

## Two new horse flies from Turkey (Diptera: Tabanidae)

by

JAN TIMMER

ABSTRACT. — Two new horse flies, *Haematopota sumelae* n. sp. and *Tabanus karaosus* n. sp., are described from North-Eastern Turkey.

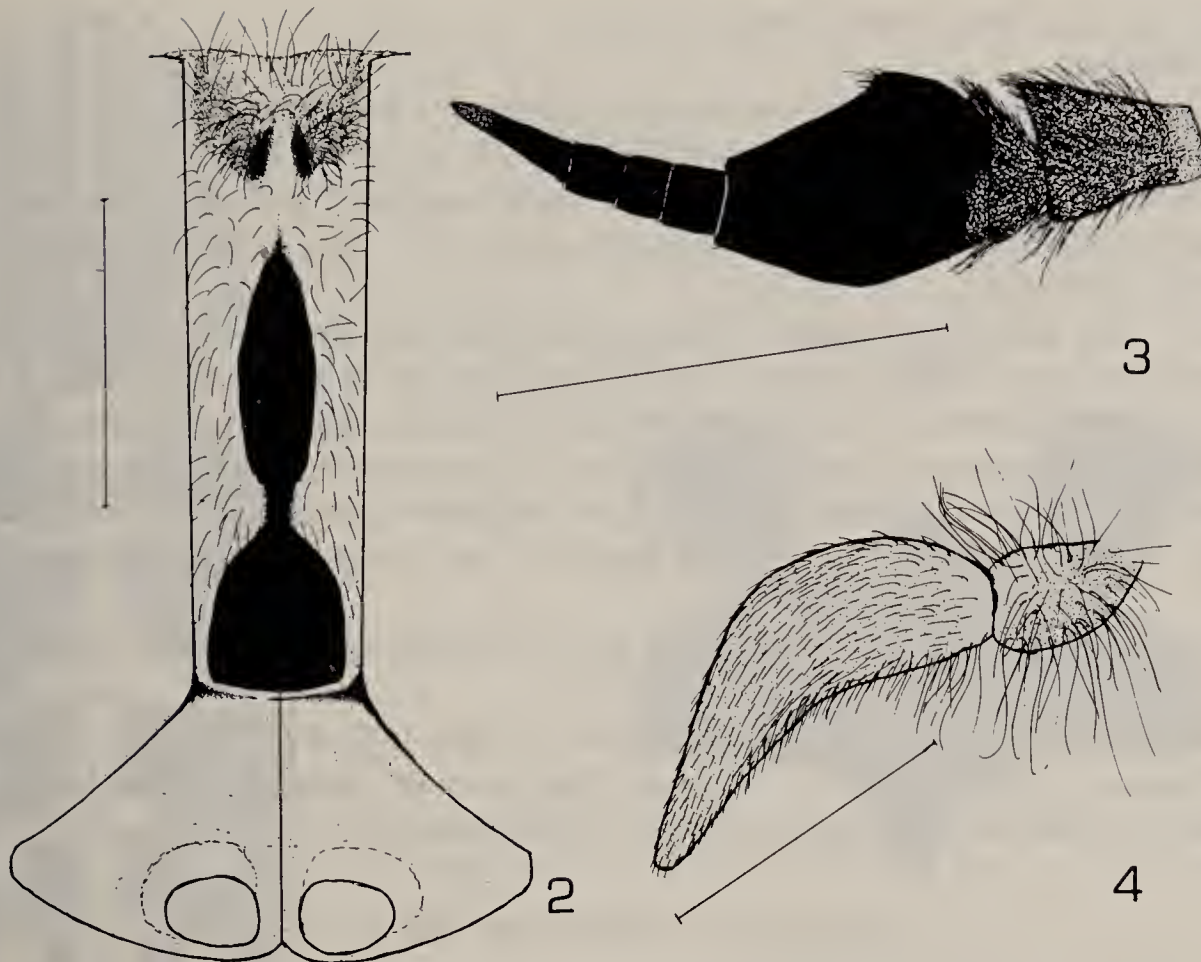
Among the horse flies collected by the author on a trip to the eastern parts of Turkey, two new species were discovered. Both species were captured in the forested hills 30-65 km south of Trabzon, in North-Eastern Turkey.

*Tabanus karaosus* n. sp., figs 2-4

Diagnosis. — A small to medium sized, extensively blackish, species, related to *Tabanus bromius* Linnaeus, 1758. It differs from the other species of the *Tabanus bromius* group by the following characters: Eyes without bands; frontal index about 1 : 4.5; mesonotum thinly grey-



Fig. 1. The surroundings of Maçka, where *Tabanus karaosus* n. sp. and *Haematopota sumelae* n. sp. were collected.



