

Identification of the Llandovery-Wenlock Boundary in Welsh Graptolitic Sequences

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The decision of the Silurian Subcommittee to place the Golden Spike for the Llandovery -Wenlock boundary at Hughley Brook in Shropshire, England has resulted in considerable uncertainties as to the position of the boundary in the graptolite biozonal scheme. Although it is widely stated that the Golden Spike correlates with the base of the *Cyrtograptus centrifigus* Biozone there is no direct evidence for this. Graptolites are absent from the boundary stratotype.

In order to resolve this problem the authors are involved in a study of graptolitic Llandovery-Wenlock boundary sections in Wales and the Welsh Borderlands with a view to using acritarchs/chitinozoans and/or bentonites to correlate these graptolitic sequences with the stratotype.

Within the Banwy River section in Powys we have recognised, for the first time in Britain, the existence of the *Cyrtograptus lapworthii* and *Cyrtograptus insectus* biozones, thus demonstrating once again the inadequacy of the so-called 'standard' graptolite biozonal scheme which places the *Monoclimacis crenulata* Biozone at the top of the Telychian. In Wales, as in Bohemia, the *crenulata* Biozone is succeeded by three biozones below the *centrifigus* Biozone.

Within the *lapworthii* and *insectus* biozones we have identified several graptolite taxa previously considered to be confined to the Wenlock. Indeed it seems almost that the only 'new' graptolite appearing at the base of the *centrifigus* Biozone is the eponymous taxon.

We hope that our study will enable greater precision in correlation of graptolitic sequences at this level and will encourage other workers to look again at their graptolitic faunas from around the Llandovery -Wenlock boundary.

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