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Re-investigation of *Holocentropus spurius* BOTOSANEANU & WICHARD, 1983 (Insecta, Trichoptera, Polycentropodidae) from the Taymyr amber and its transfer to the genus *Archaeopolycentra*

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Abstract. *Holocentropus spurius* BOTOSANEANU & WICHARD, 1983 = *Archaeopolycentra spurius* (BOTOSANEANU & WICHARD, 1983) comb. nov. is re-described. Some genital characters of this species are illustrated and compared with other members of *Archaeopolycentra*.

Continuing investigations of the Taymyr amber Trichoptera (BOTOSANEANU & WICHARD 1983, IVANOV & MELNITSKY 2017, MELNITSKY & IVANOV 2021, 2022, PERKOVSKY 2022) resulted in the description of 14 species from 7 families (MELNITSKY & IVANOV 2022). The most diverse caddisfly family in the Taymyr fauna is the Polycentropodidae, represented by six species. The extinct genus *Archaeopolycentra* includes 5 species (*A. zherikhini* BOTOSANEANU & WICHARD, 1983, *A. yantardakh* IVANOV & MELNITSKY, 2017, *A. achupomotet*, *A. turvalsia* MELNITSKY & IVANOV, 2021, *A. longesilentia* MELNITSKY & IVANOV, 2022).

The increasing amount of studied specimens in this genus has resulted in a better understanding of the enigmatic species *Holocentropus spurius* called „bastard" (spurius, lat.) for its unclear taxonomic position (BOTOSANEANU & WICHARD 1983). New data on the genital structures of diverse *Archaeopolycentra* species inspired a new interpretation of the previously enigmatic morphology of *Holocentropus spurius* and made it possible to clarify its systematic position. This species has a few structures typical for representatives of the genus *Archaeopolycentra*: long appendages of segment X and distal processes of the aedeagus. The genital structures of the species in question described by BOTOSANEANU & WICHARD (1983) include in the type specimen two long spine-like projections and a few other structures obscured by a cloud of whitish substance, presumably decomposed organic matter. The spine-like projections of segment X were described as a longer one more dorsally and a shorter one ventrally; our data suggest them to be right ("dorsal") and left (Fig.1). Other structures mentioned by the authors are not clearly visible in the inclusion.

We provide here a new illustration and interpretation of the abdominal structures. Besides the projections of segment X mentioned above, there are some details of the dorsally positioned aedeagus, the club-shaped tips of the lateral processes of the aedeagus, and the bases of the inferior appendages. Comparison with *Archaeopolycentra achupomotet* MELNITSKY & IVANOV, 2021 (Fig.2) clarifies the homology of the genital parts.

The genital structues of *Holocentropus spurius* have the same design as in other members of the genus *Archaeopolycentra* which BOTOSANEANU & WICHARD (1983) described also from the Taymyr resins. Thus, the species *Holocentropus spurius* if transferred here to the genus *Archaeopolycentra*. We publish below some additional data on the type specimen improving the previous description by these authors and compare it with one of the better preserved species.

Archaeopolycentra spurius (BOTOSANEANU & WICHARD, 1983), comb. nov.

Material: Holotype ♂: PIN 3311/528. Russia, Krasnoyarskiy Krai: Taymyr amber, Yantardakh, 3 km above the mouth of Maimecha river, Eastern Taymyr, Kheta formation, Santonian.

Description: Body length 2,5 mm, forewing length 3,1 mm. Legs, head and its appendages yellowish. Segment 5 of the maxillary palps almost as long as segments 3 and 4 together. Thorax and abdomen light brown. Fore wings apparently broader than the hind wings. DC rather long, but distinctly shorter than MC. – Male genitalia: The preservation is poor. Projections of segment X longer than the aedeagus, slightly curved subapically with pointed apex. Inferior appendages wide and thin. Aedeagus large with apical sclerite. Distal part of aedeagus with two large downward directed processes (lateral processes of aedeagus); only the apical dilated parts of these processes are visible in the type specimen.

Comparison. The species is related to *Archaeopolycentra achupomotet* MELNITSKY & IVANOV, 2021 from the same locality. *A. spurius* differs in the shape of the acute projections of segment X and in the configuration of a single apical sclerite of the aedeagus with dorsal projection, not separate apical aedeagal sclerites.

