ACADEMIA REPUBLICII SOCIALISTE ROMÂNIA

REVUE ROUMAINE DE GÉOLOGIE GÉOPHYSIQUE ET GÉOGRAPHIE

GÉOLOGIE

TOME 28 1984

EDITURA ACADEMIEI REPUBLICII SOCIALISTE ROMÂNIA

HETEROMORPHOUS AMMONITES IN THE MOESIAN PLATFORM ALBIAN

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Exclusively coming from the hydrocarbon drilling cores from the Moesian Platform (see A.II), the first heteromorphous ammonites have been published in previous works (R. Muțiu 1969 and R. Muțiu 1972) marking the presence of the genera: Hamites, Idiohamites, Lechites, Anisoceras and Mariella.

The present paper is meant to enrich paleontologic records of the Moesian Platform with new genera and species of heteromorphous ammonites by creating four species and one variety.

The following ammonitic fauna has been recorded:

Hamites cf. tenuicostatus Spath — pl. I, 1, Cr. I. 192, Albian (see A.I).

Hamites cf. compressus Sow. — pl. I, 2, 3, Cr. 177, 179, Middle-Upper Albian (see A.I)

Hamites maximus Sow. — pl. I, 4 —7, Cr. I. 119, 115, Middle-Upper Albian (see A.I).

Hamites maximus Sow. *var. rectus* Brown — pl. I, 8 — 14, Cr. I. 126, 114, 117, 118, 155, 157, 178, Middle-Upper Albian (see A.I).

Hamites intermedius Sow. — pl. I, 15 — 26, Cr. I. 126 — 131, 111, 150, 152, 158, 109, 112, 113, 154, Upper Albian (see A.I).

Hamites intermedius Sow. *var. opalina* Spath — pl. I, 29 — 37, Cr. I. 113, 133, 138, 139, 140, 153, Upper Albian (see A.I).

Hamites intermedius Sow. *var. distincta* Spath — pl. I, 27 — 28, Cr. I. 107, 108, Upper Albian (see A.I).

Hamites (S.) virgulatus (Brogn.), Pict. & Camp. — pl. I, 38 — 39, Cr. I. 136, 135, Upper Albian (see A.I).

Hamites (S?) charpentieri Pict. — pl. I, 40, 43, Cr. I. 106, 126, Upper Albian (see A.I).

Hamites (S.) subvirgulatus Spath — pl. I, 42, Cr. I. 122, Upper Albian (see A.I).

Hamites, sp. a — pl. I, 41, Cr. I. 134, Upper Albian.

Hamites, sp. b — pl. I, 44, pl. II, 3, Upper Albian, Cr. I. 134, 121.

Hamites, sp. c — pl. II, 2, Cr. I. 125, Upper Albian.

Hamites, sp. d — pl. II, 1, Cr. I. 120, Albian.

Hamites (Psilohamites) boucardianus d'Orb. — pl. II, 4, Upper Albian.

Hemiptychoceras cf. gaultinum (Pict.) — pl. II, 5, Cr. I. 137, Upper Albian (see A.I).

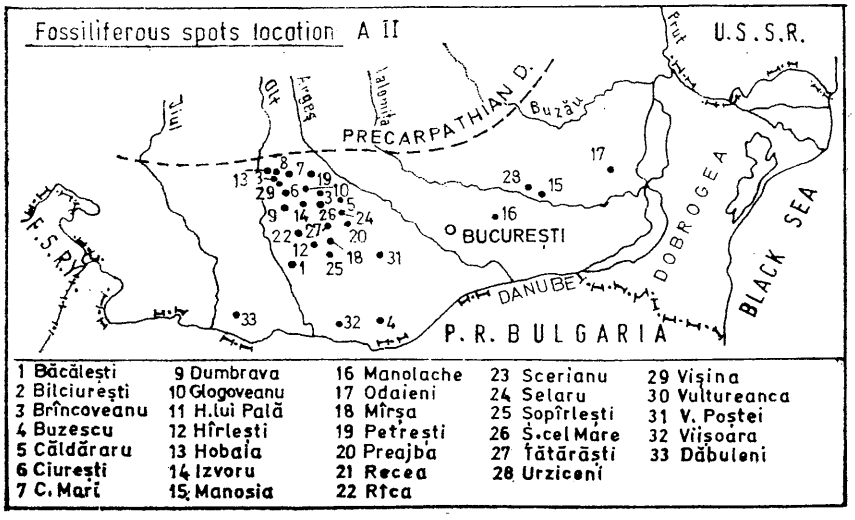
Lechites gaudini (Pict. & Camp.) — pl. II, 6, 7, 8, 9, Cr. I. 169, 167, 106, Upper Albian (see A.I).