Figs 2-4. *Tabanus karaosus* n. sp., ♀ holotype. 2, frons; 3, left antenna; 4, palpus. Scale lines: 1 mm.

ish dusted with indistinct longitudinal stripes; legs, except for the knees entirely black; dorsum of abdomen without a distinct pattern or at the most with two small, dark brown, spots on tergite 2, otherwise black and thinly blueish-grey dusted.

Description of the female. — Head. Eyes bare, without bands. Frontal index 1 : 4.5. Frons slightly diverging above, greyish yellow dusted and black haired. Lower callus rectangular to circular, shining black, well separated from eye margins, connected with linear upper callus. Postocular margin not very broad, with a row of black hairs, which are just visible in frontal view. Parafacial band not very conspicuous, yellow-brownish dusted. Antennal bows of normal size, distinctly yellowish tomented. Face and cheeks with greyish tomentum. Long blackish hairs scattered on the face and more densely present on the cheeks.

Antennae. First two segments with a dark brown ground colour, densely blackish grey dusted with short black hairs. Third segment black in holotype and dark brown at ends in paratype. Tooth distinct, with some additional small black hairs. Basal segment of palpi dark greyish tomented, with long dark hairs. Apical segment rather slender, e.g. more slender than in *T. bromius*, yellowish brown, with short black hairs.

Mesonotum. Black, black haired and thinly blackish grey dusted, with five, rather indistinct, continuous, longitudinal stripes. Humeral lobes grey tomented. Notopleural lobes and scutellum concolorous with mesonotum and black haired. Pleurae greyish to blackish grey dusted, mainly blackish haired, but ventrally of the base of the wing mixed with some pale hairs. Hypopleurae light grey dusted, not haired.

Legs. Black, with yellowish brown knees. Coxae and femora tomented as mesopleurae.

Wings. Clear, or very light yellowish tinted. Veins dark brown. No appendix to vein R4. Squamae brownish grey, short pale haired. Upper squama with a small tuft of longer pale hairs. Halteres dark brown with a partly yellowish brown knob.

Abdomen. Dorsum of abdomen black with black hairs, without a distinct pattern. Tergite 2 with small, rather inconspicuous dark brown side marks. Venter black, a darker median stripe is hardly visible. The whole abdomen distinctly greyish tomented, in fresh specimens with distinct metallic reflections.

Length of body: 14 mm; length of wing: 11 mm.

Male: Unknown.

Discussion. — In the Zoological Institute in Leningrad, I was able to examine series of the most closely related species: *Tabanus miki* Brauer, 1880, *T. indrae* Hauser, 1939 and *T. armeniacus* (Kröber, 1929). I studied the types of the dark forms of *T. miki* and *T. indrae*; *T. miki niger* Olsufjev, 1937 and *T. indrae montivagus* Olsufjev, 1970. They were found not to be conspecific with *T. karaosus*.

Habitat. — The species was caught at Zigana and in the neighbourhood of Maçka. Zigana is situated about 65 km south of Trabzon, near the Zigana passes at an altitude of 1700 m. Maçka lies 30 km south of Trabzon, at a height of 360 m. The average temperature in July is 25 °C, in January 3 °C. The amount of annual precipitation is considerable: about 1500 mm. Maçka is surrounded by steep hills (1100 m), which are for the greater part covered with deciduous forests. Fig. 1 gives a good impression of the habitat in the locality where the species was captured.

The name *karaosus* means: Full of black. Kara is a Turkish word for black, -osus is a Greek suffix, meaning, full of.

Type material. — Holotype ♀, Turkey, Maçka 8-11 July 1977, leg. J. Timmer; Paratype ♀, Turkey, Zigana 11 July 1977, leg. J. Timmer. The types are preserved in the Instituut voor Taxonomische Zoölogie (Zoölogisch Museum), Amsterdam.

#### *Haematopota sumelae* n. sp., figs. 5-11

Diagnosis. — *H. sumelae* can be distinguished from the other palearctic species of *Haematopota*, mentioned in Leclercq & Olsufjev (1981), by the following characters: First antennal segment with black ground colour, nearly completely dusted, about 2½-3 times as long as broad, without apical constriction; wings without a light coloured posterior margin; femora black, greyish dusted; scutellum with a conspicuous whitish middle part; abdomen with rather broad median triangles on tergites, especially on tergite 2; sublateral spots present on all tergites, except the first.

