

A NEW LOCALITY OF *SYMPETRUM FONSCOLOMBEI* (SEL.) IN POLAND (ANISOPTERA: LIBELLULIDAE)

A female was collected (by M.J. Łuszczak) in the area of the Forest Experiment Station in Krynica, on September 6, 1980. It was flying near a forest stream (a tributary of the Mochnaczką Creek), 1.5 m wide, shallow, fast, meandering between tree roots. Since it flows through an open windfall area, its water warms up quickly in the summer. Within 200-600 m from the collecting site, there is an 80-90 years old fir-spruce stand, and some marshy spots, without open pools. The elevation is 730 m a.s.l., and the slope has a 5-10° inclination, with strongly southern exposure. The insect was not sexually entirely mature; when triangled its eyes became wrinkled, though the right hind-wing was already heavily rugged. The specimen was identified by L. Sawkiewicz.

On August 2, 1981, by the same collector, a male was taken in the same general area, at an elevation of 700 m. It was flying at the boundary between a fir wood (900-100 years old) and wet meadows. There are numerous marshy areas in the forest, with numerous pools. The Fataloszka Creek, another tributary of the Mochnaczką, has its origin here. The creek is 3.0 m wide, its gravelly floor is covered with silt in the numerous meanders, and patches of *Alnus incana* and *Salix purpurea* grow on its banks. The slope is 2-4°, and has southern exposure. The specimen was fully mature; it was identified by the first author.

*S. fonscolombei* is a southern species, representing a mediterranean element in the Polish fauna. In Central Europe the species occurs locally and sporadically. The northern boundary of its range runs through Poland, but it has not yet been precisely defined.

So far adults as well as larvae have been mainly reported from the southern part of Poland (cf. Fig. 1). The adults were recorded from Bieszczady; Jabłonki nr Lesko (M. BIELEWICZ, 1968, *Przegl. zool.* 12: 356-357), Pieniny (Ł. SAWKIEWICZ & M. ŻAK, 1966, *Roczn. Mus. górnośl.* 3: 73-132); — Beskid Zachodni: Stawki Dębnie nr Kraków (J. ZAĆWILICHOWSKI, 1929, *Spraw. Kom. Badán fizjogr.* 63: 229-232), Sucha in the Skawa R. valley (J.

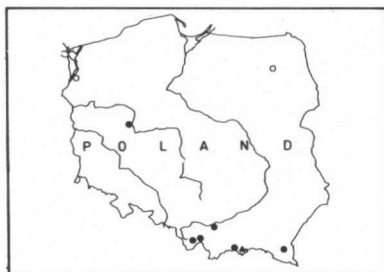


Fig. 1. The occurrence of *Sympetrum fonscolombei* in Poland: ● = localities reported in literature; ○ = localities requiring confirmation; — ▲ = the new locality.

ZAĆWILICHOWSKI, 1930, *Spraw. Kom. Badán fizjogr.* 64: 41-48), Węgierska Górka nr Zywiec (J. ZAĆWILICHOWSKI, 1931/32, *Spraw. Kom. Badán fizjogr.* 65: 159-162); — Pojezierze Mazurskie: Elk (O. LE ROI, 1911, *Schr. phys.-ekon. Ges. Königsb.* 25: 13-30 A.N. BARTENEV, 1915, *Fauna Rossii* 1: 1-352); — and from the Pojezierze Pomorskie: the vicinity of Szczecin (L. KRÜGER, 1925, *Abh. Ber. pommer. naturf. Ges.* 6: 53-106). A single larva was collected in the Wielkopolski National Park nr Poznań (S. MIELEWCZYK, 1966, *Pr. monogr. Przyr. Wielkop. Parku nar.* 4(3): 1-40).

J. URBANŃSKI (1948, *Annls Univ. Mariae Curie-Skladowska* (C) 3: 289-317) was of the opinion *S. fonscolombei* is an expanding species, drifting into northern direction. However, in his opinion, the records from Elk and near Szczecin are questionable and need confirmation. The Wielkopolski National Park, therefore, should be considered as the northernmost locality of this species in Poland.

Analysis of the literature relative to the occurrence of *S. fonscolombei* in Poland reveals that in a single locality but a single specimen was always collected. The attempts to gather additional specimens in the same general locality at a later date failed. The collection of 2 adults in Krynica (one of which was immature), in 2 localities, situated within an approximate distance of 3 km from one another, during 2 consecutive years, indicates that the species

breeds in this area. Under favourable conditions it may migrate to other localities. Krynica is the seventh locality so far known from Poland. It is highly probable that more careful search will enable shifting the known boundary of its range further northward.

A. Łabedzki, Chair of Forest Entomology, Academy of Agriculture, Wojska Polskiego 71 c PO-60-625 Poznań, Poland; — M.J. Łuszczak, Forest Experiment Station, Academy of Agriculture, Ludowa 10, PO-33-380 Krynica, Poland.