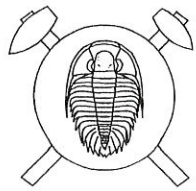
Pterygotid eurypterids (Arthropoda, Chelicerata) in the Silurian and Devonian of Bohemia



Pterygotidní eurypteridi (Arthropoda, Chelicerata) v českém siluru a devonu (Czech summary)

(3 text–figs., 6 plates)

IVO CHLUPÁČ

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Representatives of the family Pterygotidae Clarke et Ruedemann, 1912 from the Ludlovian, Přídolian and Lochkovian strata of the Barrandian area, central Bohemia (Czech Republic) are reviewed and discussed: *Acutiramus bohemicus* (Barrande, 1872), *A. perneri* sp. n., *A.? nobilis* (Barrande, 1872), *Pterygotus barrandei* Semper, 1898, *P. kopaninensis* Barrande, 1872 and doubtful species *P. mediocris* Barrande, 1872 and *P.? blahai* Semper, 1898. Pterygotids show their maximum development in strata of Přídolian age and they tend to be concentrated in offshore dark platy limestone facies with anoxic bottom influences. They are constituents of marine faunas and exhibit the same environmental dependence as the coeval phyllocarid crustaceans of the fam. Ceratiocarididae.

The Silurian and Devonian deposits of the Barrandian area of central Bohemia contain marine eurypterids in strata of Wenlockian up to Lochkovian age. Particularly the family Pterygotidae is well represented and finds of the genus *Acutiramus* Ruedemann, 1935 belong to the relatively most common eurypterid remains found in the late Silurian and earliest Devonian strata.

Bohemian eurypterids were described for the first time by Barrande (1872) and later supplemented by Semper (1898) and Seemann (19O6). A thorough revision was made by Prantl and Přibyl (1948). Since their work only comments on distribution and stratigraphic occurrence (e.g.Chlupáč et al. 1972, Chlupáč in Kříž et al. 1986) have appeared with only a few systematic comments (Kjellesvig–Waering 1964).

The author had the opportunity to collect at most eurypterid localities of the Barrandian area since the mid–forties. The detailed biostratigraphic studies of Silurian and Devonian strata also offered new eurypterid materials. Valuable contributions also represented some older collections, especially those of F. J. Pecka, F. Hanuš and R. Růžička, deposited in the National Museum and not included in the revision by Prantl and Přibyl (1948).

The majority of the reference material is deposited in the collections of the National Museum, Prague (inventory numbers prefixed by L) and only a few specimens are housed at the Department of Geology and Paleontology, Charles University, Prague.

The terminology is adopted according to Stormer (1955), Waterston (1964) and Tollerton (1989). The drawings were made using transparent sheets which allowed to redraw outlines directly from the specimens. Dotted lines indicate in drawings secondary limits of organic remains (damages etc.).

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Systematic part

Order Eurypterida Burmeister, 1843

Suborder Pterygotina Caster et Kjellesvig–Waering, 1964

Family Pterygotidae Clarke et Ruedemann, 1912

Genus *Acutiramus* Ruedemann, 1935

T y p e s p e c i e s : *Pterygotus cummingsi* Grote et Pitt, 1875 (synonyme *Pterygotus buffaloensis* Pohlman, 1881).

D i a g n o s i s : Prosoma subquadrate, free and fixed rami of chelicera with acute distal tips and large recurved terminal teeth. Teeth in proximal part of rami inclined anteriorly, some larger teeth of the fixed ramus commonly serrated. Metastoma obovate, cordate anteriorly, rather narrow. Genital appendages not segmented, type A spatulate or club–shaped, type B simple, lozenge–shaped or pyriform. Telson paddle–shaped, terminating in a short spine, margin serrated.