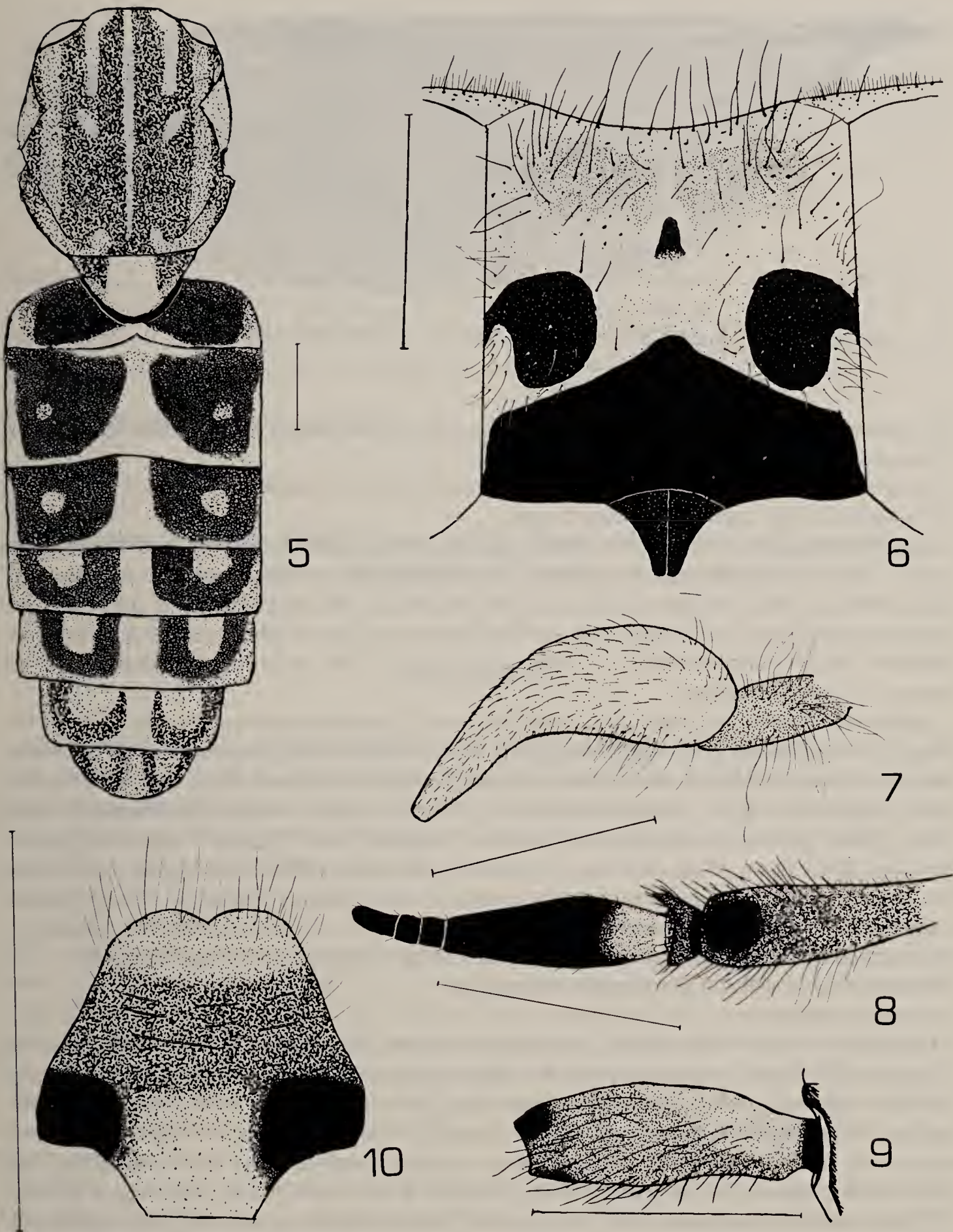
Description of the female. — Head. Frons about as high as broad, or slightly higher than broad; nearly parallel-sided, sometimes slightly convergent above; yellow greyish dusted. Mid-frontal spot not very small, blackish. Paired spots circular to triangular, often connected with the eyemargins, usually not connected with the callus, blackish in colour. Callus black, of variable form, but always more or less triangular shaped, generally connected with the eyemargins at the lower corners. Frons mainly pale haired below the paired spots, mainly black haired above the paired spots. Interantennal spot blackish brown, triangular shaped, sometimes with an incision below, broadly connected with callus. Face whitish grey tomented, with or without a pair of small dark patches on the clypeus. Upper part of the parafacials with dark spots, from which white hairs arise.

