

Llandovery-Wenlock Boundary Interval in the Graptolite-rich Sequence of the Barrandian Area (Bohemia)

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In the Barrandian area continuous sections through the graptolite-rich Llandovery-Wenlock boundary strata have been examined bed by bed. *Stom. grandis*, *Cyrt. insectus*, *Cyrt. centrifugus*, and *Cyrt. purchisoni* zones have been studied and 43 graptolite taxa have been found in this interval. Graptolite taphocenoses account for gradual increase in species diversity, without any prominent radiation and/or extinction events.

Despite this statement several well determinable species of promising correlative potential appear at about the base of the *insectus* Zone (*M. kolithaj*, *M. kodymi*, *M. pseudocultellus*, *Mcl. basilica*, *Mcl. chuchlensis*, *Cyrt. insectus*, and *Ps. giganteus*). The base of the succeeding *centrifugus* Zone lacks such distinct faunal change.

The base of the Wenlock Series was formally placed at the base of the *centrifugus* Zone. Graptolite evidence of the *centrifugus* Zone, however, is insufficient in the type area, being based on the presence of *Pr. watneyae* and *Mcl. aff. vomerina* the stratigraphic range of which is not well known.

In general the graptolites are neither common and diverse in the type Wenlock area and precise correlation with graptolite-rich sequences is difficult. Graptolite zones equal to the *grandis* and *insectus* Zones of Bohemia, for instance, have not yet been recognized in Britain.

According to the graptolite successions elsewhere (Bornholm, Arctic Canada, China, Poland) *Cyrt. insectus* occurs along with or in the lower part of stratigraphic range of *Cyrt. centrifugus*. In the Barrandian area *Cyrt. insectus* clearly precedes *Cyrt. centrifugus*. Here the first *Cyrt. insectus* is accompanied by a distinct change in the associated graptolite fauna as opposed to a very minor change at the base of the *centrifugus* Zone. The faunal change at the base of the *insectus* Zone in Bohemia is comparable with that observed at the base of the *centrifugus* Zone where the *insectus* Zone is not recognized. That is why in Bohemia the base of the Wenlock Series is placed traditionally at the base of the *insectus* Zone.

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