

A REVISION OF THE SOUTH AMERICAN DIPTEROUS
INSECTS OF THE FAMILY PTYCHOPTERIDÆ.

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The only genus of Ptychopteridæ as yet made known from the Neotropical regions is *Tanyderus* Philippi,¹ erected in 1865 to receive the then unique species, *pictus* Philippi, of Chile. Two New Zealand species, *forcipatus* Osten Sacken² and *annuliferus* Hutton,³ have been described. The *Cylindrotoma ornatissima*, described by Doleschall from the East Indies in 1858, was later found to be a true *Tanyderus*.⁴

I have given, below, a rather free translation of Philippi's original description of *T. pictus* and also add the description of a fifth species, the second from the American continent.

KEY TO THE AMERICAN SPECIES OF TANYDERUS.

- Anal angle of the wing very sharp; wing with two brown fasciæ which are almost unicolorous in all of the cells; antennæ with at least 25 segments.....*pictus*.
Anal angle of the wing less pronounced, square; wing with an irregular picture; dark along the cross-veins, much paler in the posterior cells of the wing; antennæ 17-segmented.....*patagonicus*.

TANYDERUS PICTUS Philippi.

Length body, 12 l.; wing expanse, 26 l.

Head quite black, only the antennæ are pale yellow, except the first two segments, which, however, are black. The long, slender neck-like prothorax is also black and there appears above in the cephalic half a caniculated excavation, which is run through by an elevated longitudinal line continuing to the posterior margin. The anterior portion of the mesothoracic præscutum is yellow with a black spot in the middle; the remainder of the mesothorax is, for the most part, black; on the pleuræ, in front of the wing basis, is a yellow

¹ R. A. Philippi. Aufzählung der Chilenischen Dipteren, Verh. der Zoöl.-bot. Ges., 1865, vol. 15, pp. 780, 781, pl. 29, fig. 57.

² Verh. Zoöl.-bot. Ges., 1879, p. 518.

³ Trans. New Zealand Institute, vol. 32, p. 48.

⁴ Osten Sacken, Studies on Tipulidæ, pt. 2, 1887, pp. 228-230.

spot, and the space before the scutellum is likewise yellow; remainder of the pleuræ yellow with black spots; metanotum is yellowish with four black spots on the caudal margin. The segments of the abdomen are yellow with black posterior edges and black longitudinal spots, of which there are four on the dorsum in two rows. The wings have yellow veins and a yellowish membrane, especially in the middle, and there are ramifying, yellow, black-bordered crossbands, which make this species one of our most beautiful Tipulids. The legs are yellowish with black coxæ and a blackish ring above and below the knee; they are rather strongly haired. Halteres are black with bright stem.

The species has an extremely sharp anal angle and possesses a supernumerary cross vein in cell R_4 of the wing.

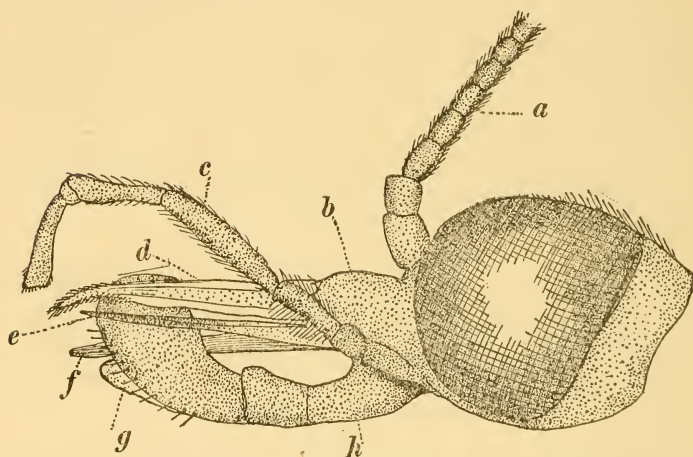


FIG. 1.—LATERAL ASPECT OF THE HEAD OF *TANYDERUS PATAGONICUS*. *a*, ANTENNA; *b*, CLYPEUS; *c*, MAXILLARY PALPUS; *d*, LABRUM; *e*, MAXILLA; *f*, HYPOPHARYNX (?); *g*, HYPOPHARYNX (?); *h*, LABIUM.

TANYDERUS PATAGONICUS, new species.

Antennæ 17-segmented; thorax gray with chestnut stripes; anal angle of the wings not prominent; supernumerary cross veins in cells R_3 and R_5 ; wings marked with brown and gray.

Female.—Length, 12.1 mm.; wing, 18.2 mm. Legs, posterior femora, 8.2 mm.; tibia, 9.8 mm.

Head.—Mouth parts, clypeus (*b*) rather quadrate, about as broad as long; the labrum closely applied to its cephalic margin. Labrum (*d*) elongate, depressed, flattened, its edges toward the tip, with numerous stout hairs; underneath the labrum is a pair (*e*) of elon-

gate, slender, extremely pointed stylets which I believe to be homologous with the maxillæ of certain other Diptera (Tabanidæ); at the base of the maxillæ, beneath the clypeus, arise the elongated maxillary palpi (*c*), which are almost as long as the antennæ; these palpi are 5-segmented; segment 1 short; 2 twice as long as 1; 3 longer than 1 and 2 combined; 4 and 5 subequal, longer than 2 but shorter than 3; palpi clothed with long appressed hairs; between the labrum and labium, there projects an elongated stylet, almost as broad as the labrum, which seems to be homologous with the hypopharynx (*f*); the possibility exists, however, that it may consist of the two mandibles closely applied to one another. The specimen is unique and I do not care to remove the mouth parts. The elongated labium (*h*) apparently 2-segmented, and bearing a pair of broad palpi at the tip, arises from the ventral surface of the head; viewed from beneath, the labium is seen to consist of a basal and apical piece, the latter deeply divided by a longitudinal furrow; the palpi divergent, their margins clothed with long, stout hairs; from between the palpi there projects outward a narrow compressed organ (*g*); this may (in case the organ (*f*) described above as possibly being the hypopharynx is not this) be the hypopharynx. In this case the mandibles would be present and accounted for in the organ described above as the hypopharynx.

