

OCCASIONAL PAPERS
OF
BERNICE P. BISHOP MUSEUM
HONOLULU, HAWAII

Volume XIV

November 5, 1938

Number 11

**On the Genus *Goniophyto* Townsend, 1927, with
Description of a New Species from Hawaii**

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Sometime ago, Mr. E. H. Bryan, Jr., Curator of Collections, B. P. Bishop Museum, sent to me for study some determined specimens of *Sarcophaga* and abundant material of an interesting sarcophagid fly, apparently new to science. I found that it agreed most closely with the genus *Agria* Desv. (type: *Musca latifrons* Fallen). One specimen of this material was sent to C. H. T. Townsend, who wrote me as follows: ". . . a species near *Goniophyto* differing from that genus practically only by arista micro-pubescent, palpi gently clavate, 1 Pa, M3 nearly cubitulus. . . . The Hawaiian Sarcophagid may be referred to that genus (*Goniophyto*) as an atypic member."

Through the kindness of Walther Horn, I studied the holotype of *G. formosensis* Towns., genotype of *Goniophyto*, from the collection of the Deutsches Entomologisches Institut, Berlin-Dahlem. Comparing it with *G. bryani*, n. sp., I am still in doubt whether this latter can be placed in *Goniophyto*, because the shape of head is very different. The head of *G. formosensis* Towns., viewed from the side, is more or less quadrangular, because the antennae are very long. On the contrary, *G. bryani* has the front obliquely sloping down, because the antennae are much shorter. Notwithstanding, I provisionally include the new species in the genus *Goniophyto*.

As this species may have been introduced into Hawaii from the Oriental region, I compared it with the descriptions of some Oriental species (Senior-White, Rec. Ind. Mus., 26: 257, 1924). *Leucomyia cinerea* Fabr. (synonym: *Sarcophila alba* Schin.) seems to be similar, but Townsend, in his redescription of *S. alba* Schin. (Ann. Mag.

Nat. Hist., X, 8: 377, 1931) does not mention the unusual enlargement of the second arisal joint, present in the new species.

Genus GONIOPHYTO Townsend, 1927

Towns., 1927, Ent. Mitt., 16:281.—1935, Man. Myiology, 2:176.

Resembling *Agria* Desv. mainly in the shape of male abdomen. First two arisal joints elongate. Fronto-orbital bristles proclinate in both sexes (sometimes minute in *G. bryani*, n. sp.). Costal spine strong. Fifth sternite entire in male. Abdomen of male truncate at apex, and first genital segment with two rows of bristles.

Goniophyto formosensis Towns., Ent. Mitt., 26: 281, 1927; (fig. 1).

Male: total length, 7.5 mm.

Front about 0.36 of head, frontal stripe 0.33 of front width above. Head silvery; frontal bristles about 6; two small proclinate fronto-orbital bristles present. Parafrontals with some hairs in whole length. Antennae grayish, second joint about 0.34 length of third and reaching 0.92 of the way to vibrissae. Arista pubescent, first two joints elongate. Palpi light brown. Ocellar and outer vertical bristles present. Three to four rows of black bristles on back of head.

Thorax gray with three indistinct black stripes. Three pairs of postsutural dorsocentral bristles, two anterior dorsocentrals; anterior acrostichals very weak, scarcely differentiated from vestiture of praescutum; posterior acrostichals absent; humerals 3; notopleurals 2, sternopleurals 2, hypopleurals 4, mesopleurals 4; posthumeral 1; intralar 2, supralar postsuturals 3, and presutural 1. Scutellum with two pairs of marginals and a small discal, no apical bristles. Propleura and prosternum bare.

Abdomen silvery pollinose, blackish on hind margin of segments 3 to 5. Second segment with only one lateral bristle, third and fourth with a median marginal, fifth with a row of about 16. Fifth sternite entire. Genital segments black, the first with two pairs of basal bristles and a preapical pair; second segment with black hairs. Forceps reddish, covered with short yellow pile, except in the extreme apex and with black hairs which are very long at base; viewed from behind they diverge slightly to the apex. Accessory plate shining yellow, about as long as forceps, with black bristles at apex. Posterior claspers very small and with a very long bristle at apex. Anterior claspers shining reddish yellow and greatly developed. Penis very long and thin, directed backward.

