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A Monograph of *Trichonta* With a Model for the Distribution of Holarctic Mycetophilidae (Diptera)

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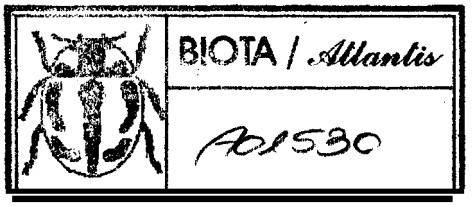

mania. In addition, the type of exigua is from Latvian S.S.R.

T. exigua is the only vulgaris synonym for which I did not see a type. but Lackschewitz's figures of the male terminalia satisfy me that exigua is *a* synonym of vulgaris.

Six other Trichonta species—amica, bifida, brevicauda, *clemens,* generosa, and rnerita—resemble *vulgaris* closely and can be separated only on differences of the male terminalia as outlined in couplets 22–27 of the key and as illustrated in figures 31-40. Females are probably similar in general aspect to that described here for vulgaris. Synapomorphies of the seven species comprice the cinuous Cu; the dark female sternum VIII, ctriking next to the lighter sclerites of the postabdomen; and the characteristic male terminalia, dark brown, with the cerci subequal in length *to* tergum X and without strong apical setae, the lateral part of the gonostylus short. simple, and single lobed, and the characteristic aedeagus with a short caudal projection on each side. Other characters that unite those ceven species but are shared with some other *Trichonta* are Sc ending in R; Cu petiole asetose; A weak, asetose; hind coxa with posterobasal seta; and hind tibia without anteroventral or posteroventral setae.

Six species are included here for various reasons. Three should be recognizable when the typec are studied, assuming they are in good ccndition. *T. cincta, obesa,* and *floresiana* are true *incertae* sedis because they lack abdomens and cannot otherwise be keyed lo species. The type of *floresiana* is also probably lost.

Trichonta canariensis Landrock 19255: 182

trivittata Santos Abreu **1920: 122,** preocc Lundström (1916), replaced with new name, *canariensis,* by Landrock (1925b).

A 3½-page original description, rnostly of color characters, in Santos Abreu *(7920)* gives little more meaningful information other than that the species is a Trichonta. ?he type, unavailable for loan at present, muct be examined before this species can be identified.

Syntypes, males, Barranco del Rio, La Palma, Canary Is., 4–XI–1907, in the care of Santos Abreu'c heirs.

Trichonta cincta Johannsen 1912: *303*

The type lacks the abdomen and hind legs beyond the coxae and consequently cannot be identified with certainty.

Holotype, female, Eastport, Maine, 16–VII–1909, MCZ Type No. 27262, in Museum of Comparative Zoology, Cambridge, Mass.

Trichonta floresiana Storå 1945: 11

The type, originally depocited in the Zoological Museurn: Helainki. is apparently lost (Lindebsrg. in litt.), but it might not be identifiable because the postabdomen is lost. Two items in the original description, the darkencd wing apex and thc brown distal section of the hind femur, indicate that *floresiana* rnight belong to *vitta* or to a close relative.

Holotype, sex unknown ("hypopygium brokcn off"), Vales, Flores, Azores, 28–*Vi,* Storå, originally deposited in Zoological Museum. Helsinki.

Trichonta genitalis (Brunetti) 1912: 104 (*Rhymosia*)

T genitalis was transferred from *Rymosia* to *Trichonta* by Edwards (*1924b*). The type is now in the Zoological Survey of India in Calcutta. The specimen is very fragile and partly damaged (P. T. Cherian, in iitt.). It is probably best left in Calcutta until someone can study it there.

Holotype, male, "Darjiling," 29–V–1910, E. Brunetti, in Indian Museum, Calcutta.

Trichonta obesa Winnertz 1863: 854

The type of obesa is one of ths few Winnertz types that are extant because it was not part of his collection and was returned after study to the Schiner collection in Vienna, its original deposrtory. Since the type, a female, lacks an abdomen and hind tibiae, it probably cannot now be referred to any known species. Mik (7880) identified specimens of *venosa* Staeger as alleged males of obesa, but the two species are not identical. The type of obesa *has* narrow front tarsomeres, whereas in venosa females they are strcngly dilated. The identification of a Greenland specimen as obesa by Lundback (7898) was the source of the listing in Laffoon *(7965)* through Johannsen *(7972).* Since that identification was based on Mik (*1880*), the specimen rnay have belonged to venosa.

Hoiotype. female, Ausiria, in Schiner collection, Naturhistorisches Museum, Vienna.

Trichonta pilicauda Bukovsky 1949: 409

This name is probably a synonym of *atricauda* or *melanura,* but onc cannot determine which one from ths illustration accompanying the original description cf *pilicauda.* An inquiry I made about the type to the Zoological Museum in Leningrad has so far been unanswerod.

Holotype, male, Crimea, U.S.S.R., presumably deposited in the Zoological Institute, Leningrad.