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GÉOLOGIE

DOBROGEITES — A NEW GENUS OF VALANGINIAN AMMONITES

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(Submitted by Academician E. Bonchev on October 27, 1961)

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, ellyptically coiled umbilici. Clear forward-sloping and slightly twisted bullae terminate with more or less sharp tubercle from

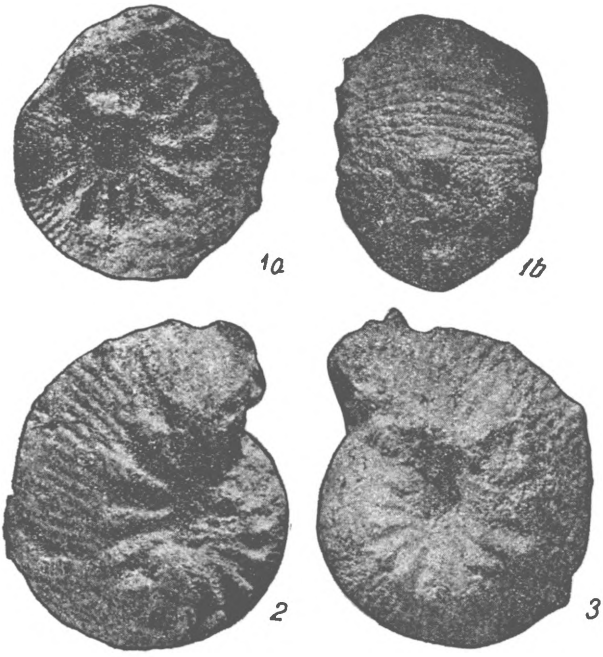
which begins a group of secondary ribs. There is in the venter a central row of ventral tubercles between which 4 to 12 secondary ribs can be seen. In the early whorls, the walls are low and rounded, but towards the end they become higher, steeper and subparallel.

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. 1*a*, *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[1] Cr 253, Upper Valanginian, Vladimirovo village, Southern Dobrogea, Bulgaria.

[1] 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

Т. Николов

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*.

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GÉOLOGIE

NEW GENERA AND SUBGENERA OF AMMONITES OF FAMILY *BERRIASELLIDAE*

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(Submitted by Academician E. Bonchev on March 25, 1966)

The investigation of an exceptionally rich ammonite collection collected by the author in recent years from the sediments of the Tithonian, Berriasian, and Valanginian of Northern Bulgaria, and the taxonomic revisions carried out in this connection of certain earlier determinations of ammonites from various sections of these levels in the Mediterranean region, served as the basis of defining a number of new genera and subgenera. The latter's basic characteristics do not make it possible to include them in the familiar ammonite taxones of the generic group. Their brief characterization is the subject of the present report.

Family *BERRISELLIDAE* SPATH, 1922

Subfamily BERRIASELLINAE SPATH, 1922

Genus *Berriasella* Uhlig, 1905

Subgenus **Tirnovella** subg. nov.

Type-species. *Berriasella alpillensis* Mazenot, 1939 (pl. VI, fig. 22)* Berriasian, S. France.

Description. Compressed ammonites, with elliptically coiled and relatively narrow umbilicus. The whorls grow very rapidly in height. Rounded ventral region with a thin narrow band gradually disappearing with development. Involution about 1/3. The ribs are rather fine, prorsiradiate to slightly sinusoidal. They bifurcate between 1/2 and the outer 1/3 of the walls, ending in the ventral region. There are also simple and intercalated ribs which start together with the main ones from the rounded umbilical edge and contact them at various levels on the valls. Slight constrictions and individual moderately thickened ribs are to be seen. Upper Tithonian — Berriasian, Mediterranean region.

* The Figures refer to the type-specimens of the species.

Subgenus **Elenaella** subgen. nov.

Type-species. *Berriasella cularensis* Mazenot, 1939 (pl. VIII, fig. 1), Tithonian, S. France.

Description. Discoidal compressed ammonites, with rounded ventral region, moderately large and somewhat deep umbilicus. The whorls increase very rapidly in height. Involution 1/3. The siphonal groove in the young whorls gradually passes over into a smooth band. In the inner whorls Berriasella-like ornamentation. The ribs are fine, rectiaradiate to slightly prorsiradiate, starting in an isolated manner or in pairs from the umbilical ridge. Part of the ribs bifurcate in the outer 1/3 of the walls, while the other part remain simple. With development, in the umbilical ridge appears a row of tubercles slightly elongated in a radial direction. The latter and the moderate smoothing of the ribs around the middle of the walls are among the basic characteristics of this subgenus. Upper Tithonian — Berriasian, Mediterranean region.

Subgenus **Strambergella** subgen. nov.

Type-species. *Ammonites carpathicus* Zittel, 1868 (pl. XVIII, fig. 4), Upper Tithonian, Koniakau, Germany.

Description. Compressed, medium-sized to large ammonites, with medium-sized and elliptically coiled umbilicus. Rounded ventral region, with siphonal groove. Involution about 1/3. Fine ribs, mostly bifurcating around the middle of the walls, a small part remaining simple. The fascicles of ribs and the syphonal groove are the basic characteristics of this subgenus. Upper Tithonian — Berriasian, Mediterranean region.