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Abbreviations: IX – segment IX; aed – aedeagus, ia – inferior appendages, ps – projections of the segment X, pae – lateral processes of aedeagus.

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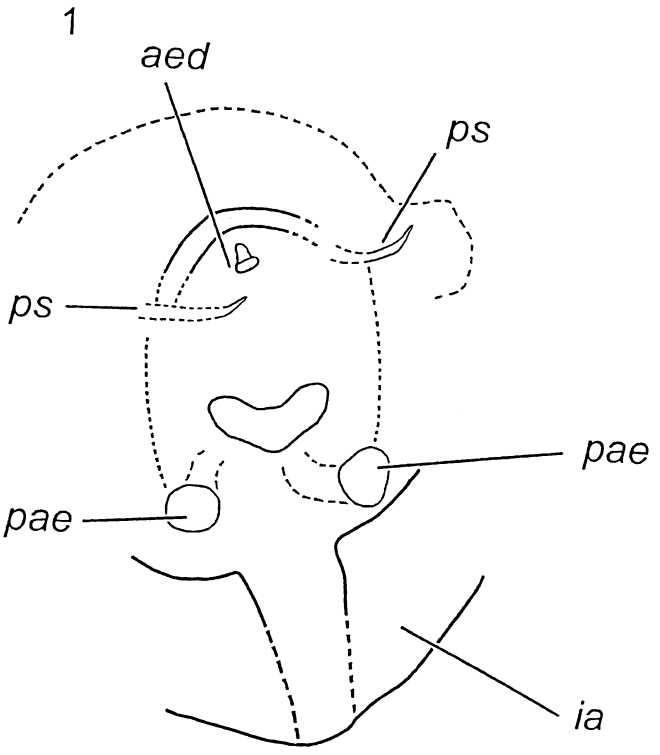

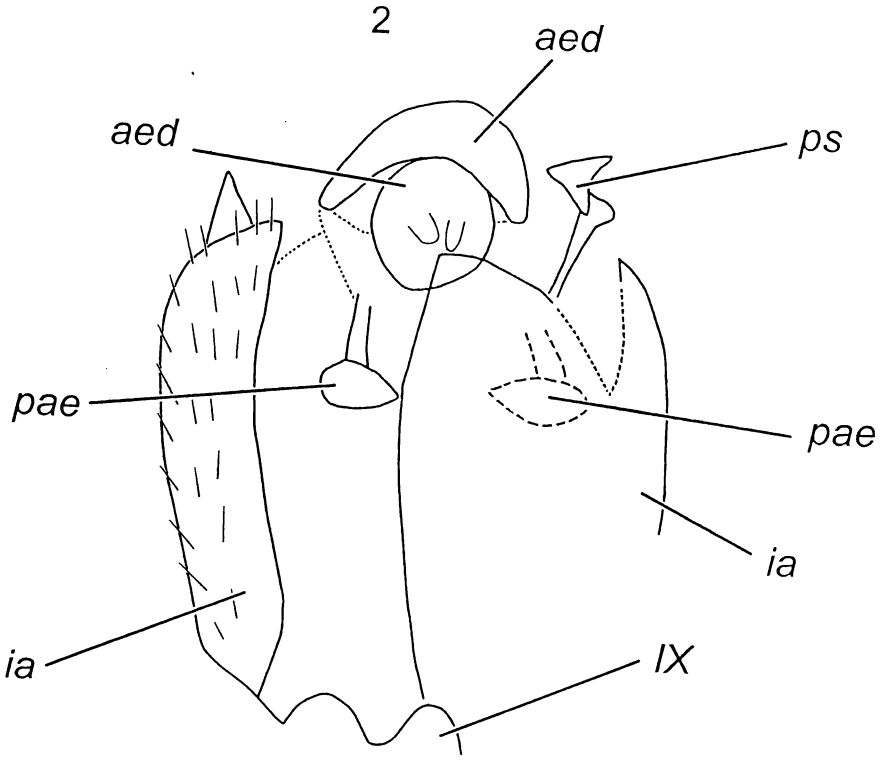

Fig.1: *Archaeopolycentra spurius* BOTOSANEANU & WICHARD, 1983, male genitalia, laterocaudal.

Fig.2: *Archaeopolycentra achupomotet* MELNITSKY & IVANOV, 2021, male genitalia, lateroventral.