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Uppermost Devonian and Dinantian rugose corals from Southern Belgium and surrounding areas

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Rugose corals, Strunian, Dinantian, Tournaisian, Viséan, Southern Belgium, Namur-Dinant Basin, classical sites, Tournai, Visé, Avesnois, Aachen Region

ABSTRACT. The present guide illustrates the diversity of rugose corals from the Strunian and Dinantian strata of Southern Belgium and surrounding areas (mainly Aachen region in Germany, and Avesnois in Northern France). This atlas illustrates an updated state-of-the-art status on the taxonomy, stratigraphical and spatial distribution of the rugose corals within the Dinantian type area. Diagnosis of genera and species are given with their geographical and stratigraphical distribution, although the informations available for the specific taxa are variable. Many classical species of the Tournais and Visé areas have not been reviewed for a long time, but their names are still in use. 167 species and subspecies, belonging to 60 genera are listed and illustrated on 12 plates.

CONTENT

1. INTRODUCTION

This atlas illustrates the Strunian (Uppermost Devonian), Tournaisian and Viséan (Mississippian) rugose corals from Southern Belgium and surrounding areas that belonged to the Namur-Dinant Basin during time of deposition. Many taxa described from the type locality of the Tournaisian (Tournai) and the Viséan (Visé) have not been reviewed for a long time but are their names still used. The atlas is not a taxonomic review of the species found in the uppermost Devonian and Dinantian strata but plays its role as illustrated guide for the rugose corals in parallel with the field trip in the Belgian Dinantian type localities organized during the 11th International Symposium

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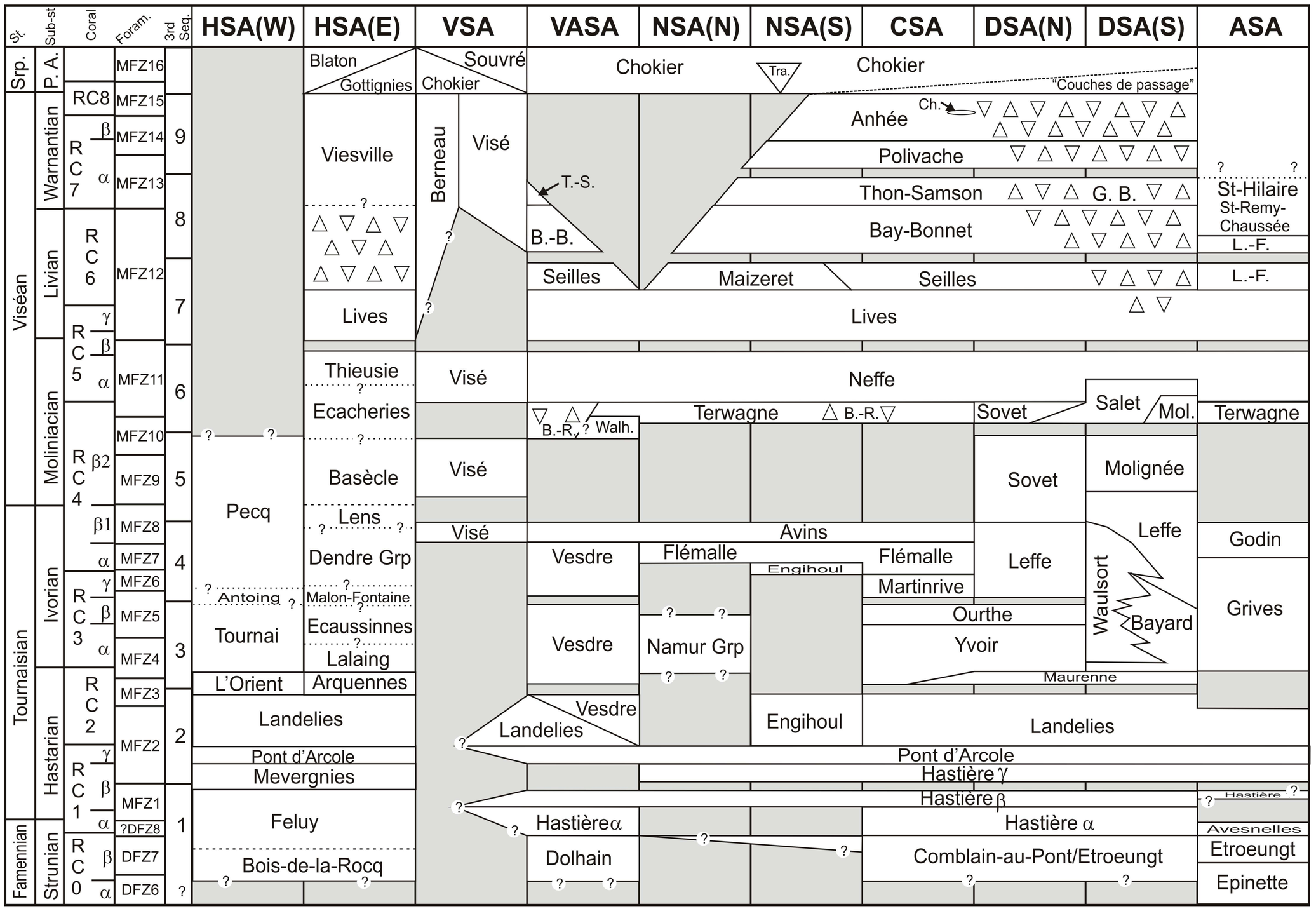

Fig. 1: Lithostratigraphic, biostratigraphic and sequence stratigraphic framework for the Uppermost Devonian, Tournaisian, Viséan and Lower Serpukhovian of Southern Belgium and surrounding areas. Gaps are indicated by gray zones. Third-order sequences according to HANCE et al. 2001 and DEVUYST et al. 2005. Biostratigraphy (foraminifers and rugose corals biozones) after POTY et al. 2006. Legend: St: stages, Sub-st.: sub-stages, Coral: Rugose Corals biozone, Foram.: Foraminifers biozones, 3rd Seq.: third order sequences, Srp.: Serpukhovian, P. A.: Pendleian and Arnsbergian, L.-F.: Limont-Fontaine Fm, Mol.: Molignée Fm, Walh.: Walhorn Mbr, B.-R.: Belle-Roche Breccia, B.-B.: Bay-Bonnet Mbr, T.-S.: Thon Samson Mbr, G. B.: Grande Brèche, Ch.: Chabôfosse Facies, Tra.: Tramaka Mbr, Dendre Grp: Dendre Group, Namur Grp: Namur Group. Tournai Fm includes Crampon, Allain, Providence, Pont-à-Rieu and Vaulx Mbr. Antoing Fm includes Calonne lower and upper members, Vignoble, Gaurain-Ramecroix and Warchin Mbr. Lives Fm includes Haut-le-Wastia, Corphalie and Awirs Mbr. Modified after POTY et al. (2002, 2006), POTY & HANCE (2006a, 2006b), DEVUYST et al. (2006), HANCE & POTY (2006), HANCE et al. (2006a, 2006b, 2006c), AMLER & HERBIG (2006) and POTY & DELCULÉE (2011).

on Fossil Cnidaria and Porifera, 2011 – Liège, Belgium. Biostratigraphy, lithostratigraphy and palaeogeography are presented accordingly with the data of POTY et al. (this volume, and Figs. 1, 2).

2. TAXONOMY

The systematic diagnoses are from various authors listed in the references. Note that synonymy lists and the sections where the taxa occur in the studied areas are not presented in this atlas, but the reader will find these data easily in the references cited herin and the field trip mentioned above (POTY et al. this volume). The taxonomic classification respects mainly that of HILL (1981); excepted some taxa reviewed recently (see introduction in POTY et al., this volume). Several taxa are presented in open nomenclature because they are currently under examination and thus, not yet published at the time of the editorial process.

Subclass Rugosa MILNE-EDWARDS & HAIME, 1850
Order Stauriida VERRILL, 1865
Suborder Streptelasmatina WEDEKIND, 1927
Family Antiphyllidae ILJINA, 1970
Genus *Bradyphyllum* GRABAU, 1928

Type species: *Bradyphyllum bellicostatum* GRABAU, 1928.

Diagnosis: (after POTY 1981), small ceratoid to trochoid solitary coral, straight or curved. Outer wall marked by longitudinal furrows. In juvenile stages, major septa long, joined with axial ends, forming an axial column. In mature stages, major septa withdrawn from the axis. Cardinal septum shorter. Counter septum

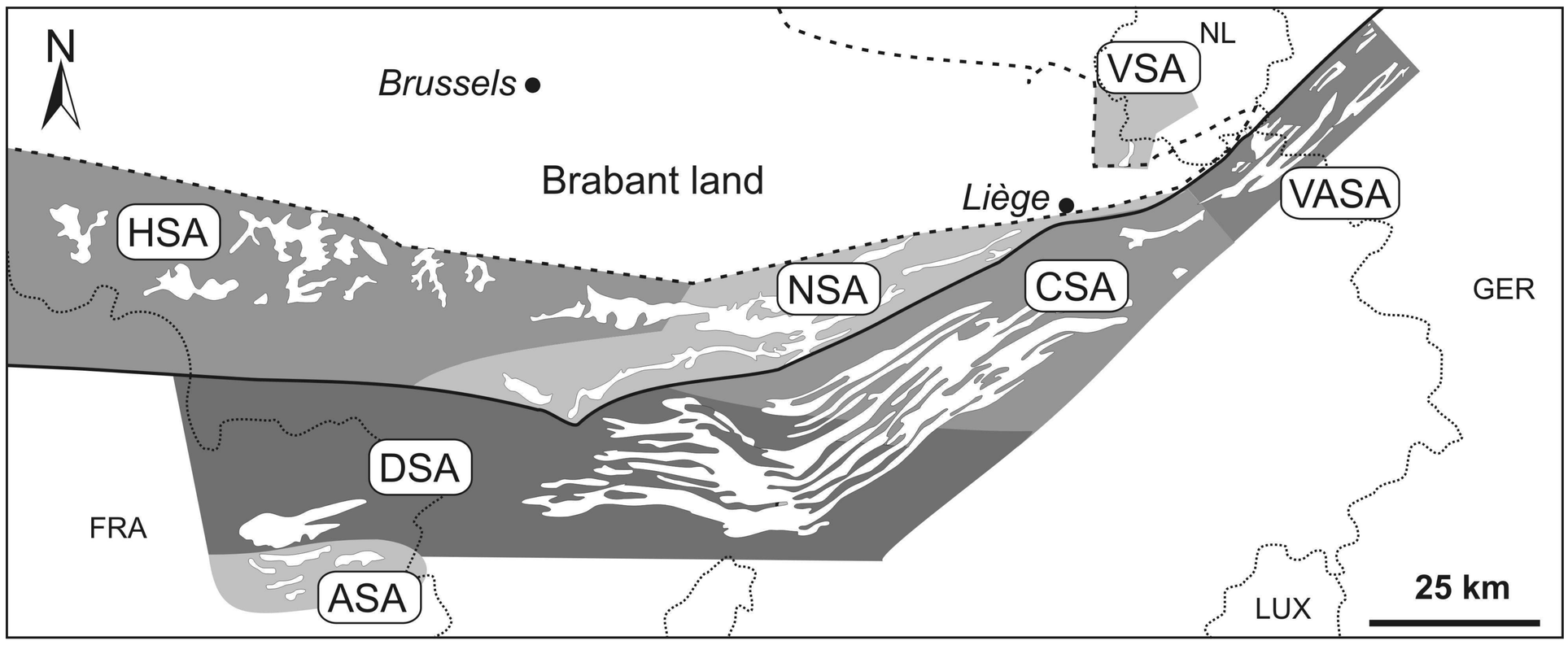

Fig. 2: Sedimentation areas for the Dinantian strata around the Brabant Massif in Belgium and western Germany. Outcropping Dinantian strata in white. ASA: Avesnois Sedimentation Area, CSA: Condroz Sedimentation Area, DSA: Dinant Sedimentation Area, HAS: Hainaut Sedimenatation Area, NSA: Namur Sedimentation Area, VSA: Visé Sedimentation Area, VASA: Vesdre-Aachen Sedimentation Area (modified from ARETZ et al. in press).

longer. Minor septa poorly developed or absent. Dissepiments absent. Tabulae numerous, downturned toward the periphery.

***Bradyphyllum rotiphylloides* POTY, 1981**
(Pl. 9, Fig. L)

Diagnosis: (after POTY 1981), ceratoid *Bradyphyllum*, up to 40 mm long, up to 20 mm in diameter and having 24 to 32 major septa. In juvenile stages (diameter < 12 mm), major septa joined in a thick axial column. Major septa withdrawn from the axis in mature stages (diameter > 12 mm). Minor septa poorly developed. Cardinal fossula well marked. Tabulae downturned toward the periphery where the axial column exist, flat where not.
Distribution: VSA, upper part of Visé Fm, RC7β.

Genus *Rotiphyllum* HUDSON, 1942

Type species: *Densiphyllum rushianum* VAUGHAN, 1908.
Diagnosis: (after HILL 1981) small solitary ceratoid coral. Major septa straight or slightly curved toward the cardinal fossula, with dilated base. Minor septa absent or short and thickened. Axial ends of septa joined in an axial column or an aulos. Septa joined in four groups in juvenile stages. Cardinal fossula on the convex side of the coral, inconspicuous in mature stages. Counter and alar fossulae occasionally present. Dissepiments absent. Tabulae conical, strongly downturned toward the periphery.

***Rotiphyllum rushianum* (VAUGHAN, 1908)**
(Pl.9, Fig. M)

Diagnosis: (after POTY 1981), *Rotiphyllum* with major septa joined in the center of the corallite, forming a wide axial column, tubular in place. All elements strongly thickened.
Distribution: VSA, upper part of Visé Fm, RC7β.

***Rotiphyllum* sp. nov.**
(Pl. 4, Fig. O)

Distribution: VSA, lower part of Visé Fm, RC4β.

***Rotiphyllum* ? sp.**
(Pl. 4, Fig. P)

Distribution: VSA, lower part of Visé Fm, RC4β.

***Rotiphyllum* sp.**
(Pl. 9, Fig. P)

Distribution: VSA, upper part of Visé Fm, RC7α.

Genus *Proheterelasma* COTTON, 1973

Type species: *Hadrophyllum edwardsianum* DE KONINCK, 1872 (= *Proheterelasma omaliusi* (MILNE-EDWARDS & HAIME, 1851)).
Diagnose: (after COTTON 1973), small ceratoid to trochoid solitary coral. Major septa joined in four groups fusing in the center of the corallite in an axial column. Septa of the counter quadrant rhopaloid in some cases. Minor septa poorly developed and short. Cardinal fossula on the convex side of the coral. Counter fossula well marked. Cardinal and counter septa usually long. Alar septa usually shorter. Dissepiments absent. Tabulae

downturned toward the periphery or horizontal. Outer wall thick.

***Proheterelasma omaliusi* (MILNE-EDWARDS & HAIME, 1851)**
(Pl. 3, Fig. O)

Diagnosis: (after COTTON 1973) small *Proheterelasma*, maximum 13 mm in diameter. Maximum 32 major septa joined in four groups around the fossulae and united in an axial column. Septa withdrawn and rhopaloid in counter quadrants. Minor septa very short. Tabulae complete, downturned toward the periphery.
Distribution: CSA, Yvoir, Martinrive and Longpré Fm, RC3α to RC4α; VSA, lower part of Visé Fm, RC4β1-2; HAS, Ecaussinnes Fm, Vaulx Mbr and Calonne lower Mbr, RC3α-β.

