A NEW SPECIES OF *FORCIPESTRICIS* BURKS, 1968 (HYMENOPTERA: ENCYRTIDAE) FROM PUERTO RICO PARASITIC ON *FORCIPOMYIA* (DIPTERA: CERATOPOGONIDAE)

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ABSTRACT

Forcipestricis portoricensis, spec. nov., is described. It and the type-species, *F. gazeaui* Burks are internal larval-pupal parasites of ceratopogonids in the genus *Forcipomyia* Meigen.

Willis W. Wirth recently gave me some encyrtid parasites of *Forcipomyia fuliginosa* (Meigen) collected by L. G. Saunders on Puerto Rico during 1953. The specimens represent an undescribed species of *Forcipestricis* Burks. The distinctive habitus of the specimens, their host association and possible negative effect on biological control attempts prompted this description.

Forcipestricis portoricensis Gordh spec. nov.

FEMALE—1.0-1.3 mm long. Body uniformly tan; antenna and legs except coxae and femora slightly paler.

Head in frontal aspect slightly wider than high, subtriangular; compound eye, vertex, inner margin near compound eye, malar space and region between toruli sparsely setose; head smooth, bearing few faintly incised striae on vertex and malar space. Torulus 2 times as high as wide; toruli separated by 2 times torulus diameter and 1 torulus height below imaginary line extending between ventral margin of compound eyes. Antennal scape (Fig. 1) sparsely setose, nearly smooth and not reaching vertex; pedicel sparsely setose, smooth and as long as funiculars 1-3 combined; funicular segments transverse, moderately setose, smooth, each succeeding segment uniformly increasing in size; club compact, setose, smooth; rhinaria on all funiculars and club. Clypeal margin straight; mandible tridentate, middle mandibular tooth large, conically pointed, inner and outer teeth small. Maxillary palpus 3 segmented, apical segment blunt, as long as segments 1 and 2 combined; labial palpus 2 segmented, apical segment blunt, segments subequal.

Pronotum nearly concealed from above, strongly transverse, moderately setose, with faintly incised reticulate sculpture; mesoscutum moderately setose with faintly incised reticulate sculpture; scutellum (Fig. 3) nearly smooth, with central pair of scolopophorus (?) sensilla, longitudinal mesal portion lacking setae, laterally adjacent areas with a few pale thin setae and a cluster of 7-10 horseshoe-shaped tubercles, lateral region lacking setae and sculpture; metanotum with transverse striae and small setae only along anterolateral margin. Propodeum mesally short,

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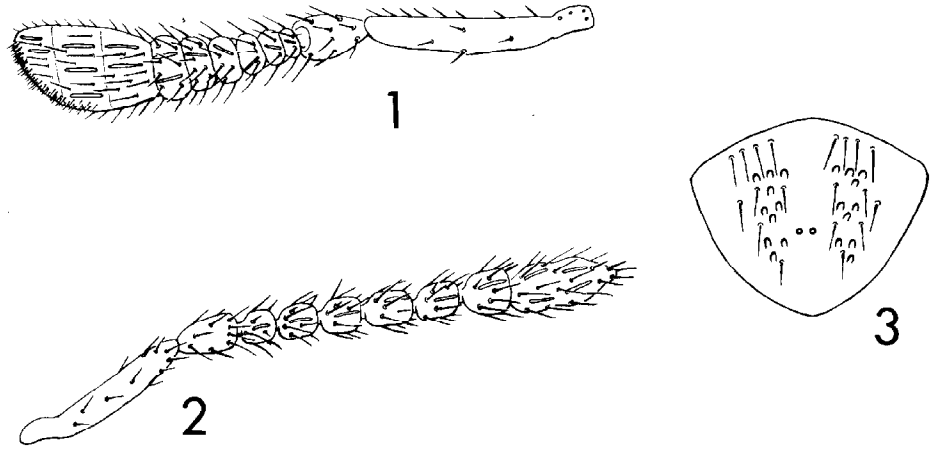

Fig. 1-3. *Forcipestricis portoricensis.* 1. Female antenna, inner aspect; 2. Male antenna, inner aspect; 3. Female scutellum.

strongly transverse and bulbous laterally to accommodate a large spiracle; with a few striae. Tegula sparsely setose and bearing a faintly incised reticulate sculpture.

