

Correlation of Upper Permian deposits in the Volga-Urals region and Kuznetsk basin

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Abstract

The correlation of marine and terrestrial deposits is one of the most difficult problems of stratigraphy. The Volga-Urals region comprises stratotypes of the Upper Permian stages (Ufimian, Kazanian, Tatarian). A thorough lithologic, paleontologic, and paleomagnetic investigation is used to outline regularities and stages in fauna and flora evolution, to estimate the rank of stratigraphic boundaries, and to trace them in the neighboring areas of the Angaraland - Kuznetsk basin. The correlation is based on the analysis of the Late Paleozoic macroflora from the Volga-Urals region and Kuznetsk basin. As a result, the Ufimian Stage of the stratotype locality is correlated with the Usyatskoe, Starokuznetsk, Mitina, and Kazankova-Markina formations, whereas the Kazanian Stage is assumed to correspond to the Uskat and Leninsk formations, and the Tatarian Stage, to the Gramoteino and Tailugan formations of the Kuznetsk basin. Thus, the Lower-Upper Permian boundary in the Kuznetsk basin is placed at the base of the Usyatskoe Formation. Copyright © 1997 by MAHK Hayka/Interperiodica Publishing.

Keywords

Correlation, Kuznetsk basin, Macroflora, Stratotype, Upper permian, Volga-urals region