***Proheterelasma* sp.**
(Pl. 5, Fig. L)

Distribution: DSA, Sovet Fm, RC4β2.

Family Laccophyllidae GRABAU, 1928
Subfamily Amplexocariniinae SOSHKINA, 1941
Genus *Amplexocarinia* SOSHKINA, 1941

Type species: *Amplexocarinia muralis* SOSHKINA, 1941.
Diagnosis: (after HILL 1981), small cylindrical solitary coral. Major septa reaching the axis in juvenile stages but withdrawn in mature stages. Minor septa not developed. Axial ends of the septa forming a discontinuous aulos. Cardinal septum shorter in some cases. Tabulae spaced, mesa-shaped, resting on the tabulae next below and forming an aulos, downturned toward the periphery.

***Amplexocarinia* ? cf. *muralis* SOSHKINA, 1941**
(Pl. 9, Fig. O)

Distribution: VSA, upper part of Visé Fm, RC7β.

***Amplexocarinia* sp.**
(Pl. 8, Fig. M)

Distribution: CSA, Poilvache Mbr, RC7α.

Subfamily Laccophyllinae GRABAU, 1928
Genus *Syringaxon* LINDSTRÖM, 1882

Type species: *Cyathaxonia siluriensis* MCCOY, 1850
Diagnosis: (after POTY 1981), small ceratoid to trochoid solitary coral. Major septa long with axial ends thickened and joined in an inconstant aulos. Minor septa curved toward the major. Base of the septa thickened, forming a peripheral stereozone. Tabulae irregularly spaced, declined toward the periphery and flat in the aulos. No dissepiments.

***"Syringaxon" beruinensis* (POTY, 1981)**
(Pl. 4, Fig. Q)

Diagnosis: (after POTY 1981), small coral, maximum 12 mm in diameter. Major septa very thick, joined an aulate axial column reaching 6 mm in diameter. Minor septa long and contraclinent. Septa neighboring the counter septum usually longer than the others. Outer wall thick.
Distribution: VSA, lower part of Visé Fm, RC4β1-2.

Familly Cyathaxoniidae MILNE-EDWARDS & HAIME, 1850
Genus *Cyathaxonia* MICHELIN, 1847

Type species: *Cyathaxonia cornu* MICHELIN, 1847.
Diagnosis: (after HILL 1981), small ceratoid to cylindroid solitary coral. Strong axial column developed independently of the septa but attached to them. Major septa long. Minor septa long and contratingent. Dissepiments absent. Outer wall arched or festooned. Tabulae complete and downturned toward the periphery.

***Cyathaxonia cornu* MICHELIN, 1847**
(Pl. 2, Fig. G)

Diagnosis: (after POTY 1981), *Cyathaxonia* with a diameter < 6 mm. Axial column circular in transverse section. Major septa carinated. Tabulae complete and slightly downturned toward the periphery.
Distribution: All sedimentation areas, from RC1γ to RC5; VSA, Visé Fm, RC6; CSA, Thon-Samson Mbr, RC6.

***Cyathaxonia rushiana* VAUGHAN, 1906**
(Pl. 12, Fig. G)

Diagnosis: (after POTY 1981), *Cyathaxonia* 8 mm in diameter and having 44 septa. Axial column ovale in transverse section.
Distribution: DSA, "couches de passage" topping the Anhée Fm, RC7β-RC8; VSA, Souvré Fm, RC8.

Familly Stereolasmatidae FOMITCHEV, 1953
Genus *Saleelasma* WEYER, 1970

Type species: *Zaphrentis delepini* VAUGHAN, 1915.
Diagnosis: (after WEYER 1970), small solitary coral, maximum 10 mm in diameter. Major septa usually reaching the axis and axially fused in juvenile stages. Minor septa short and absent from juvenile stages. In mature stages, minor septa neighboring the counter septum, long and contratingent. Cardial septum on the convex side of the coral, long in the juvenile stage but shortened in mature stages. Septal spine common. Tabulae domal.

***Saleelasma delepini* (VAUGHAN, 1915)**
(Pl. 2, Fig. F)

Diagnosis: same as the genus.
Distribution: DSA, CSA, ASA, NSA, HAS, top of Pont d'Arcole Fm and base of Landelies Fm, RC1γ-RC2.

***Saleelasma* cf. *delepini* (VAUGHAN, 1915)**
(Pl. 3, Fig. I)

Distribution: HAS, Providence Mbr, RC3β.

Suborder Stauriina VERRILL, 1865
Family Amplexidae CHAPMAN, 1893
Genus *Amplexus* SOWERBY, 1814

Type species: *Amplexus coralloides* SOWERBY, 1814.
Diagnosis: (after POTY 1981), solitary coral with scolecoid to cylindrical form. Major septa thin and short, amplexoid. Cardinal fossula marked by the shortened cardinal septum. Minor septa poorly developed. Dissepiments absent. Tabulae complete and mesa-shaped with long downturned edges.

***Amplexus coralloides* SOWERBY, 1814**
(Pl. 3, Fig. E, T-V, Pl. 9, Fig. R-U)

Diagnosis: same as the genus. Maximum 50 mm in diameter and 62 major septa.
Distribution: All sedimentation areas, from RC2 to RC7β.

Family Pentaphyllidae SCHINDEWOLF, 1942
Genus *Pentaphyllum* DE KONINCK, 1872

Type species: *Pentaphyllum armatum* HINDE, 1890.
Diagnosis: (after HILL 1981), small solitary coral possessing 5 major septa reaching the axis and 5 major septa shorter. Counter septum shorter. Minor septa not developed or very short. Septa thinner in mature stage.

***Pentaphyllum* sp. A**
(Pl. 3, Fig. Q)

Distribution: HAS, Calonne upper Mbr, RC3 *s.l.*

***Pentaphyllum* sp. B**
(Pl. 12, Fig. F)

Distribution: VSA, upper part of Visé Fm, RC7β.

Family Lophophyllidae GRABAU, 1928
Genus *Lophophyllum* MILNE-EDWARDS & HAIME, 1850

Type species: *Lophophyllum konincki* MILNE-EDWARDS & HAIME, 1850.
Diagnosis: (after HILL 1981), small solitary coral with oblique calice showing bilateral symetry. Cardinal fossula in the convexe side of the corallite. Cardinal septa long in juvenile stage, shorter in mature stages. Septa commonly fused axially in cardinal quadrant but not fused in counter quadrants. Minor septa short or poorly developed. Columella small, slightly thickened, continuous with cardinal and counter septa in juvenile stages, still connected to the counter septum in mature stages. Dissepiments absent. Tabulae arched.
Remark: Newly collected material from the type strata in the type locality (Tournai) indicates that *L. konincki* is probably the young stage of *Caninia cornucopiae*.

***Lophophyllum konincki* MILNE-EDWARDS & HAIME, 1850**
(Pl. 3, Fig. G-H, Zc)

Diagnosis: same as the genus.
Distribution: HSA, Pont-à-Rieu and Vaulx Mbr, RC3β.

Family Zaphrentoididae SCHINDEWOLF, 1938
Subfamily Zaphrentoidinae SCHINDEWOLF, 1938
Genus *Sychnoelasma* LANG, SMITH & THOMAS, 1940

Type species: *Verneuilia urbanowitchi* STUCKENBERG, 1895
Diagnosis: (after COTTON 1973), ceratoid to cylindrical solitary coral. Major septa pinnately arranged, long or withdrawn. Minor septa poorly developed or half as long as the major septa. Cardinal fossula long, wide and surrounded by thick major septa. Dissepiments absent. Outer wall made of the thickened base of the septa. Tabulae complete or not, horizontal or convex in the central part, downturned toward the periphery, strongly depressed in the cardinal fossula.

***Sychnoelasma hawbankense* MITCHELL & SOMERVILLE, 1988**
(Pl. 4, Fig. F)

Diagnosis: (after MITCHELL & SOMERVILLE 1988), small ceratoid *Sychnoelasma*, 24 mm in diameter and having 46 major septa. Major septa thick, thigh to the fossula. Minor septa short or half as long as the major septa. Cardinal septum shorter. Cardinal fossula long and closed. Outer wall very thick. Tabulae numerous, irregular and vesicular.
Distribution: CSA, NSA, Flémalle Mbr, RC4β1; VSA, lower part of Visé Fm, RC4β1, DSA, Sovet Fm, RC4β2.

***Sychnoelasma hawbankense* subsp. nov.**
(Pl. 5, Fig. Q)

Distribution: DSA, Sovet Fm, RC4β2.

***Sychnoelasma konincki* (MILNE-EDWARDS & HAIME, 1851)**
(Pl. 3, Fig. N)

Diagnosis: (after COTTON 1973), small ceratoid *Sychnoelasma*, 9-10 mm in diameter. Major septa pinnately arranged in the cardinal quadrants but radialy arranged in counter quadrants. Minor septa usually short to third as long as the major septa. Cardinal septum shorter. Cardinal fossula long and closed. Outer wall thick. Tabulae numerous, irregular and vesicular.
Distribution: CSA, Yvoir and Ourthe Fm, RC3α; HAS, Tournai Fm, RC3 *s.l.*

Family Hapsiphyllidae GRABAU, 1928
Subfamily Hapsiphyllinae GRABAU, 1928
Genus *Hapsiphyllum* HUDSON, 1941

Type species: *Hapsiphyllum calcariformis* HALL, 1882.
Diagnosis: (after HILL 1981), small ceratoid or trochoid solitary coral. Cardinal fossula in the concave side of the corallite. Cardinal septa long in juvenile stages, shorter in mature stages and connected to the axial column. Minor septa long and contratingent. Dissepiments absent. Tabulae conical.

***Hapsiphyllum* sp. nov.**
(Pl. 3, Fig. K, S)

Distribution: HSA, Providence and Pont-à-Rieu Mbr, RC3β.

Genus *Zaphrentites* HUDSON, 1941

Type species: *Zaphrentis parallela* CARRUTHERS, 1910.
Diagnosis: (after HILL 1981), small ceratoid solitary coral. Minor septa poorly developed or absent. Cardinal fossula on the concave side of the corallite. In juvenile stages, septa extending to the axis, cardinal fossula long and closed by the neighboring septa. Counter fossula usually developed. In mature stages, septa withdrawn or not. Cardinal fossula still long and closed, with shorter cardinal septum. Counter fossula inconspicuous with counter septum, rhopaloid in some cases. Alar fossulae often present. Dissepiments absent. Outer wall straight and thick. Tabulae incomplete, downturn toward the cardinal fossula.

***Zaphrentites delanouei* MILNE-EDWARDS & HAIME, 1851**
(Pl. 3, Fig. P, R)

Diagnosis: (after CARRUTHERS 1910), *Zaphrentites* maximum 13 mm in diameter and having 33 major septa attached to the septa edging the cardinal fossula in the cardinal quadrants, and to the edge of the fossula in the other quadrants. Long cardinal fossula with parallel sides, occupied by a short cardinal septa. Alar fossulae well-developed.
Distribution: CSA, Martinrive Fm, RC3γ; HAS, Tournai Fm, RC3 *s.l.*

***Zaphrentites* cf. *delanouei* MILNE-EDWARDS & HAIME, 1851**
(Pl. 4, Fig. D)

Distribution: CSA, Ourthe Fm, RC3β.

***Zaphrentites* aff. *crassus* HUDSON, 1944**
(Pl. 5, Fig. O)

Distribution: VSA, lower part of Visé Fm, RC4β2.

Suborder Cyathophyllina NICHOLSON, 1889
Family Cyathopsidae DYBOWSKI, 1873
Genus *Caninia* MICHELIN *in* GERVAIS, 1840

Type species: *Caninia cornucopiae* MICHELIN *in* GERVAIS, 1840.
Diagnosis: (after HILL 1981), ceratoid to cynlindrical solitary coral. Cardinal fossula on the convexe side of the corallite. In juvenile stages, major septa long and thickened in the cardinal quadrants. In mature stages, septa withdrawn and thin, straight or curved toward the cardinal septa. Counter septa often longer. Minor septa short. Dissepimentarium narrow, made of simple interseptal dissepiments and, in rare cases, first and second order lonsdaleoid dissepiments. Tabulae complete, horizontal in the axial zone, depressed in periphery.

***Caninia cornucopiae* MICHELIN *in* GERVAIS, 1840**
(Pl. 3, Fig. A-D)

Diagnosis: (after SEMENOFF-TIAN-CHANSKY 1974), *Caninia* with thin major septa half to third as long as the coral radius. Minor septa very short, appearing as septal crest on the wall. Counter septum often long and thickened, forming a weak columella. 1-3 rows of simple interseptal dissepiments and second order lonsdaleoid dissepiments.
Distribution: DSA, NSA, CSA, from Landelies to Martinrive Fm, RC2-RC3α, RC3γ; HAS, from Providence to Calonne lower Mbr, RC3 *s.l.*

***Caninia* aff. *cornucopiae* MICHELIN *in* GERVAIS, 1840**
(Pl. 4, Fig. E)

Distribution: CSA, Martinrive Fm, RC3γ.

***Caninia* sp. nov. A**
(Pl. 4, Fig. M)

Distribution: NSA, Flémalle Mbr, RC4α; VSA, lower part of Visé Fm, RC4β1; DSA, Sovet and Salet Fm, RC4β2.

***Caninia* sp. nov. B**
(Pl. 3, Fig. M)

Distribution: HSA, Vaulx Mbr, RC3β.

***Caninia* sp. C**
(Pl. 4, Fig. K)

Distribution: DSA, Sovet Fm, RC4β2.

***Caninia* sp. D**
(Pl. 9, Fig. M)

Distribution: VSA, upper part of Visé Fm, RC7β.

Genus *Siphonophyllia* SCOULER *in* MCCOY, 1844

Type species: *Siphonophyllia cylindrica* SCOULER *in* MCCOY, 1844.
Diagnosis: (after POTY & BOLAND 1994), large cylindrical solitary coral. Major septa numerous and long but not extending to the axis. Minor septa reaching the inner edge of the dissepimentarium. Septa thickened in the tabularium, particularly in the cardinal quadrants. Cardinal fossula usually well-developed, with a shorter and thicker cardinal septum. Counter fossula developed, with a shorter and thicker counter septum. Dissepimentarium wide, made of many rows of simple interseptal, V-shaped, herringbones, first and second order lonsdaleoid dissepiments. Outer wall simple and thick. Tabulae complete and horizontal in the central zone, incomplete and depressed in periphery.

***Siphonophyllia caninoides* (SIBLY, 1906)**
(Pl. 5, Fig. B)

Diagnosis: (after SIBLY 1906), small *Siphonophyllia* with a maximum diameter of 43 mm and having 59 major septa. Major septa straight or sinuous, half to third as long as the radius of the corallite. Minor septa slightly longer than the dissepimentarium. Cardinal fossula not well-developed. Dissepimentarium narrow made of 1-7 rows of very large first order lonsdaleoid dissepiments, second order lonsdaleoid dissepiments and some simple interseptal dissepiments. Outer wall thick. Tabulae spaced.
Distribution: VSA, lower part of Visé Fm, RC4β1.

***Siphonophyllia cylindrica* SCOULER *in* MCCOY, 1844**
(Pl. 2, Fig. B, Pl. 3, Fig. Zb)

Diagnosis: (after POTY & BOLAND 1994), large ceratoid or cylindrical *Siphonophyllia*, maximum 70 mm in diameter and having 72 major septa. Major septa thickened in the tabularium, especially in the cardinal quadrants. Minor septa short or as septal crests on the dissepiments. Cardinal and counter fossulae developed. Cardinal and counter septa shorter. Dissepimentarium wide, made of simple interseptal and lonsdaleoid dissepiments. Tabulae dispersed, slightly divided and downturned toward the cardinal fossula.
Distribution: DSA, CSA, NSA, ASA, middle member of Hastière Fm to Yvoir Fm, RC1β-RC3α; HAS, Providence and Pont-à-Rieu Mbr, RC3β.