Legs black, middle femora without comb, middle tibia with three bristles on the outer front side. Hind femora with a complete row of dorsal bristles and three bristles below.

Wings hyaline: *r* 1 bare, *r* 4-5 with about five bristles, reaching two thirds of the way to crossvein. Costal spine strong.

Redescribed from the holotype male, Anping, Formosa, V.1912 H. Sauter, in Berlin-Dahlem (Deutsch. Ent. Inst.).

***Goniophyto bryani*, n. sp. (fig. 2).**

Differs from the genotype in shape of head and male genitalia.

Male: total length, 3.5-8 mm.

Front about 0.33 of head, frontal stripe 0.38 of front width above. Head silvery, frontal bristles 6 to 8; two small proclinate fronto-orbitals present, about as long as ocellars (in some specimens very minute). Parafrontals with sparse hairs in whole length. Antennae grayish, second joint about 0.47 length of third, reaching 0.71 of the way to vibrissae. Arista pubescent, first two joints elongate. Palpi yellow-brown. Ocellar and outer vertical bristles present. Back of head with four to five rows of postocular cilia.

Thorax gray with indistinct stripes. Three postsutural dorsocentral bristles, two anterior ones; anterior acrostichals very weak, prescutellars present; humer-

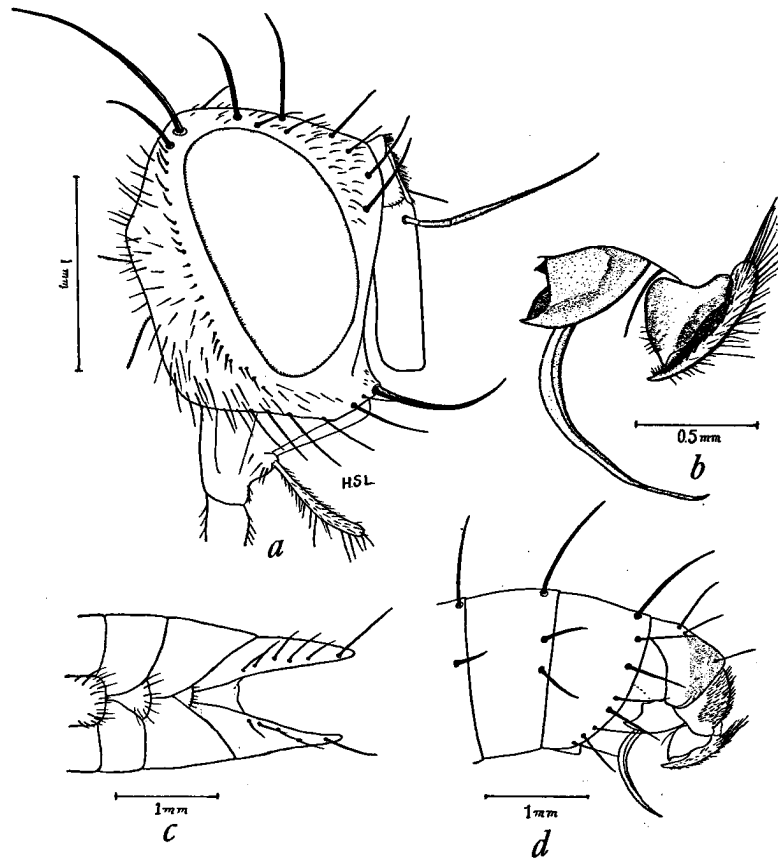


FIGURE 1.—*Goniophyto formosensis*: *a*, head of male, lateral view; *b*, male terminalia; *c*, male abdomen, ventral view; *d*, male abdomen, lateral view.

als 3, posthumeral 1, intralar 2, supralar postsuturals 3, and 1 presutural; notopleurals 2, mesopleurals 5, sternopleurals 2, hypopleurals 4 to 5. Propleura and presternum bare. Scutellum with two pairs of marginal bristles, one small preapical pair and no apical.

