FURTHER NOTES ON THE PANGONIINI OF THE
AUSTRAL REGION OF SOUTH AMERICA
(DIPTERA: TABANIDAE)\textsuperscript{1}

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\textbf{Abstract}

The study of new material available since Coscaron's publication on the same subject (1976) enables us to describe 2 new species of \textit{Veprius} from Chile, and to furnish additional records, also from Chile, for 2 species of \textit{Protodasyapha} and 1 of \textit{Chaetopalpus}.

The primitive Pangoniini occurring in the southern part of South America are of particular interest on account of possible transantarctic relationships with Australia and Southern Africa. The present publication completes and supplements work previously published by the senior author (Coscaron 1976).

\textit{Veprius apatelesteus} Coscaron, Philip, and Fairchild, NEW SPECIES

A blackish species with grayish pollinosity on head and its appendages. Frons laterally elevated. Hairs of ventral part of body and eyes grayish, tibiae yellowish brown.

\textbf{Holotype} \#: Body length 11.5 mm, wing 9.0 mm. Head (Figs. 1 and 2) blackish, eyes black with greenish reflections but no bands (relaxed). Frons black, shiny laterally; subcallus, face, occiput, palpi, and scape and pedicel of antenna black with grayish pollinosity. Third antennal segment with style black, basal plate grayish brown basally. Proboscis black, fleshy. Hairs of frons, basal antennal segments, and proboscis black; hairs of eyes, occiput, palpi, and beard light gray. Thorax and abdomen black with brownish-gray tones dorsally and grayish pollinosity ventrally; hairs whitish gray, as are those on legs. Wings with veins dark brown and membrane brown tinted. Coxae, femora, apices of tibiae and tarsi blackish, tibia otherwise light brown. Frons divergent below, with basal portion elevated, 3 large ocelli at vertex, subcallus elevated, frontal index 1.3 (height/basal width).

Antennae with robust scape, basal plate well-differentiated, with indistinct annulations; style 4-segmented. Palpi subcylindrical, quite straight, apically pointed and similar to those of \textit{Veprius presbiter} Rond. Proboscis short and membranous. Wings with short appendix on vein \textit{R}_1.

\textbf{Paratype} females of similar coloration with body lengths 11 to 11.5 mm and wing lengths 10 mm.

\textbf{Genitalia} (\#): Very similar to \textit{Veprius presbiter}, but showing differences in the genital fork, which has the base and lateral arms less sclerotized in the new species. Sternite VIII is darker on the posterior border and paler on the midline.

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**Figs. 1-7. Veprius apatolestus n. sp.** 1) ♀ head, front view; 2) ♀ frons; 3) ♂ head, front view; and 4) ♂ antenna. Veprius fulvus n. sp. 5) ♀ frons; 6) ♀ antenna; and 7) ♀ palpus. Figures of heads, fronts, and appendages are each to the same scale; the heads are least enlarged, and the antennae and palpus are most enlarged.

**Allotype ♂:** Body length 12 mm, wing 11 mm. Agrees in color with the female, but since dorsal pilosity is denser, the lighter colors are more apparent. Eyes iridescent violet black with more bluish tones in the area of small facets, with abundant gray pilosity. Head structures (Figs. 3, 4), in profile flatter than illustrated for Veprius presbiter (Coscaron 1967, Fig. 5). Antennae with scape and pedicel robust (Fig. 4) and basal plate relatively slender with pseudoannulations. Shape of palpus as in Veprius presbiter. Paratype males show no differences from the allotype except for small differences in size. Body lengths 10.5 to 12 mm and wing lengths 10 to 11 mm. **Genitalia (♀):** No appreciable differences from Veprius presbiter observed.


Holotype and 1 ♂, 1 ♀ paratypes to be deposited in California Academy of Sciences, CAS Ent. Type No. 13181; allotype and 4 ♂, 1 ♀ paratypes in collection of L. L. Pechuman; and remaining paratypes, 2 ♀, 1 ♀ in
Canadian National Collection and in Museo de la Plata, La Plata, Argentina, 1 ♂ 1 ♀.

_Veprius presbiter_ differs from the present new species in being darker, the pilosity of eyes and body dark greyish brown, body and appendages black. The face and head appendages with blackish pollinosity, legs wholly black, and wings darker. The head is relatively narrower with the frons flatter. The scape and pedicel of the male antennae are less robust and the basal plate without pseudoannulations. There are also slight differences in the sclerotization of the female genital fork and 8th sternite.

