

A NOTE ON SOME DRAGONFLIES FROM AFGHANISTAN*

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A list is given of 11 species from various Afghan localities, together with detailed illustrations of structural characters of *Enallagma risi* Schmidt, *Sympetrum tibiale* Ris, and *S. vulgatum flavum* Bartenef. *S. sanguineum armeniacum* Selys is new to the fauna of Afghanistan.

INTRODUCTION AND LIST OF LOCALITIES

In July 1975, Mr. E. Van Cappellen (Brussels) made a butterfly-collecting trip to Central Afghanistan. At my request, some dragonflies were also brought back. Following SCHMIDT'S (1961) review of the dragonflies of Afghanistan, only two further notes by ASAHINA (1963, 1968) have been published. Mr. Van Cappellen's collection is further significant by the fact that, except for the first and the last one, all localities are above 2000 m., and are situated in an area from which no dragonflies were known yet. These are as follows: (1) Kabul Gorge: canyon at 35 km E. of Kabul, about half-way Kabul-Sorubai, 22-VII-1975; — (2) Band-i-Amir (Bande Amir): a group of large mountain lakes, about 250 km W. of Kabul, and 75 km W. of Bamiyam, 14-VII-1975; — (3) Caghcaran: 400 km W. of Kabul; on the so-called middle-route, between Herat and Kabul, 18-VII-1975; — (4) Road Sahrah-Jam: 450 km W. Kabul; river Heri Rood and surrounding marshy spots, 19-VII-1975; — (5) Lal-o-Sarajang: 300 km W. Kabul, on middle-route, 15-VII-1975; — (6) Kandahar (Oasis), 26-VII-1975.

*To Dr. B.F. BELYSHEV, on his 65th birthday.

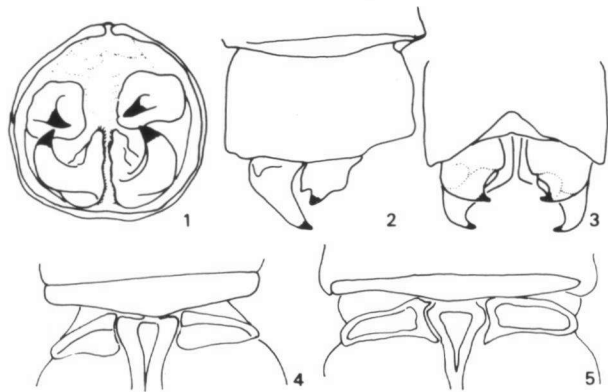
LIST OF SPECIES

Platycnemis dealbata Sélys – Kandahar, 2 ♂

Enallagma risi Schmidt (Figs. 1-4). – A short series, in both sexes from Band-i-Amir. In habitus, this species is reminiscent of *E. deserti* Sélys, by its reduced humeral black, but similar decolorate forms also exist in true *E. cyathigerum* (Charp.), e.g. from Anatolia. This species has not been well figured by its describer. We therefore present extensive illustrations of the male terminalia (Figs. 1-3), and the female lamina mesostigmalis (Fig. 4). One of the chief characteristics is the strongly curved spine on top of the appendices superiores in the male. In side view, it appears as a blunt hook. In copulation, this hook apposes to the lamina mesostigmalis (Fig. 4). The latter has a very strongly raised anterior ridge. In *E. cyathigerum*, the lamina is a triangle, with weakly raised marginal ridges all around (Fig. 5). As pointed out by SCHMIDT (1961), specimens from Turkestan, pertaining to this species, had already attracted RIS' attention (1928), but had not been studied in detail. The range of this species is probably wider than Afghanistan and Turkestan. I strongly suspect that BENEDEK's (1968) *Enallagma cyathigerum mongolicum* is conspecific with *E. risi*.

Epallage fatime (Charp.) – Band-i-Amir, 1 ♀ (teneral). The wing-tip of the specimen is completely hyaline.

Onychogomphus flexuosus (Schneider) – River Heri-Rood, 1 ♀, slightly smaller than middle-eastern specimens, but structurally identical to examples from Turkey and Israel.