***Siphonophyllia cylindrica hastariensis* (SALÉE, 1913)**
(Pl. 1, Fig. O)

Diagnosis: (after POTY & BOLAND 1994), *Siphonophyllia cylindrica* with major septa extremely thickened in the cardinal quadrants but not in the other quadrants.
Distribution: DSA, CSA, NSA, ASA, middle and upper members of Hastière Fm, Landelies and Yvoir Fm, RC1β-RC3α.

***Siphonophyllia garwoodi* RAMSBOTTOM & MITCHELL, 1980**
(Pl. 5, Fig. C)

Diagnosis: (after RAMSBOTTOM & MITCHELL 1980), medium-sized conical to cylindrical *Siphonophyllia* with a maximum diameter of 65 mm and having 80 major septa. Major septa thickened in the tabularium, half to third as long as the radius of the corallite. Minor septa shorter than the dissepimentarium. Cardinal fossula well-developed, opened. Counter fossula developed in some cases, with a shorter counter septum. Dissepimentarium wide. Tabulae horizontal or slightly convex in the central zone, depressed in the periphery where it forms a gutter.
Distribution: VSA, lower part of Visé Fm, RC4β1.

***Siphonophyllia rivagensis* POTY & BOLAND, 1994**
(Pl. 2, Fig. A)

Diagnosis: (after POTY & BOLAND 1994), *Siphonophyllia* with a tabularium diameter of 17-27 mm and having 40-59 major septa. Major septa usually thickened in the cardinal quadrants. Minor septa short. Dissepimentarium wide, made of simple interseptal and lonsdaleoid dissepiments.
Distribution: DSA, CSA, NSA, ASA, Pont d'Arcole and Landelies Fm, RC1γ-RC2.

***Siphonophyllia samsonensis* (SALÉE, 1913)**
(Pl. 8, Fig. G)

Diagnosis: (after POTY 1981), large sub-cylindrical *Siphonophyllia*. Major septa long, thickened in the dissepimentarium. Minor septa discontinuous, short or appearing as septal crests. Cardinal fossula well-developed. Dissepimentarium narrow, made of simple, V-shaped, herringbones and rare lonsdaleoid dissepiments. Tabulae horizontal in the axial zone and depressed in periphery.

Distribution: NSA, Thon-Samson Mbr, RC7α; CSA, Anhée Fm (Chabôfosse Facies), RC7β; VSA, Berneau and upper part of Visé Fm, RC7β.

Siphonophyllia siblyi SEMENOFF-TIAN-CHANSKY, 1974
(Pl. 7, Fig. L)

Diagnosis: (after SEMENOFF-TIAN-CHANSKY 1974), *Siphonophyllia* intermediate in size. Major septa long (1/2-1/3 as long as the radius), usually sinuous and thickened in the dissepimentarium. Minor septa poorly developed or appearing as septal crests. Cardinal fossula well-developed. Dissepimentarium wide made of simple, V-shaped, herringbones and narrow lonsdaleoid dissepiments of both orders.
Distribution: NSA, Seilles Mbr, RC6.

Siphonophyllia sp. nov.
(Pl. 3, Fig. L)

Distribution: HAS, Vaulx Mbr, RC3β.

Genus *Uralinia* STUCKENBERG, 1895

Type species: *Heliophyllum multiplex* LUDWIG, 1862.
Diagnosis: (after POTY & BOLLAND 1994), cylindrical solitary coral. Major septa strongly thickened in the cardinal quadrants and reduced or lacking in the other parts of the tabularium. Minor septa usually lacking or very rudimentary. Cardinal fossula well marked. Shorter cardinal septum. Dissepimentarium wide, mainly made of lonsdaleoid dissepiments. Tabulae more or less divided and declined toward the fossula.

Uralinia lobata POTY & BOLAND, 1994
(Pl. 2, Fig. C)

Diagnosis: (after POTY & BOLLAND 1994), large *Uralinia* with a maximum diameter of 50 mm and having up to 60 major septa. Major septa very thickened in the cardinal parts of the tabularium. Axial ends of the septa thickened in the other parts of the tabularium. Septa thin and discontinuous in the counter parts of the tabularium and in the dissepimentarium. Dissepimentarium wide in the cardinal parts of the corallite but narrow and contracted in the counter parts, made of small lonsdaleoid dissepiments.
Distribution: CSA, VASA, Pont d'Arcole and Landelies Fm, RC1γ-RC2.

Uralinia multiplex (LUDWIG, 1862)
(Pl. 2, Fig. K)

Diagnosis: (after ONOPRIENKO 1979), large *Uralinia* with a maximum diameter of 120 mm and having up to 80 major septa. Major septa very thickened in the cardinal parts of the tabularium but also in the counter parts. Dissepimentarium wide, particularly in the counter parts of the corallite, made of numerous small lonsdaleoid dissepiments.
Distribution: CSA, Yvoir Fm, RC3β.

Genus *Bifossularia* DOBROLJUBOVA, 1966

Type species: *Caninia ussowi* GABUNIA, 1919.
Diagnosis: (after HILL 1981), solitary coral. Major septa of the same length, thickened in the whole tabularium. Minor septa developed or not. Cardinal and counter fossulae well defined, with shorter cardinal and counter septa. Dissepimentarium narrow, made of simple and rare lonsdaleoid dissepiments. Tabulae convex, downturned toward the axis.

Bifossularia aff. *tictensis* (TOLMATCHEV, 1931)
(Pl. 2, Fig. I)

Distribution: ASA, Grives Fm, RC3α; CSA, Yvoir Fm, RC3α.

Genus *Keyserlingophyllum* STUCKENBERG, 1895

Type species: *Cystiphyllum obliquum* KEYSERLING, 1846.
Diagnosis: (after POTY & XU 1996), large solitary coral. Major septa long and thickened in the tabularium, especially in the cardinal quadrants. Septa pinnately grouped around the cardinal septum and alar septa, forming distinct cardinal and alar fossula. In mature stages, major septa becoming thinner in the counter parts but still thickened in the cardinal quadrants. Minor septa absent or very poorly developed. Small lonsdaleoid dissepiments present in mature stages. Rare small interseptal dissepiments.

Keyserlingophyllum obliquum (KEYSERLING, 1846)
(Pl. 4, Fig. C)

Diagnosis: (after POTY & XU 1996), *Keyserlingophyllum* up to 50 mm in diameter and having up to 68 major septa. Major septa very thickened and coalescent in the cardinal quadrants. Minor septa absent. Tabularium as wide as the half of the radius. Axis of the coral eccentric toward the cardinal fossula. Cardinal fossula closed by the curved end of the septa, enclosing one or several septa. Dissepiments small, simple interseptal and lonsdaleoid.
Distribution: CSA, top of Yvoir Fm, RC3β; VASA, Vesdre Fm, RC3 *s.l.*

Genus *Pseudozaphrentoides* STUCKENBERG, 1904

Type species: *Pseudozaphrentoides jerofeewi* STUCKENBERG, 1904.
Diagnosis: (after SEMENOFF-TIAN-CHANSKY 1974), conical to cylindrical solitary coral or with limited budding. Major septa thickened in the dissepimentarium. Minor septa short, rudimentary or

absent. Cardinal fossula marked by a shorter cardinal septum. Dissepimentarium third as wide as the radius of the corallite, made of simple interseptal, V-shaped and herringbones dissepiments. Tabulae complete and horizontal.

***Pseudozaphrentoides juddi* (THOMSON, 1893)**
(Pl. 11, Fig. F)

Diagnosis: (after SEMENOFF-TIAN-CHANSKY 1974), large cylindrical coral. Major septa thickened in the tabularium, particularly in the cardinal quadrants. Wide free central zone. Dissepiments simple and herringbones. Tabulae complete, flat, slightly depressed axially and downturned toward the dissepimentarium.
Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β.

Genus *Conilophyllum* POTY & BOLAND, 1994

Type species: *Conilophyllum streeli* POTY & BOLAND, 1994.
Diagnosis: (after POTY & BOLAND 1994), cylindrical solitary coral. Major septa usually short, thick or not, limiting a free zone in the center of the tabularium. Minor septa of various length, not developed in some cases. Cardinal fossula inconspicuous. Dissepimentarium absent to wide, made of lonsdaleoid dissepiments and rare second order lonsdaleoid and simple interseptal dissepiments. Tabulae complete or slightly divided, horizontal or slightly convex, depressed laterally to form a gutter in some cases.

***Conilophyllum priscum* (MÜNSTER, 1840)**
(Pl. 1, Fig. N)

Diagnosis: (after POTY & BOLAND 1994), long *Conilophyllum* maximum 19 mm in diameter and having 35 major septa. Major septa usually short, amplexoid or caninoid. Minor septa short or not developed. Dissepimentarim absent to narrow, made of lonsdaleoid dissepiments. Outer wall undulating or arched.
Distribution: ASA, DSA, CSA, VASA, Hastière Fm, RC1α-β.

***Conilophyllum streeli* POTY & BOLAND, 1994**
(Pl. 1, Fig. M)

Diagnosis: (after POTY & BOLAND 1994), *Conilophyllum* maximum 37 mm in diameter and having 50 major septa. Major septa of various length, thickened or not in the tabularium. Minor septa short, occasionally contratingent. Cardinal fossula inconspicuous, marked by a shortened cardinal septum. Dissepimentarim narrow, made of lonsdaleoid and rare interseptal dissepiments.
Distribution: ASA, DSA, CSA, VASA, Hastière Fm, RC1α-β.

Genus *Haplolasma* SEMENOFF-TIAN-CHANSKY, 1974

Type species: *Caninia subibicina* MCCOY 1851.
Diagnosis: (after SEMENOFF-TIAN-CHANSKY 1974), solitary coral. Major septa long but withdrawn from the axis with a large free zone in the central part of the tabularium. Minor septa short (<1/2 major). Small cardinal fossula with a shorter major septum. Dissepimentarium of various width, made of small simple and V-shaped dissepiments.

***Haplolasma conili* POTY, 1981**
(Pl. 7, Fig. I)

Diagnosis: (after POTY 1981), medium-sized *Haplolasma* with 19 mm in diameter (maximum 33 mm). Major septa long (< 2/3 radius), slightly thickened in the tabularium. Minor septa long. Dissepimentarium narrow, made of simple dissepiments in the inner part of the dissepimentarium and lonsdaleoid dissepiments in the outer part. Tabulae complete or not, depressed in periphery, forming a gutter.
Distribution: CSA, VASA, Awirs and Seilles Mbr, RC6.

***Haplolasma* cf. *densum* (LEWIS, 1930)**
(Pl. 11, Fig. G)

Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β.

***Haplolasma* sp.**
(Pl. 6, Fig. A)

Distribution: VSA, lower part of Visé Fm, RC4β2.

Family Campophyllidae WEDEKIND, 1922
Genus *Campophyllum* MILNE-EDWARDS & HAIME, 1850

Type species: *Cyathohyllum flexuosum* GOLDFUSS, 1826.
Diagnosis: (after HILL 1981), cylindrical solitary coral straight or sinuous, often carinated. Major septa long (2/3 of the radius) and extending to the axis in some cases. Minor septa long and contratingent. Cardinal fossula well-developed. Dissepimentarium narrow, made of small simple dissepiments. Tabulae complete, often slightly depressed.

***Campophyllum gosseleti* (WEYER, 1997)**
(Pl. 1, Fig. F)

Diagnosis: (after WEYER 1997), medium-sized *Campophyllum,* maximum 25 mm in diameter and having maximum 58 major septa. Major septa long, united in group in the central part of the tabularium. Septa dissected at their base. Small simple and herringbones dissepiments developed between the branches of the dissected septa.

Distribution: ASA, DSA, Etroeungt Fm, RC0.

***Campophyllum flexuosum* (GOLDFUSS, 1826)**
(Pl. 1, Fig. B)

Diagnosis: (after HILL & JULL 1965), small-sized *Campophyllum* with a mean diameter of 12 mm (maximum 22 mm) and having maximum 56 major septa.
Distribution: ASA, DSA, Etroeungt Fm, RC0; VASA, Dolhain Fm, RC0.

***Campophyllum* sp.**
(Pl. 1, Fig. C)

Distribution: ASA, Etroeungt Fm, RC0.

Family Endophyllidae TORLEY, 1933
Genus *Tabulophyllum* FENTON & FENTON, 1924

Type species: *Tabulophyllum rectum* FENTON & FENTON, 1924.
Diagnosis: (after HILL 1981), conical or cylindrical solitary coral. Major septa long but withdrawn from the axis, surrounding a wide central free zone. Minor septa often short or discontinuous and reduced to septal crests. Wide dissepimentarium made of simple interseptal, V-shaped and large lonsdaleoid dissepiments of both order. Neither cardinal nor counter septum visible in mature stages. Tabulae complete or not, flat in the central zone, somewhat downturn toward the periphery and forming a peripherical gutter.

***Tabulophyllum* sp.**
(Pl. 1, Fig. H)

Distribution: ASA, Etroeungt Fm, RC0; VASA, Dolhain Fm, RC0.

Family Bothrophyllidae FOMITCHEV, 1953
Genus *Caninophyllum* LEWIS, 1929

Type species: *Cyathophyllum archiaci* MILNE-EDWARDS & HAIME, 1852.
Diagnosis: (after POTY 1981), large solitary coral. Major septa numerous, long, thick in the tabularium, particularly in the cardinal quadrants, thinning toward the axis. Cardinal septum short. No axial structure but some septa can fuse in group near the axis. Cardinal fossula well defined with depressed tabulae. Dissepimentarium of various width, made of simple, V-shaped or herringbones dissepiments. Tabulae more or less complete, horizontal in the central part of the tabularium but usually depressed in the periphery.

***Caninophyllum archiaci* (MILNE-EDWARDS & HAIME, 1852)**
(Pl. 7, Fig. G)

Diagnosis: (after POTY 1981), trochoid to cylindrical coral, up to 70 mm in diameter and having up to 100 major septa. Septa divided and braided, thickened in the tabularium. Major septa extending to the axis. Minor septa shorter than the dissepimentarium. Cardinal fossula in the convex side of the corallite. Dissepimentarium wide, made of simple, V-shaped, herringbones, arched and occasional naotic dissepiments. Tabulae complete or slightly divided.
Distribution: NSA, Lives Fm, RC5γ-RC6.

***Caninophyllum archiaci halkynense* LEWIS, 1929**
(= *Bothrophyllum streeli* POTY, 1981)
(Pl. 11, Fig. A)

Diagnosis: (after LEWIS 1929), large *Caninophyllum* showing a weak axial structure. Mean diameter of 44 mm and 47 major septa. Major septa strongly thickened in the cardinal quadrants. Minor septa shorter than the dissepimentarium width. Cardinal and counter septa long. Cardinal fossula on the convex side of the corallite. Dissepimentarium wide, made of simple, V-shaped, herringbones and arched dissepiments of various width.
Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β.