_Veprius fulvus_ Coscaron, Phillip, and Fairchild, NEW SPECIES

A dark brown species with antennae, legs and anterior border of wings yellowish.

**Holotype ♀:** Body length 10 mm, wing 9 mm. Eyes violaceous black. Frons blackish brown; occiput, subcallicus and face brown with dark gray pollinosity. Antennae yellowish, palpi and probosics dark brown. Hairs on the eyes, occiput and antennae light brown, on face and palpi blackish brown. Frons divergent below, elevated meso-basally and with smooth, transverse median depression. Ocelli prominent (Fig. 5). Frontal index 1.6. Basal plate of 3rd antennal segment with pseudoannulations (Fig. 6), the style not clearly distinguishable from basal plate. Palpus subcylindrical (Fig. 7). Thorax, abdomen, coxae and femora dark brown, with concolorous hairs. Tibiae and tarsi yellow with yellowish brown hairs. Wing membrane lightly tinted with veins C, Sc, R₁, and M yellowish, the remainder brown.

**Genitalia (♀):** Very similar to _Veprius presbiter_, with slight differences in sternite VIII which shows a deeper concavity in the distal border, and cerci with the internal sides somewhat longer, giving a subtriangular appearance.

**Material Examined:** “CHILE, Valparaiso, November, 1900” (from Reed coll.). Holotype ♀ deposited in California Academy of Sciences, CAS Ent. Type No. 13132.

_Veprius fulvus_ differs in color from _V. presbiter_, the latter being totally blackish brown, without yellowish tones in antennae, legs and wings. The frons of _fulvus_ is somewhat narrower and with darker sublateral spots well-differentiated. _Veprius apatolestus_ may be separated from _fulvus_ by having blackish antennae with grayish scape and pedicel, frons shorter without median depression, the legs blackish with the exception of the distal portions of the tibiae, which are light brown, and wing without yellowish veins.

We have examined another female from “Valparaiso, December, 1916, Reed coll.” which is similar in some respects, but whose darker coloration does not permit it to be placed with _fulvus_, nor with any other known species; the fact that it is not well preserved and is somewhat discolored does not allow us to decide its identity.

**Protodasyapha (P.) hirotosu** (Philippi)

Two specimens in CAS, 1 ♂ 1 ♀ collected by Reed with “Chile” as only locality, are paler (perhaps more faded with age) than other material seen by us. The frontal callus of the ♀ is light brown and the body light grayish brown. Since the specimens are not in good condition, it seems better for the present to retain them in the above species.
Protodasyapha (Curumia) lugens (Philippi)

A single additional ♂ in the collection of L. L. Pechuman has been seen. It is labelled “Chile, Linares, Estero De Loiva, 8/12-I-1953, Poña coll.”

Chaetopalpus annulicornis (Philippi)

A single ♀ from “Elolla, 22-XII-1949, J. Lewis R. coll.” is smaller than any previously seen. It has a wing length of 5.5 mm, and is somewhat paler than usual. The anterior borders of the abdominal tergites have narrow gray margins with gray hairs. The antennae show 5 well-differentiated, apical annuli in the flagellum and pseudoannulations basally. However, the genitalia show no differences from C. annulicornis. Due to the great morphological variation in this species, we do not believe it advisable to separate this specimen as a distinct taxon.

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A NEW SPECIES OF WATER MITE1
PARASITIZING THE BACKSWIMMER
BUENOASCIMITRA2

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ABSTRACT

Hydrachna sirella (Acari: Hydrachnellae), a new species of water mite that parasitizes backswimmers of the species Buenoa scimitra Bare (Hemiptera: Notonectidae), is described. Adults and nymphs are characterized by a pronounced elongation of the posteromedial portion of the 4th coxae. Larvae are distinguished by the relative sizes of the coxal plates and by the positions and relative sizes of the coxal plate setae.

Water mites of the genus Hydrachna are common, usually red mites that inhabit mostly standing bodies of water. The nymphs and adults are predatory on insect eggs (Davida 1973, Lanciani 1978) but the larvae are ectoparasitic on aquatic Coleoptera and Hemiptera (Smith and Oliver 1976). This paper presents information on a new species of Hydrachna (subgenus Hydrachna) that parasitizes backswimmers of the genus Buenoa.

Measurements, except those on the body dimensions of live mites, were made on a sample of 5 specimens. The mean is presented first and is followed in parentheses by the minimum and maximum values.

Holotypes, allotypes, and paratypes have been deposited in the Florida State Collection of Arthropods, Gainesville, FL.

1Acari: Hydrachnellae.
2Hemiptera: Notonectidae.