE

Distributional Notes on *Bertamyia notata* (Loew), Including the First Report of the Family Platypezidae from the Caribbean (Diptera: Platypezidae)

Kessel (1970) erected the genus Bertamyia, differentiating it from Agathomyia Verrall primarily by its lack of a postsutural supra-alar seta; the position of crossvein rm, which is slightly more distal than in Agathomyia; and differences in larval structure. Bertamyia also differs from known Agathomyia in forming a puparial cocoon within the fungal host (Kessel et al. 1973). The genus contains two species, the type species, B. notata (Loew), found widely in the Nearctic and Neotropical regions, and B. umacibise (Kessel and Clopton) from South Africa. Bertamyia notata has been reared from the bracket fungus Tyromyces chioneus (Fr.) P. Karst. (Kessel 1957, Chandler 2001) in North America. Adults, like those of many other platypezids, can be found running actively on the upper surfaces of broad leaves.

Another feature of *Bertamyia* that is well known, but has not been used as a diagnostic feature, is the presence of well-defined, pale maculations with a light metallic bluish or greenish sheen on the dorsum of the thorax and on the abdominal tergites of both sexes as well as on the frons of the female. Only a few other platypezids in the genus Agathomyia Verrall (e.g., Agathomyia collini Verrall) have silvery markings or a silvery sheen to the thorax (Chandler, personal communication). In B. notata, these markings are variable which led earlier authors to describe several species that subsequently have been synonymized (Kessel 1957, Kessel and Pearce 1966). In some specimens, these markings appear faint, which may be due in part to age of the specimen or greasing after preservation. On the other hand, the male genitalia have not been examined across the geographic range of the species, and it is possible that future work will reveal additional species.

Bertamyia notata is widespread in the Nearctic Region, ranging from Alaska to Northwest Territories and Quebec, south to California and Georgia (Kessel and Pearce 1966). Kessel and Pearce (1966) recorded the species from Mexico, Argentina, Brazil, and Paraguay in the Neotropical Region.

I recently collected a single female of B. notata in Puerto Rico and a series from the Dominican Republic, which prompted me to examine material in the collection of the National Museum of Natural History, Smithsonian Institution (USNM). Additional distribution records of interest came to light. A specimen from Chiapas, Mexico, extends the range well east of Oaxaca, the southernmost previous record from Mexico (Kessel and Pearce 1966). Kessel and Pearce (1966) noted that they had not seen specimens from Central America. Material in the USNM collection from Costa Rica and specimens that I collected from Panama document the occurrence of B. notata there. The USNM collection also has a small series from Madre de Dios Department, Peru, well west and north of previous South American records, and material that I recently collected in Bolivia. The collection also contains specimens from Jamaica, which together with my collections from Puerto Rico and the Dominican Republic, are the first records for the Caribbean and suggest a widespread occurrence in the region. In fact, the family Platypezidae has not previously been recorded from the Caribbean (Chandler, personal communication), although the USNM collection contains specimens of an unidentified species of Microsania from Dominica, so that platypezid genus occurs in the Caribbean as well. The specific localities of material examined are given below. Bertamyia notata

is a small, inconspicuous fly that is easily overlooked. The new records presented here provide a strong indication that the species occurs throughout much of the Neotropical Region.

Adults of *B. notata* have habits similar to many other platypezids. They can be found on horizontal surfaces of large leaves in semi-moist to wet broadleaf forests, sometimes in dappled sunlight. They usually are seen walking quickly in an erratic fashion in a small area on the leaf.

Material examined (north to south). PUERTO RICO: 1 9, Caribbean National Forest, Road 186 at Quebrada Grande, 450 meters, 18°18′24″N, 65°50′00″W, 17 June 2003, N. E. Woodley. DOMINICAN RE-PUBLIC: 4 ♂, 3 ♀, Pedernales Province, Parque Nacional Sierra de Baoruco, Las Abejas, 18°09.011'N, 71°37.342', 1,150 meters, 11 July 2004, N. E. Woodley. JA-MAICA: 4 &, Runaway Bay, February 1969, W. W. Wirth, "stream bed". MEXI-CO: 1 &, Chiapas, Finca Prusia, 33 km S of Jaltenango, 1,000 meters, 12 May 1985, W. N. Mathis. COSTA RICA: 7 9, La Suiza, various dates (April 1922, July 1926, August 1926, September 1926), Pablo Schild; 1 9, Turrialba, November 1922, Pablo Schild; 1 ♀, Turrialba, 15–19 July 1965, P. J. Spangler. PANAMA: 1 ♀, Bambito River, 30 August 1952, F. S. Blanton; 1 &, 1 ♀, Canal Zone, Barro Colorado Island, 10 June 1978, N. E. Woodley; 6 &, 1 9, Canal Zone, Chiva Chiva Road, 8 air km north of Fort Clayton, 25 July 1978, N. E. Woodley. PERU: 2 ♂, 1 ♀, Madre de Dios, Manu, Río Manu, Pakitza, 250 meters, 12°07′S, 70°58′W, 9–23 September 1988, Amnon Friedberg; 1 ♂, Madre de Dios, Manu, Erika, near Salvación, 550 meters, 5–6 September 1988, Amnon Friedberg; 3 ♂, Madre de Dios, Manu, Río Manu, Cocha Salvador, 240 meters, 14 September 1988, Amnon Friedberg. BOLIVIA: 4 ♀, Santa Cruz Department, Ichilo Province, Hotel Flora y Fauna, 4–6 km SSE Buena Vista, 17°29.95′S, 63°N33.15′W, 400–500 meters, 6–8 November 2003, N. E. Woodley.

I am very grateful to Peter Chandler (Burnham, Slough, England), for providing information and reading the manuscript, and John Brown and Allen Norrbom (both of the Systematic Entomology Laboratory, USDA) for their review of the manuscript.

LITERATURE CITED

Chandler, P. J. 2001. The flat-footed flies (Diptera: Opetiidae and Platypezidae) of Europe. Fauna Entomologica Scandinavica 36: 1–276.

Kessel, E. L. 1957. Distribution and variation in *Agathomyia notata* (Loew) (Diptera: Platypezidae). The Wasmann Journal of Biology 15(1): 69–80.

. 1970. Bertamyia, a new genus of Platypezininae (Diptera: Platypezidae). The Wasmann Journal of Biology 28(2): 185–190.

Kessel, E. L., M. E. Buegler and P. M. Keyes. 1973. A survey of the known larvae and puparia of Platypezidae, with a key to ten genera based on immature stages (Diptera). The Wasmann Journal of Biology 31(2): 233–261.

Kessel, E. L. and M. J. Pearce. 1966. The genus *Agathomyia* in the Americas south of the United States (Diptera: Platypezidae). The Wasmann Journal of Biology 24(2): 261–278.

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Woodley, Norman E. 2005. "Distributional notes on Bertamyia notata (Loew), including the first report of the family platypezidae from the caribbean (Diptera: Platypezidae)." *Proceedings of the Entomological Society of Washington* 107, 731–732.

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