Rev. Roum. Géol., Géophys. et Géogr., GÉOLOGIE, Tome 28, p. 83—92, 1984, Bucarest

Heteromorphous ammonites distribution in the albian areas framework of the moesian platform

OCCURRENCE IN THE MOESIAN PLATFORM

EPOCH	STAGE	SUBSTAGE	ZONE	HETEROMORPHOUS AMMONITES	BĂCĂLEŞTI	BILCIUREŞTI	BRÎNCOVEANU	BUZESCU	CALDĂRARU	CIUREŞTI	CORBII MARI	DĂBULENI	DUMBRAVA	GLOGOVEANU	HANU PALA	HÎRLEŞTI	HOBAIA	IZVORU	MANASIA	MANOLACHE	ODAIENI	MÎRŞA	PETREŞTI	PREAJBA	RECEA	RÎCA	STERIANU	SELARU	ŞOPÎRLEŞTI	STEFAN C. MARE	TĂTĂRĂŞTI	URZICENI	VIŞINA	VULTUREANCA	VALEA POŞTEI
LOWER CRETACEOUS	ALBIAN	UPPER ALBIAN	OSTLINGOCERAS (O.) PUZOSIANUM	Ostlingoceras (o.) puzosianum ORB.																	●				●										●
				Lechites gaudini PICT.												●	●						●										●		
				Lechites cf. communis SPATH.																								●							●
				Lechites gaudini trc. L. communis SOW.			●																												
				Anisoceras (A.) perarmatum PICT.			●		●					●	●							●	●												
				Paraturilites (B.) bergeri BROWN.							●																								
				Scaphites (S.) meriani PICT.									●			●		●				●								●			●		
				Scaphites (S.) simplex JUK-BR.				●																											
				Hamites charpentieri PICT.												●										●									
				Hamites virgulatus BROWN.												●												●							
				Hamites subvirgulatus SPATH.																									●						
				Scaphites cf. hugardianus ORB.												●																			
				Lechites communis SPATH.																								●							
				Idiohamites bicostatus n. sp.									●																						
				Idiohamites moesicus n. sp.									●																						
				Idiohamites tenuis n. sp.																										●					
				Idiohamites latus n. sp.									●																						
				Idiohamites desorianus trans. I. turgidus SOW.										●																					
				Idiohamites desorianus PICT.									●					●																	
				Idiohamites favrinus v. robusta n. sp.									●																						
				Idiohamites favrinus PICT.									●																						
				Idiohamites spiniger SOW.					●				●			●		●												●					
				Idiohamites tuberculatus SOW.														●																	
				Hemiptychoceras cf. gaultinum PICT.												●																			
				Hamites (P.) boucardianus ORB. ?												●																			
				Hamites intermedius v. distincta SPATH.																													●		
				Hamites intermedius v. opalina SPATH																											●	●			
				Hamites intermedius SOW.												●				●		●			●								●		
				Hamites maximus v. rectus BROWN.									●																						
				Hamites maximus SOW.																						●									
				Hamites cf. compressus SOW.								●		●																					
				Hamites cf. tenuicostatus SPATH.																													●		
				Protanisoceras sp.	●					●																									



