

OBSERVATION ON AN INTERGENERIC COPULATION BETWEEN A MALE *CORDULIA AENEAE* (L.) AND A FEMALE *EPITHECA BIMACULATA* (CHARP.) (ANISOPTERA: CORDULIIDAE)

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Abstract – The copula is briefly described and documented by a photograph. It took place on 13-VI-1994, at an oxbow in Berd' R., nr Legostaevo, Iskitim distr., Novosibirsk prov., Russia. A statement on the prezygotic mating barriers in dragonflies is made.

Description

On 13th June 1994, almost at noon, under good weather conditions, I witnessed a copula, *Cordulia aenea* (♂) × *Epithea bimaculata* (♀), at a left bank oxbow of the Berd' River, some 2 km NNW

of the village of Legostaevo, Iskitim district, Novosibirsk province, western Siberia, Russia (54°38'35"N, 83°48'20"E). The copulating pair was settled on a dry willow branch, ca 1.5 m above the ground, several metres off the water, in an open willow stand.

No behavioural abnormalities could be noticed. The slow, pulsating abdominal movement was as usual in dragonfly copulation. During anything like 0.5-1.0 min, I was able to take a dozen of photographs (cf. Fig. 1), whereafter the pair felt disturbed and took off.

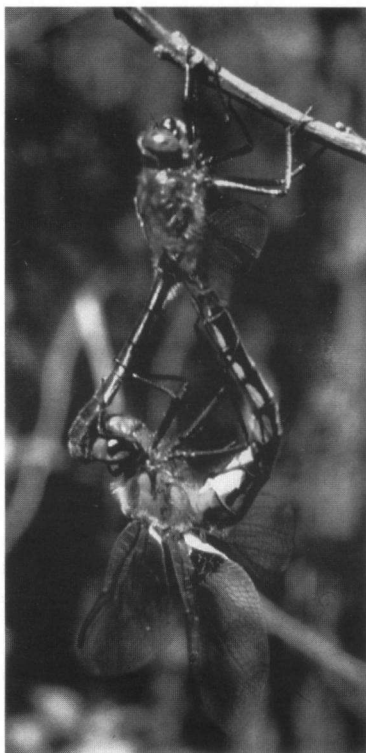


Fig. 1. Intergeneric copula, (♂) × (♀).

Discussion

C. aenea is abundant at this site, as it is elsewhere in the forest and forest-steppe of western Siberia.

E. bimaculata, on the other hand, is rare in this region.

The oxbow (alt. 135 m) is situated on the Berd' R. floodplain, covered by alternating glades and pine/birch or poplar woods, at the border of the Salairskii Kryazh range, within the forest-steppe zone. It is surrounded by willow thickets.

It should be emphasized that BELYSHEV (1973) recorded several *E. bimaculata* (♂) × *Libellula quadrimaculata* (♀) copulations. Intergeneric pairings, *C. aenea* (♂) × *Somatochlora flavomaculata* (♀), were reported by SCHIEMENZ (1952, 1953) and VALTONEN (1982). Reviews of intergeneric pairings in the Order were produced by BICK & BICK (1981) and UTZERI & BELFIORE (1990). Our record confirms the evidence that the prezygotic mating barriers, related to the appearance, behaviour, and (perhaps?) the morphology of the genitalia, are not absolute in dragonflies, as discussed by UTZERI & BELFIORE (1990).

References — BELYSHEV, B.F., 1973, *The dragonflies of Siberia (Odonata)*, Vol. 1, Pt. 2, p. 347, Nauka, Novosibirsk; — BICK, G. & J. BICK, 1981, *Odonatologica* 10(4): 259-270; — SCHIEMENZ, H., 1952, *Wiss. Z. tech. Hochsch. Dresden* 1: 313-320; — 1953, *Libellen unserer Heimat*, Urania, Jena; — UTZERI, C. & C. BELFIORE, 1990, *Fragm. faun.* 22(2): 217-287; — VALTONEN, P., 1982, *Luonnon Tutkija* 86(5): 196.

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