Antennae, first segment cylindrical in lateral view, about 2½-3 times as long as broad at apex; no apical constriction; in dorsal view rather swollen, broadest in the middle. Black, entirely greyish dusted, but the inner side of the antennae, on the apical quarter, with a shining spot. Dorsally black haired, ventrally in the basal half of the segment predominantly covered with longer pale hairs. Third antennal segment black, in some specimens brown at extreme base. In general more slender than the first segment. First flagellomere about 1½ times as long as terminal flagellomeres together. Apical flagellomere nearly as long as second and third flagellomeres together.

Palpi, first segment grey dusted, with long whitish hairs. Apical segment yellowish, swollen at base, flattened laterally, apically pointed and black and white haired. Tomentum rather variable, in most specimens only thinly greyish dusted, but in some specimens denser.

Eyes haired (visible at 10 ×). Vertex with black hairs, occiput with pale and black hairs.

Thorax. Scutum brown greyish tomented, with a paler greyish pattern as follows: Five longitudinal lines, the middle three of them being quite conspicuous. The median line running from



Figs 5-11. *Haematopota sumelae* n. sp. ♀ paratype. 5, thorax and abdomen, dorsal view; 6, frons; 7, palpus; 8, left antenna, lateral view; 9, first segment of left antenna, dorsal view; 10, subgenital plate. Scale lines: 1 mm.

the anterior part of the scutum to the posterior part and nearly touching the scutellum. The other two conspicuous lines also starting at the anterior part of the scutum, but ending in a patch after the thoracal suture. Scutum with some dispersed shorter pale and black hairs. Notopleurae with longer pale and black hairs. Ventral parts of thorax densely greyish dusted and covered with long pale hairs. Scutellum with a few, predominantly pale hairs. The middle part of the scutellum is densely whitish grey dusted. Halteres yellow with a partially brown to grey-

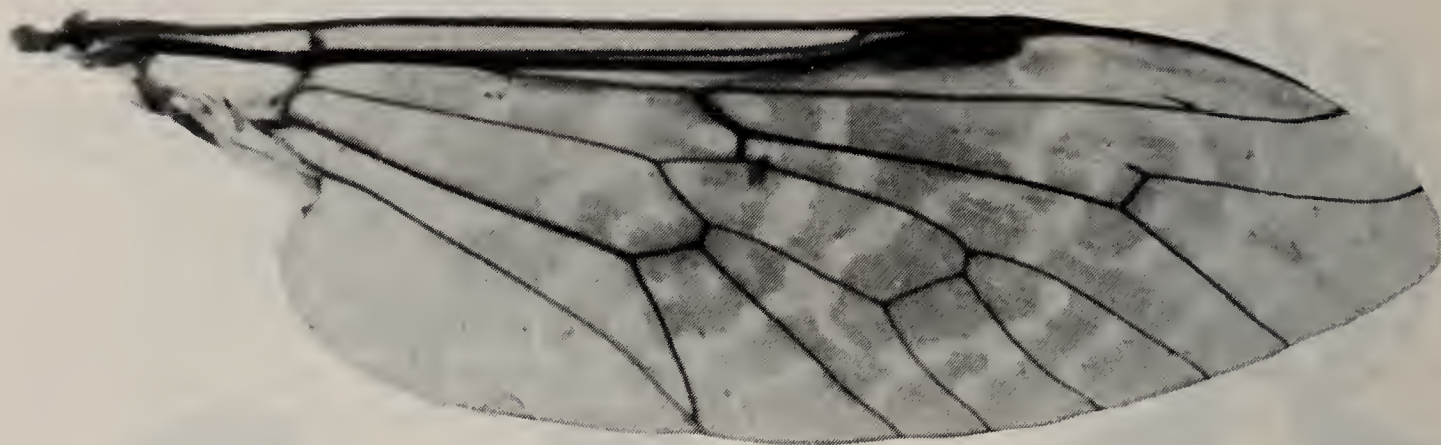


Fig. 11. *Haematopota sumelae* n. sp., ♀ paratype, right wing.

ish brown knob. Squamae pale haired. Upper squama greyish brown with a darker fringe. Lower squama greyish yellow without a darker fringe.

Wings. Brownish grey with a typical *Haematopota* pattern consisting of rosettes. Pale posterior margin of wing absent. Veins dark brown.

Legs. Coxae and femora brown to black in ground colour, densely greyish dusted like ventral parts of thorax and abdomen. Fore tibiae black, basal third yellow. Sometimes a lighter coloured band is visible on the apical half of the fore tibiae. Mid and hind tibiae dark with two yellowish bands. Fore tarsi black. Mid and hind tarsi with a black tipped yellowish metatarsus, otherwise black. Hairs on tibiae and tarsi concolorous to the surface from which they arise. Femora with long white hairs.

