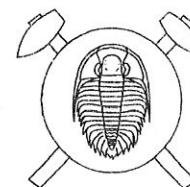


New stratigraphical results in the Paleozoic of the Dražanská vrchovina Upland (Moravia, Czech Republic)



Nové poznatky o stratigrafii paleozoika Dražanské vrchoviny (Czech summary)

(3 text-figs., 2 plates)

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Recent conodonts studies have brought some new results which modify the stratigraphical ranges of the limestones of Dražany (Basinal) and Ludmírov (Transitional) development in the Konice–Mladeč Belt (Dražanská vrchovina Upland). The lowermost boundary of the Jesenec Limestone (Dražany development) can be shifted down to the Emsian–Eifelian boundary and the base of sedimentation of the equivalents of the Macocha Formation can be shifted to the Eifelian. The uppermost occurrence of the Jesenec Limestone reaches up to the Middle–Upper Tournaisian boundary. According to these data a considerable part of volcanic activity belongs probably to the Tournaisian as well, which emphasizes the similarity between the sedimentation in the Konice–Mladeč belt and the southern part of the Šternberk–Horní Benešov Belt.

Introduction

In the period from fifties to eighties of this century basic facial developments and separate lithostratigraphic units of the Devonian in Moravia had been defined. Based on new principles of the stratigraphic classification and nomenclature the results were summarized in the comprehensive review of unmetamorphosed Devonian in Moravia by Zúkalová and Chlupáč (1982). In three main developments – basinal (Dražany) development, platform (Moravian Karst) development and Transitional (Ludmírov) development, formations and members were distinguished, stratotypes were chosen and boundaries were defined both based on macropaleontological and micropaleontological data. More recent data on the stratigraphy of the metamorphosed and unmetamorphosed Devonian were published by Chlupáč et al. (1986).

Recent micropaleontological research in the Konice Devonian in the Dražanská vrchovina Upland has yielded some new results which modify up to now assumed stratigraphical ranges of the carbonate facies both in the basinal and Transitional development. It has been assumed that basinal Jesenec Limestone – a term introduced by Chlupáč (1964), was deposited from the Givetian to the Frasnian and at the end of the Frasnian the carbonate sedimentation was completely substituted by pelitic facies of the Ponikev Formation. New research based mainly on the study of conodont fauna has, however, shown that the time interval corresponding to the

deposition of the Jesenec Limestone was substantially longer and the basinal limestone facies range from the lower boundary of the Middle Devonian up to the Lower Carboniferous.

Middle Devonian in the Ludmírov abandoned quarry

Some evidence on the possible existence of older limestone facies was suggested already during the extensive deposit survey in the Konice–Mladeč Belt by Crha et al. (1989). The age of the oldest limestones correlated with the range of *Tortodus kockelianus* and *Polygnathus ensensis* conodont zone, however, reflected rather broad stratigraphical range of the impoverished conodont association. The new results of conodont studies in carbonates in the quarry situated E of Ludmírov (see fig. 1) shift the lower boundary of the Jesenec Limestone significantly lower.

The eastern neighbourhood of Ludmírov on the Prúchodnice Hill is a typical region of the Transitional (Ludmírov) development. In the abandoned quarry situated on the western slope of the hill (see fig. 1) about 23 m of limestones that can be regarded as equivalents of the Macocha Formation are exposed overlain by about 2 m of the Jesenec Limestone (see fig. 2, section 1). The equivalents of the Macocha Formation are grey, massive and locally recrystallized with abundant crinoid ossicles and deformed recryst-