Lechites gaudini (Pict. & Camp.) transition to *L. communis* Spath- pl. II, 10, 11, Cr. I. 169, 166, Upper Albian (see A.I).
Lechites communis Spath — pl. II, 12, 13, Cr. I. 110, 123, Upper Albian (see A.I).
Lechites sp. — pl. II, 14, Upper Albian.
Protanisoceras sp. — pl. II, 15, 16, 17, Cr. I 367 (see A.I), Middle Lower Albian.
Anisoceras (A.) perarmatum Pict. & Camp. — pl. II, 18, 19, 20, 21, 22, 23, 24, 26, Cr. I. 160, 164, 168, 174, 175, 176, Upper Albian (see A.I).
Anisoceras sp. — pl. II, 25, 27, Cr. I. 368, Upper Albian.
Anisoceras sp. a — pl. II, 35, Cr. I. 172, Upper Albian.
Anisoceras sp. b. (sp. n.) — pl. II, 28 — 32, Cr. I. 170, 171, 173, Upper Albian.
Anisoceras sp. c. — pl. II, 33, Cr. I. 162, Upper Albian.
Anisoceras sp. d — Cr. I. 158, Upper Albian.
Anisoceras sp. e — Cr. I. 161, pl. II, 38, Upper Albian.
Anisoceras sp. f — pl. II, 37, Cr. I. 369, Upper Albian.
Anisoceras sp. g. — pl. II, 36, Cr. I. 160, Upper Albian.
Anisoceras sp. h — pl. II, 34, Cr. I. 160 b, Upper Albian.
Anisoceras sp. i — pl. III, 1, Cr. I. 163, Upper Albian.
Idiohamites tuberculatus (Sow.) — pl. II, 39, 40, Cr. I. 189, 197, Upper Albian.
Idiohamites spiniger (Sow.) — pl. III, 2 — 12, Cr. I. 181, 182, 183, 185, 186, 187, 196, Upper Albian.
Idiohamites favrinus (Pict.) — pl. III, 11, 13, Cr. I.143, 142, Upper Albian.
Idiohamites favrinus Pict. *var. robustus* subsp. n. — pl. III, 19, 20, Cr. I. 102, Upper Albian (see A.I).
Idiohamites desorianus (Pict.) transitional to *I. turgidus* (Sow.) —pl. III, 17, 18, Cr. I. 144, Upper Albian (see A.I).
Idiohamites desorianus (Pict.) — pl. III, 14, 15, 16, Cr. I. 145, 146, Upper Albian (see A.I).
Idiohamites latus n. sp. — pl. III, 24, Cr. I. 101, Upper Albian (see A.I).
Idiohamites tenuis n. sp. — pl. III, 21, Cr. I. 141, Upper Albian (see A.I).
Idiohamites moesicus n. sp. — pl. III, 23, Cr. I. 104, Upper Albian (see A.I).
Idiohamites bicostatus n. sp. — pl. III, 22, Cr. I. 105, Upper Albian (see A.I).
Idiohamites sp. — pl. III, 25.
Ostlingoceras (O.) puzosianum (d'Orb.) — Cr. I. 230, 240, Upper Albian.
Paraturrilites (B.) bergeri var. *carssituberculata* Spath — Cr. I. 238, Upper Albian.
Paraturrilites (B.) miliaris (Pict. & Camp.) — Cr. I. 227, 236, 241, Upper Albian.
Paraturrilites (Bergericeras) bergeri (Brogn.) — Cr. I. 239, Upper Albian.
Scaphites (S.) meriani Pict & Camp. — Cr. I. 232, 235, 233, 242, 244, Upper Albian.
Scaphites (S.) cf. hugardianus (d'Orb.) — Cr. I. 234, Upper Albian.
Schaphites (S.) simplex Jukes-Browne — Cr. I. 180, 193, 245, Upper Albian.