Subgenus **Fauriella** subgen. nov.

Type-species. *Berriasella gallica* Mazenot, 1939 (pl. XXIII, fig. 3) Berriasian, S. France.

Description. Compressed planulates, with elliptically coiled umbilicus. Rounded ventral region without siphonal band or groove. Involution about 1/4. Fine, sinusoidal to prorsiradiate, bifurcating or simple ribs. All start from the umbilical edge and show a growing tendency to join into couples in a small umbilical tubercle. Fine rib-formation and the absence of siphonal band or groove are the basic characteristics of this subgenus. Upper Tithonian — Berriasian, Mediterranean region.

Genus ***Jabronella*** gen. nov.

Type-species. *Berriasella jabronensis* Mazenot, 1939 (pl. XVIII, fig. 1), Berriasian, S. France.

Description. Moderately compressed ammonites, with elliptical and medium-sized umbilicus. The umbilical edge is well defined and slightly rounded. The ventral region has a groove which gradually passes into a smooth band. Involution 1/5—1/6. The ornamentation changes rapidly in the course of development. In the inner whorls the ribs are strong, rectiradiate to slightly sinusoidal or moderately prorsiradiate. Most of them are in fas-

cicles. Part of them remain simple, the others bifurcate around the middle of the walls. Trifurcation is to be seen on the same level as well. Two rows of tubercles: unbilical and mediolateral. The ribs are interrupted in the ventral region and form a slight tubercular thickening. Upper Tithonian — Berriasian, Mediterranean region.

Genus ***Mazenoticeras*** gen. nov.

Type-species. *Berriasella broussei* Mazenot, 1939 (pl. XII, fig. 5), Berriasian, S. France.

Description. Moderately large to large compressed ammonites with rather open umbilicus. The whorls increase rather rapidly in height. The ventral region is with a groove gradually passing into a smooth strip which disappears with age. Involution 1/4—1/3. Strong ribs, mostly branching off, bi- or trifurcate, rectiradiate or slightly prorsiradiate. Two rows of tubercles: umbilical in the basis of the ribs and lateral at the spot of their branching off. There are main, secondary, and intercalated ribs. Upper Tithonian — Berriasian, Mediterranean region.

Genus ***Boncheviceras*** gen. nov.

Type-species. *Berriasella ardescensis* Mazenot, 1939 (pl. XXIII, fig. 6), Berriasian, S. France.

Description. Medium-sized to large ammonites, with moderately large umbilicus. Isodiametric section. Rounded ventral region, without groove or band. Strong ribs, dense in the beginning, then more sparse, prorsiradiate to slightly sinusoidal, rapidly growing in thickness. All of them bifurcate at about the middle of the walls. Intercalated ribs are to be observed. Upper Tithonian -- Berriasian, Mediterranean region.

Genus ***Retowskiceras*** gen. nov.

Type-species. *Perisphinctes Andrussowi* Retowski, 1893 (pl. II, fig. 10), Berriasian, USSR.

Description. Compressed ammonites of medium-sized umbilicus. Rounded ventral region, without groove or band. Strong tri- or bifurcating ribs with well defined mediolateral tubercles. Upper Tithonian — Berriasian, Mediterranean region.

Subfamily **NEOCOMITINAE** SPATH, 1924

Genus ***Neocomites*** Uhlig, 1905

Subgenus **Eristavites** subgen. nov.

Type-species. *Neocomites platycostatus* Sayn, 1907 (pl. III, 1 — lectotype here designated), Valanginian, S. France.

Description. Moderately compressed, Neocomites-like forms, with relatively open umbilicus. In the beginning the ribs are finer, then they gra-

dually become more sparse and thicker. They start singly from the umbilical edge or in couples from a small umbilical tubercle. Very rarely there are separate ribs bifurcating in the outer 1/3 of the wall. Slight umbilical tubercles and a tendency toward bullate swellings of the ribs in the outer region. The ribs are interrupted in the venter. Valanginian, Mediterranean region

Genus ***Busnardoites*** gen. nov.

Type-species. *Ammonites desori* Pictet et Campiche, 1858—1860 (pl. 33, fig. 4), Valanginian, Switzerland.

Description. Moderately compressed amonites with medium-sized umbilicus. Well defined row of strong umbilical tubercles which are the points of departure of fascicles of 2—3 ribs each. Some bifurcate at about the middle of the sides, while others remain simple. Many intercalated ribs. The absence of mediolateral tubercles and the rather compressed section distinguish it from *Sarasinella.* Valanginian, Mediterranean region.

Genus ***Luppovella*** gen. nov.

Type-species. *Thurmannia (Kilianella) superba* Sayn, 1907 (pl. IV, fig. 18 — lectotype here designated), Valanginian, S. France.

Description. Compressed ammonites with a rather open umbilicus. Well defined syphonal groove. Strong ribs: main and simple. The main ones bifurcate slightly above the middle of the walls. The simple ones are thinner. Two rows of strong tubercles: umbilical in the beginning of the main ribs, and lateral at the point of their bifurcation. Slight tubercular thickening of the ribs in the ventrolateral region. Valanginian, Mediterranean region.

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