

## BRIEF NOTES AND RECORDS

THE STATUS OF *CALOPTERYX OKINAWANA* MATSUMURA, 1931 (ZYGOPTERA: CALOPTERYGIDAE)

In his "6000 illustrated insects of Japan-Empire", S. MATSUMURA (1931, p. 1454) described and illustrated *Calopteryx okinawana* Mats. as a new species from Okinawa, Japan.

This is conspecific with *Matrona basilaris japonica* Foerster, 1897. However, as far as I know, this synonymy has not been presented in any publication. Consequently, in their catalogues, C.A. BRIDGES (1994) and H. STEINMANN (1997) list *okinawana* as a good species in *Calopteryx*, though the former hesitantly so, with a question mark after the genus name.

Thus: *Matrona basilaris japonica* Foerster, 1897  
*Calopteryx okinawana* Matsumura, 1931,  
**syn. nov.**

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AN ATYPICAL *CALIAESCHNA MICROSTIGMA* (SCHNEIDER) HABITAT IN BULGARIA (ANISOPTERA: AESHNIDAE)

V.L. BESHOVSKI (1964, *Bull. Inst. Mus. Sofia* 15: 115-129) and H. BEUTLER (1987, *Opusc. zool. flumin.* 16: 1-8) have provided information on the occurrence of this species in SE and SW Bulgaria and along the Black Sea coast, with Baltchik as the northernmost locality. Recent surveys have extended the known range up to Kavarna in the North, and in the Rhodope Mts (cf. Fig. 1). These authors have also supplied some evidence on its habitat preferences, while some additional data on the ecology of the species were given subsequently by V.L. BESHOVSKI (1966, *Priroda, Sofia* 50(3): 66-68; -1967, *Bull. Inst. Zool. Mus. Sofia* 24: 5-20).

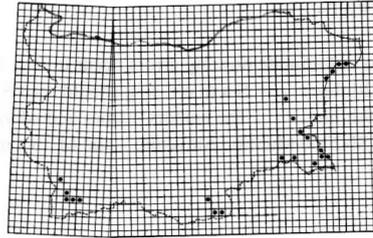


Fig. 1. Distribution of *Caliaeschna microstigma* in Bulgaria.

As it goes from the above publications, *C. microstigma* inhabits rapid, shadowy streams, with rich aquatic and bank vegetation, e.g. *Berula erecta* and *Equisetum* spp. at the emergence sites. The exuviae are located also on stones and on tree bark. (G. PETERS, 1987, *Die Edellibellen Europas*, Ziemsen-Verlag, Wittenberg Lutherstadt).

On 22-VI-1999, numerous males were sighted flying over a small forest stream, the Izgrevsko Dere, in the village of Izgrev, Mt Strandja, SE Bulgaria. Surprisingly, the rivulet is completely devoid of any kind of vegetation, whether aquatic or on the banks. The bottom is stony and stones are spread along the bank as well. The surrounding trees (mainly *Alnus*) are casting a deep shade, as peculiar for the *Caliaeschna* habitats. The sole exuviae found was sitting on the bark of a tree.

Apparently, in this particular habitat, *C. microstigma* larvae dwell in a lithorheophile coenosis, in contrast to their hitherto reported phytorheophile character (cf. BESHOVSKI, 1967, *loc. cit.*). In this part of the country they seem well adapted to this kind of habitat. On 25-III-1995, I have seen them under the stones, in the Veleka River, Mt Strandja. Their wing sheets reached up to the 3rd abdominal segment which, in view of the early season, could imply they are likely to overwinter at this stage.

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