PLATE I

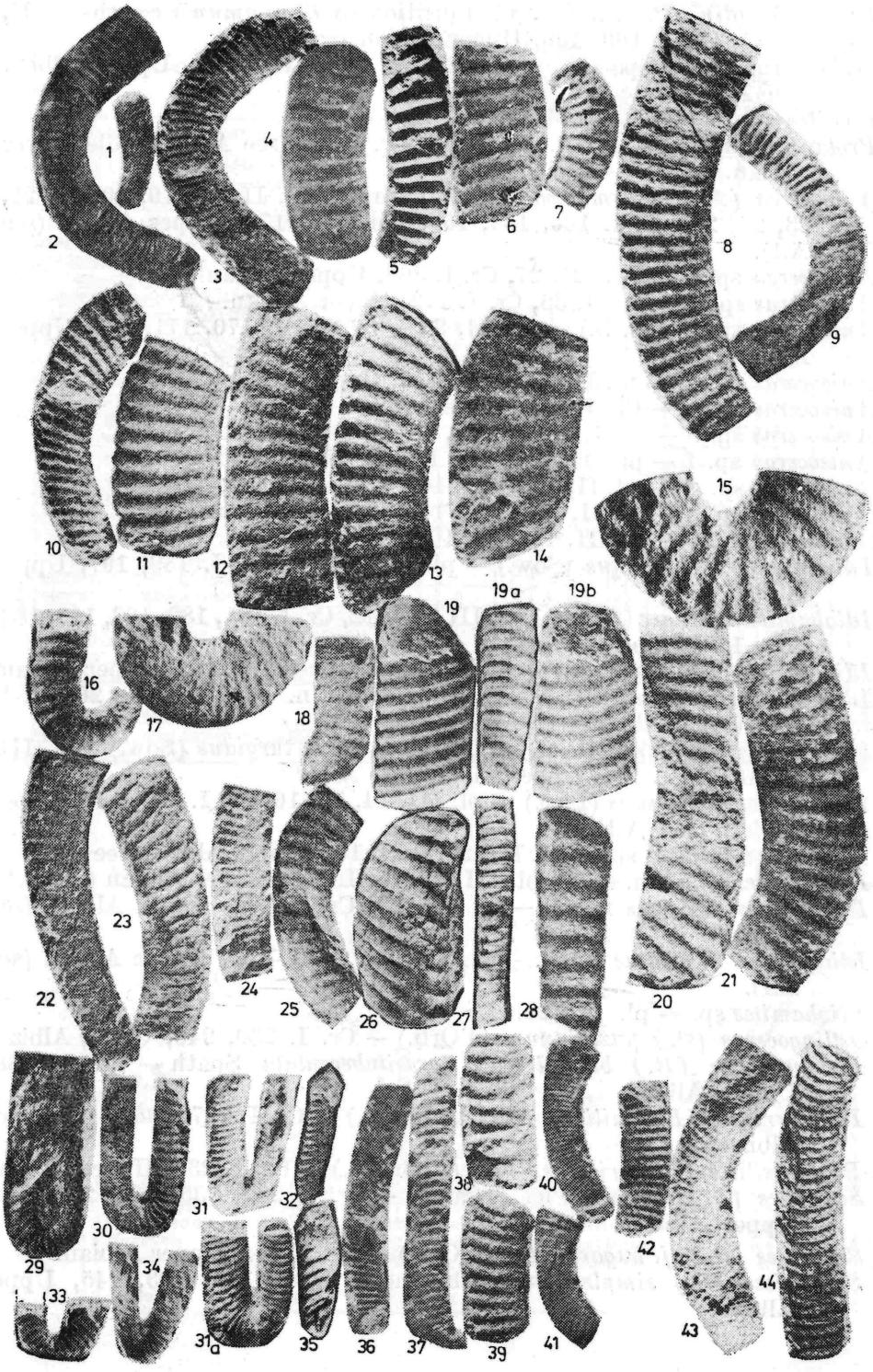

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