***Caninophyllum patulum* (MICHELIN, 1846)**
(Pl. 3, Fig. J, Za)

Diagnosis: (after POTY 1981), trochoid to cylindrical coral, up to 30 mm in diameter and having up to 50 major septa. Major septa extending rarely to the axis and thickened in the tabularium, particularly in the cardinal quadrants. Minor septa shorter than the dissepimentarium width. Cardinal fossula marked by withdrawn dissepiments and cardinal septum shorter. Dissepimentarium wide, made of simple, V-shaped and second order lonsdaleoid dissepiments. Tabulae complete.
Distribution: CSA, Yvoir, Ourthe and Martinrive Fm, RC3, Neffe Fm, RC5α; HSA, Providence Mbr, Pont-à-Rieu Mbr and Malon-Fontaine Fm, RC3 *s.l.*; ASA, Grives Fm, RC3α.

***Caninophyllum* sp. nov. A**
(Pl. 4, Fig. J)

Distribution: NSA, CSA, Flémalle Mbr, RC4α.

***Caninophyllum* sp. B**
(Pl. 4, Fig. G)

Distribution: CSA, Martinrive Fm, RC3γ; VSA, Visé Fm, RC4α-β1.

Genus *Bothrophyllum* FOMITCHEV, 1953

Type species: *Turbinolia conica* (FISCHER VON WALDHEIM, 1837) = *Bothrophyllum conicum* TRAUTSCHOLD, 1879.

Diagnosis: (after SEMENOFF-TIAN-CHANSKY 1974), large solitary coral. Major septa long, variably thickened in the tabularium. Inner ends of the major septa united in groups, forming with the longer counter septum, a weak axial structure. Cardinal fossula extending into the dissepimentarium. Dissepimentarium made of small simple dissepiments densely packed in the outer part of the dissepimentarium. Tabulae incomplete, upturned toward the axis, horizontal or convex in the outer part of the dissepimentarium.

***"Bothrophyllum" lateseptatum* POTY, 1981**
(Pl. 11, Fig. B)

Diagnosis: (after POTY 1981), large trochoid "*Bothrophyllum*" (querying *Caninophyllum* with a weak axial structure) ovale in transverse section. Mean diameter of 45 mm for 50 major septa. Major septa strongly thickened in the cardinal quadrants. Inner ends of the major septa united in groups and forming a more or less complex irregular axial structure. Minor septa extending in the outer part of the tabularium. Dissepi-mentarium narrow, made of simple, V-shaped, herringbones and arched dissepiments in the outer part. Tabulae domal in the axial part of the tabularium and depressed in a peripheral gutter.
Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β.

"*Bothrophyllum*" sp.
(Pl. 9, Fig. H)

Distribution: VSA, upper part of Visé Fm, RC7β.

Gen. et sp. nov. A.
(Pl. 1, Fig. D)

Distribution: VASA, Dolhain Fm, RC0.

Genus *Calmiussiphyllum* VASILJUK, 1959

Type species: *Calmiussiphyllum calimussi* VASILJUK, 1959
Diagnosis: (after HILL 1981), large solitary coral. Major septa numerous, extending almost to the axis, except the cardinal septum and its neighboring septa. Minor septa half as long as the major, contratingent. Septa thickened in juvenile stages. Thickening decreasing in mature stages, firstly in counter quadrants then in the cardinal parts of the dissepimentarium. Dissepimentarium wide, made of simple interseptal and rare lonsdaleoid dissepiments in mature stages. Tabulae incomplete, domal.

***Calmiussiphyllum* cf. *calmiussi* VASILJUK, 1959**
(Pl. 2, Fig. J)

Distribution: ASA, Grives Fm, RC3α; CSA, Yvoir Fm, RC3α.

Family Palaeosmiliidae HILL, 1940
Genus *Palaeosmilia* MILNE-EDWARDS & HAIME, 1848

Type species: *Palaeosmilia murchisoni* MILNE-EDWARDS & HAIME, 1848.
Diagnosis: (after POTY 1981), solitary coral or with limited increase. Septa numerous and densely packed. Major septa reaching the axis. Minor septa long. Cardinal fossula long and narrow. Dissepimentarium wide made of numerous rows of simple interseptal, V-shaped or arched dissepiments replaced in periphery by lonsdaleoid and naotic dissepiments. Tabulae incomplete and of two types: small axial tabulae domal, axially depressed, large tabulae downturn toward the dissepimentarium. Outer wall thin.

***Palaeosmilia murchisoni* MILNE-EDWARDS & HAIME, 1848**
(Pl. 6, Fig. G)

Diagnosis: (after POTY 1981), large *Palaeosmilia* up to 100 mm in diameter. Base of the septa often carinated or in zig-zag. Minor septa long (2/3 major). Cardinal fossula long and narrow, widening and open toward the axis. Axial tabulae incomplete, domal and axially depressed.
Distribution: CSA, NSA, DSA, ASA, VASA, from Terwagne Fm to Anhée Fm (Chabôfosse Facies), RC5-RC8; VSA, Berneau and upper part of Visé Fm, RC7-RC8.

***Palaeosmilia* sp. nov.**
(Pl. 5, Fig. J)

Distribution: CSA, NSA, VSA, Avins Mbr; ASA, Godin Fm, RC4β1.

"*Palaeosmilia*" *aquisgranensis* (FRECH, 1885)
(Pl. 1, Fig. A)

Diagnosis: (based on BERKOWSKI 2002 and CHWIEDUK 2005) medium-sized *Palaeosmilia* (querying a *Campophyllum* with long major septa) with a maximum diameter of 66 mm and having 114 major septa. Major septa usually extending to the axis but withdrawn in some cases. Minor septa long. Dissepimentarium wide, made of numerous simple, V-shaped and rare heringbones dissepiments. Tabulae strongly divided and depressed in the central zone of the tabularium.
Distribution: CSA, Comblain-au-Pont Fm, RC0; VASA, Dolhain Fm, RC0.

Gen. et sp. nov. B.
(Pl. 1, Fig. E)

Distribution: ASA, Etroeungt Fm, RC0.

Genus *Palastrea* MCCOY, 1851

Type species: *Astrea carbonaria* MCCOY, 1851.

Diagnosis: (after HILL 1981), cerioid, astreoid or aphroid *Palaeosmilia*.

Palastrea cf. *carbonaria* (McCOY, 1851)

(Pl. 12, Fig. H)

Distribution: CSA, Anhée fm (Chabôfosse Facies), RC8.

Family Aulophyllidae DYBOWSKI, 1873

Subfamily Aulininae HILL, 1981

Genus *Aulokoninckophyllum* SANDO, 1976

Type species: *Campophyllum carinatum* CARRUTHERS, 1909.

Diagnosis: (after SANDO 1976), solitary coral or with limited increase. Major septa long, often carinated. Aulos made of the axial ends of the major septa and edges of the axial tabulae. Cardinal fossula usually marked. Tabulae incomplete. Axial tabulae vesicular with downturned edges. Periaxial tabulae downturn toward the dissepimentarium, forming a gutter. Dissepiments small in longitudinal section, inclined toward the axis in the inner part of the dissepimentarium, and declined toward the outer wall in the outer part of the dissepimentarium. Limited lateral or peripheral increase.

Aulokoninckophyllum carinatum (CARRUTHERS, 1909)

(Pl. 8, Fig. I)

Diagnosis: (after CARRUTHERS 1909), *Aulokoninckophyllum* with a maximum diameter of 20 mm. Septa bearing well-marked carinae. Minor septa long. Dissepimentarium narrow, made of simple dissepiments. Tabulae numerous and horizontal in the aulos, abruptly declined in the peripheral part of the tabularium.
Distribution: VSA, Berneau Fm, RC7α.

Aulokoninckophyllum ubaghsi POTY, 1981

(Pl. 8, Fig. F)

Diagnosis: (after POTY 1981), small ceratoid *Aulokoninckophyllum* with a maximum diameter of 9 mm. Major septa slightly carinated. Minor septa long. Dissepimentarium narrow, made of simple dissepiments declined toward the outer wall in longitudinal section. Tabulae strongly divided in the aulos.
Distribution: CSA, Poilvache Mbr, RC7α; CSA, Anhée Fm (Chabôfosse Facies), RC7β; VSA, upper part of Visé Fm, RC7β.

Aulokoninckophyllum cf. *ngakoi* VUILLEMIN, 1990

(Pl. 4, Fig. N)

Distribution: ASA, Godin Fm, RC4β1.

Aulokoninckophyllum sp.

(Pl. 3, Fig. M)

Distribution: HSA, Pont-à-Rieu Mbr, RC3β.

Subfamily Clisiophyllinae NICHOLSON, 1889

Genus *Clisiophyllum* DANA, 1846

Type species: *Clisiophyllum keyserlingi* McCOY, 1849.
Diagnosis: (after POTY, 1981), ceratoid to cylindrical solitary coral. Axial structure very well-developed, made of an axial plate thin and of various length, numerous radial lamellae connected or not to the axial ends of the septa, and axial tabulae. Cardinal fossula opened, with shorter cardinal major septum or connected to the axial plate. Minor septa long. Dissepimentarium large, made of small simple interseptal dissepiments. Tabulae incomplete, axial tabulae upturn toward the axial plate, periaxial tabulae slightly downturned toward the dissepimentarium.

Clisiophyllum garwoodi (SALÉE, 1913)

(Pl. 7, Fig. D)

Diagnosis: (after POTY 1981), small *Clisiophyllum*, 9.7 mm in diameter (maximum 14.3 mm) and having 31 (maximum 41) major septa. Minor septa shorter than the dissepimentarium width, very short in some cases. Axial structure 1/3-1/4 as wide as the diameter of the corallite, dense, symmetrical or poorly developed with few radial lamellae. Dissepimentarium wide.
Distribution: DSA, CSA, NSA, ASA, VASA, Lives Fm and Seilles Mbr, RC5γ-RC6; VSA, Visé and Berneau Fm, RC6.

Clisiophyllum keyserlingi McCOY, 1849

(Pl. 9, Fig. C, W)

Diagnosis: (after POTY 1981), large *Clisiophyllum*, 20-40 mm in diameter, with an axial structure half as wide as the corallite diameter. Major septa thin and sinuous in the dissepimentarium, straight and thick in the tabularium, particularly in cardinal quadrants. Axial structure symmetrical or in spiral.
Distribution: VSA, upper part of Visé Fm, RC7β; CSA, Anhée Fm (Chabôfosse Facies), RC7β.

Clisiophyllum keyserlingi crassiseptatum SEMENOFF-TIAN-CHANSKY, 1974

(Pl. 11, Fig. I)

Diagnosis: (after SEMENOFF-TIAN-CHANSKY 1974), large *Clisiophyllum keyserlingi*, with major septa thin in the dissepimentarium and thick in the tabularium, both in cardinal and counter quadrants. Axial structure symmetrical and thickened.

Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β.

Clisiophyllum aff. *garwoodi* (SALÉE, 1913)
(Pl. 7, Fig. E)

Distribution: VSA, Berneau Fm, RC6.

Clisiophyllum sp. nov. A
(Pl. 7, Fig. F)

Distribution: NSA, Awirs Mbr, RC6.

Clisiophyllum sp. B
(Pl. 6, Fig. B)

Distribution: DSA, Sovet Fm, RC4β2.

"*Clisiophyllum*" *omaliusi* HAIME, 1855
(Pl. 1, Fig. J)

Diagnosis: (based on SALÉE 1913), small "*Clisiophyllum*" (questionably *Acrophyllum* after HILL, 1938), with a mean diameter of 25 mm and having 45 major septa. Major septa long, extending usually to the axis and thickened in the tabularium. Minor septa long but never longer than the dissepimentarium width. Axial structure made of curved radial lamellae, usually attached to the axial ends of several major septa and disposed in spiral. Many axial tabulae in mature stages. No clear axial plate. Dissepimentarium narrow, made of simple interseptal and V-shaped dissepiments. Inner row of dissepiments usually thickened.
Distribution: ASA, Etroeungt Fm; VASA, Dolhain Fm, RC0.

"*Clisiophyllum*" aff. *omaliusi* HAIME, 1855
(Pl. 1, Fig. I)

Distribution: VASA, Dolhain Fm, RC0.

Genus *Neoclisiophyllum* WU, 1964

Type species: *Clisiophyllum yengtzeense* YOH, 1929.
Diagnosis: (after WU 1964), clisiophylloid solitary coral. Major septa thin in the dissepimentarium but thickened in the tabularium. Minor septa of various length. Axial structure clisiophylloid but more complex and nucleate. Cardinal fossula distinct.

Neoclisiophyllum aff. *ingletonense* (VAUGHAN, 1911)
(Pl. 8, Fig. C)

Distribution: VSA, Berneau Fm, RC7α.

Genus *Axoclisia* SEMENOFF-TIAN-CHANSKY, 1974

Type species: *Axoclisia cuspiforma* SEMENOFF-TIAN-CHANSKY, 1974.

Diagnosis: (after SEMENOFF-TIAN-CHANSKY 1974), Clisiophylloid solitary coral. Major septa usually thickened in the tabularium. Minor septa long and present as septal crests in the dissepimentarium. Axial structure made of a thick axial plate, some radial lamellae and axial tabulae. Axial plate connected to the cardinal and, in some cases, to the counter septum. Radial lamellae occasionally connected to the axial ends of the major septa. Dissepimentarium made of large simple and second order lonsdaleoid dissepiments. Axial tabulae upturned toward the axial plate. Periaxial tabulae domal and downturned toward the dissepimentarium.

Axoclisia cf. *cuspiforma* SEMENOFF-TIAN-CHANSKY, 1974
(Pl. 6, Fig. D)

Distribution: VSA, lower part of Visé Fm, RC4β2.

Axoclisia aff. *cuspiforma* SEMENOFF-TIAN-CHANSKY, 1974
(Pl. 8, Fig. H)

Distribution: VSA, Berneau Fm, RC7α.

Genus *Cravenia* HUDSON, 1928

Type species: *Cravenia rhytoides* HUDSON, 1928.
Diagnosis: (after HILL 1981), cerato-cylindrical solitary coral. Major septa straight or with slightly curved axial ends, rhopaloid in some cases. Minor septa half as long as the major septa or shorter. Base of the septa usually thick. Axial structure made of a thin axial plate, radial lamellae not connected to the septa and variously packed axial tabulae. Axial structure often surrounded by thickened edges of the tabulae. Axial plate often connected to the cardinal septum. Cardinal septum shorter and thicker than the others. Cardinal fossula well marked, on the convex side of the corallite. Dissepiments absent. Outer wall simple and thick. Tabulae arranged in three zones. Axial tabulae strongly upturn toward the axial structure. Intermediate tabulae domal and densely packed. Outer tabulae downturned toward the periphery.

Cravenia rhytoides HUDSON, 1928
(Pl. 4, Fig. I)

Diagnosis: (after HUDSON 1928), *Cravenia* maximum 25 mm in diameter and having 48 major septa. Major septa thick and rhopaloid. Minor septa short (1/3 of the major). Axial structure half as wide as the diameter of the corallite.
Distribution: CSA, Martinrive Fm, RC3γ; VSA, lower part of Visé Fm, RC4β2.

Cravenia sp. nov.
(Pl. 4, Fig. R)

Distribution: DSA, Sovet Fm, RC4β2; VSA, lower part of Visé Fm, RC4β2.

Subfamily Dibunophyllinae WANG, 1950

Genus *Dibunophyllum* THOMSON & NICHOLSON, 1876

Type species: *Clisiophyllum bipartitum* (MCCOY, 1849).
Diagnosis: (after SEMENOFF-TIAN-CHANSKY 1974), large solitary coral. Axial structure very well-developed, made of an axial plate inconspicuous in some cases, several radial lamellae disconnected from the axial plate, and axial tabulae. Diameter of the axial structure at least 1/3 of the diameter of the corallite. Major septa thickened in the tabularium, particularly in the cardinal quadrants. Minor septa short or absent. Cardinal septum shorter in a long and open fossula. Dissepimentarium large. Tabulae incomplete, axial tabulae upturned toward the axial plate, periaxial tabulae slightly downturned toward the dissepimentarium.

