Proposal for the subdivision of Přídolí Series based on stratigraphic markers defined in Central Bohemia

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Abstract

The Silurian System consists of four series, three of them further subdivided into stages. The definition of the Přídolí Series as the fourth division has been the only major addition to the Silurian System in over the past 100 years (Kříž et al. 1986). Since then the Přídolí remains the only series recognized by the IUGS that has not been formally divided into stages. The Přídolí Series has been defined in the Prague Synform. The Series represents an interval of faunal changes, which strongly influenced the middle Palaeozoic transformation of marine ecosystem. Herein, the two-fold subdivision of the Přídolí Series is proposed into a lower Jarovian Stage and an upper Radotinian Stage. The base of the Jarovian Stage corresponds to the base of the Přídolí in its defined GSSP. The graptolite Wolynograptus *bouceki* is suggested as the critical marker to define the base of the upper Radotinian Stage. The condont *Oulodus detortus* enters close to the base of the *bouceki* Biozone together with the cephalopod Kopaninoceras fluminese, which is abundant in the Přídolí strata across peri-Gondwana. Bivalves and the common brachiopod Dayia bohemica are useful for tentative interregional correlation. The appearance and proliferation of scyphocrinid crinoids represent a time specific biofacies in the Radotinian Stage. A shift to slightly positive $\delta 13$ Ccarb values coincides with the base of the *bouceki* Biozone in sections of the Prague Synform. The Hvížďalka section with uninterrupted sedimentation and integrated graptolite and conodont biostratigraphy and geochemical proxies is proposed for potential stratotype of the Radotinian Stage.

References

Kříž, J., Jaeger, H., Paris, F. & Schönlaub, H.P., 1986. Přídolí - the fourth subdivision of the Silurian. Jahrbuch der Geologischen Bundesanstalt, 129, 2: 291-360. Wien.

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