PLATE II

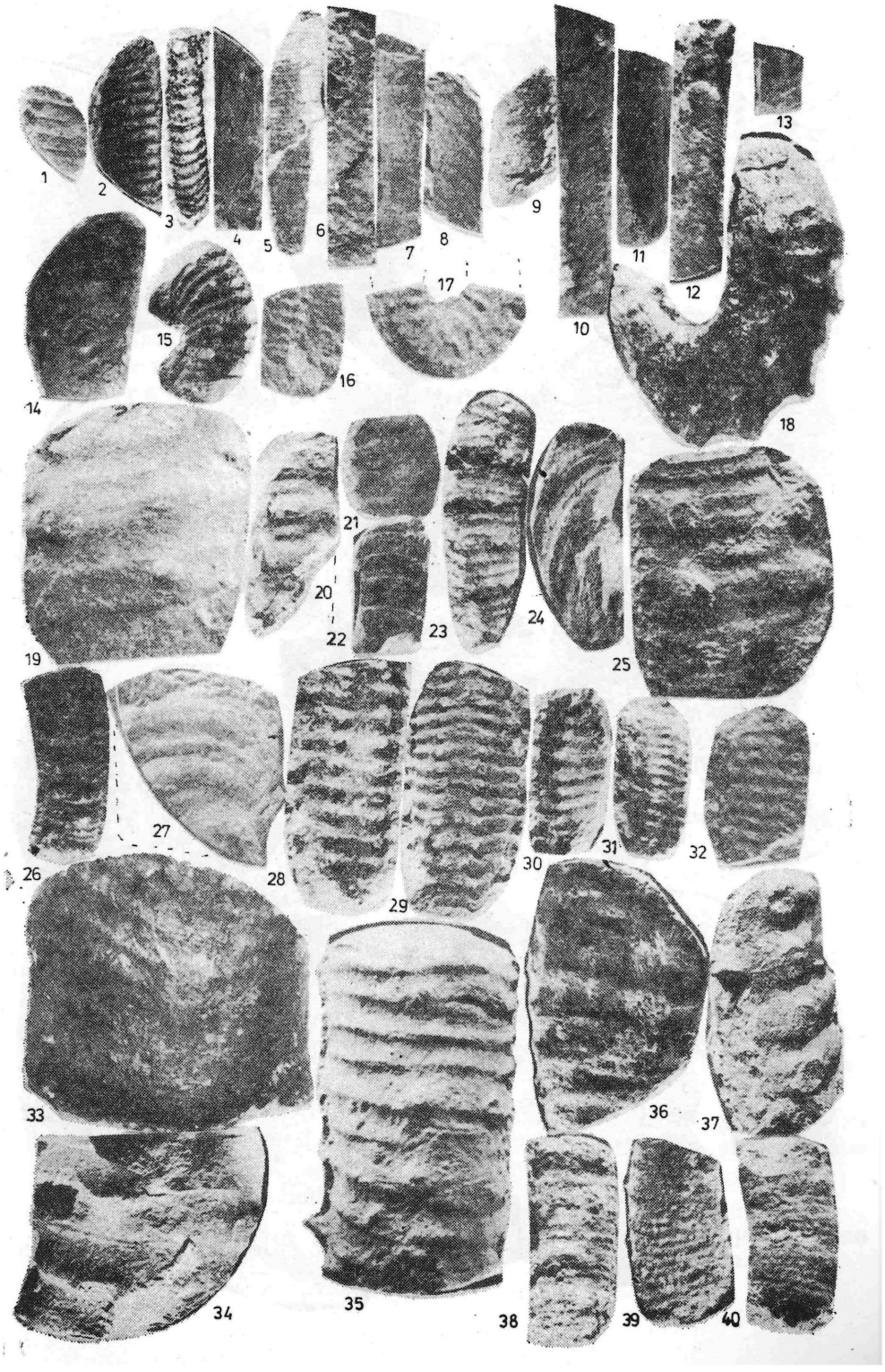
