

A NEW AMMONITE SUBGENUS — JABRONELLA (ERDENELLA) SUBGEN. N.  
(BERRIASELLIDAE, TITHONIAN-BERRIASIAN)

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In 1966 we distinguished a new genus of ammonites — *Jabronella* (type-species: *Berriasella jabronensis* Mazenot, 1939, pl. 18, Fig. 1), and we then gave the following diagnosis of this genus: "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, retriradiate to slightly sinusoidal or moderately prorsiradiate. Most of them are in fascicles. 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: umbilical and mediolateral. The ribs are interrupted in the ventral region and form a slight tubercular thickening." During the last decade we had the opportunity of compiling a rich collection of representatives of this genus, originating from Bulgaria, South-Eastern France, Crimea, Hungary and Algeria. Parallel with that we also studied material from the collections of various museums abroad (USSR, Hungary, France and Switzerland).

The investigation of this rich collection of representatives of the genus *Jabronella* outlined two relatively homogeneous groups of species which possess the common features and style of ornamentation characteristic of the genus and, parallel with that, reveal distinguishing features which provide for their differentiation into two subgenera, namely: *Jabronella* (*Jabronella*) and *Jabronella* (*Erdenella*).

Subgenus *Jabronella* (*Jabronella*) Nikolov, 1966

Nomenclature: type-species as for the genus.

Diagnosis: The nominate subgenus includes those representatives of the genus *Jabronella* with dense and fine ribs on the phragmacone and development of umbilical and mediolateral tubercles at the end of the phragmacone and on the body chamber. The formation of rib fascicles starts rather early — at the beginning of the phragmacone.

Subgenus *Jabronella* (*Erdenella*) subgen. n.

Nomenclature. The type-species is *Hoplites paquieri* Simionescu, 1899 (pl. 1, Fig. 6—lectotype). The lectotype originates from the Berriasian at Jansiac (Basses-Alpes), S.-E. France.

The subgenus has been called after the name of Erden Village, Mikhailovgrad District (Western Fore-Balkan) where its representatives are frequent.

