



Lithological and Palynostratigraphical correlations between Silurian Deposits from the Dnestr Basin (Podolia) and the North of the Moldavian Platform (Romania)

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Abstract

The Silurian deposits from the Podolia Region outcrop very clearly along the valley of the Dnestr river and its left-side tributaries. Some of the outcrop deposits are represented by the Malynivtsy Formation (Middle-Upper Ludlowian in age) and the Skala Formation (Upper Ludlowian in age). The ages of these formations have been established through the rich fauna, with tabulate and rugose corals, stromatoporoids and brachiopods, characteristic for a Ludlowian age. Our palynological and palynostratigraphical study (acritarchs, chitinozoans and miospores) have focused on these geological formations (Middle – Upper Ludlowian in age) outcropping on the Dnestr Valley (Zhvanets locality area) and the Smotrych brook (Kamenets Podolskyj locality).

The chitinozoan assemblage represents the basis for the stratigraphical correlation of Silurian deposits between the Dnestr Valley (Podolia) and the north of the Moldavian Platform (Romania). The Silurian deposits of Romania have been studied by numerous authors and have focused on diverse stratigraphical Silurian layers intercepted by means of drillings from Iași, Grănicești, Todireni, Bătrânești, Popești, Preutești, Bosanci and Rădăuți.

The chitinozoan species analyzed are present in both the studied regions, but with certain particularities and local individualities. We have separated species of the following genera: *Angochitina*, *Belanochitina*, *Conochitina*, *Eisenachitina*, *Linochitina*, *Urnochitina* a.o. The chitinozoan species analyzed have been found in various regions from Gondwanaland, Laurentia, Baltica, where they represent the biozone species, but some of them are typical for the Silurian of the East-European Platform. The large spread of these species has great importance for the palynostratigraphical correlation between different regions of the East-European Platform and the north of the Moldavian Platform, respectively.

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