ORTHETRUM TRINACRIA (SEL.) AS A PART OF THE DRAGONFLY FAUNA IN SOUTHERN SPAIN (ANISOPTERA: LIBELLULIDAE)

In September 1980 I watched and collected dragonflies I km NW of Mazagon, province of Huelva, Spain, at the Laguna de las Madres. This is a relatively large lake along the road from Huelva to Mazagon keeping water during the dry late summer season and with a good vegetation of aquatic plants around the shore. I visited the Laguna for some days in the evening and I found some interesting species some of which had also been reported by other authors: Erythromma viridulum (Charp.) (1 & 9-IX); — Ischnura graellsi (Ramb.) (1 & 2 & 9/10-IX); — Anax imperator Leach (a number of & seen); —

A. parthenope Sel. (abundant); — Brachythemis leucosticta (Burm.) (1 Q, 9-IX); — Crocothemis erythraea (Brullé) (1Q, 10-IX); — Diplacodes lefebvrei (Ramb.) (43, 4Q, 5/9/10-IX); — Orthetrum cancellatum (L.) (13, 10-IX); — O. coerulescens (Fabr.) (1Q, 5-IX); — O. trinacria (Sel.) (13, 10-IX); — Trithemis annulata (P. de Beauv.) (23, 3Q, 5/9-IX).

B. leucosticta has been reported by A. COMPTE SART (1962, Vie Milieu 13: 604-607) for the province of Malaga, by J. KÄH-LERT (1984, Notul. odonatol. 2: 64-65) from "about 30 km NW of Cordoba", by J. BELLE (1984, Ent. Ber. Amst. 44: 79-80) from the north-western Huelva, and by C. AGUIAR & S. AGUIAR (1983, Notul odonatol. 2: 8-9) from Portugal. P. CRUCITTI et al. (1981, Notul. odonatol. 1: 115-117) recorded it from Sardinia. The species seems to be extending its range in the northward direction. The above mentioned teneral female was perched on a small bush near the water on the said evening.

T. annulata was recorded from Spain by M.A. LIEFTINCK (1981, Odonatologica 10: 69), and from Portugal by AGUIAR & AGUIAR (cf. above). Further Spanish localities were brought on record by BELLE and KÄH-LERT (cf. above). I have found this species in some abundance (incl. immature individuals). One mature male was perched on a stalk, defending its territory against C. erythraea. I have also found it (1 Q) 10 km E of Osuna at the Rio Blanço (close to the N-334 road, 4-IX-1980), and have captured a ♂ and 2 Q (18-IX-1980) at the Barragem Santa Clara (Odemira prov.) in Portugal. There T. annulata was very abundant and the population likewise included teneral individuals

B. leucosticta and T. annulata must have a young generation in the Iberian peninsula in the late summer, as evidenced by the records of immature individuals. M.A. CONESA GARCIA & J.E. GARCIA RASO (1982, Mon. Trab. Zool., Málaga 3/4: 21-24) also recorded exuviae of the former near Malaga.

At the Laguna de las Madres I collected a mature male of *O. trinacria*. It was perched on a stalk in the water, near the shore, defending a territory against *O. cancellatum*. In July 1981, P. Jahn, Berlin, has seen *O. trinacria* near Rio Burdalillo, Badajoz prov., on a brook in a little

valley (pers. comm.). BELLE (cf. above) collected a mature female in June 1983, at San Bartholome de la Torre. In September 1984, R. Völker, M. Ristow and R. Prasse, Berlin, photographed a female at Acebuche, 20 km SE of the Laguna de las Madres, perched and devouring a male of S. fonscolombei (pers. comm.).

No records of O. trinacria, an African species, are known from Europe between 1841 and 1980 (cf. C. CONCI & C. NIELSEN, 1956, Fauna d'Italia: Odonata, p. 171, Calderini, Bologna); the reference to "Italia", by T. BENTIVOGLIO (1907, Atti Soc. nat. mat. Modena, IV, 9: 22-47), is not documented. The records from 1980 onwards seem to indicate that O. trinacria is autochthonous in southern Spain, though this assumption could only be confirmed by the records of immature individuals and/or exuviae.

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