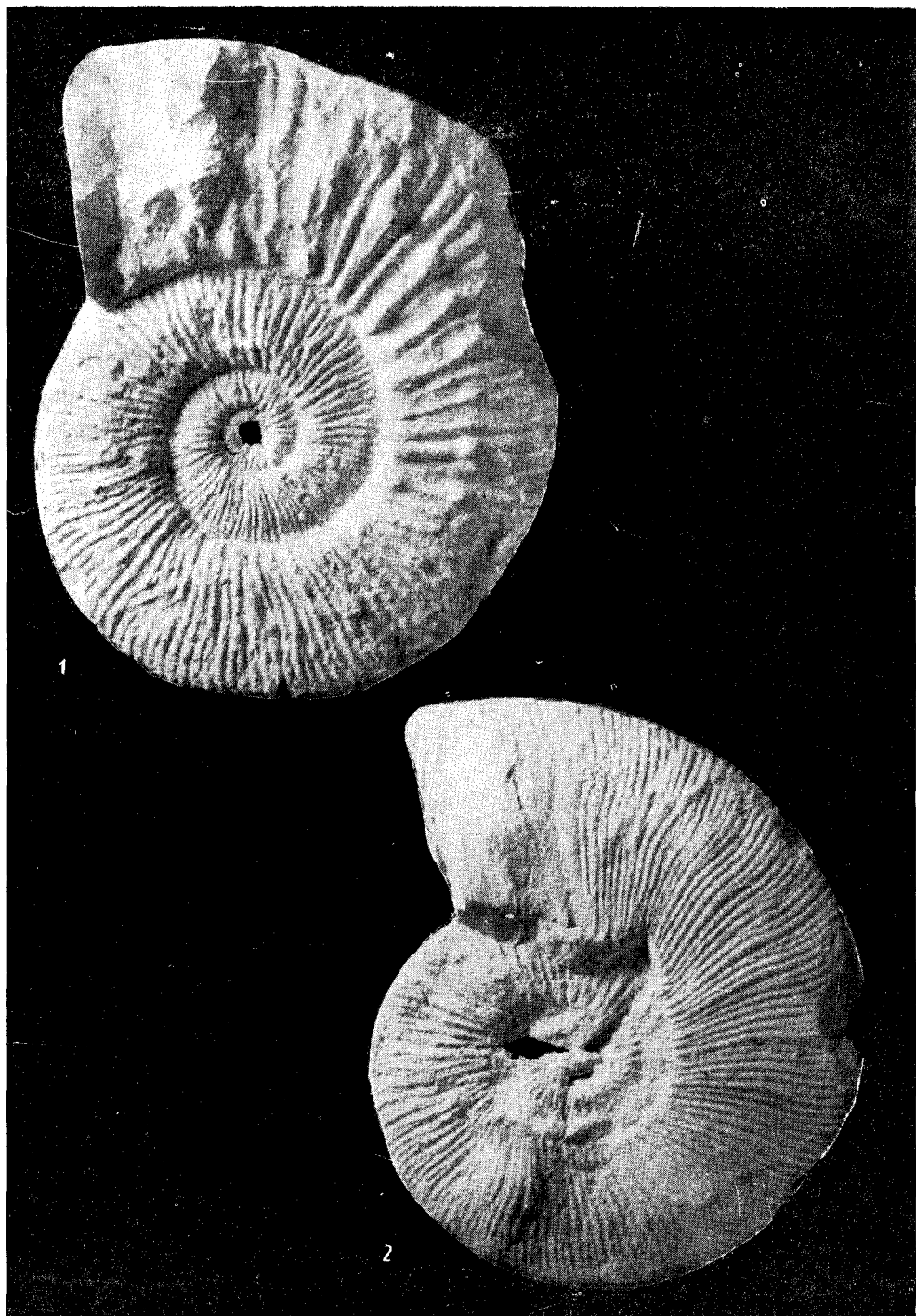


Plate 1

Fig. 1. *Jabronella (Jabronella) jabronensis* (Mazenot, 1939). Berriasian, F. boissieri Zone, M. paramimounum Subzone. Noyers-sur-Jabron, S. E. France. Holotype (= *B. jabronensis* Mazenot, 1939, pl. 18, Fig. 1, ID601).

Fig. 2. *Jabronella (Jabronella) patruliusi* Le Hégarat, 1973. Berriasian, F. boissieri Zone, M. paramimounum Subzone. La Faurie, S. E. France. Holotype (= *Jabronella patruliusi* Le Hégarat, 1973, pl. 31, Fig. 5, ID528)

