

Resembles *T. recedens* Walker, but is smaller; the annulate portion of the third antennal joint is shorter, not or scarcely a third of the length of the joint; the dorsum of the thorax is lighter colored, the markings less distinct, the pile of the pleuræ less abundant, the abdomen lighter colored, etc. The abdomen is ferruginous red, with a single row of rather narrow triangles; it is attenuated posteriorly, but less so than in *T. recedens*. Wings tinged with brownish, the veins broadly and diffusely clouded with brownish, the cross-veins very distinctly clouded with brown; first posterior cell coarctate. From *T. turbidus*, under which it would be sought for in Osten Sacken's table, and with which it might perhaps be best compared, the nearly square frontal callosity and the short annulate portion of the third antennal joint will immediately separate it. Two specimens, Florida.

TABANUS SPARUS Whitney, Can. Entom. xi, 38.

This species is closely allied to *T. pumilus*, and only by a careful examination is one able to distinguish it in the dried specimens. I have a number of specimens of *T. sparus* from Connecticut and Massachusetts, (July 1.) and three of *T. pumilus* from Indiana. In all of the former the lateral whitish spots of the second and third abdominal segments are broadly contiguous with the hind margins, while in the latter they form on all the segments, small, oval, isolated spots. Most distinctively characteristic of the two species, however, are the color-markings of the eyes, as I can corroborate from the revivification of my dried specimens. *T. pumilus* has two bright green stripes on purple ground, while in *T. sparus* the eyes are wholly light green with a purple reflection.

TABANUS FRATELLUS, n. sp.

*Female*: Length 8-9 mm. Abdomen with three series of isolated spots; wings hyaline; antennæ narrow; small species.

Palpi slender, white, with minute black hairs. Face grayish white, with white pile. Front brownish gray, convergent anteriorly; callus nearly square, black, with a larger, shield-shaped, shining spot above it. Antennæ blackish brown, the basal portion of third joint sometimes reddish brown, narrow, only a little wider at base of non-annulate portion, the angle feebly indicated. Thorax grayish black, with three well-indicated narrow gray stripes; pleuræ gray, with whitish pile. Abdomen black, with well-marked whitish hind borders to the segments; segments two-five each, with three small, rounded, transverse, whitish spots. Venter with grayish dust, and posterior whitish hind borders to the segments. Legs black, the base of front tibiæ, and the most of the four posterior tibiæ yellowish; four posterior tarsi brownish. Wings hyaline, stigma brown; first posterior cell open.

Two specimens, Washington Territory. The species closely resembles *T. pumilus*, but is darker, and the antennæ are much narrower at the base of the third joint, with the angle feebly indicated.

TABANUS GRACILIS Wiedemann, Auss. zweifl. Ins. i, 156, 71; Osten Sacken, Cat. Dipt., note 81, p. 228.

I recognize this species in a number of specimens from Florida. They agree well with Wiedemann's description, except in the color of the antennæ, which are either wholly red, or with the annulate portion brown. The slenderness, pale but distinct brown clouds on the veins of the wings, and general light color—lilac-red-dish—throughout, will distinguish it. Osten Sacken, from an examination of the faded type, compared the species with his *T. longus*. From the description, indeed, it seems to be nearly related to that species, though differing in the lighter color, and brownish clouds on the wings. The lateral spots of the abdominal segments, in all my specimens, reach distinctly to the hind margin, the only thing that prevents