

Studia breviora

First finding of *Protogrammoceras* (Harpoceratinae, Ammonitina) in the Pliensbachian (Ozirovo Formation), West Bulgaria

Apart from a few members of the Phylloceratina and the Lytoceratina, the two families of ammonites that dominate the Bulgarian Pliensbachian are the Liparoceratidae and the Amaltheidae. The ammonites at this age reported by Сапунов (1961), Стефанов (1960) and Сапунов, Чумаченко, Шопов (1976) prove the presence of *Prodactylioceras davoei*, *Tragophylloceras ibex*, *Amaltheus stokesi* and *Amaltheus margaritatus* Zones in the uppermost levels of the Dolni Loukovit Member of the Ozirovo Formation and the *Amaltheus stokesi* and *Pleuroceras spinatum* Zones in the lowermost parts of the Boukorovtsi Member. Specimens obtained usually occur in a white crow and they are always subordinate to a rich fauna of bivalves, brachiopodes and belemnites. No Bulgarian examples of *Protogrammoceras* have been found before. The genus is well-known from its numerous South European and North African occurrences. All its examples show the characteristic coiling with moderately wide umbilicus, flat whorl sides, keeled venter and sinuous or falcooid ribbing. This note presents an isolated finding of *Protogrammoceras* who has seen in situ in the uppermost beds of the Dolni Loukovit Member of the Ozirovo Formation, immediately below the boundary with the Boukorovtsi Member. Its locality is situated at the northern slope of the so-called "Ginski venets", near the village of Gintsi (Sofia District), Ponor Planina Mountain, West Bulgaria.

The finding represents large and almost leached, moderately evolute and compressed adult phragmocone with incomplete body-chamber. It consists of nearly a whole whorl that is two-third septate and one-third body-chamber. The specimen is septate up to 153 mm diameter and the body-chamber ending at diameter of about 174 mm. The whorl height at the end of the preserved part of the body-chamber is about 41 % of the whole diameter and the value of the umbilical diameter is about 28 % of the maximal diameter of the coil. The suture-lines are considerably simplified but have clear patterns with diagnostic importance. The most discernable of them shows the presence of moderately deep lateral lobe with trifid pattern and deep central prong, a large division in the first lateral saddle in two unequal parts - large dorsal part and smaller ventral part, wide second lateral saddle and wide umbilical lobe, divided into 4 or 5 auxiliaries. The last five are crowded together. The ornament is preserved in a small part at the beginning of the whorl. It consists of fine, dense, single and sinuous striate ribs. The ribs are prorsiradiate in the inner half, gently curved

backwards in the middle of the whorl sides and projected on the ventro-lateral area.

Despite its poor preservation such described specimen shows morphological features of a typical *Protogrammoceras*. The opened coil, dense falcooid ribbing, large division in the first lateral saddle and trifid lateral lobe make it sufficiently generically discernible. Unfortunately it is undiscernible at specific level. As regards of its stratigraphical position it comes from a level not dated more accurately than Upper Pliensbachian, because it is not associated with any other ammonites. Realised by Сапунов, Чумаченко (1987) revision on the Jurassic in the eastern vicinity of the village of Gintsi have indicated the presence of the *Amaltheus stokesi* Zone the base of the Boukorovtsi Member in this area. This age has been documented by one well preserved fragment of phosphatized mould of *Amaltheus stokesi* (J. Sowerby), found at about 1.0 - 1.5 m above the lower boundary of the Boukorovtsi Member. Having in mind that, it is reasonably to suggest that the here presented finding is of the *Amaltheus stokesi* Zone or the *Amaltheus margaritatus* Zone.

References

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Ljubomir Metodiev
Bulgarian Academy of Sciences
Geological Institute, Sofia 1113