

***Gomphus vulgatissimus* (Linnaeus) new to the fauna of Spain, with records of other interesting Odonata Anisoptera**

by

JEAN BELLE

ABSTRACT. — Besides *Gomphus vulgatissimus*, which is new to the fauna of Spain, *Gomphus pulchellus*, *G. simillimus*, *Onychogomphus forcipatus*, *O. uncatatus* and *Cordulegaster boltoni* are recorded from the Cea River. The occurrence of *Gomphus graslini*, *Brachythemis leucosticta* and *Trithemis annulata* in the province of Jaén is also mentioned.

In the summer of 1984, from July 13 to July 20, I made a dragonfly collecting trip to the Río Cea, a tributary of the Río Esla in the northwest of Spain. During this trip I had the good fortune to secure three males and three females of *Gomphus vulgatissimus* (Linnaeus), a gomphid not yet collected in Spain. Its discovery brings the total number of Odonata species known from this country to 73 (cf. Compte Sart, 1965).

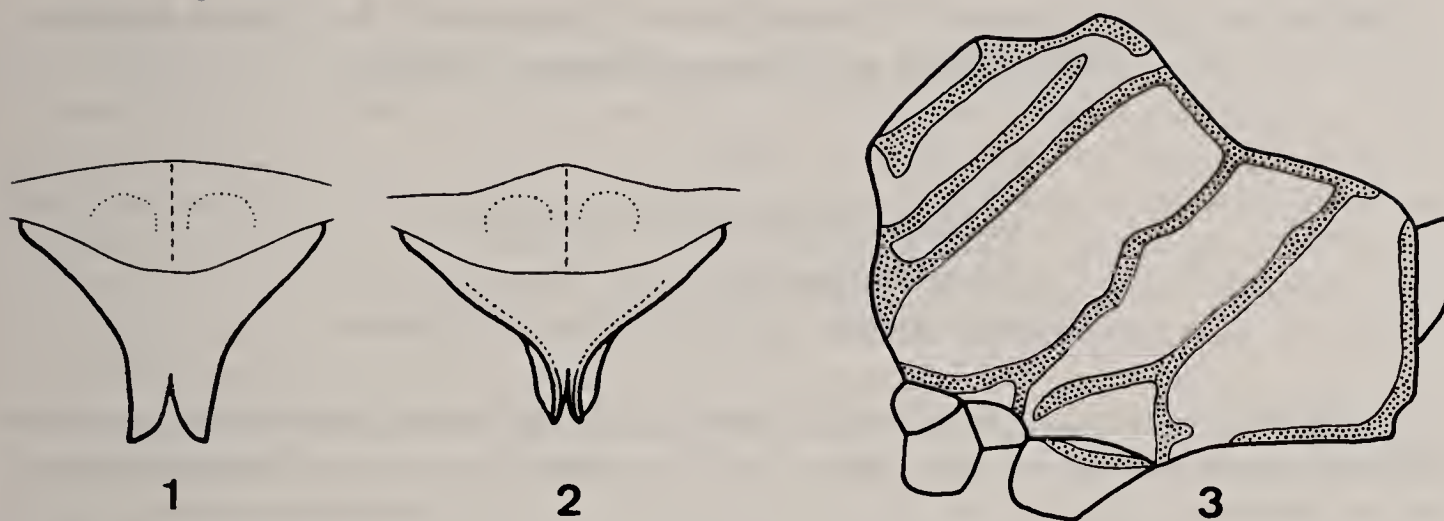
Gomphus vulgatissimus was recorded from the south of France (cf. Belle, 1983) and its occurrence in the adjoining area of Spain might be expected. Here the species was encountered at the upper part of the Río Cea near the bridge at Almanza. Upstream, the Cea River is no more than a brook with clean, swiftly flowing water, winding its way through the valleys of the Cantabrian mountain range. In this part of the flow no gomphid was encountered, but *Cordulegaster boltoni* was plenty present. The latter species, however, was also collected near the bridge at Almanza. Downstream, the Río Cea is for the greater part an undep stream with turbid, slowly running water. South of the bridge at Almanza, the banks of the river are covered with dense vegetation and this environment is apparently a suitable habitat of *Gomphus vulgatissimus*. The species was not found elsewhere along the river. The three males were detected on shady places, one of them perching on a small stone close to the water's edge and the other two resting on leaves of overhanging branches about two meters above the water surface. The three females were collected on sunny places, along footpaths near the stream.