Occipital region narrowed behind, broadening to the vertex; vertex narrowed between the eyes, its sides parallel; front encroaching onto the inner margin of the eye in a broad, shallow sinus, in which the antennæ (*a*) are located. Antennæ, 17-segmented; the scapal segments almost smooth or with very small hairs; both segments short, the first cylindrical, the second oval, its distal end more enlarged; the flagellar segments clothed with dense appressed hairs; basal flagellar segments almost subequal; apical segments more elongated. (See figs. 1 and 2.)

Mouth-parts yellow, the labium brown; maxillary palpi dark brown; clypeus dull brownish gray; antennæ dark brown, the clothing of hairs on the flagellum rather paler.

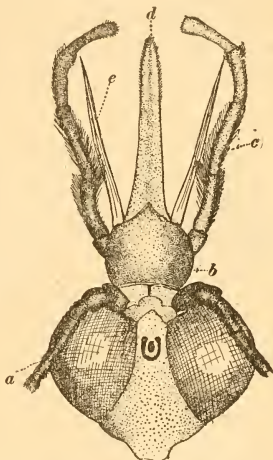


FIG. 2.—DORSAL ASPECT OF THE HEAD OF TANYDERUS PATAGONICUS. *a*, ANTENNA; *b*, CLYPEUS; *c*, MAXILLARY PALPUS; *d*, LABRUM; *e*, MAXILLA.

Front dark brown, black apically and with a narrow median stripe; vertex brown with a black U-shaped mark between the eyes; occiput and genæ brown.

Cervical sclerites prominent, transverse, deep velvety black on the dorsal mid line, grayish brown laterally.

Thorax.—Pronotum, the scutum projects on the dorsal surface of the insect, the scutellum is not visible from above, dark brown, paler on the sides. Mesonotum, præscutum gray, the extreme mid line narrowly black; on either side of this, extending from the cephalic margin of the sclerite backward to the transverse suture where they become confluent, a broad chestnut stripe; laterad of this, near the middle of the sclerite, a broad brownish-chestnut stripe runs backward, interrupted by the shallow, open, transverse suture. Scutum light brown mesially, caused by the spreading out of the central præscutal stripes; on the sides of the sclerite are the well-defined

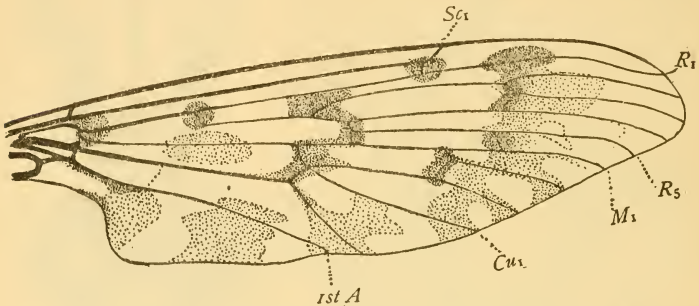


FIG. 3.—WING OF TANYDERUS PATAGONICUS. *Sc*₁, SUBCOSTA 1; *R*₁, RADIUS 1; *R*₅, RADIUS 5; *M*₁, MEDIA 1; *Cu*₁, CUBITUS 1; *1st A*, ANAL.

continuations of the brownish-chestnut lateral præscutal stripes; scutellum and post-notum rich brown; metanotum dull brown. Pleuræ, spiracles prominent, spongy in appearance, yellow; epi-pleuræ gray, sternal region more brown. Halteres brown, stem slightly paler. Legs, coxæ, and trochanters dull gray; femora rich brown; dark brown at the tip; tibia extreme base and tip brown, remainder yellow; tarsi dark brown.

Wings.—Venation, *Sc* long, its tip nearer the fork of *R*₂₊₃ than to the fork of *R*₄₊₅; a spur at the fork of *Sc*; a slight spur at the origin of *R*₅; an oblique supernumerary cross vein in cell *R*₃; a second one in cell *R*₅. Anal angle of the wing not especially prominent.

Wings (fig. 3) subhyaline, veins brown; cells *C* and *Sc* yellow; wings marked with gray and brown as follows: Brown; a rounded spot at the base of the wing under the cross vein *h*; a second at the origin of *R*₅; a third under the tip of *Sc*; a large irregular spot extending along the cord which is on the proximal half of the wing; a

brown seam on the two supernumerary cross veins and on *m*; stigma oval, lighter brown. The gray extends as an irregular band distad of the supernumerary cross veins; and as an interrupted band proximad of the cord; an isolated spot in the ends of the cells *Cu*₁ and *Cu*.

Abdomen.—Tergum light yellowish brown; a narrow brown median stripe; caudal edge of the sclerites gray, interrupted medially by the brown median line; lateral edge of the sclerites dark brownish black, narrowest caudally; segment eight dark brown; genital segment light brown. Sternum light yellowish white, a brown transverse sub-basal band; eighth segment dark brown.

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Holotype.—Latitude Cove, Patagonia; United States Bureau of Fisheries; accession No. 21999.

Type.—Cat. No. 14919, U.S.N.M.