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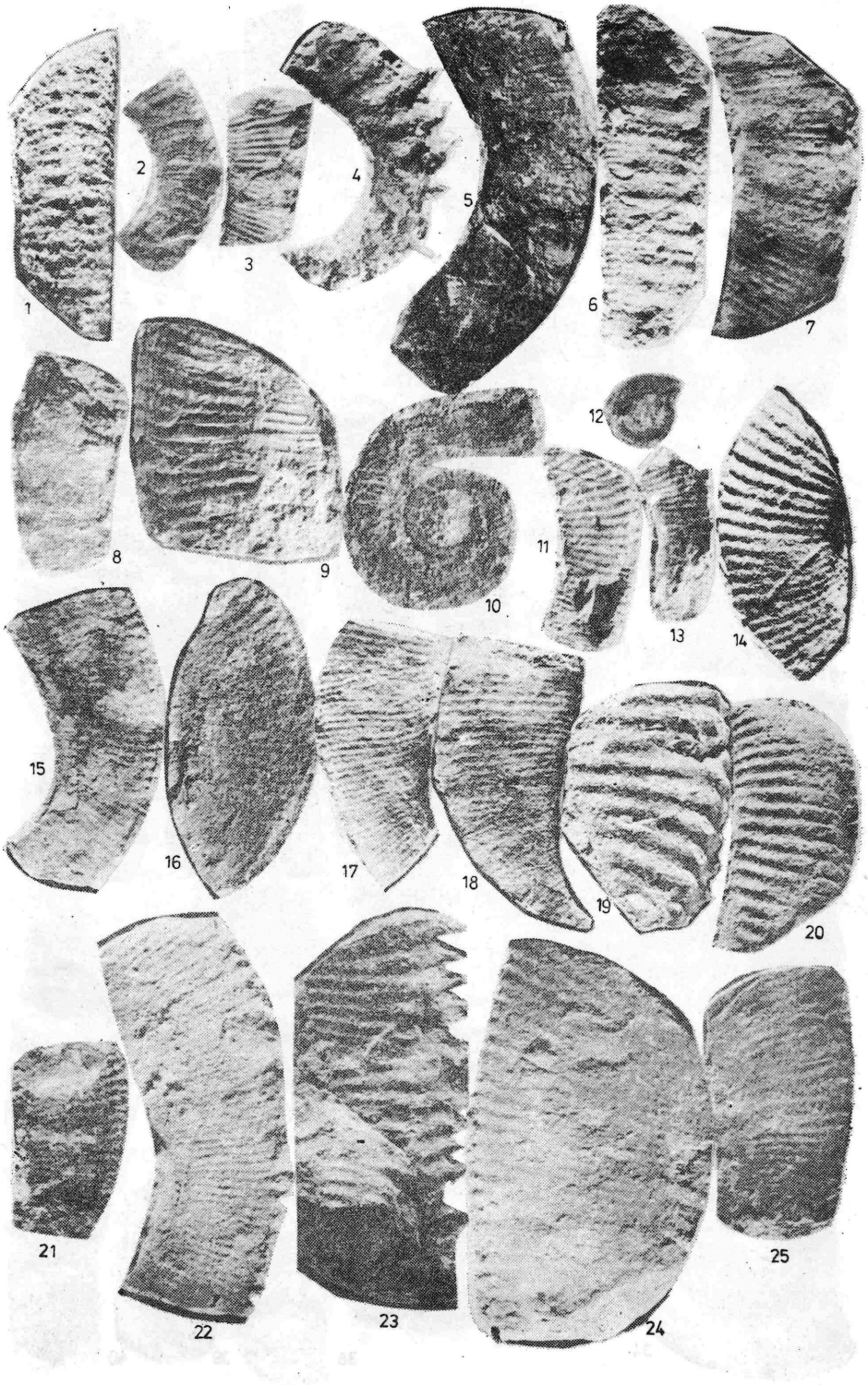
PLATE III