Dibunophyllum bipartitum (MCCOY, 1849)
(Pl. 11, Fig. F, Pl. 9, Fig. Q)

Diagnosis: (after POTY 1981), large *Dibunophyllum*, 32-40 mm in diameter and having 55-60 major septa. Axial structure symmetrical or in spiral with curved radial lamellae. Dissepimentarium large, made of V-shaped, herringbones and arched dissepiments.
Distribution: NSA, CSA, DSA, VASA, Thon-Samson Mbr and Anhée Fm (Chabôfosse Facies), RC7β; VSA, upper part of Visé Fm, RC7β.

Genus *Bounophyllum* CHWIEDUK, 2005

Type species: *Bounophyllum pomeranicum* CHWIEDUK, 2005.
Diagnosis: (after CHWIEDUK 2005), solitary coral. Axial structure irregular with no distinct axial plate, connected to cardinal and counter septa in juvenile stages. Major septa long, twisted axially, thickened in the tabularium. Minor septa long. Cardinal septum slightly shorter in the cardinal fossula. Dissepimentarium made of simple interseptal dissepiments. Tabulae incomplete, domal.

Bounophyllum praecursor (FRECH, 1885) (= *"Dibunophyllum" praecursor* (FRECH, 1885))
(Pl. 1, Fig. G)

Diagnosis: (based on FRECH 1885 and BERKOWSKI 2002), small cylindrical *Bounophyllum* with a mean diameter of 8.3 mm (maximum 12.8 mm) and having 29 major septa (maximum 33). Minor septa short. Axial structure large (1/3 of the diameter of the corallite) made of an axial plate and up to 10 irregular radial lamellae. Dissepimentarium narrow made of 1-2 rows of simple interseptal dissepiments and rare lonsdaleoid dissepiments. Tabulae complete or not, strongly upturned toward the axis.
Distribution: VASA, Dolhain Fm, RC0.

Genus *Arachnolasma* GRABAU, 1922

Type species: *Lophophyllum sinense* YABE & HAYASAKA, 1920
Diagnosis: (after SEMENOFF-TIAN-CHANSKY 1974), solitary coral. Septa of two orders. Axial structure narrow (1/5 of the radius) made of a thick axial plate and few radial lamellae. Dissepimentarium usually wide. Axial tabulae upturned toward the axis.

Arachnolasma sp.
(Pl. 8, Fig. B)

Distribution: VSA, Berneau Fm, RC7α.

Arachnolasma ? sp.
(Pl. 8, Fig. 1)

Distribution: VSA, Berneau Fm, RC6-RC7α.

Genus *Aulophyllum* MILNE-EDWARDS & HAIME, 1850

Type species: *Clisiophyllum prolapsum* MCCOY, 1849.
Diagnosis: (after POTY 1981), sub-cylindrical solitary coral with a complex axial structure. Major septa long but not connected to the axial structure, often thickened in the cardinal parts of the tabularium. Minor septa half as long as the major septa. Cardinal septum slightly shorter, except in juvenile stages. Axial structure dense, forming a well-defined column with a circular shape and cuspidate toward the cardinal fossula, made of densely packed radial lamellae and axial tabulae with no median plate. Cardinal fossula in the convex side of the corallite. Dissepimentarium wide, made of small simple dissepiments. Tabulae incomplete and depressed in the outer part of the tabularium. Axial tabulae densely packed, downturned toward the axis and toward the outer part of the axial column.

Aulophyllum fungites (FLEMING, 1828)
(Pl. 11, Fig. J)

Diagnosis: same as the genus.
Distribution: NSA, CSA, Anhée Fm (Chabôfosse Facies), RC7-RC8.

Genus *Koninckophyllum* THOMSON & NICHOLSON, 1876

Type species: *Koninckophyllum magnificum* THOMSON & NICHOLSON, 1876.
Diagnosis: (after HILL 1939), large solitary coral with numerous septa. Major septa long but withdrawn from the axis, often thickened in the outer part of the tabularium, particularly in the cardinal quadrants. Minor septa long, often discontinuous in the dissepimentarium. In juvenile stages, clisiophylloid axial structure connected to the counter septum. In mature stages, axial structure reduced to a simple columella supported by conical tabulae, absent in some cases. Cardinal fossula indenting the dissepimentarium.

Dissepimentarium wide, made of simple, V-shaped, herringbones and arched dissepiments, often with second order lonsdaleoid dissepiments. Tabulae complete or not, conical or tent-shaped.

Koninckophyllum interruptum THOMSON & NICHOLSON, 1876
(Pl. 11, Fig. C)

Diagnosis: (after HILL 1939), *Koninckophyllum* often diphymorphic and with few lonsdaleoid dissepiments
Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β.

Koninckophyllum magnificum THOMSON & NICHOLSON, 1876
(Pl. 11, Fig. D)

Diagnosis: (after HILL 1939), *Koninckophyllum* with short radial lamellae, commonly withdrawn. Dissepimentarium very wide, made of small interseptal, concentric and V-shaped dissepiments.
Distribution: DSA, Anhée Fm (Chabôfosse Facies), RC7β.

Koninckophyllum cf. *variabile* SEMENOFF-TIAN-CHANSKY, 1974
(Pl. 8, Fig. K)

Distribution: VSA, upper part of Visé Fm, RC7β.

Koninckophyllum sp.
(Pl. 7, Fig. K)

Distribution: VSA, Berneau Fm, RC6.

Subfamily Amygdalophyllinae GRABAU *in* CHI, 1935
Genus *Amygdalophyllum* DUN & BENSON, 1920

Type species: *Amygdalophyllum etheridgei* DUN & BENSON, 1920.
Diagnosis: (after SEMENOFF-TIAN-CHANSKY), solitary coral with an axial structure. Major septa usually long and connected to the axial structure, commonly thickened and carinated. Minor septa half as long as the major septa, carinated or contratingent in some cases. Cardinal septum slightly shorter. Cardinal fossula variabily developed. Axial structure made of a strong thickened axial plate, many radial lamellae, connected to the axial ends of the major septa, and upturned tabulae. In some cases, axial structure reduced to some radial lamellae and tabulae. Dissepimentarium usually wide, made of simple interseptal and V-shaped dissepiments. In rare cases, some lonsdaleoid dissepiments of both order are present. Inner row of dissepiments usually thickened. Outer wall simple and thin.

Amygdalophyllum praecursor (HOWELL, 1938)
(Pl. 5, Fig. K)

Diagnosis: (after HOWEL 1938), *Amygdalophyllum* maximum 29 mm in diameter and having 54 major septa. Major septa slightly carinated. Cardinal fossula inconspicuous. Minor septa long, reaching the tabularium, often contratingent and carinated. Axial structure variably developed, from a simple weak columella to a complex structure involving radial lamellae and upturned tabulae, thickened or not. Dissepimentarium wide, made of simple interseptal and first order lonsdaleoid dissepiments. Axial tabulae numerous, divided and upturned toward the axial structure. Periaxial tabulae depressed, forming a gutter in the peripheral part of the tabularium but upturned toward the axial tabulae. Dissepiments small and inclined toward the tabularium.
Distribution: VSA, lower part of Visé Fm, RC4β1.

Amygdalophyllum sudeticum ZOLYNSKI, 2000
(Pl. 5, Fig. I)

Diagnosis: (after ZOLYNSKI 2000), *Amygdalophyllum* maximum 25 mm in diameter and having 40 major septa. Minor septa contratingent and often thicker than the majors. Axial structure thick and oval in transverse section, elongated toward the cardinal septum. Dissepimentarium narrow, made of simple interseptal dissepiments. Tabulae slightly divided, flat in periphery and upturned toward the axis.
Distribution: ASA, Godin Fm; CSA, Avins Mbr; VSA, lower part of Visé Fm, RC4β1.

Amygdalophyllym? cf. *vesiculosum* (GARWOOD, 1913)
(Pl. 5, Fig. H)

Distribution: VSA, lower part of Visé Fm, RC4β1.

Amygdalophyllum aff. *etheridgei* DUN & BENSON, 1920
(Pl. 8, Fig. E)

Distribution: VSA, Berneau Fm, RC7α.

Amygdalophyllum sp. nov. A
(Pl. 5, Fig. P)

Distribution: DSA, Sovet Fm, RC4β2.

Amygdalophyllum sp. nov. B
(Pl. 5, Fig. G)

Distribution: VSA, lower and middle part of Visé Fm, RC4β1-RC5.

***Amygdalophyllum* sp. nov. C**
(Pl. 5, Fig. N)

Distribution: VSA, lower part of Visé Fm, RC4β2.

***Amygdalophyllum* sp. D**
(Pl. 7, Fig. J)

Distribution: VSA, Berneau Fm, upper part of Visé Fm, RC6-RC7β.

***Amygdalophyllum* sp. E**
(Pl. 7, Fig. H)

Distribution: VSA, Berneau Fm, RC6.

"*Amygdalophyllum*" ? sp.
(Pl. 1, Fig. K)

Distribution: VASA, Dolhain Fm, RC0.

Genus *Eostrotion* VAUGHAN, 1915

Type species: *Cyathaxonia tortuosa* MICHELIN, 1847.
Diagnosis: (after HILL 1981), ceratoid solitary coral. Major septa long and thin in juvenile stages, withdrawn from the axis in mature stages. Cardinal septum long. Minor septa short. Columella long in juvenile stages, shorter in mature stages but connected with the cardinal septum. Cardinal fossula open. Dissepimentarium narrow. Tabulae conical, downturned toward the dissepimentarium.

***Eostrotion tortuosum* (MICHELIN, 1847)**
(Pl. 2, Fig. E)

Diagnosis: (after CHWIEDUK 2005), *Eostrotion*, up to 40 mm long and maximum 22 mm in diameter for 23-26 major septa. Septa often slightly thickened at the base. Columella protruding from the base of the calice.
Distribution: DSA, CSA, ASA, Landelies, Maurenne and Yvoir Fm, RC2-RC3α; HSA, Pont-à-Rieu Mbr, RC3β.

***Eostrotion* sp.**
(Pl. 2, Fig. D)

Distribution: DSA, CSA, Landelies Fm, RC2.

Genus *Cyathoclisia* DINGWALL, 1926

Type species: *Cyathoclisia tabernaculum* DINGWALL, 1926.
Diagnosis: (after POTY 1981), ceratoid, cylindrical or trochoid solitary coral. Major septa thickened in the cardinal quadrant of the tabularium. Minor septa as long as the dissepimentarium width, contratingent in some cases. Axial structure large, made of a thickened axial plate, numerous radial lamellae and axial tabulae. Cardinal fossula well-developed, with a short cardinal septum. Radial lamellae connected to the axial ends of the major septa, commonly arranged in spiral. Dissepimentarium narrow, made of simple interseptal, V-shaped and second order lonsdaleoid dissepiments. Base of the septa dissected near the lonsdaleoid dissepiments. Axial tabulae upturned toward the axial structure and densely packed. Periaxial tabulae downturned toward the dissepimentarium and more spaced.

***Cyathoclisia modavensis* (SALÉE, 1913)**
(Pl. 4, Fig. L)

Diagnosis: (after POTY 1981), medium-sized trochoid or cylindrical *Cyathoclisia*, sometimes very large. Minor septa extending to the tabularium. Cardinal septum long and irregular. Axial plate short and thick. Dissepimentarium absent in the juvenile stages and short (<1/4 of the radius) in mature stages. Dissepiments strongly inclined in longitudinal section.
Distribution: DSA, NSA, CSA, Flémalle Mbr, RC4α; ASA, Godin Fm, RC4α.

***Cyathoclisia* cf. *soshkinae* SAYUTINA, 1973**
(Pl. 2, Fig. H)

Distribution: CSA, Yvoir Fm, RC3α.

Genus *Rylstonia* HUDSON & PLATT, 1927

Type species: *Rylstonia benecompacta* HUDSON & PLATT, 1927.
Diagnosis: (after HILL 1981), ceratoid or cylindrical solitary coral. Major septa thickened in the whole corallite in juvenile stages. Major septa thickened in the cardinal quadrants of the tabularium in mature stage. Minor septa short or not developed. Axial structure made of an axial plate connected to (nearly) all major septa, several radial lamellae and tabulae. Cardinal fossula well marked, with a short and thin cardinal septum. Dissepimentarium narrow, made of simple and rare herringbones and lonsdaleoid dissepiments. Outer wall simple or festooned. Tabulae almost complete, downturn toward the periphery.

***Rylstonia benecompacta* HUDSON & PLATT, 1927**
(Pl. 5, Fig. E)

Diagnosis: (after HUDSON & PLATT 1927), *Rylstonia* maximum 17 mm in diameter and having 28 major septa. Axial structure connected to the cardinal and counter septa. Radial lamellae mostly connected to the axial ends of the major septa. Tabulae depressed in periphery, forming a gutter.
Distribution: VSA, lower and midlle parts of Visé Fm, RC4β1-RC5.

***Rylstonia* aff. *benecompacta* HUDSON & PLATT, 1927**
(Pl. 5, Fig. E)

Distribution: VSA, lower part of Visé Fm, RC4β1.

***Rylstonia* cf. *benecompacta* HUDSON & PLATT, 1927**
(Pl. 11, Fig. L)

Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β.

***Rylstonia* cf. *laxocolumnata* SEMENOFF-TIAN-CHANSKY, 1974**
(Pl. 5, Fig. D)

Distribution: VSA, lower part of Visé Fm, RC4β1.

Genus *Guadatia* GOMEZ-HERGUEDAS & RODRIGUEZ, 2005

Type species: *Guadatia pseudocoloniale* GOMEZ-HERGUEDAS & RODRIGUEZ, 2005.
Diagnosis: (after GOMEZ-HERGUEDAS & RODRIGUEZ 2005), pseudocolonial or protocolonial coral with peripheral parricidal increase. Septa long and thin. Axial structure made of an axial plate, numerous irregular radial lamellae and axial tabulae. Dissepimentarium made of simple interseptal, V-shaped and arched dissepiments. Outer wall usually thin. Tabulae incomplete, bell-shaped, upturned toward the axis.

***Guadatia* sp.**
(Pl. 11, Fig. L-M)

Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC8.

Family Kizillidae DEGTJAREV, 1965
Genus *Kizillia* DEGTJAREV, 1965

Type species: *Kizilia concavitabulata* DEGTJAREV, 1965.
Diagnosis: (after POTY 1981), small-sized ceratoid to cylindrical coral having a clear bilateral symmetry. Major septa straight, or weakly sinuous, unequal in length. Minor septa short (< 1/5 of the radius). Cardinal and counter septa shorter. Dissepiments simple, inner row of the dissepimentarium thickened. Tabulae complete or not, convex and cone-shaped, strongly depressed to vertical. Outer wall generally thickened, festooned in some cases.

***Kizilia concavitabulata* DEGTJAREV, 1965**
(Pl. 12, Fig. A)

Diagnosis: (after DEGTJAREV 1965), small *Kizilia*, 10 mm in diameter and having 16 major septa. Minor septa short. Cardinal and counter septa poorly developed. Dissepimentarium made of simple interseptal and occasional lonsdaleoid dissepiments. Tabulae cone-shaped, divided. Outer wall thick and festooned.
Distribution: VSA, upper part of Visé Fm, Berneau Fm, RC6-RC7β.

