

First record of *Trithemis kirbyi* Sélys, 1891 in Catalonia (Odonata, Libellulidae)

Primera cita de *Trithemis kirbyi* Sélys, 1891 en Cataluña (Odonata, Libellulidae)

Trithemis kirbyi Sélys, 1891 is a native species from Africa and southern Asia, typically found in arid areas. It is widely distributed in northern Africa (D'AGUILAR & DOMMANGET, 1987; DIJKSTRA, 2006) but several individuals have been recently collected in the south of the Iberian Peninsula and Sardinia (CHELMICK & PICKESS, 2008; HOLUSA, 2008). A possible explanation of its northward expansion is the higher frequency of the Saharan southern winds, which facilitate dispersion and create arid conditions appropriate for the establishment of the species (MÁRQUEZ-RODRÍGUEZ, 2011). The first citation in the Iberian Peninsula dates from 2008 in the Manilva River, Malaga province (CHELMICK & PICKESS, 2008). Since then, the species has been cited in other regions in Andalucía (e.g. CANO & CONESA, 2009; CANO, 2011; MÁRQUEZ-RODRÍGUEZ, 2011; PRUNIER, 2011) arriving to Castellón in 2012 (Ezequiel Prieto-Lillo, pers. com.).

T. kirbyi is a species of the family Libellulidae, characterized by bright red males and cryptic yellow females. Its wings have a basal large spot of between yellow-orange and red color, which is more conspicuous in males. The pterostigma is black and has a wide and dorsoventral flattened abdomen. This species is easily differentiated from *Crocothemis erythraea* (Brullé, 1832) (species with similar ecological requirements of *T. kirbyi* and widely distributed in the Iberian Peninsula) by a larger basal spot in the wings and the color of the pterostigma, which is brownish or whitish in *C. erythraea*.

In Catalonia, the genus *Trithemis* includes only a single species, *Trithemis annulata* (Palisot de Beauvois, 1807), that also colonized the Iberian Peninsula from north of Africa (FERRERAS-ROMERO, 1980). To this genus we can add now *T. kirbyi*, which increases the number of Odonata species in Catalonia up to 70 (http://www.oxygastra.org/arxius/recursos/catalog_odonats_catalunya/catalog.htm). The male adult was observed the 3rd of August 2012 in the area of "Toll del Vidre" in the Algars River

(Ebro Basin), near the village of Arnes (Tarragona), at 40°51'19.35"N 0°15'08.60"E and with 545 m.a.s.l.. The river in this area has a calcareous geology and a substrate mainly composed by bedrock with multiple pools connected by tiny riffles. The riparian vegetation includes a scarce population of *Salix* cf. *eleagnos* and a dominant adjacent forest composed by *Pinus halepensis*, *Quercus ilex* s.l. and several species of Mediterranean shrubs. The reed species *Schoenus nigricans* is very common in the river edges of the open reaches.

It is unknown if this observation comes from a well-established population or if the observed individual is a colonizing specimen. The latter option seems the most probable because there have not been more individuals observed during any further visits (Pere Luque, pers. com.).

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