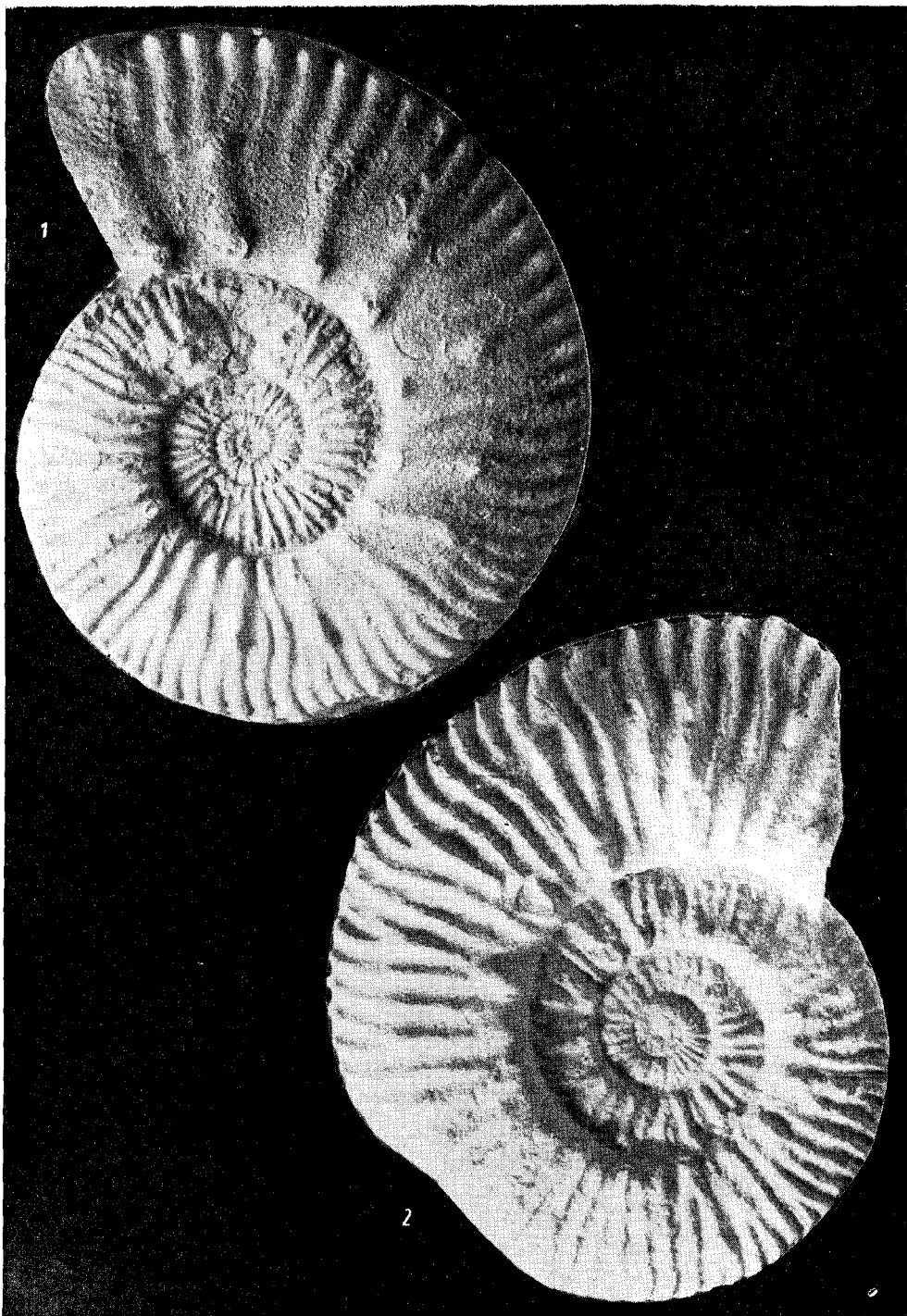


Plate II

Fig. 1. *Jabronella (Erdenella) erdenensis* sp. n., holotype. Berriasian, F. boissieri Zone, M. paramimounum Subzone. Erden, Mikhailovgrad District, Western Fore-Balkan. Sofia University, Cr<sub>I</sub> 3401.

Fig. 2. *Jabronella (Erdenella) paquieri* (Simionescu, 1899). Berriasian, F. Boissieri Zone. B. picteti Subzone. Jansiac, S. E. France. Holotype (= *Hoplites paquieri* Simionescu, 1899, pl. 1, Fig. 6)

Diagnosis. Ammonites of coarse and rare ornamentation. The tubercles appear rather early. Fasciculation begins around the middle of the phragmocone, and even later in some species. It smoothens slightly on the body chamber of certain species.

Remarks. Compared with the representatives of the nominate subgenus, the species of subgenus *J. (Erdenella)* show accelerated ontogenetic development, more rapid biological realization and, as early as in the region of the phragmocone they bear the characteristic features of the genus.

Systematic composition. Subgenus *Jabronella (Jabronella)* includes the following species: *J. (J.) discrepans* (Retowski, 1893), *J. (J.) jabronensis* (Mazenot, 1939), *J. (J.) cisternensis* Le Hégarat, 1973, *J. (J.) patruleus* Le Hégarat, 1973, *J. (J.) balkanica* Nikolov, 1960, *J. (J.) haemusius* (Nikolov & Mandov, 1967), as well as a number of new species.

Subgenus *Jabronella (Erdenella)* includes the following species: *J. (E.) paquieri* (Simionescu, 1899), *J. (E.) isaris* (Pomel, 1889), *J. subsaris* (Mazenot, 1939), *J. (E.) erdenensis* sp. n. (pl. 2, Fig. 1 — holotype), *J. (E.) romani* (Mazenot, 1939).

Occurrence. The ammonites of this genus are extensively developed in the Berriasian (Tirnovella occitanica Zone — F. boissieri Zone) with acme in the Malbosiceras paramimounum Subzone. The presence of the genus in the Upper Tithonian is questionable, although there are indications to this end [2,3]. The first representatives of the nominate subgenus have been established in T. occitanica Zone, B. privasiensis Subzone, the acme-zone coinciding with the M. paramimounum biostratigraphic zone. The first representatives of *J. (Erdenella)* appeared probably in the Late Tritonian [? (*E. isaris*)], and their acme-zone also coincides with M. paramimounum Subzone, while the last representatives are to be found in F. boissieri Zone, B. callisto Subzone.

Origin. The problem of the origin of *Jabronella* is not finally settled. The representatives of *Jabronella (Jabronella)* have common features with *Fauriella* in the style of their ornamentation, and one of the possibilities is for *Jabronella* to be a derivation of *Fauriella*, as assumed by Le Hégarat [2]. Another and no less probable alternative is for *Jabronella (Erdenella)* to originate from *Dalmasiceras (Elenaella)*, whose representatives have elements of fasciculation, umbilical tubercles, as well as mediolateral tubercles developed in some of them. The demonstration of the second alternative will most probably raise the problem of the separate filiation of *Jabronella (Jabronella)* and *Jabronella (Erdenella)*, hence the problem of whether this is one systematic generic unit. It seems from the material available that *Jabronella (Erdenella)* appears earlier than the nominate subgenus.

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## REFERENCES

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