(Noona Dan Papers No. 66.)

Two New Species of Scatopsidae (Diptera) from the Bismarck Islands.

By Edwin F. Cook¹

I have recently had the opportunity to examine two specimens of Scatopsidae from the Noona Dan Expedition of 1961—62 to the Bismarck Archipelago (see Petersen, 1966: Ent. Meddr. 34: 283— 304). These were sent to me by Dr. Elmo Hardy who found them in material assumed to be bibionids.

Each of these specimens represents a new species. One is a *Rhegmoclema* and the other is a *Colobostema*.

Rhegmoclema hardyi, new species

Female. — Total length 1.75 mm. Color dark brown with head somewhat darker; head and thorax shining, abdomen dull blackish brown; antennae and legs largely concolorous with body, except basal half of tibia pale yellowish; tarsi dark; halteres darkbrown.

Head with rather long occipital setae posteriorly; 3 campaniform sensillae on each side of occiput behind eyes; 2 long setae in front of ocelli and about 12 curved, stout setae above and between antennal bases. Antennae with 12 segments, penultimate flagellomere with approximately 9 setae, other flagellomeres similar; 7 setae in a single row on cardo-stipites; maxillary palpi ovoid, 0.076 mm long. Thorax with 3 supra-alar setae, 4 subspiracular setae, pedicel without setae. Spiniform setae and a comb of setae on apex of all tibiae. Wing (fig. 1) length 1.88 mm; width 0.75 mm; WL/WW = 2.52. Setae on costa and all around margin, setae numerous on R₁ and R₂, 2 to 5 on remaining veins, and 7 on

¹ Paper No. 6394, Scientific Journal Series, Minnesota Agricultural Experiment Station, St. Paul, Minnesota 55101.



Figs. 1—4. 1. Wing of *Rhegmoclema hardyi* n. sp.; 2. Tergum 7 of same; 3. Female genitalia of same; 4. Male genitalia of *Colobostema nocturnalis* n. sp.

membrane behind Cu 1b. Wing membrane covered with rather long microtrichia.

Abdominal terga and sterna sparsely setaceous, with small setae; setae longer and more abundant on sterna than terga; a cluster of about 10 stout spiniforms on the middle of the hind margin of sternum 6; sternum 7 with a median posterior projection; tergum 7 with a median posterior groove (fig. 2). Female genitalia as in fig. 3.

Holotype \bigcirc . Bismarck Islands, NEW BRITAIN: Yalom, 1000 m., 10. May 1962. Noona Dan Expedition. In the Zoological Museum, Copenhagen.

This is a very setaceous and spiny species but this is not unusual in this genus.

Colobostema nocturnalis, new species

Male: — Total length 1.18 mm. Color dark brown, semishining; head and thorax concolorous; antennae brown except segments

4 and 5 yellow. Wing base yellow, the rest brown, subshining, covered with long microtrichia; capitulum of haltere brown, pedicel yellow; coxae brown; trochanters and base of femora yellow, basal half of each tibia nearly white, all tarsi yellow; setae all long.

Occiput covered with rather long setae; 2 campaniform sensilla on each side behind eyes; cardo-stipites a median, setaceous triangular plate; labellae small; maxillary palpi small, ovoid, 0.06 mm long; antennae with 10 segments, a double row of setae around each flagellomere. Supra alar setae 4—5, but scarcely differentiated; subspiracular setae 6; pedicellar setae 2; spiracular plate rounded; hind tibiae with a few spiniforms; legs otherwise with normal setae. Wing 1.31 mm long; wing width 0.47 mm; WL/WW = 2.74; setae present on R₁ and R₂, none more posteriorly; microtrichia long and dense. Abdominal terga and sterna with sparse but fairly long setae on posterior 3/4, sternal setae stouter than tergal; tergum 7 transverse, posterior margin nearly straight; sternum 7 with a shallow V-shaped emargination posteriorly. Vesica and apodemes 0.238 mm long. Male genitalia as in fig. 4.

Holotype ♂. Bismarck Islands, MUSSAU: Talumalaus, 3. Feb. 1962. Noona Dan Expedition, caught by Mercury light. In the Zoological Museum, Copenhagen.

The only other *Colobostemas* from the area are *C. fumipenne* Enderlein and *C. pulchripes* Brunetti. It is distinguished from the later by the yellow 4th and 5th antennal segments. *C. pulchripes* has the 3rd and 4th segments yellow. *C. fumipenne* Enderlein has dark brown legs while this species has yellow coxae and trochanters.