# A NEW GENUS OF NEOTROPICAL DEERFLIES (DIPTERA, TABANIDAE) (\*)

By

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Among the new generic names proposed within recent years for groups of Neotropical horseflies, it is strange that the distinctness of a group of 3 species, heretofore placed in Chrysops, has not been recognized. These are C. megaceras Bell. (syn. C. ceras Town.) from New Mexico and Mexico, C. melanoptera Hine from Guatemala, and C. tanycerus Osten Sacken (syn. C. tanyceras of authors) from Costa Rica.

The name Assipala (Latin, unit plus spade) is here proposed for this group because of the frontal callosities which

<sup>(\*)</sup> Contribution from the Rocky Mountain Laboratory (Hamilton, Montana) of the Division of Infectious Diseases of the National Institute of Health.

have been described as like an "ace of spades", whit tany-cerus O. S. as the genotype species. Hine (1925) has suggested the species as having "some characters in common with" C. longicornis Macq., the type species of Kleineana End. 1925, specimens of which are at hand collected by me in Nigeria, West Africa.

Enderlein based Kleineana chiefly on separation of the eyes in the male, a tendency found in a group of Southwestern, Nearctic Chrysops and most marked in an undescribed species seen by the writer from California. I have not seen the males of either Kleineana from Africa, or Assipala from the New World, but the females of the two are only superficially similar in the elongation of the scape and pedicel of the antennae. However, the swollen smooth face and swollen tibiae at once distinguish the former from either Assipala or the nearctic group mentioned above, while the Chrysops-like eye, wing and abdominal patterns further separate Kleineana from Assipala.

The elongate first two and short third antennal segments of the 3 species of the last are given the following ratios by various describers: megaceras (ceras)-312 to 4:3:112 to 1-3 4 (Townsend); melanopterus—2:1.5:1 (Hine); tanycerus—41 2:3:2 (Osten Sacken). All antennal segments are much thicker than in Kleineana longicornis and the third segments shorter and more chunky in proportion. The faces. of melanopterus and tanycerus (I hace not seen megaceras) are short and receding above the mouth, and the subantennal pollenosity has a different distribution than usually seen in Chrysops. The palpi are extremely slender, and about half the length of the proboscides. The eyes (revived) of both show fine scattering maculations more closely resembling Silvius than Chrysops, although Osten Sacken states that tanycerus has unicolorous eyes. The frontal callosities resemble a broad "ace of spades" with the apex upward; in megaceras, Hine has described this structure as "normal for Chrvsops", and Townsend "more or less rounded diamond shaped, wider than long". Although melanopterus is uniformly blackish including the wings, the other 2 species show distribution of infuscation of the wings and abdomen quite unlike the usual Chrysops arrangement in this respect.

Because of the shortening of the third antennal segment, and consequent emphasizing of annulation with appearance often approaching pangoniines with more than 5 annuli, placement of the genus in such keys as Hines' (1925, p. 3) and Enderlein (1924, p. 260) is somewhat unsatisfactory.

Of their parasitic propensities, the only record we have is of *melanopterus* of which Hine observes them "very persistent in following... and taking every opportunity to bite..." him.

Specimens examined in this study: *C. caecutiens* (Linn.) (genotype of *Chrysops*) 2 male 4 female, Europe; *K. longicornis* (Macq.) (genotype of *Kleineana*) 2 female, Lagos, Nigeria; *A. melanoptera* (Hine) 6 female, Guatemala (including one apparently of original series through courtesy of Dr. Alan Stone); and *A. tanycerus* (O. S.) (genotype of *Assipala* n. gen) 3 female, Costa Rica.

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Twns=megaceras Bell.)

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## SUPLEMENTAL OBSERVATION

Since submission of the preceding notes for publication, the writer has been privileged, through courtesy of Mr. H. Oldroyd of the British Museum, to examine a cotype of Chrysops ceras Townsend from New Mexico, and a specimen of C. megaceras Bellardi from Mexico. Their distinctness is not only confirmed, but the peculiar characters of antennae, facial pollenosity, eye and wing patterns show them to belong to Assipala. The frontal callosities are not so tall, but have the same fine wrinkled appearance.

Comparative measurements of antennal segments do not support Hine's (1917) key for separation, as tabulated for

individual specimens below:

Length (mm.)	Body	Scape	Pedicel	3d Seg- ment
tanycerus Osten Sacken	9	1.25	0.9	0.85
melanoptera Hine	7	1.4	1.1	0.9
ceras Townsend (cotype)	9	1.45	1.1	0.7
megaceras Bellardi	11	1.6	1.2	0.9

His key also reverses distinguishing characters for ceras and megaceras. The following key to the four species of Assipala is therefore offered, based, of course, on very limited material.

- 1. Body and wings dull brownish black; antennae slender ... ... ... ... melanoptera Hine Body bicolored with gray and brown; wings with brown spots; antennae robust at least basally ... 2
- 2. Venter of abdomen uniformly gray pollinose; first two antennal segments markedly swollen . . . ceras

  Townsend