If a comparison is made with the French examples of *Gomphus vulgatissimus* from the Tarn River slight morphological differences are found in the vulvar lamina which in the female from France has the lobes of the excised tip parallel (fig. 1), while in the females from Spain these lobes are more or less folded against each other (fig. 2).

Geijskes & Van Tol (1983), in their monograph of the Dutch Odonata, included Spain in the range of *Gomphus vulgatissimus* and *Ophiogomphus cecilia* (Fourcroy) basing their statement on the information in Schmidt's (1978) „Limnofauna Europaea" that both gomphids are West Mediterranean species. The occurrence of *Gomphus vulgatissimus* in Spain is ascertained by my recent captures but that of the *Ophiogomphus* remains doubtful and will continue to be so as long as no observation of the species has been made in that country.

At the same place of capture, about 100 m south of the bridge at Almanza, I also collected *Onychogomphus uncatatus* (Charpentier). I found the males of this species perching on a sunny gravelled spot near the bank. Downstream, the Río Cea can be explored over its whole length of 100 km without much effort because of the many (ten) bridges which make it easy to reach the streambed. In this lower part of the river *Gomphus pulchellus* Selys occurs everywhere and especially at those places where the flow is quiet. At the stream-rapids with projecting cobbles *Gomphus simillimus* Selys and *Onychogomphus forcipatus* (Linnaeus) var. *unguiculatus* Vander Linden, are found. The first species has been collected at the bridge near Villaverde de Arcayos while the second has been observed and collected from Villaverde de Arcayos to Mayorga.

Contrary to some West European gomphids the thoracic colour pattern of *Gomphus pulchellus* is rather constant. A figure of this pattern is published by Aguesse (1968: 127, fig. 2) but curiously enough the black middorsal, midlateral and posterior metepimeral stripes are lacking



Figs 1-2. Vulvar lamina of *Gomphus vulgatissimus* (Linnaeus). 1, ♀ from the Tarn River, France; 2, ♀ from the Cea River, Spain. Fig. 3. Thoracic colour pattern of *Gomphus pulchellus* Selys, ♂ from the Cea River, Spain.

in the depiction. Geijskes & Van Tol (1983: fig. 183), apparently not having noticed these deviations, have published Aguesse's illustration in their monograph of the Dutch Odonata. In fact these black stripes are distinct, although sometimes rather narrow (cf. Lieftinck, 1926: 176). Aguesse's drawing should have been made from a specimen with an abnormally aberrant colour pattern or from a specimen the thoracic pattern of which is largely obliterated owing to post-mortem changes. Fig. 3 shows the thoracic colour design of one of the males from the Río Cea; the black lateral stripes are about equal in width. The colour design is typical of *Gomphus pulchellus* and in the field it can be used for the recognition of the species.

In Spain, another *Gomphus* species is still known, namely *Gomphus grasslini* Rambur. This species has not been found at the Río Cea. Earlier in the year 1984 I visited the province of Jaén and here I collected *Gomphus grasslini* together with *Trithemis annulata* (Palisot de Beauvais) along the Río de las Yeguas (June 20, bridge at the road C. 420) and, near the lower end of this tributary, a young male of *Brachythemis leucosticta* (Burmeister) which was perching on a track close to the bank of the Río Guadalquivir (June 19, bridge at Marmolejo).

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Onder de Beumkes 35, 6883 HC Velp, the Netherlands.