FAUNAL DESCRIPTIONS

Family: **ANISOCERATIDAE** Hyatt, 1900

Genera: **Idiohamites** Spath, 1925

Idiohamites favrianus Pict. var. robustus — subsp. n.

Pl. III, 19, 20

Holotype: 2 specimens from Upper Albian.

Material: 2 fragments, Cr. I. 102, 102 a from the Moesian Platform.

Derivatio nominis: from the Latin "robustus" assigned to shell-ribbing.

Locus typicus: Moesian Platform (see A.I).

Stratum typicum: *Mortoniceras inflatum* zone—*H. Orbigny* s.z.

Description: Laterally compressed shell fragments, 7 strong ribs spaced with the diameter; dorsally attenuated ribbing, each rib with 2 well-developed tubercules on the narrowed ventral side.

Remarks: Differs from the type-species in its strong, bulky ribs and its narrowed ventral part.

Level in Romania: Upper Albian s.z. with *Hysteroceras orbigny*.

Occurrence: Upper Albian (Hyseroceratian) (see A.I).

Idiohamites latus n. sp.

Pl. III, 24

Holotype: A Romanian specimen Cr. I. 101 collected from the Moesian Platform (see A.I) is designated as holotype.

Material: 1 fragment from the Upper Albian marl cores of the Moesian Platform (dee A.I).

Derivatio nominis: From the Latin "latus" characterizing the shell flanks.

Locus typicus: Moesian Platform.

Stratum typicum: Marls with *Mortoniceras inflatum* (s. z. with *H. Orbigny*).

Description: Fragmentary, fairly compressed moulding, with very wide flanks; 13 ribs spaced with the shell diameter. Straight ribbing, salient towards the ventral side where each rib has 2 nodules; ombilically attenuated ribbings.

Remarks: Differs from the other species in the genera by its much wider and flattened flanks, its narrowed ventral side, and its dense ribbing.

Level in Romania: s.z. *Hysteroceras Orbignyi*.

Occurrence: Romanian Moesian Platform, Upper Albian marls with *H. Orbignyi*? well 2059 Dumbrava 1929—1935 m.

Idiohamites tenius n. sp.

Pl. III, 21

Holotype : The Romanian specimen from the Upper Albian marls in the Moesian Platform is designated as a holotype.

Material : 1 fragment moulding Cr. I. 141.

Derivatio nominis : From the Latin "tenuis" referring to its ribbing.

Locus typicus : well 505 Ştefan cel Mare 1725—1728 m.

Stratum typicum : Upper Albian (Hysteroceratian) marls.

Description : Fragment with ancyloceratic rolling; wide flanks flattened, fine sharp ribs, supplied with fine sharp thorns on the ventral side. The flattened ventral side shows 10 ribs spaced with the shell diameter.

Remarks : Differs from the other Idiohamites species by its fine ribs, each with a sharp small ventral thorn.

Level in Romania : s.z. with *Hysteroceras Orbignyi.*

Occurrence : Romanian Moesian Platform, Upper Albian (Hysteroceratian).

Idiohamites moesicus n. sp.

Pl. III, 23

Holotype: The specimen from the Upper Albian marls of the Moesian Platform is designated as a holotype, Cr. I. 104.

Material : 1 fragment (Cr. I. 104) from the Moesian Platform.

Derivatio nominis : According to its geographical location (in the Moesian Platform).

Locus typicus : well 2059 Dumbrava 1929—1935 m.

Stratum typicum: Albian marls with *Mortoniceras inflatum.*

Description : Hamitoidic shell with orally flattened section; strong flank ribbing, generally alternating 2 ribs joined in triangular ventral tubercule; simple tuberculated ribs: salient tubercules on the narrowed ventral side.

Remarks : Differs from the other Idiohamites species by the typical rib alternance (simple tuberculated rib alternating with 2 tubercule-joined ribs).

Level in Romania : s.z. *Hysteroceras Orbignyi.*

Occurrence : Romanian Moesian Platform, Upper Albian.

Idiohamites bicostatus n. sp.

Pl. III, 22

Holotype : The specimen from the Upper Albian marls of the Moesian Platform.

Material : 1 specimen-fragment, Cr. I. 105.

Derivatio nominis : From its specific bi-ribbed ornamentation (2 ribs joined in a ventral tubercule).

Locus typicus : Romanian Moesian Platform (well 2059 Dumbrava 1929—1935 m.).

Stratum typicum : Marls with *Mortoniceras inflatum* (s.z. *Orbignyi-varicosum*).

Description : Anisoceratidic rolling, flattened flanks, fine prominent ribbing, 2 ribs joined in a small triangular tubercule, narrowed ventral side, each rib supplied with 2 tubercules, dorsally attenuated ribbing.

Remarks : The bi-ribbing and its fineness individualize this species.

Level in Romania : Upper Albian (s.z. *Orbignyi-varicosum*).

Occurrence : Hysteroceratian marls of the Moesian Platform (well 2059 Dumbrava 1929—1935 m.).

