

Acknowledgements

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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

Fuengirola where two males have been collected (Compte Sart, 1962). It has also been reported from two localities in middle Portugal (Aguiar & Aguiar, 1983), and from Sardinia (Crucitti et al., 1983). The females are heterochromatic and lack the conspicuous black-brown cross-bands of the wings of the males. Owing to this feature they are not easily detected on the sandy and rocky ground. Five fully mature specimens were taken, two males and two females (not in copula) on June 23 and a male on June 25. A not quite matured male was seen; it was recognizable by the weakly developed cross-bands of the wings. The species apparently breeds in the embalse.

Further my attention was attracted by an unusually large libellulid on a bush near the water-edge. The insect was rather shy but after some unsuccessful efforts it could be secured. The dragonfly proved to be a fully mature male of *Orthetrum trinacria* (Selys), an African species hitherto known in Europe from Sicily only. Further diligent hunting yielded another fully mature male and a newly hatched female whereas more males were seen. Two days later a fully mature female could be collected in the bushes about 50 meters from the lake.

The second water reservoir is a stretch of the Ribera de la Dehesa. It is about 200 meters long and is caused by a low concrete dam under the bridge of the C-443 over this river. There is a dense vegetation in the water of this reservoir and its shores are shaded by high trees. At this second dragonfly locality I found a few young and fully mature individuals of *Trithemis annulata*. There was no trace of *Brachythemis leucosticta* and *Orthetrum trinacria*.

The hypothesis that African species increased their range recently to the Iberian Peninsula is supported by the present captures.

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