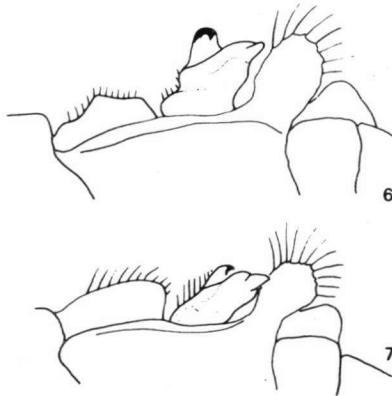
Figs. 1-5. *Enallagma risi* Schmidt and *E. cyathigerum* (Charp.): (1-3) *E. risi*, ♂ terminalia (posterior, lateral and dorsal view respectively); – (4) *E. risi*, ♀, laminae mesostigmales (and adjacent thoracal area); – (5) *E. cyathigerum*, ♀, laminae mesostigmales (and adjacent thoracal area).

Aeshna juncea mongolica Bartenef – Band-i-Amir, 1♂.

Orthetrum b. brunneum (Fonscol.) – River Heri-Rood, a series of both sexes.

Orthetrum ramburi (Sélys) – This species is still frequently referred to under the name *O. anceps* (Schneider). The type of *anceps* was a female of *O. brunneum*, as shown by HAGEN (1863), and recently stressed by ST. QUENTIN (1964) and LIEFTINCK (1966) and therefore the name *anceps* is not available for a possible eastern subspecies of *O. ramburi*. Typical *O. ramburi* (Sardegna, North Africa) have a pure white membranula. Specimens from the Balkans and Asia Minor tend to vary in this respect, some having a white, others a greyish membranula. SCHMIDT (1961) reports both types from Afghanistan. The specimen before me has a dark grey membranula, exactly as in a large series of specimens from Israel before me.

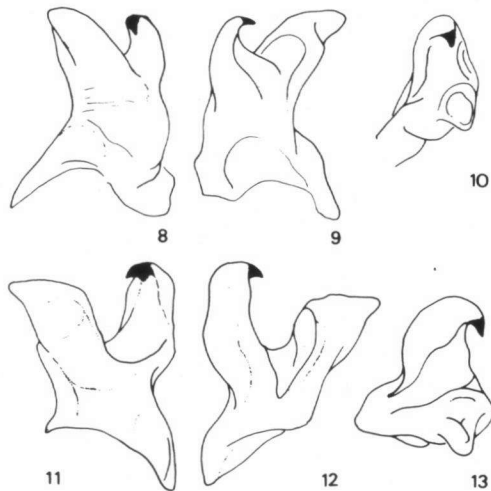
Sympetrum sanguineum armeniacum Sélys: Heri-Rood valley, 3♂, 1♀. New to the fauna of Afghanistan. An interesting subspecies, ranging from the Caucasus, Eastern Anatolia (Dumont, unpublished data), over Iran (Dumont, unpublished data) to this country. The animals from Afghanistan are smaller than those I have seen from Turkey and Iran, and are chiefly characterized by a yellow stripe on the femora of all three pairs of legs. They are also more decolorate in aspect than typical *sanguineum*, but this applies to all *Sympetrum* from Afghanistan.



Figs. 6-7. Lateral views of ♂ accessory genitalia: (6) *Sympetrum vulgatum flavum* Bart.; – (7) *S. tibiale* Ris.

