

Late Viruan (Caradoc) polychaete jaws from North Estonia and the St. Petersburg region


Olle Hints

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An abundant, diverse and well-preserved fauna of jaw-bearing polychaetes (Annelida, Polychaeta, Eunicida) was recovered from the late Viruan (Caradoc) of eight borehole sections in North Estonia and the St. Petersburg region. Altogether 46 species are encountered. Two new genera, *Incisiprion* with type species *I. incisus* (Kielan-Jaworowska, 1966) and *Estonioprion* with type species *E. maennili* sp. n., and five new species (*Incisiprion edentulus*, *Polychaetura kielanae*, *Ramphoprion bialatus*, *Ramphoprion peterburgensis*, *Estonioprion maennili*) are introduced. In addition 17 new species are described under open nomenclature. The taxonomy is based on jaw apparatuses, fused or reconstructed ones. Many species found in Estonia have been previously described from the erratic boulders of Poland. The studied polychaete fauna was confined to the North Estonian Confacies, a shallow-water carbonate shelf, which constituted favourable habitats for Ordovician polychaete worms. The stratigraphical ranges of many prevalent polychaete species exceed the interval studied. However, a few species seem to be restricted to particular horizons and may be useful for stratigraphy. Polychaete assemblages of certain time intervals, characterized by very steady species composition and relative frequencies of different taxa, were spatially widespread within the North Estonian Confacies. Based on the changes in the assemblages, some stratigraphical levels, like the boundary beds of the Idavere and Jhvi stages, can be traced within the study area. The jawed polychaete faunas of Baltica and Laurentia probably had several species in common during the Caradoc.

Key words: Polychaetes, scolecodonts, North Estonia, St. Petersburg region, Ordovician, Caradoc, late Viruan.

Olle Hints [olle@gi.ee], Institute of Geology at Tallinn Technical University, Estonia Ave. 7, 10143 Tallinn, Estonia.

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