STRATIGRAPHIC CONCLUSIONS

In the Albian deposits succession in the Moesian Platform there have been identified the 6 classical Albian zones from England (SPATH, 1941), the Acanthoplitan belonging to the Aptian.

The above-described fauna mostly belongs to the Upper Albian (*Mortoniceras inflatum* and *Stoliczkaia dispar Zones*) and only 3 species may be assigned to the Middle Albian (*Hoplites dentatus* Zone). The most frequent species may be attributed to the Hamitidae family, and especially to *Hamites intermedius* with its varieties encountered in the marly limestones with *Hysteroceras orbignyi* and *Inoceramus sulcatus* (bed IX in Folkestone).

REFERENCES

Breistrofer M. (1947) *Sur les zones d'ammonites dans l'Albien de France et d'Angleterre.* Trav. Lab. Géol. Fac. Sci. Univ. Grenoble, **26**, 17 — 184.

Chiriac M. (1960) *Reprezentanţi ai familiei Turrilitidae Meek 1876, în cretacicul Dobrogei de Sud,* St. Cercet. Geol., **463**, Bucureşti.

Collignon M. (1963) *Atlas des fossiles caractéristiques de Madagascar (Ammonites) Albien.* Sér. Géol., 1—184, Tananarive.

Filipescu M., Grigorescu D. (1966) *Contribuţii la studiul faunei cretacice din flişul Carpaţilor Orientali.* St. Cercet. Geol.

Murgeanu, G., Patrulius D. (1960) *Les formations des Carpathes Roumaines et de leur avant pays.* Ann. Inst. Geol. Publ. Ungariae., **49**, fasc. 1, Budapest.

Marcinovski R., Naidin P. D. (1967) *An Upper Albian ammonite fauna from Crimeea.* Acta Geol. Polon., **26**, 1, Warszawa.

Muţiu R. (1967) *Contributions à l'étude paléontologique du Crétacé inférieur dans la Plate-Forme Moesique.* Cong. VIII, Assoc. Carp. Balkan., 1967, 315 — 322, Belgrade.

Muţiu R. (1972) *Noi contribuţii la studiul paleontologic şi stratigrafic al depozitelor albiene din Platforma Moesică.* St. Cercet. Geol., **17**, 131 — 150, Bucureşti.

Muţiu R. (1974) *Notă asupra faunei vraconiene-cenomaniene din bazinul Rucăr.* Petrol şi Gaze, **25**, 248 — 251, Bucureşti.

Orbigny A. (1840—1842) *Paléontologie française — Terrains crétacés I Céphalopodes,* 1—662, Paris.

Passendorfer E. (1930) *Étude stratigraphique et paléontologique du Crétacé de la série hauttatrique dans le Tatras.* Prace P.I.G. (Trav. Serv. Geol. Polon). **2(4)**, 511 — 676, Warszawa.

Pictet F. J. (1847—1854) in Pictet & Roux, *Description des mollusques fossiles qui se trouvent dans les Grès Verts des environs de Genève*, Mem. Soc. Phys. Hist. Nat., **11** (1847), Genève.

Pictet & Campiche, *Description des fossiles du terrain crétacé des environs de Sainte-Croix*. Mat. Paleont. Suisse, **1** (1858—1860) 1—38, **2** (1861—1864), Genève.

Quenstedt T., *Atlas cephalopopodae*, 290, Tübingen.

Spath F. L. (1937, 1939, 1941) *Ammonidea of the Gault*. 498 —525, 543—593, 609—668, London.

Stoliczkaia F. (1863—1869) *The fossil cephalopoda of the Cretaceous rocks of Southern India*, Paleont. Indica, 199.

Wiedmann J. (1962) *Ammoniten aus der Vascogotischen Kreide (Nord—Spanien) I Phylloceratina*, Lytoceratina Paleontographica, 1, 118, 119, 241, Stuttgart.

Wiedmann J. (1965) *Origin, limits and systematic position of scaphites Paleontology*, **8**, 397 — 453, London.

Wiedmann J., Dieni (1968) *Die Kreide Sardiniens und ihre Cephalopoden*. Paleontogr. Italica, **64**, 1 — 171, Pisa.

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