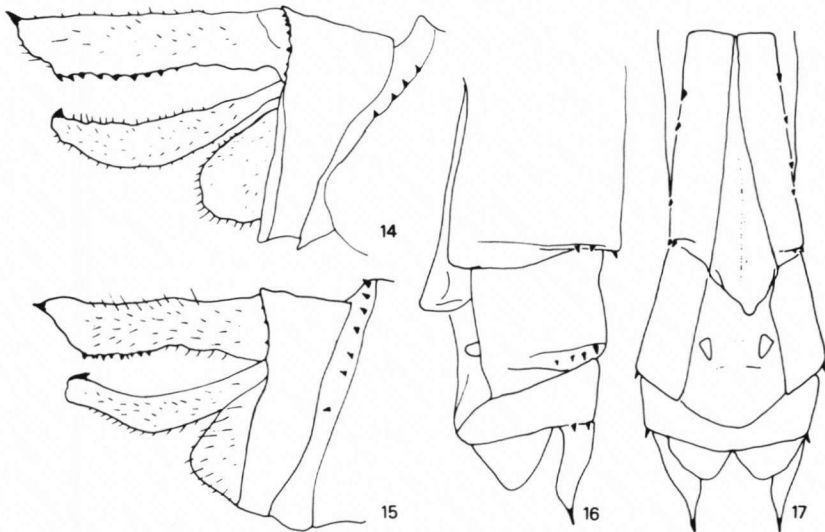
Sympetrum tibiale (Ris) (Figs. 7-10, 15-17). – ♂, Lal-o-Sarajang; ♀ (teneral) Heri-Rood river. This species, still known from a limited number of specimens only, seems to be typical of the Central Asiatic steppes and mountain ranges, where it is probably widely distributed (BELYSHEV & DOSHIDORDZHI, 1958). The description by RIS (1897) was based upon two teneral males, and

the species was redefined by BARTENEF (1919), who mainly had Turkestan-material at his disposal. *S. tibiale* appears to have a similar distribution as *Enallagma risi*, since it was reported from Mongolia as well (SCHIEMENZ, 1956; BELYSHEV & DOSHIDORDZHI, 1958; BENEDEK, 1968). It was reported from Afghanistan (a teneral female) by SCHMIDT (1961). The two specimens before me agree structurally well with BARTENEF'S (1919) figures, and there is also a tolerable agreement with SCHIEMENZ' (1956) figure of a male from Mongolia. My specimens, however, differ from the descriptions by Ris and



Figs. 8-13. Hamulus of *Sympetrum tibiale* Ris (8-10), and *S. vulgatum flavum* Bart. (11-13), viewed outwardly (8, 11), inwardly (9, 12) and from above (10, 13).

Bartenef by having a straw-coloured thorax, and dito abdomen (although in life this may have been red), but, before all, in the complete absence of black on all legs, whereas these should be black, lined with yellow. Since, however, many other instances are known of pale "races" in *Sympetrum* (*S. vulgatum flavum*, *S. striolatum pallidum*), I do not believe this is a major obstacle to a correct identification. In this context I should mention that *S. decoloratum* Selys presents the reverse phenomenon in the Central Sinai desert, where I have found distinct melanic examples. Finally, as stated hereafter, I would not be surprised if some of ASAHINA'S (1966) specimens, identified as *S. vulgatum flavum*, would turn out to be pale examples of *S. tibiale*. Both species may occur together in the same locality in Afghanistan, but although very similar in habitus, *S. tibiale* is a much smaller animal, and structurally very different in both sexes (cf. Figures).



Figs. 14-17. *Sympetrum vulgatum flavum* Bart. and *S. tibiale* Ris: (14) *S. vulgatum flavum*, ♂ terminalia (lateral view); – (15) *S. tibiale*, ♂ terminalia (lateral view); – (16-17) *S. tibiale*, ♀, valvulae vulvae in lateral and ventral view respectively.

Sympetrum vulgatum flavum Bartenev (Figs. 6, 11-14). – A series in both sexes, from Lal-o-Sarajang. Structurally, this insect is identical to typical *vulgatum* (Figs.), while in habitus it is completely different. The abdomen is uniformly straw-yellow; the thorax has a peculiar woolly aspect and is cream-coloured. The legs are brownish, with some lateral blackish patches on the tibiae and femora. SCHMIDT (1961) and ASAHINA (1966) say that it varies enormously in size according to the habitat. I have seen long series of this taxon from various localities in Anatolia, and found them all strongly built, robust insects, absolutely comparable in size to the nominal subspecies. The series from Afghanistan is identical to those from Anatolia. ASAHINA (1966) figures a series of *S. vulgatum flavum* showing enormous size differences. I wonder whether the smaller specimens could not pertain to the preceding species.

S. fonscolombei (Sélys) – 1 ♂, Caghcaran. A widely distributed species, that does not seem to form any geographical subspecies.

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