

**Jarovian Stage and Bitovian Stage -  
a Proposal for the Prídolí Series Subdivisions  
(Silurian, Prague Basin, Bohemia)**

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During the 1992 Prague Field Meeting of Subcommittee on Silurian Stratigraphy it was recommended to Czech side to propose the international subdivision of the Prídolí in type area of the Prídolí Series - the Prague Basin. The Prídolí represents the last series of the Silurian System which was undivided into stages.

The Prídolí Series is in the Prague Basin developed as very monotonous series of alternating laminites and calcareous shales in whole thickness from the base up to the top, which is defined by the Silurian-Devonian global boundary stratotype. Only in the shallow environment carbonate sedimentation prevails in the upper parts and it is characterized by crinoidal limestones. Biostratigraphically the series is subdivided into six graptolite biozones and one graptolite interzone. Generally the whole series represents one conodont biozone and one chitinozoan biozone. Benthic fauna is mainly related to the facies distribution and cannot be used for detailed biostratigraphy.

When based on the graptolite biozonation, the subdivision must be based on the biozone which can be correlated internationally. Besides the basal biozones the *Monograptus bouceki* Biozone and the *Monograptus transgrediens* Interzone show the widest geographic distribution. *Monograptus bouceki* is recorded according to Jaeger (in Kríz et al. 1986) from many parts of the world but although a world-wide distribution of this species may be expected, this cannot yet be considered as safely established. What concerns *Monograptus transgrediens*, the species is known according to Jaeger (in Kríz et. al. 1986) from all continents except Antarctica and represents one of the most common Prídolian graptolite species in many areas.

There are just two alternative bases for the second stage when considered the wide geographic distribution of graptolite biozones. The base of the *Monograptus bouceki* Biozone and the base of the *Monograptus transgrediens* Interzone. Since the *Monograptus transgrediens* Interzone is defined as the part of the sequence above the *Monograptus perneri* Biozone in which *Monograptus transgrediens* occur almost exclusively and because *Monograptus transgrediens* ranges from the uppermost *Monograptus ultimus* Biozone through the *Monograptus lochkovenski*, *Monograptus bouceki* and *Monograptus perneri* Biozones to near the top of the Prídolí (Jaeger in Kríz et al. 1986) only the base of the *Monograptus bouceki* Biozone may be acceptable.

The *Monograptus bouceki* Biozone was recognized in the Prague Basin in the sections Pozáry, Marble Quarry, Hvizdalka, Budnany Rock, Certovy Schody, Kosov

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Quarry and others (KRIZ et al. 1986). The best accessible and most fossiliferous is the base of the *Monograptus bouceki* Biozone developed in the section Hvizdalka which was in detail described by KRIZ et al. 1986. The section is also protected by the State Law. For this we propose this section as the international boundary stratotype of the Bítovian Stage.

### **Jarovian Stage**

For the first stage of the Prídolí Series we propose the name Jarovian Stage. The name is taken from Jarov Village, which is the part of Beroun Town in the western part of the Prague Basin. The base of the Jarovian Stage is coincident with the base of the Prídolí Series, which is defined on the International boundary stratotype at Pozáry near Praha - Reporyje.

### **Bítovian Stage**

For the second stage of the Prídolí Series we propose the name Bítovian Stage. The name is taken from Bítov Village, south of Beroun in the western part of the Prague Basin. For the base of the Bítovian Stage we propose as the international stratotype the section Hvizdalka in Radotín Valley near Prague, on the base of the shale bed no. 27/28a. This point correlates with the base of the *Monograptus bouceki* Biozone and is marked by a mass occurrence of *Monograptus bouceki*.