Abdomen. Dorsum brownish black with two rows of greyish sublateral spots at least on tergites 3 to 6 and usually extending on tergites 2 and 7. Median triangles present on all segments, forming a broad middorsal stripe. Median triangle on tergite 2 quite large and at its base as broad as half the tergite. Posterior borders of all tergites pale. Dorsum predominantly black pilose. White pilosity at the posterior borders of tergites 2 to 7. Tergite 1 with a mixture of black and white hairs. Middorsal stripe sometimes with some pale pilosity as well. Venter unicolorous grey with fine pale pilosity. A darker medioventral stripe is visible in some specimens, when viewed from behind. Posterior borders of all sternites very narrow pale; 5th, 6th and especially the 7th sternite with some stiff black hairs. Subgenital plate with an apical incision.

Length of body: 10½-11 mm; length of wing: 9 mm.

Male: Unknown.

Discussion. — Closest of the species seem to be *Haematopota gallica* Szilády, 1923, *H. sewelli* Austen, 1920 and *H. latebricola* Austen, 1925. *H. gallica* is a South European species which is probably replaced by *H. sewelli* in the Middle East. Both species differ from *H. sumelae* in having the first antennal segment and femora yellowish brown coloured. *H. latebricola* is still known only from the female holotype, captured in the Asiatic shore of the Dardanelles. I did not see this specimen, but according to the description given by Chvála, Lyneborg & Moucha (1972), it cannot be identical with *H. sumelae*. *H. latebricola* differs in having very narrow median triangles on the tergites and in the absence of a conspicuous light coloured middle part of the scutellum.

Habitat. — *H. sumelae* was captured in the same locality near the town of Maçka where *I. karaosus* was collected. For more detailed information see the previous species.

The name of the species refers to the Sumela cloister which is an ancient building in the neighbourhood of Maçka.

Type material. — Holotype ♀ and five paratypes ♀, Turkey, Maçka 8-11 July 1977, leg. J. Timmer. Holotype and one paratype are deposited in the Instituut voor Taxonomische Zoölogie (Zoölogisch Museum), Amsterdam; one paratype in Zoologische Staatsammlung, München (BRD); one paratype in the collection of Dr. M. Leclercq, Beyne-Heusay (Belgium); two paratypes in the author's collection.

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## Orthetrum trinacria (Selys) new to the fauna of Spain, with records of three other Afrotropical Odonata Anisoptera

by

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**ABSTRACT.** — Besides *Orthetrum trinacria* (Selys), which is new to the fauna of Spain, three other Afrotropical species have been collected in the province of Huelva, viz. *Hemianax ephippiger* (Burmeister), *Brachythemis leucosticta* (Burmeister), and *Trithemis annulata* (Palisot de Beauvais). The Iberian provenience of the specimens belonging to these species is evidenced by the presence of teneral individuals.

In 1979 I collected dragonflies in the eastern part of the province of Huelva, Spain (Belle, 1979). Among the material assembled was a teneral aeshnid female, captured on the 27th March at the western side of the Ruta de las Marismas (road C-445) a few hundreds meters north of El Rocio. The specimen, set apart for closer inspection and erroneously not recorded in my article of 1979, is a female of *Hemianax ephippiger* (Burmeister). In the Iberian Peninsula this African species is known only from a few specimens taken in Spain (Compte Sart, 1965; Ferreras Romero, 1982, 1983) and from observations made by Buchholz in southern Spain in the neighbourhood of Sevilla (cf. Heimer, 1967). The teneral condition of the present female, however, proves its local provenience.

In 1983 I went again to the province of Huelva but this time I collected in the western part. The main dragonfly localities visited were two water reservoirs situated at the western side of the road C-443, the first about 400 m north of the village of San Bartolomé de la Torre and the second more northern where the C-443 crosses the seasonal river Ribera de la Dehesa.

The water reservoir or "embalse" at San Bartolomé de la Torre is relatively small and is formed by a high concrete weir in a valley. There are practically no aquatic plants in this artificial lake, and the sandy and rocky shores have only a scarce vegetation. When I visited this embalse on June 23 I was surprised to find here *Trithemis annulata* (Palisot de Beauvais) in great abundance. Exuviae belonging to this species were also found. This African species was reported in Spain for the first time by Lieftinck in 1979, and in Portugal for the first time by Aguiar & Aguiar in 1983.

On the shores of the embalse I also encountered a number of males and females of *Brachythemis leucosticta* (Burmeister). This African species is known in Spain only from the Río