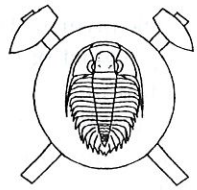
The Arenig/Llanvirn boundary (Ordovician) in the Prague Basin (Bohemia)



Hranice arenig–llanvirn (ordovik) v pražské pánvi (Čechy) (Czech summary)

(2 text-figs.)

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Relations within the Klabava/Šárka Formations boundary interval at the Drahouš locality near Rokycany are described. In the lower part of the Šárka Formation, there is one biozone (Corymbograptus retroflexus Biozone) and Bouček's (1973) horizons are of a local character. The Arenig/Llanvirn boundary is situated above the Klabava/Šárka Formations boundary, because the first appearance of *Didymograptus spinulosus* Perner is within the Corymbograptus retroflexus Biozone.

Introduction

During the construction of a highway west of Rokycany, the Klabava/Šárka Formations boundary of the Prague Basin Ordovician was uncovered in the area of the classical locality Drahouš (Holub, 1908; Iserle 1903; J.Kraft, 1974; J.Kraft et P.Kraft, 1992). The whole section was macropaleontologically investigated in detail. In addition, samples for supplemental study (micropaleontology, lithology, paleomagnetism, determination of the diagenetic degree, absolute age) were collected.

An intensive research of the Lower Ordovician, and especially of the boundaries between particular stages, is in progress. Therefore, we summarize the most important preliminary results of macropaleontological research of the outcrop in a simple qualitative form in the present paper.

In the Prague Basin, the Klabava/Šárka Formations boundary is exposed at the Ejpovice (Frýda, 1988; Mergl, 1983, 1991; Dzik, 1983) and Strašice (Frýda, 1988; Mergl 1983, 1991) localities. The tuffites and tuffitic shales of the Klabava Formation are overlain there by oolitic iron ores that belong to the Šárka Formation. Graptolites have not been found in these rocks; an exception is several undetermined stipe fragments from Ejpovice.

The boundary between both formations was also described by Horný et Chlupáč (1952) from the quarry near a sporting airport (Rokycany – Stráň quarry). Deeply weathered yellow clayey shales of the Klabava Formation with relatively common fragments of graptolites, inarticulate brachiopods, trilobites and other fossils contain in their uppermost part (two meters thick) several thin layers of tuffitic shales with different assemblages composed mostly by inarticulate brachiopods. The index fossil of the upper biozone of the Klabava Formation – *Tetragraptus reclinatus abbreviatus* Bouček – was found as high as three meters below the boundary of the Klabava/Šárka Formations. The shales of the Klabava Formation are followed by an about 1.2 m thick layer of oolitic iron ore belonging to the Šárka Formation. In its overlay occur disintegrated shales with siliceous concretions containing fauna typical of the Šárka Formation. At present, this sequence is in the filled part of the quarry and is not accessible.

Locality Drahouš near Rokycany

The locality consists of several outcrops (both natural and artificial) exposed during the construction of the highway) in the low slope above the alluvial plane of the Klabava river, about two kilometers WSW of Rokycany, near the Klabava dam.

The westernmost outcrop has been only roughly investigated (Kraft, 1974 – outcrop marked C). At present, the exposures in the eastern part of the locality are obscured by the embankment of the highway.

The sequence exposed includes the uppermost part of the Klabava Formation and the lower part of the Šárka Formation including their boundary. The continuity of the sequence of the Šárka Formation is interrupted by a fault.

The Klabava Formation is formed by grayish–green, grayish–yellow to brownish–yellow clayey shales, which are followed by a 1.9 m