

**New Neotropical Tabanidae (Diptera). III.  
Notes on three rare species of Diachlorini in Mexico with  
descriptions of Neallotypes for two**

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Despite increasing collection of Tabanidae in various parts of Mexico, certain distinctive elements among the Tribe Diachlorini remain seldom taken and inadequately known. The present report provides new information on three such species, recently described from Chihuahua to Chiapas, and describes neallotypes for two of them from other states.

***Bolbodimyia lampros* Philip and Floyd**

Until the specimen described below was provided through courtesy of Dr. W. W. Middlekauff of the University of California, Berkeley, the type male of this striking species remained the only known specimen. Fortunately the former supplies information on the previously unknown female, and confirmatory diagnostic characters.

Neallotype female. Length 13 mm, a little shorter than the type male. Otherwise, and except for the usual sexual differences, this is tinctorially in good agreement with the type from Chihuahua, considerably to the north and inland from the locality of the present specimen. The original speculation that the bright (like a "Jack-O-Lantern"), entirely orange abdomen might suggest a possibly sexually dichromatic species is thus eliminated, and this distinctive character precludes running *lampros* in Stone's (1954) key to other species of the Neotropical genus, though *B. celeroides* Stone from Colombia does have an entirely orange venter. The name thus aptly applies to the bright, almost luminous orange abdomen in contrast to the predominantly dark notum and wings in both sexes.

The neallotype female also otherwise has the same basic coloration of blackish body, legs and wings, orange face, genae and beard, plus orange hair patches on pre-alar lobes and upper pleura as in the type male. The shiny black antennal scapes are more swollen below, bases of reddish plates a little wider, dark palpi longer, and dorsum of abdomen predominantly orange-haired. Frons gently divergent below, index about 1:2, a rather broad, lanceolate, black median callus and black boss at vertex without ocelli, flanked on sides by gray pollenosity, basal callosity shining black, a little broader than tall, somewhat swollen in profile, below which the shining black subcallus is strongly protuberant to bases of antennae. The hyaline apical crescents are reduced in the blackish wings about as in the male, but all tibiae appear a little more swollen.

Locality. — Mexico: Jalisco, Guadalajara, 4. iv. 72, E.A. Kane and B. Villegas. In California Academy of Sciences, No. 13037, on permanent deposit from University of California, Berkeley.

The same features by which Tidwell and Philip (1977) differentiated their newly described *B. bermudezi* from the type male, will also distinguish the females, namely (in *lampros*), the more reddish antennal flagellum, the pre-alar thoracic hair patches orange and extending onto upper pleura, entirely orange abdomen and wing infuscation not restricted to a costal band; in addition, the eyes are not obviously hairy, and the median callus of the female frons is more restricted.

*Stenotabanus (Aegialomyia) yaquii* Philip

When this surprising beach-inhabitant on the western coast of Mexico was described recently, an important, pertinent male from the coast farther south was overlooked in a collection of Mexican horse flies received some years ago from Mrs. Reginald H. Painter of Manhattan, Kansas. It is here described as neallotype of the typical form because of the entirely red antennae including styles.

Neallotype male. Length 10.5 mm, a little larger than the type female from Sinaloa, the antennal plates, as usual in males, a little narrower, and the palpi subovoid, half again longer than thick. The upper, pale yellow, enlarged facets are bare, occupy the upper three-fourths of the eye area, and are somewhat rolled over the occipital margin behind; lower small facets sharply black. Wing venation, reddish legs and halteres as in the female, but the body is paler grayish, the pattern of small, double-paired spots more obscure.

Locality: Mexico: Colima, 4.5 km NW Manzanillo, 26.viii.62, R.H. & E.M. Painter, colls. In California Academy of Sciences, no. 13038.

While this was collected even south of Nayarit where the types of *S. (A.) yaquii* subspecies *occidentalis* Philip were taken, the question still remains of whether intergradation will eventually be found between the 2 forms. More collecting along western beaches in Mexico, possibly in the vicinity of mangrove (as in the case of *S. (A.) littoreus* (Hine) on the eastern Gulf Coast), should provide more adequate series of both sexes, to decide if these characters are plastic and subject to variation.

The males of related *magnicallus* Stone and *pechumani* Philip of Gulf Coast of Mexico lack evidence of any abdominal patterns in unsoiled specimens, and, though the distribution of enlarged eye facets is about the same in the former, the palpi are more pointed and the flagella brown to black apically; in *pechumani*, the male eyes are very narrowly separated mesally, and upper facets less enlarged, more restricted, and the flagellum mostly black.

Both sexes of *yaquii* bear considerable resemblance with their all-red antennae to *S. (A.) littoreus* (Hine), particularly from mangrove beaches on the Atlantic Gulf Coast from Quintana Roo, Mexico, to Panama; *littoreus*, however, are more brownish overall, the scutellum reddish. The male, especially, of *yaquii* is a much grayer insect with darker thoracic integument underlying the pale gray pollenosity, including the scutellum. The eye pattern was only faintly revived in one of four eastern *littoreus*, but it appears to resemble that in *yaquii*, namely, two green stripes on a purple ground.

*Teskeyellus hirsuticornis* Philip and Fairchild

The describers of this peculiar, Mexican tabanid, considered its systematic relationships as "unclear," but believed it "belongs in the more primitive section of Diachlorini with *Dasybasis* and

*Stenotabanus*." Their attempts, however, to check this by genitalic dissections in each sex eventuated unsuccessfully, possibly because the specimens were somewhat teneral. This surmise regarding primitive diachlorine relationships was confirmed in a delicate, genitalic preparation from the allotype male during a recent visit of Dr. Sixto Coscaron, La Plata University, Argentina, to the California Academy of Sciences. The allotype and genitalic mount have been returned to Canadian National Collection, Ottawa.

In addition to the postulated autogenous development, because of discovery of eggs in the sectioned abdomen of the apparently somewhat teneral holotype female, other unusual features are the biannulate antennal styles in both sexes and the female frons with a deep notch at vertex but no calli below, as figured by the describers.

The collector did not recall the circumstances of the original capture, but it must have been near some breeding site where both sexes were present, at just over 2100 meters altitude, in Chiapas near San Cristobal. It is disappointing that no additional, fully mature specimens have turned up in subsequent collections by several collectors of Tabanidae in the general area.

I am indebted to Dr. Coscaron for the genitalic studies and confirmatory opinion regarding diachlorine relationships.

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