***Kizilia gregaria* (POTY, 1981)**
(Pl. 12, Fig. B)

Diagnosis: (after POTY 1981), small *Kizilia* with a mean diameter of 25 mm and 24 major septa. Minor septa half to third as long as major septa. Dissepimentarium wide (1/4 to 1/2 of the radius), made of large lonsadaleoid dissepiments.
Distribution: VSA, upper part of Visé Fm, RC7β.

***Kizilia kremersi* (POTY, 1982)**
(Pl. 1, Fig. L)

Diagnosis: (after POTY 1982), *Kizilia* 27 mm in diameter and having 36 major septa. Major septa long and thickened in the tabularium. Minor septa shorter than the dissepimentarium width. Minor and major septa discontinuous and dissected in peripheral part of the dissepimentarium. Dissepimentarium made of large lonsadaleoid dissepiments and small simple and V-shaped interseptal dissepiments. Tabulae cone-shaped, strongly depressed axially.
Distribution: CSA, DSA, VASA, lower part of Hastière Fm, RC1α.

***Kizilia* sp. nov.**
(Pl. 9, Fig. K)

Distribution: VSA Berneau Fm, upper part of Visé Fm, RC6-RC7α.

Suborder Lonsdaleiina SPASSKIY, 1974
Family Axophyllidae MILNE-EDWARDS & HAIME, 1851
Subfamily Axophyllinae MILNE-EDWARDS & HAIME, 1851
Genus *Axophyllum* MILNE-EDWARDS & HAIME, 1850

Type species: *Axophyllum expansum* MILNE-EDWARDS & HAIME, 1850.
Diagnosis: (after POTY 1981), solitary coral with two order of septa usually interrupted by lonsdaleoid dissepiments. Axial structure made of a strong axial plate, thick irregular and braided radial lamellae and upturned edges of tabulae. Fossula inconspicuous or absent. Dissepiments long in longitudinal section. Axial tabulae upturned toward the axis. Periaxial tabulae horizontal or upturned toward the axis. Outer wall usually festooned.

***Axophyllum densum* (RYDER, 1930)**
(Pl. 9, Fig. E)

Diagnosis: (after POTY 1981), small trochoid to ceratoid *Axophyllum*, 8.2 mm (maximum 15 mm) in diameter and having 25 major septa (maximum 34). Axial structure connected to the counter septum. Dissepimentarium present in mature

stages, made of few simple and lonsdaleoid dissepiments. Outer wall and dissepiments strongly thickened.
Distribution: DSA, Anhée Fm (Chabôfosse Facies), RC7β; VSA, Berneau Fm and upper part of Visé Fm, RC7.

Axophyllum expansum MILNE-EDWARDS & HAIME, 1850
(Pl. 9, Fig. G)

Diagnosis: (after POTY 1981), *Axophyllum* 11 mm in diameter and having 32 major septa. Major septa withdrawn from the axial structure. Minor septa short. Dissepimentarium wide, made of simple interseptal, first and second order lonsdaleoid dissepiments. Inner row of dissepiments strongly thickened.
Distribution: VSA, upper part of Visé Fm, RC7β.

Axophyllum lonsdaleiforme (SALEE, 1913)
(Pl. 9, Fig. F, V)

Diagnosis: (after POTY 1981) *Axophyllum* 13 mm (maximum 18.5 mm) in diameter and having 32 (maximum 41) major septa. Minor septa short or poorly developed. Major septa usually restricted to septal crests. Inner edge of the dissepimentarium strongly thickened.
Distribution: VSA, upper part of Visé Fm, RC7β.

Axophyllum mendipense (SIBLY, 1906)
(Pl. 6, Fig. F)

Diagnosis: (after POTY 1981), trochoid to ceratoid then cylindrical *Axophyllum*, 12.7 mm (maximum 20 mm) in diameter and having 28 major septa (maximum 35). Dissepimentarium narrow. All elements strongly thickened, particularly the outer wall and the inner edge of the dissepimentarium.
Distribution: DSA, CSA, NSA, Neffe Fm, RC5α.

Axophyllum nanum POTY, 1981
(Pl. 7, Fig. C)

Diagnosis: (after POTY 1981), small *Axophyllum,* 7.8 mm (maximum 12 mm) in diameter and having 22-27 major septa. Major septa withdrawn from the axial structure. Minor septa short or not developed. Dissepimentarium very narrow or absent, made of lonsdaleoid dissepiments and rare simple interseptal dissepiments.
Distribution: DSA, CSA, NSA, Lives Fm and Seilles Mbr, RC5γ-RC6; DSA, Anhée Fm (Chabôfosse Facies), RC7β.

Axophyllum pseudokirsopianum SEMENOFF-TIAN-CHANSKY, 1974
(Pl. 9, Fig. D)

Diagnosis: (after POTY 1981), large *Axophyllum*, 24 mm (maximum 31) diameter and having 41 (maximum 50) major septa. Major septa thinner in the tabularium. Minor septa long, entering the tabularium. Axial structure large (1/3 of the radius), dense and irregularly thickened. Radial lamellae numerous, straight, curved and arranged in spiral.
Distribution: VSA, upper part of Visé Fm, RC7β.

Axophyllum simplex (GARWOOD, 1913)
(Pl. 6, Fig. C)

Diagnosis: (after GARWOOD 1913), *Axophyllum,* 12 mm (maximum 17) in diameter and having 29 major septa. Minor septa short but reaching the inner edge of the dissepimentarium. Fossulae inconspicuous. Axial structure made of a thick axial plate connected to the cardinal septum, surrounded by several thickened radial lamellae not connected to the septa, and axial tabulae. Dissepimentarium present only in mature stages, made of simple interseptal and first order lonsdaleoid dissepiments. Axial tabulae small, dissected by the radial lamellae of the axial structure. Periaxial tabulae irregular and vesiculous. Outer wall thick and festooned.
Distribution: VSA, lower part of Visé Fm, RC4β2.

Axophyllum vaughani (SALÉE, 1913)
(Pl. 7, Fig. B)

Diagnosis: (after POTY 1981), trochoid to ceratoid then cylindrical *Axophyllum* 13.5 mm (maximum 16.5 mm) in diameter and having 28 major septa (maximum 36). Minor septa short, absent in some cases. Large axial structure, regular or in spiral, half to third as wide as tabularium width. Dissepimentarium wide made of large lonsdaleoid dissepiments.
Distribution: CSA, NSA, Lives Fm and Seilles Mbr, RC5γ-RC6.

Axophyllum aff. *kirsopianum* (THOMSON, 1880)
(Pl. 8, Fig. D)

Distribution: VSA, Berneau Fm, upper part of Visé Fm, RC7α-β.

Axophyllum sp. A
(Pl. 11, Fig. E)

Distribution: CSA, Anhée Fm (Chabôfosse facies), RC7β.

***Axophyllum* sp. B**
(Pl. 7, Fig. A)

Distribution: NSA, Awirs Mbr, RC6.

Genus *Gangamophyllum* GORSKY, 1938

Type species: *Gangamophyllum boreale* GORSKY, 1938.
Diagnosis: (after SEMENOFF-TIAN-CHANSKY 1974), conical solitary coral. Large and complex axial structure with no axial plate but numerous thick curved lamellae and axial tabulae. Axial structure less dense in the central part than in the periphery. Axial structure forming a domal column in longitudinal section. Dissepimentarium made of large dissepiments, occasionally lonsdaleoid. Dissepimentarium much narrow in mature stages. Dissepiments large and strongly downturn toward the axial zone in longitudinal section. Periaxial tabulae depressed and downturned toward the axial zone.

***Gangamophyllum densitabulatum* POTY, 1981**
(Pl. 9, Fig. A)

Diagnosis: (after POTY 1981), *Gangamophyllum* 30 mm in diameter and having 43 major septa. Major septa extending to the axial structure. Minor septa short (< 1/5 of the major septa). Septa interrupted by lonsdaleoid dissepiments. Axial structure occupying 1/3 of the diameter of the corallite. Dissepimentarium wide (1/3 of the diameter), made of simple interseptal, V-shaped, herringbones and lonsdaleoid dissepiments of both order.
Distribution: VSA, upper part Visé Fm, RC7β.

Genus *Pareynia* SEMENOFF-TIAN-CHANSKY, 1974

Type species: *Pareynia splendens* SEMENOFF-TIAN-CHANSKY, 1974.
Diagnosis: (after SEMENOFF-TIAN-CHANSKY 1974), large solitary coral or with limited increase. Axial structure axophylloid, large. Dissepimentarium wide, made of numerous simple and large lonsdaleoid dissepiments. In longitudinal section, lonsdaleoid dissepiments subhoritontal, simple interseptal dissepiments strongly declined. Outer wall thin. Periaxial tabulae upturedn toward the axial zone.

***Pareynia splendens* SEMENOFF-TIAN-CHANSKY, 1974**
(Pl. 12, Fig. E)

Diagnosis: (after SEMENOFF-TIAN-CHANSKY 1974), large *Pareynia* up to 70 mm in diameter. Minor septa short. Dissepimentarium half as wide as the diameter. Outer wall usually absent. Lateral increase common.
Distribution: VAS, upper part Visé Fm, RC7β.

cf. *Pareynia splendens* SEMENOFF-TIAN-CHANSKY, 1974
(Pl. 12, Fig. C)

Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β.

Subfamily Lonsdaleiinae DE FROMENTEL, 1861
Genus *Lonsdaleia* MCCOY, 1849

Type species: *Erismatolithus Madreporites* (*duplicatus*) MARTIN, 1809 = *Lonsdaleia duplicata* (MARTIN, 1809).
Diagnosis: (after POTY & HECKER 2002), fasciculate, sub-cerioid or cerioid colonial coral. Minor septa variously developed. Axial structure more or less complex, made of a medial plate connected to the cardinal and/or the counter septum, radial lamellae and axial tabulae. Axial structure sporadically reduced or absent. Cardinal fossula indistinct. Dissepimentarium dominated by lonsdaleoid dissepiments. Periaxial tabellae incomplete, slightly concave or sub-horizontal. Increase lateral non-parricidal.

Subgenus *Lonsdaleia* MCCOY, 1849

Type species: same as the genus.
Diagnosis: (after POTY & HECKER 2002), fasciculate or rarely cerioid *Lonsdaleia*. Medial plate usually connected to the cardinal septum. Cardinal fossula indistinct.

***Lonsdaleia* (*Lonsdaleia*) *duplicata* (MARTIN, 1809)**
(Pl. 12, Fig. I)

Diagnosis: (after POTY 1981), *Lonsdaleia* 11 mm in diameter and having 27 major septa. Minor septa absent or poorly developed. Dissepimentarium made of simple interseptal (the inner row is usually thickened) and first order lonsdaleoid dissepiments. Axial tabulae domal with subvertical edges. Periaxial tabulae subhorizontal or depressed.
Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC8.

Subgenus *Actinocyathus* D'ORBIGNY, 1849

Type species: *Erismatolithus Madreporites* (*floriformis*) MARTIN, 1809 = *Lonsdaleia floriformis* (MARTIN, 1809).
Diagnosis: (after POTY & HECKER 2002), cerioid or subcerioid, rarely fasciculate *Lonsdaleia*. Cardinal fossula indistinct or small. Dissepimentarium usually wide. Periaxial tabulae complete, seldom divided.

***Lonsdaleia* (*Actinocyathus*) *floriformis floriformis* (MARTIN, 1809)**
(Pl. 12, Fig. K)

Diagnosis: (after POTY 1981), cerioid *Actinocyathus,* 15 mm in diameter and having 25 major septa. Minor septa forming septal crests on the dissepiments.
Distribution: VSA, Souvré Fm, RC8.

***Lonsdaleia* sp. nov.**
(Pl. 12, Fig. J)

Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC8.

Family Aphrophyllidae HILL, 1973
Genus *Merlewoodia* PICKETT, 1967

Type species: *Merlewoodia bensoni* PICKETT, 1967.
Diagnosis: (after HILL 1981), solitary coral with numerous thickened major septa. Septa curved toward the cardinal fossulae in the cardinal quadrants and toward the counter fossulae in the counter quadrants. Counter and cardinal septa usually shorter. Minor septa of various length. Dissepimentarium wide, made of numerous simple interseptal, V-shaped, naotic lonsdaleoid dissepiments. Inner row of dissepiments commonly thickened. Tabulae complete, depressed in the central part and downturned toward the periphery.

***Merlewoodia avesnensis* (DELEPINE, 1929)**
(Pl. 5, Fig. F, M)

Diagnosis: (based on DELÉPINE 1929), ceratoid to cylindrical *Merlewoodia,* maximum 68 mm in diameter. Major septa strongly thickened and extending to the axis. Minor septa half as long as the major septa. Cardinal and counter fossula well-developed. Dissepiment wide, made of simple interseptal, V-shaped, second order lonsadaleoid and naotic dissepiments. Dissepiments long and narrow in longitudinal section.
Distribution: ASA, Godin Fm, RC4β1; CSA, Avins Mbr, RC4β1.

***Merlewoodia* sp. nov. A**
(Pl. 5, Fig. S)

Distribution: VSA, lower part of Visé Fm, RC4β1.

***Merlewoodia* sp. nov. B**
(Pl. 5, Fig. T)

Distribution: VSA, lower part of Visé Fm, RC4β1; ASA, Godin Fm, RC4β1.

***Merlewoodia* sp. nov. C**
(Pl. 5, Fig. R)

Distribution: VSA, lower part of Visé Fm, RC4β1; CSA, Avins Mbr, RC4β1.

***Merlewoodia* sp. D**
(Pl. 9, Fig. J)

Distribution: VSA, upper part of Visé Fm, RC7β.

***Merlewoodia* sp. E**
(Pl. 8, Fig. L)

Distribution: VSA, Berneau Fm, RC7β-RC8.

Family Lithostrotionidae D'ORBIGNY, 1851
Subfamily Lithostrotioninae D'ORBIGNY, 1852
Genus *Siphonodendron* MCCOY, 1849

Type species: *Siphonodendron pauciradiale* (MCCOY, 1844).
Diagnosis: (after POTY 1981), fasciculate colonial coral. Major septa of various length, reaching commonly the axis. Minor septa half as long as the dissepimentarium width. Axial structure made of a lath-like columella usually connected to the counter septum and commonly to several other major septa. Dissepimentarium usually wide, made of small simple dissepiments, but reduced or absent in species of small diameter. Cardinal fossula small and opened. Tabulae often complete cone-shaped, upturn toward the columella and downturn toward the dissepimentarium. Outer wall thin, straight, undulating or festooned. Increase lateral and non-parricidal.

***Siphonodendron intermedium* POTY, 1981**
(Pl. 10, Fig. E)

Diagnosis: (after POTY 1981), phaceloid colonies. Corallites mean diameter 5.2 to 6.2 mm for 21-24 major septa (maximum 26). Minor septa, half of the major in length. Usually 2 rows of dissepiments.
Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β; VSA, upper part of Visé Fm, RC7β.

***Siphonodendron irregulare* (PHILLIPS, 1836)**
(Pl. 7, Fig. N)

Diagnosis: (after POTY 1981), dendroid to phaceloid colonies. Corallites mean diameter 4.5 mm for 21-23 major septa (maximum 26). Usually 1 row of dissepiments, but commonly up to 4.
Distribution: NSA, CSA, Lives Fm, Seilles and Bay-Bonnet Mbr, RC5-RC6; VSA, Visé Fm, RC6.

