

## ENVIRONMENTALLY CONTROLLED AMMONITE ASSEMBLAGES FROM THE LATE ALBIAN OF HUNGARY

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The Late Albian ammonite record from Hungary is extremely rich and well documented (Scholz, 1979; Horváth, 1985, 1989; Szives (ed.) 2007). Ammonites are known from boreholes and surface outcrops as well, from two different paleotectonic units – the Bakony Mountain of the Alcapa Unit and the Villány Mountain of the Tisza Unit. The surface assemblages of the Bakony Mts. region – Jásd 1 Quarry, Bakonyháza and Tiloserdő - contains *Ostlingoceras*, *Stoliczkaia*, *Salaziceras*, *Neophlycticeras*, *Anisoceras* and *Scaphites* in great abundance, and *Ficheuria*, *Turrillitoides*, *Zuluscapites*, *Engonoceras*, members of Hamitidae and Hoplitidae as additional elements of the fauna. These faunistic composition suggest so-called „Tethyan” affinity from paleobiogeographical point of view. The sediment itself is a light, yellow marl. In contrast, the same aged borehole assemblages of the Bakony Mts – Jásd-36 and Jásd-42 boreholes -, which are geographically now very close to the surface outcrops, show absolutely different faunistic record with the high dominance of Hoplitidae – *Discohoplites*, *Hyphoplites* -, and the additional occurrence of *Lechites*, *Paraturrillites*, *Mariella* and *Stoliczkaia*. Paleobiogeographically, the Hoplitid dominance was interpreted as a „Boreal” feature (Birkelund et al., 1984; Horváth, 1985, 1989). The sediment is a dark grey siltstone and light grey marl.

The present, very nearby geographic position of the boreholes and surface outcrops in the Bakony Mts. with the very different faunistic picture, and without any sign of great tectonic movements between them suggest, besides the paleogeographic significance there should be other controlling factor.

The ammonite assemblage of Bóly-1 borehole from the Villány Mts. is documented by Bujtor (1989) and Szives & Bujtor (2007), and also indicates Late Albian age. The dark grey siltstone consist *Desmoceras*, *Puzosia*, *Tetragonites*, *Lechites* and *Scaphites* in great abundance and with the additional appearance of Hamitidae, *Kossmatella* and *Worthoceras*. This ammonite record suggests „Boreal” paleobiogeographical affinity, besides the well-known and documented different tectonic position (Csontos & Vörös, 2004) of the Tisza Unit.

After the taxonomic interpretation of the Hungarian Late Albian ammonite assemblages, the same aged ammonite successions from Europe were analyzed. Considering the tectonical, biogeographical and paleoecological interpretations, it is likely that the ammonite record of the surface outcrops of the Bakony Mts. indicates shallower marine environment, the borehole assemblages indicate somehow deeper neritic environment while the Villány Mts. succession suggest pelagic - deep basin environment in the Late Albian.

A microfossil correlation and geochemical studies should be done in the further work.

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Artikel/Article: [Environmentally Controlled Ammonite Assemblages from the Late Albian of Hungary 104-105](#)