

## DOBROGEITES — A NEW GENUS OF VALANGINIAN AMMONITES

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During research on representatives of the family *Olcostephanidae*, the author found in the Lower Cretaceous of North Bulgaria several ammonites which cannot be identified with any of the genera of this family known so far. All these ammonites have, as a common feature, a row of ventral tubercles placed at intervals of 4 to 12 secondary ribs.

Ammonites with similar features have been described from other regions in the world. For instance, C. I. Lisson [2, p. 153, pl. I, figs. 1—2] described several similar specimens from the Lower Cretaceous of Peru as „*Sphaeroceras broggianus* n. sp.“. V. Benavides-Caceres [1, p. 437, pl. 40, figs. 10—12] redescribed this species and attributed it to the genus *Valanginites*. However, all the specimens mentioned so far differ from the representatives of the genus *Valanginites* in that they have not only lateral tubercles, but ventral ones as well. These ventrotuberculate ammonites clearly belong to a new genus, which is here named *Dobrogeites* gen. nov.

Type Locality. The above described ammonites are found in Upper Valanginian limestones near the village of Vladimirovo, Tolbukhin District (South Dobrogea). At the base are 7 m. of soft white limestone over which comes 1 m. of strong cryptocrystalline limestones without any fauna. Upwards follow 1 m. of sandy yellowish limestone in which very rich fauna is found including: *Neocomites neocomiensis* (d'Orbigny), *Valanginites nucleus* (Roemer), *Valanginites wilfridi* (Karakach), *Dobrogeites ventrotuberculatus* gen. et sp. nov. The *Valanginites* are the most abundant, then comes *Dobrogeites* and more rarely the *Neocomites*. The profile terminates with 3 m. of strong microcrystalline limestone without any fauna.

The fauna shows that the described limestones belong to the Upper Valanginian.

SYSTEMATIC PALEONTOLOGY  
Family *OLCOSTEPHANIDAE* HAUG, 1910  
Subfamily *POLYPTYCHITINAE* PAVLOV, 1892

Genus *Dobrogeites* nov.

Type species. *Dobrogeites ventrotuberculatus* gen. et sp. nov., Upper Valanginian, Southern Dobrogea, Bulgaria.

Generic characteristics. These are involute, inflated sphaerocones, with a depressed whorl section, elliptically coiled umbilici. Clear forward-sloping and slightly twisted bullae terminate with more or less sharp tubercle from

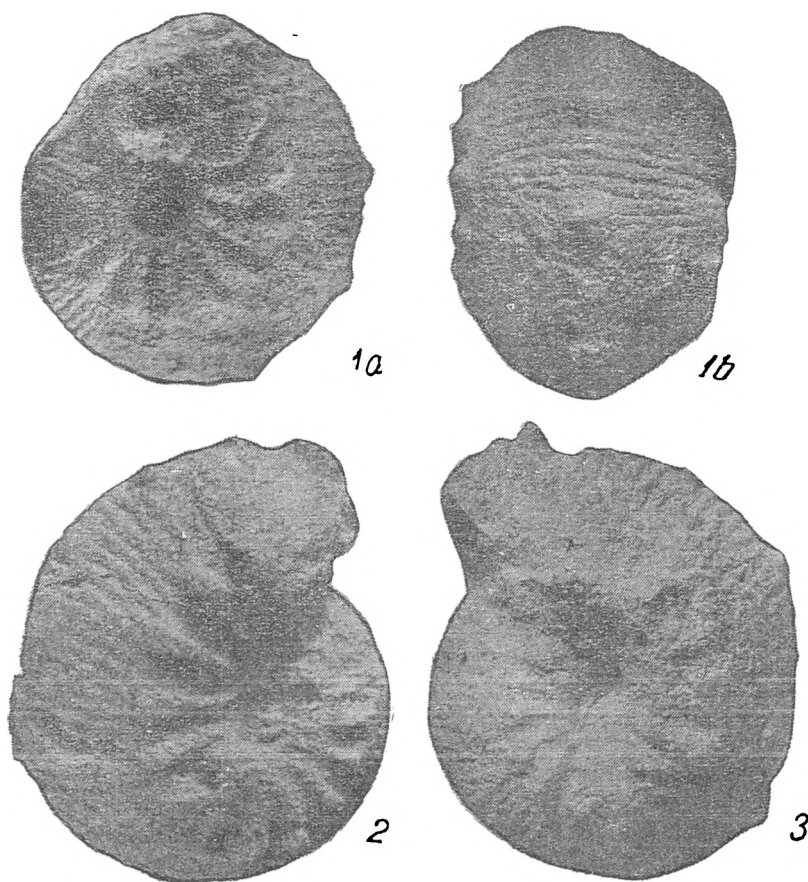
which begins a group of secondary ribs. There is in the venter a central row of ventral tubercles between which 4 to 12 secondary ribs can be seen. In the early whorls, the walls are low and rounded, but towards the end they become higher, steeper and subparallel.