***Siphonodendron junceum* (FLEMING, 1828)**
(Pl. 10, Fig. G)

Diagnosis: (after POTY 1981), dendroid to phaceloid colonies. Small corallites, 2.3-3 mm in diameter and having 14-18 major septa (maximum 20). Dissepiments absent.
Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β; VSA, upper part of Visé Fm, RC7β.

***Siphonodendron kleffense* (SCHINDEWOLF, 1927)**
(Pl. 8, Fig. O-P)

Diagnosis: (based on SCHINDEWOLF 1927), dendroid or sub-cerioid colonies. Large corallites 7-9,5 mm in diameter (4-8 mm for the tabularium diameter) having 28-32 major septa. Septa long, sinuous in the dissepimentarium, straight in the tabularium, usually connected to the columella. Up

to 4 rows of simple dissepiments. Inner row of dissepiments thickened. Tabulae incomplete. Axial tabulae upturned toward the axis, other tabulae flat or slightly depressed toward the dissepimentarium.
Distribution: VSA, Berneau Fm, upper part of Visé Fm, RC7α-RC7β.

Siphonodendron martini (MILNE-EDWARDS & HAIME, 1851)

(Pl. 6, Fig. K)

Diagnosis: (after POTY 1981), fasciculate *Siphonodendron* with corallites 6 to 10 mm in diameter and having 23 to 25 major septa (maximum 28). 2 to 4 rows of small regular dissepiments. Acolumellate (diphyphymorph) corallites common.
Distribution: DSA, NSA, ASA, CSA, VASA, from Lives to Anhée Fm, RC5α to RC8; VSA, Visé Fm, RC5-RC8.

Siphonodendron ondulosum POTY, 1981

(Pl. 6, Fig. J)

Diagnosis: (after POTY 1981), dendroid, phacelloid or sub-cerioid *Siphonodendron* with corallites 8 to 9 mm in diameter and having 25 to 28 major septa (maximum 33). 2 to 6 rows of regular dissepiments, the inner row often thickened and appearing as an inner wall. Tabulae conical and incomplete. Outer wall particularly undulating.
Distribution: DSA, NSA, ASA, CSA, Neffe Fm, RC5α.

Siphonodendron pauciradiale (MCCOY, 1844)

(Pl. 10, Fig. F)

Diagnosis: (after POTY 1981), dendroid to phaceloid colonies. Corallites mean diameter 4 mm for 18-20 major septa (maximum 22). 1-2 rows of dissepiments, rarely up to 4.
Distribution: NSA, CSA, from Thon-Samson Mbr to Anhée Fm, RC7β; VSA, upper part of Visé Fm, RC7β.

Siphonodendron scaleberense NUDDS & SOMERVILLE, 1987

(Pl. 8, Fig. N)

Diagnosis: (after NUDDS & SOMERVILLE 1987), large corallites 13-20 mm in diameter (10-14 mm for the tabularium diameter) and having 30-41 major septa and at least 2 rows of dissepiments.
Distribution: CSA, Thon-Samson Mbr and Anhée Fm (Chabôfosse Facies), RC7α-RC7β; VSA, upper part of Visé Fm, RC7β.

Siphonodendron sociale (PHILLIPS, 1836)

(Pl. 7, Fig. O)

Diagnosis: (after POTY 1981), dendroid *Siphonodendron* with large corallites, 9-11 mm in diameter for 28-31 major septa (maximum 34). Minor septa extending to the dissepimentarium width but shorter in some colonies. Tabulae conical and incomplete.
Distribution: DSA, NSA, ASA, CSA, Lives Fm, RC6.

Genus *Lithostrotion* FLEMING, 1828

Type species: *Lithostrotion striatum* FLEMING, 1828 = *Lithostrotion vorticale* (PARKINSON, 1808).
Diagnosis: (after POTY 1981), cerioid colonial coral. Major septa long, extending to the axis and commonly connected to the columella. Minor septa extending to the inner edge of the dissepimentarium or slightly entering the tabularium. Columella lath-like, connected to the counter septa. Dissepimentarium of various width, made of simple interseptal dissepiments and occasional lonsdaleoid dissepiments. Tabulae incomplete. Axial tabulae conical and peripheral tabulae horizontal or declined toward the dissepimentarium. Increase lateral and non-parricidal.

Lithostrotion araneum (MCCOY, 1844)

(Pl. 7, Fig. M)

Diagnosis: (after POTY 1981), large *Lithostrotion*, maximum 5,3 mm in tabularium diameter and having 30 major septa. Minor septa usually short. Dissepimentarium wide, made of numerous rows of simple interseptal, V-shaped, herringbones dissepiments and occasional lonsdaleoid dissepiments.
Distribution: NSA, CSA, VASA, base of the Corphalie Mbr, RC6; VSA, Berneau Fm, RC7α.

Lithostrotion vorticale (PARKINSON, 1808)

(Pl. 8, Fig. J)

Diagnosis: (after POTY 1981), medium-sized *Lithostrotion* maximum 4,1 mm in tabularium diameter and having maximum 24 major septa.
Distribution: CSA, Bay-Bonnet Mbr to Anhée Fm, RC6-RC7β; VSA, Visé Fm, RC7α.

Lithostrotion decipiens (MCCOY, 1849)

(Pl. 10, Fig. H)

Diagnosis: (after POTY 1981), medium-sized *Lithostrotion* maximum 3 mm in tabularium diameter and having maximum 18 major septa.
Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β; VSA, upper part of Visé Fm, RC7 β.

***Lithostrotion maccoyannum* MILNE-EDWARDS & HAIME, 1851**
(Pl. 10, Fig. I)

Diagnosis: (after POTY 1981), small *Lithostrotion* maximum 2 mm in tabularium diameter and having maximum 14 major septa.
Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β-RC8; VSA, upper part of the Visé Fm, RC7 β-RC8.

Genus *Diphyphyllum* LONSDALE, 1849

Type species: *Diphyphyllum concinnum* LONSDALE, 1849.
Diagnosis: (after POTY 1981), phaceloid colonial coral. Major septa short. Minor septa as long as the dissepimentarium or shorter. Columella absent. Dissepimentarium made of small simple dissepiments. Cardinal fossula small and opened. Tabulae incomplete, axial tabulae horizontal with downturned edges, periaxial tabulae horizontal or slightly downturned toward the dissepimentarium. Increase peripheral and parricidal.

***Diphyphyllum furcatum* HILL, 1940**
(Pl. 10, Fig. C)

Diagnosis: (after POTY 1981), corallites 6.2-6.9 mm in diameter and having 23-25 major septa (maximum 31). 2-4 rows of dissepiments.
Distribution: DSA, CSA, Anhée Fm (Chabôfosse Facies), RC7β-RC8; VSA, upper part of Visé Fm, RC7 β.

***Diphyphyllum fasciculatum* FLEMING, 1828**
(Pl. 10, Fig. D)

Diagnosis: (after POTY 1981), corallites 4.6 mm in diameter and having 21 major septa (maximum 30). 2-4 rows of dissepiments.
Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β.

***Diphyphyllum lateseptatum* MCCOY, 1849**
(Pl. 10, Fig. B)

Diagnosis: (after POTY 1981), large corallites, 7.2-9.1 mm in diameter and having 24-30 major septa (maximum 38). 2-4 rows of dissepiments.
Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β-RC8; VSA, upper part of Visé Fm, RC7β.

***Diphyphyllum maximum* POTY, 1981**
(Pl. 10, Fig. A)

Diagnosis: (after POTY 1981), large corallites 10.2 mm in diameter (maximum 20 mm) and having 31 major septa (maximum 45). 2-5 rows of dissepiments.
Distribution: CSA, Anhée Fm (Chabôfosse Facies), RC7β.

Subfamily Heterostrotioninae POTY & XU, 1996
Genus *Heterostrotion* POTY & XU, 1996

Type species: *Diphyphyllum*? *vesicotabulata* YÜ, 1934.
Diagnosis: (after POTY & XU 1996), fasciculate colonial coral with "heterocorallia-like" pattern of septa. Major septa long, pinnately connected at the axis where it form a weak axial structure, occasionally withdrawn and forming an aulos. Axial ends of the septa often thickened. Minor septa usually present. Cardinal and counter septum not distinguishable from the other septa. Septa usually carinated. Dissepimentarium made of simple dissepiments. Tabulae domal to conical, more or less incomplete. Increase parricidal or non-parricidal and lateral.

***Heterostrotion* sp.**
(Pl. 4, Fig. B)

Distribution: ASA, Grives Fm, RC3α.

Genus *Solenodendron* SANDO, 1976

Type species: *Aulina horsfieldi* SMITH & YÜ, 1943.
Diagnosis: (after POTY 1981), fasciculate colonial coral. Aulos made of the axial ends of the major septa and edges of the axial tabulae. Dissepimentarium made of small simple dissepiments. Minor and major septa often carinated. Tabulae incomplete, axial tabulae horizontal with downturn edges, periaxial tabulae horizontal or slightly dowturn toward the dissepimentarium. Increase parricidal, lateral or axial.

***Solenodendron furcatum* (SMITH, 1925)**
(Pl. 9, Fig. B)

Diagnosis: (after POTY 1981), phaceloid colonies. Corallites 3.8 mm in diameter and having 20 major septa (maximum 24). Diameter of the aulos approximately half of the diameter of the corallite. Increase axial with four daughter corallites.
Distribution: VSA, upper part of Visé Fm, RC7β.

***Solenodendron* sp. nov.**
(Pl. 4, Fig. A)

Distribution: CSA, Yvoir Fm, RC3α; ASA, Grives Fm, RC3α.

Family Undertemined
Subfamily Undetermined
Genus *Corphalia* POTY, 1975

Type species: *Corphalia mosae* POTY, 1975.

Diagnosis: (after POTY 1981), ceratoid then cylindrical solitary coral. Major septa short. Minor septa poorly developed or absent. No axial structure. Dissepimentarium narrow, made of small simple dissepiments and some lonsdaleoid dissepiments. Outer wall undulating, arched or festooned. Tabulae complete, subhorizontal.

***Corphalia mosae* POTY, 1975**
(Pl. 6, Fig. E)

Diagnosis: (after POTY 1981), *Corphalia* 4 mm (maximum 7,5 mm) in diameter and having maximum 23 major septa.
Distribution: NSA, VASA, top of Neffe Fm, RC5β.

***Corphalia* sp. nov.**
(Pl. 5, Fig. U)

Distribution: CSA, NSA, Avins Mbr, RC4β1.

Genus *Dorlodotia* SALÉE, 1920

Type species: *Dorlodotia briarti* SALÉE, 1920.
Diagnosis: (after POTY 1981), fasciculate colonial coral with lateral non-parricidal increase. Major septa usually withdrawn from the axis. Minor septa poorly or not developed. Columella present or discontinuous, composed of a single axial plate, often thickened. Dissepimentarium typically composed of large lonsdaleoid dissepiments and some simple interseptal dissepiments. Lonsdaleoid dissepiments usually absent or poorly developed in small-sized corallites. Inner ring of simple dissepiments commonly thickened, forming an inner wall. Tabulae complete, conical where the columella is present, flat or domed where absent. Outer wall thick and festooned.

***Dorlodotia briarti* SALÉE, 1920**
(Pl. 6, Fig. I)

Diagnosis: (after POTY 1981), phaceloid colony with corallites 13-16 mm in diameter and having 26-28 septa, often thickened. Minor septa absent or, in very rare cases, poorly developed. Columella strongly thickened, usually connected to the counter septum, but absent in some colonies. Dissepimentarium made of simple interseptal and lonsdaleoid dissepiments. Inner edge of the dissepimentarium thickened. Cardinal fossula inconspicuous. Tabulae complete and upturned toward the columella. Wall thick, undulated or festooned.
Distribution: DSA, CSA, NSA, VASA, Salet, Terwagne and Neffe Fm, RC4β2-RC5α.

***Dorlodotia briarti densa* POTY, 1981**
(Pl. 6, Fig. H)

Diagnosis: (after POTY 1981) *Dorlodotia briarti* 8.7 mm in diameter and having 22 (maximum 26) major septa. Septa, dissepiments, outer wall and columella very thickened.
Distribution: NSA, VASA, top of Terwagne Fm, RC4β2.

***Dorlodotia* ? sp.**
(Pl. 5, Fig. V)

Distribution: VSA, lower part of Visé Fm, RC4β1.

Suborder Incertae Sedis
Family Incertae Sedis
Genus *Semenoffia* POTY, 1981

Type species: *Aulina amarensis* SEMENOFF-TIAN-CHANSKY, 1974.
Diagnosis: (after POTY 1981), aulate solitary coral. Major and minor septa often carinated. Cardinal fossula opened toward the aulos. Cardinal septum short. Aulos made of the curved axial ends of the major septa. Dissepimentarium narrow, made of simple interseptal, herringbones or rare arched and lonsdaleoid dissepiments. Tabulae horizontal and spaced in the aulos. Periaxial tabulae more divided and declined toward the dissepimentarium.

***Semenoffia viseensis* POTY, 1981**
(Pl. 9, Fig. I)

Diagnosis: (after POTY 1981), *Semenoffia* maximum 20 mm in diameter and having 30 major septa. Minor septa absent in the juvenile stages and poorly developed in the mature stages. Cardinal fossula inconspicuous. Aulos inconstant, occupying 1/3-1/4 of the corallite diameter. Tabulae in the aulos upturned toward the aulos wall.
Distribution: VSA, upper part of Visé Fm, RC7β.

Genus *Viseaulina* POTY, 1981

Type species: *Viseaulina singularis* POTY, 1981.
Diagnosis: (after POTY 1981), small ceratoid solitary coral. Major septa very sinuous. Minor septa short. Aulos made of the curved axial ends of the major septa and upturned edges of the tabulae. Dissepimentarium made only of large lonsdaleoid dissepiments. Outer wall festooned. Tabulae downturned toward the dissepi-mentarium.

***Viseaulina singularis* POTY, 1981**
(Pl. 12, Fig. D)

Diagnosis: (after POTY 1981), *Viseaulina* maximum 5.5 mm in diameter and having 26 major septa. Aulos occupying 1/6 to 1/4 of the corallite diameter.
Distribution: VSA, upper part of Visé Fm, RC7β.

Gen. et sp. nov. C
(Pl. 4, Fig. H)

Distribution: CSA, Martinrive Fm, RC3γ.