Metasoma 1.1-1.3 times longer than mesosoma; cerci approximately halfway between anterior and posterior margins of metasoma; terga faintly incised with reticulate sculpture; metasomal apex moderately setose. Middle tibia 1.1-1.3 times longer than ovipositor.

Forewing hyaline; speculum present, margins poorly defined; costal cell and anterior margin setose; submarginal vein long, separated from marginal vein by hyaline break; marginal vein shorter than stigmal vein; postmarginal vein apically indistinct, approximately as long as stigmal vein; wing blade distad of speculum with uniform vestiture of small, thin setae.

MALE—1.0-1.2 mm long. Similar to the female in habitus, coloration, chaetotaxy and sculpture. Differing in the following features: antennal funicular segments (Fig. 2) moniliform, but the first distinctly smaller than the last; club as long as preceding 2 funiculars combined.

Type locality: Mayaguez, Puerto Rico.

Holotype: Female dissected and mounted in balsam; USNM Number 73409. Described from 10 females and 2 males collected at Mayaguez, Puerto Rico, on 23 March 1953 by L. G. Saunders. The host was identified by W. W. Wirth as *Forcipomyia fuliginosa* (Meigen). Eight female and 2 male paratypes deposited in USNM.

Variation: Little variation of morphological features was detected among the specimens examined. One female had funicular segments 5 and 6 partly fused and was not included in the type series.

Comparative comments: Burks (1968) erected the genus *Forcipestricis* for a single species *gazeaui* which was reared by Lionel Gazeau from pupae of *Forcipomyia (F.) simulata* Walley in Maryland. *Forcipestricis portoricensis* may be distinguished from *F. gazeaui* on the basis of the following characters: the latter species is black, the first 4 funicular segments are subannelliform and the last 2 enlarged (female only), the scutellum is boldly reticulate, and the gaster is as long as the mesosoma.

Both species bear conspicuous horseshoe-shaped tubercles on the scutellum. I have not seen these features in the Encyrtidae before and suggest that they may be diagnostic characters used in addition to those cited by Burks (1968) to separate *Forcipestricis* from all other genera of encyrtids. The denticles cannot be seen with reflected light and a dissecting microscope.

Literature Cited

Burks, B. D. 1968. A new chalcidoid parasite of a ceratopogonid midge (Hymenoptera, Encyrtidae). Ent. News 79:236-40.

PSEUDOSCORPIONS PHORETIC ON FIREFLIES II—(*Note*). Female pseudoscorpions (hereafter called ps) (*Paratemnus elongatus*) are phoretic on *Photuris sp. D* fireflies during a brief, early-summer period in Gainesville, Florida (Lloyd and Muchmore, 1974, Fla. Ent. 57:381). We have made additional observations on this phenomenon at the same site. Phoresy was found on the first night of observations, 16 June 1975 and was last seen on 24 June, though sought several evenings subsequently. Seasonal distribution of phoresy during 2 seasons, as presently delimited by observations on more than 400 fireflies, of which 8 (3 males) were encumbered with a total of 22 pss (all female apparently), is 9-24 June: *Photuris D* season is from early May to mid August. Multiple phoresy is common, and the pattern established is odd, but probably not significant: 3 fireflies had 1 ps, 3 fireflies had 3 pss each, and 2 had 5 pss. Most pss were attached to a hind tibia, usually by a single chela; other attachment sites observed in the field were the tibio-tarsal junction and tarsus of a hind leg, and mesotarsus and tibia. In captivity pss occasionally reattached at other places, including the elytral apex and an antenna.