**Remarks.** The newly erected genus *Dobrogeites* is most closely related to *Valanginites* from which it probably descends. Their relationship can be established by their common form as well as by the character of their ornament. The above genus differs, however, from *Valanginites* in the presence of a row of ventral tubercles, in its exaggerated bullae which appear earlier than in *Valanginites* and its vertical subparallel walls and slightly elliptically coiled umbilicus.

The suture line is not known.

*Dobrogeites* gen. nov. includes also „*Sphaeroceras*“ *broggii* Lisson.

*Dobrogeites ventrotuberculatus* gen. et sp. nov.



Figs. 1a, b — *Dobrogeites ventrotuberculatus* gen. et sp. nov., holotype from Neocomiensis Zone of Upper Valanginian near Vladimirovo village, Southern Dobrogea, Bulgaria, coll. BAN Cr 253, (1:1). Fig. 2. *Dobrogeites ventrotuberculatus* gen. et sp. nov., topotype, coll. BAN Cr 254, (1:1). Fig. 3. *Dobrogeites ventrotuberculatus* gen. et sp. nov., topotype, coll. BAN Cr 255, (1:1)‡

*Holotype.* BAN<sup>1</sup> Cr 253, Upper Valanginian, Vladimirovo village, Southern Dobrogea, Bulgaria.

<sup>1</sup> These initials designate the collection at the Bulgarian Academy of Sciences, Geological Institute "Strashimir Dimitrov".

**Description.** These are involute, inflated sphaerocones, with a depressed whorl section. The umbilicus is comparatively small and elliptical. The umbilical edge is slightly rounded and the umbilical wall is steep. There are about 12—14 bullae in the ventrolateral wall, which begin from the umbilical edge. They are inclined forward and in the second half of the last whorl they are slightly bent. The bullae terminate with a more or less sharp tubercle on the ventrolateral wall. Out of all bullae begin 4—6 secondary ribs which pass without interruption over the venter. In specimens with a diameter of more than 32—35 mm well expressed ventral tubercles appear along the siphonal line. Usually there are about three such tubercles. Between two ventral tubercles are 4—12 secondary ribs. At the beginning of the last whorl, the lateral walls are rather low and rounded, passing into the rounded venter; about the middle of the last whorl, the lateral walls become higher, almost vertical and subparallel, and the venter becomes broader.

**Dimensions:** Holotype; Text-Figs. 1a, b: at diam. 39 mm — 0,54; 0,72; 0,17.

**Remarks.** *Dobrogeites ventrotuberculatus* is closely related to *Dobrogeites broggi* (Lisson) from Peru, but differs from it in its larger size, its longer tuberculate phase in the ventral region and in its much strongly developed bullae.

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## DOBROGEITES — НОВЫЙ РОД ВАЛАНЖИНСКИХ АММОНИТОВ

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### РЕЗЮМЕ

В статье описан новый род аммонитов из валанжинских отложений Южной Добруджи (Северо-Восточная Болгария). Эти аммониты имеют одну общую черту: один ряд вентральных бугорков, которые устанавливаются через 4—12 вторичных ребер. Аммонит назван *Dobrogeites ventrotuberculatus* gen. et sp. nov. и причислен к семейству *Olcostephanidae*.

### REFERENCES

- <sup>1</sup> V. Benavides-Caceres. Bull. Amer. Museum Natur. History. 108, 1956. 353—494. <sup>2</sup> C. Lisson. Rev. de Cien. Lima 1937, No 418. 53—58. <sup>3</sup> C. W. Wright & others in Moore (editor). Treatise on Invertebrate Paleontology, part L. Mollusca 4. Cephalopoda. Ammodoidea. Univ. Kansas Press. 1957, 129—362. ;