Abdomen silvery pollinose, black on posterior margin of segments. Second segment with lateral bristle only, third and fourth with strong median marginal and fifth with a row of about 15 marginals. Fifth sternite entire. Genital segments reddish black, the first with four basal bristles and two preapicals, the second with only black hairs. Penis with two apical lobes.

Legs black, middle femora without comb, middle tibia with two anterodorsal bristles. Hind femora with a complete row of dorsal bristles and four to five bristles below.

Wings hyaline, costal spine strong, *r* 4-5 with bristles reaching two thirds of way to crossvein. The small specimens have apical cell closed at costal border.

Female: length, 4-7 mm.

Front about 0.35 of head width, frontal stripe 0.48 of front width. Proclinate fronto-orbital bristles more developed than in male.

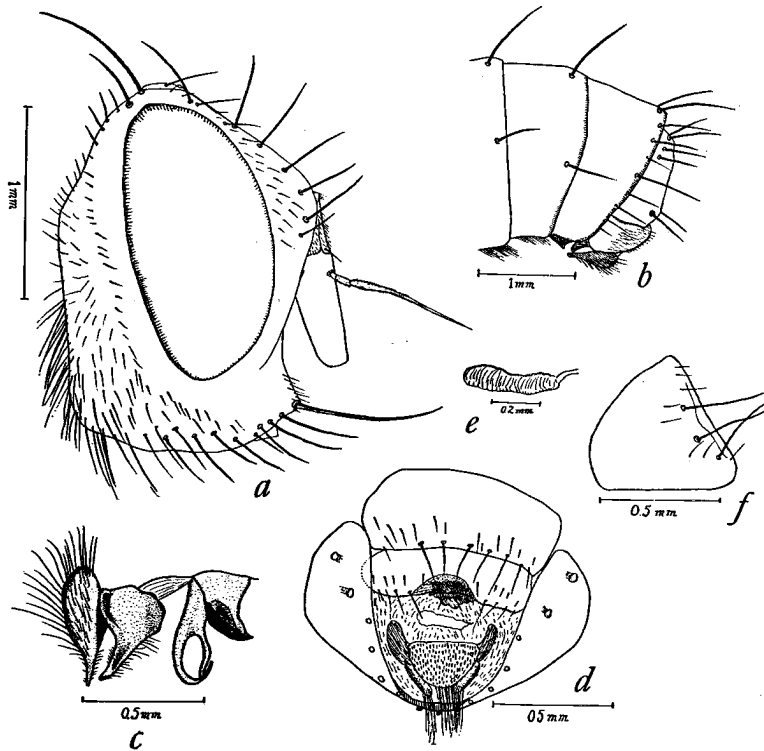


FIGURE 2.—*Goniophyto bryani*: *a*, head of male, lateral view; *b*, last segment of male abdomen; *c*, male terminalia; *d*, female terminalia, ventral view; *e*, spermatheca; *f*, female fifth sternite.

Holotype male and allotype female from Hawaiian islands, Nihoa Island, June 13, 1923, E. H. Bryan, Jr.

Paratypes as follows: Leeward Hawaiian islands: Nihoa Island, 1 male and 2 females, June 24, 1923, Bryan; Necker Island, 1 male and 5 females, June 17-20, 1923, Bryan; French Frigate Shoal, 3 males and 5 females, June 24, 1923, Bryan; Pearl and Hermes Reef, 4 females, April 26, 1923, Fullaway; Midway Island, 3 females, April 1923, Fullaway; Kure (Ocean) Island, 2 females, June 1923, Fullaway; Johnston Island, 5 males and 9 females, June 18, 1923, Bryan.

The holotype, allotype, and 31 paratypes are stored in B. P. Bishop Museum; 4 male and 4 female paratypes are in the Instituto de Biologia Vegetal (Rio de Janeiro); and 1 male and 1 female paratype are in Deutsches Entomologisches Institut (Berlin-Dahlem).

I take pleasure in naming the new species after E. H. Bryan, Jr.