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INDEX

PLATE 1

Rugose corals of the biozones RC0-RC1α

Fig. A: "*Palaeosmilia*" *aquisgranensis* **(FRECH, 1885)**
Dolhain section (VASA), Dolhain Fm (RC0), specimen Dolhain 69/d

Fig. B: *Campophyllum flexuosum* **(GOLDFUSS, 1826)**
Dolhain section (VASA), Dolhain Fm (RC0), specimen Dolhain 17/2

Fig. C: *Campophyllum* **sp.**
"Bocahut" quarry, Godin (ASA), Etroeungt Fm (RC0), specimen Godin 1995-3.8-4.5m/66

Fig. D: **Gen. & sp. nov. A.**
Kornelimünster section (VASA), Dolhain Fm (RC0), specimen Korn. 73/d

Fig. E: **Gen. & sp. nov. B.**
"Bocahut" quarry, Godin (ASA), Etroeungt Fm (RC0), specimen Godin 1995-38/88

Fig. F: *Campophyllum gosseleti* **(WEYER, 1997)**
Anseremme section (DSA), Etroeungt Fm (RC0), specimen Anseremme 43/145

Fig. G: *Bounophyllum praecursor* **(FRECH, 1885)**
Stolberg section (VASA), Dolhain Fm (RC0), specimen Stolberg I 1986-189/2

Fig. H: *Tabulophyllum* **sp.**
Stolberg section (VASA), Dolhain Fm (RC0), specimen Stolberg 130/a

Fig. I: "*Clisiophyllum*" **aff.** *omaliusi* **HAIME, 1855**
Stolberg section (VASA), Dolhain Fm (RC0), specimen Stolberg 101

Fig. J: "*Clisiophyllum*" *omaliusi* **HAIME, 1855**
Kleinsteinkoten section (VASA), Dolhain Fm (RC0), specimen Kleinsteinkoten 9/ 27bis/21/c

Fig. K: "*Amygdallophyllum*"**? sp.**
Dolhain section (VASA), Dolhain Fm (RC0), specimen Dolhain 66/73/a

Fig. L: *Kizilia kremersi* **(POTY, 1982)**
Royseux section (CSA), lower member of Hastière Fm (RC1α), specimen Royseux V 4/106-107

Fig. M: *Conilophyllum streeli* **POTY & BOLAND, 1994**
Anseremme section (DSA), Hastière Fm (RC1α), specimen Anseremme 216/46/b

Fig. N: *Conilophyllum priscum* **(MUNSTER, 1840)**
Royseux section (CSA), lower member of Hastière Fm (RC1α), specimen Royseux V 108/31

Fig. O: *Siphonophyllia cylindrica hastariensis* **(SALÉE, 1913)**
Comblain-au-Pont section (CSA), upper member of Hastière Fm (RC1β), specimen Comblain 1992-2/6/a

For all plates: without mention the scale for all specimens is x 2.

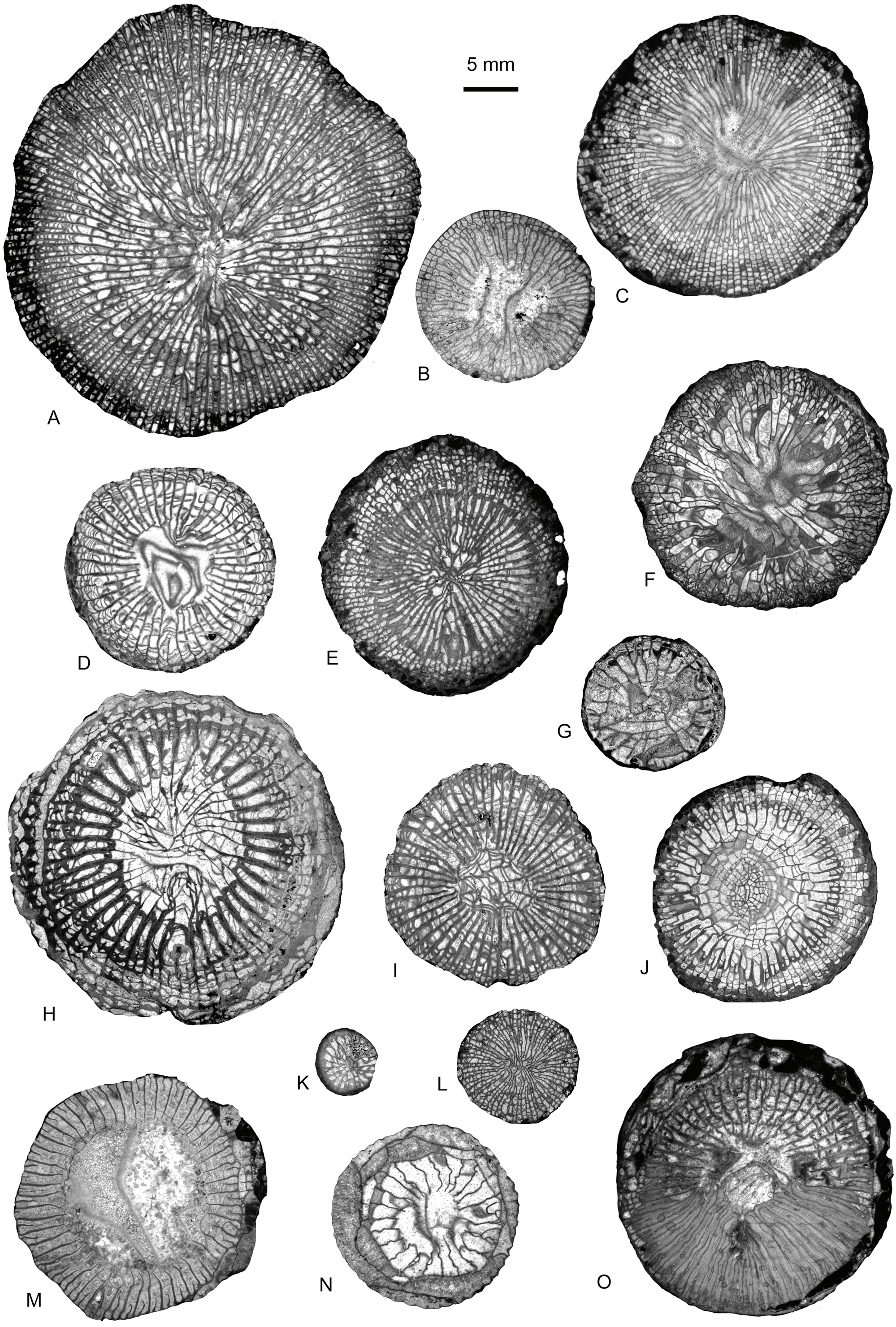
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PLATE 2

Rugose corals of the biozones RC1β-RC3α

Fig. A: ***Siphonophyllia rivagensis*** **POTY & BOLAND, 1994**
Spontin section (CSA), Landelies Fm (RC2), specimen Spontin II/19

Fig. B: ***Siphonophyllia cylindrica*** **SCOULER *in* MCCOY, 1844**
Yvoir station section (CSA), Landelies Fm (RC2), specimen Yvoir 2/i

Fig. C: ***Uralinia lobata*** **POTY & BOLAND, 1994**
Spontin section (CSA), Pont d'Arcole Fm (RC1γ), specimen Spontin II-1989/9

Fig. D: ***Eostrotion*** **sp.**
"Les Nutons" quarry, Chanssin (CSA), Landelies Fm (RC2), specimen Nutons 13/a

Fig. E: ***Eostrotion tortuosum*** **(MICHELIN, 1847)**
Rivage section (CSA), Landelies Fm (RC2), specimen Rivage 8

Fig. F: ***Salelasma delepinei*** **(VAUGHAN, 1915)**
Spontin section (CSA), Landelies Fm (RC2), specimen Spontin II/2/b

Fig. G: ***Cyathaxonia cornu*** **MICHELIN, 1847**
"Hainaut" quarry, Soignies (HSA), Soignies Mbr (RC3β), specimen Soignies 1/14

Fig. H: ***Cyathoclisia*** **cf. *soshkinae*** **SAYUTINA, 1973**
Chanxhe quarry (CSA), Yvoir Fm (RC3α), specimen Chanxhe II/45/d

Fig. I: ***Bifossularia*** **aff. *tictensis*** **TOLMATCHEV, 1931**
Ôneux section (CSA), Yvoir Fm (RC3α), specimen Ôneux I/15

Fig. J: ***Calmiussiphyllum*** **cf. *calmiussi*** **VASILJUK, 1959**
"Bocahut" quarry, Godin (ASA), Grives Fm (RC3α), specimen Godin 2/b (scale: x 1)

Fig. K: ***Uralinia multiplex*** **(LUDWIG, 1862)**
"Les Ornais" quarry, Pont-de-Bonne (CSA), Yvoir Fm (RC3α), specimen Pont de Bonne-2000/2/e' (scale: x 1)

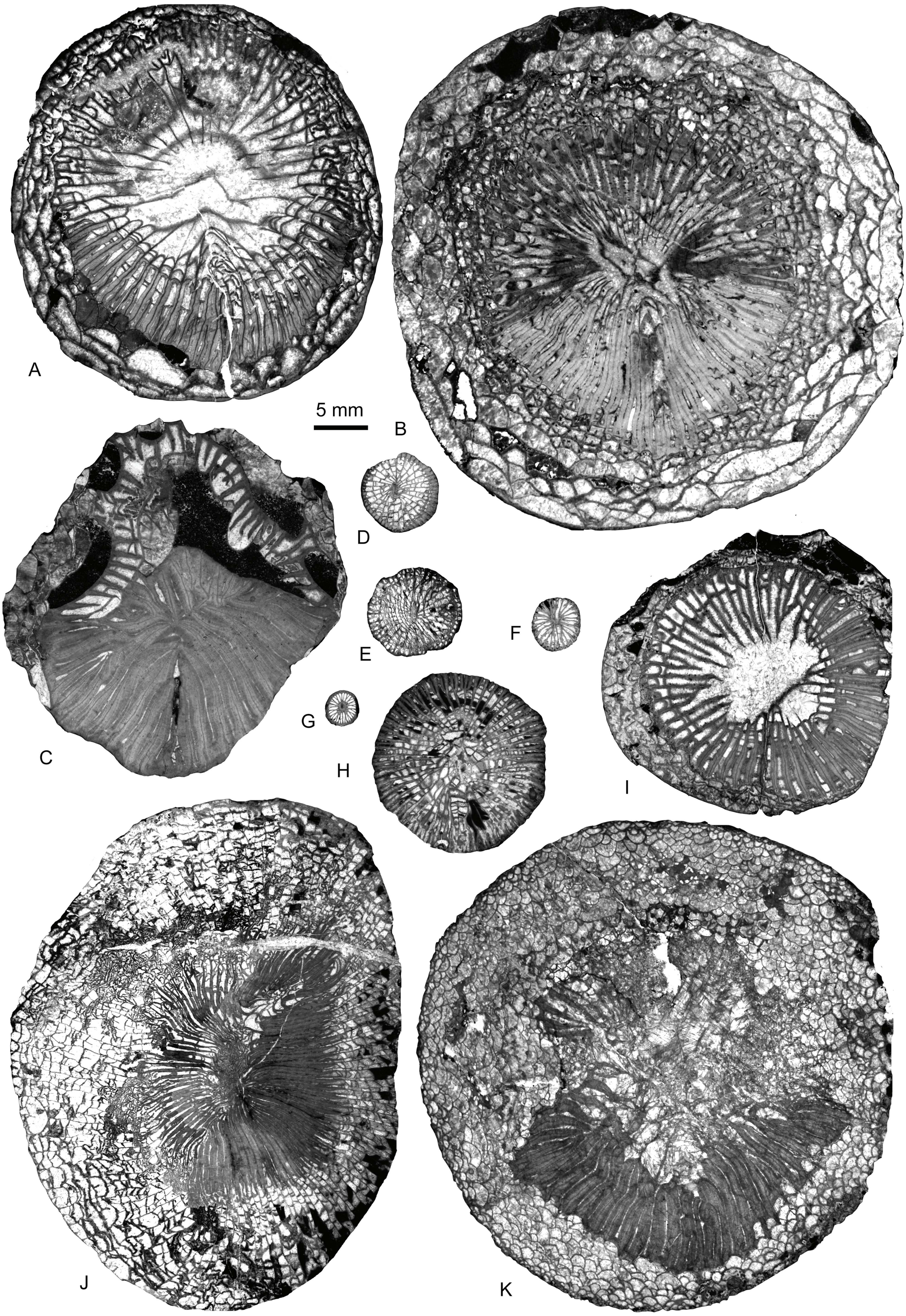
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PLATE 3

Rugose corals of the biozones RC3α-RC3β (Tournai region)

Fig. A-D: ***Caninia cornucopiae*** **MICHELIN *in* GERVAIS, 1840**
"Lemay" quarry, Tournai (HSA), Vaulx Mbr (RC3β), A1-A6 specimen Lemay-2001/108; B specimen Lemay-268 (calicular view); C specimen Lemay-2001/93; D specimen Lemay-2001/95

Fig. E: ***Amplexus coralloides*** **SOWERBY, 1814**
"Lemay" quarry, Tournai (HSA), Vaulx Mbr (RC3β), specimen Lemay-2001/72/I/d

Fig. F: ***Caninia*** **sp. nov. B**
"Lemay" quarry, Tournai (HSA), Vaulx Mbr (RC3β), specimen Lemay-2001/231/e

Fig. G-H: ***Lophophyllum konincki*** **MILNE-EDWARDS & HAIME, 1851**
"Lemay" quarry, Tournai (HSA), Vaulx Mbr (RC3β), G specimen Lemay-268 (calicular view); H1-H5 specimen Lemay-2001/247

Fig. I: ***Saleelasma*** **cf. *delepini* (VAUGHAN, 1915)**
"Milieu" quarry, Tournai (HSA), Providence Mbr (RC3α), specimen Milieu-2001/212

Fig. J: ***Caninophyllum patulum*** **(MICHELIN, 1846)**
Ôneux section (CSA), Yvoir Fm (RC3α), specimen Ôneux-1987/I/10

Fig. K: ***Hapsiphyllum*** **sp. nov.**
"Lemay" quarry, Tournai (HSA), Vaulx Mbr (RC3β), specimen Lemay-2001/155/a

Fig. L: ***Siphonophyllia*** **sp. nov.**
"Lemay" quarry, Tournai (HSA), Vaulx Mbr (RC3β), specimen Lemay-2001/122

Fig. M: ***Aulokoninckophyllum*** **sp.**
"Lemay" quarry, Tournai (HSA), Vaulx Mbr (RC3β), specimen Lemay-2001/147

Fig. N: ***Sychnoelasma konincki*** **(MILNES-EDWARDS & HAIME, 1851)**
Royseux section (CSA), Yvoir Fm (RC3α), specimen Royseux VII /14/a

Fig. O: ***Proheterelasma omaliusi*** **(MILNES-EDWARDS & HAIME, 1851)**
Paire section (CSA), Yvoir Fm (RC3α), specimen Paire 20/c

Fig. P: ***Zaphrentites delanouei*** **MILNES-EDWARDS & HAIME, 1851**
"Lemay" quarry, Tournai (HSA), Vaulx Mbr (RC3β), specimen Lemay-2001/170

Fig. Q: ***Pentaphyllum*** **sp. A**
"Lemay" quarry, Tournai (HSA), Calonne upper Mbr (RC3β-γ), specimen Lemay-2001/83

Fig. R: ***Zaphrentites*** **s. l. protocorallites growing in the calice of a adult coral**
Tournai area (HSA), location and level not known specimen from old collections of the Liège Univ.

Fig. S: **Exteral view of *Hapsiphyllum* sp.**
Tournai area (HSA), location and level not known specimen from old collections of the Liège Univ.

Fig. T-V: ***Amplexus coralloides*** **SOWERBY, 1814**
Tournai area (HSA), location and level not known specimen from old collections of the Liège Univ.

Fig. W-X: Caninomorph coral showing rejuvenescence features and changes in direction of growth
Tournai area (HSA), location and level not known specimen from old collections of the Liège Univ.

Fig. Y: Caninomorph coral attached on a crinoid stem
Tournai area (HSA), location and level not known specimen from old collections of the Liège Univ.

Fig. Za: Calicular view of *Caninophyllum patulum* (MICHELIN, 1846)
Tournai area (HSA), location and level not known specimen from old collections of the Liège Univ.

Fig. Zb: Calicular view of *Siphonophyllia cylindrica* SCOULER *in* MCCOY, 1844
Tournai area (HSA), location and level not known specimen from old collections of the Liège Univ.

Fig. Zc: ***Lophophyllum*** **protocoralite attached on a gastropod shell**
Tournai area (HSA), location and level not known specimen from old collections of the Liège Univ.

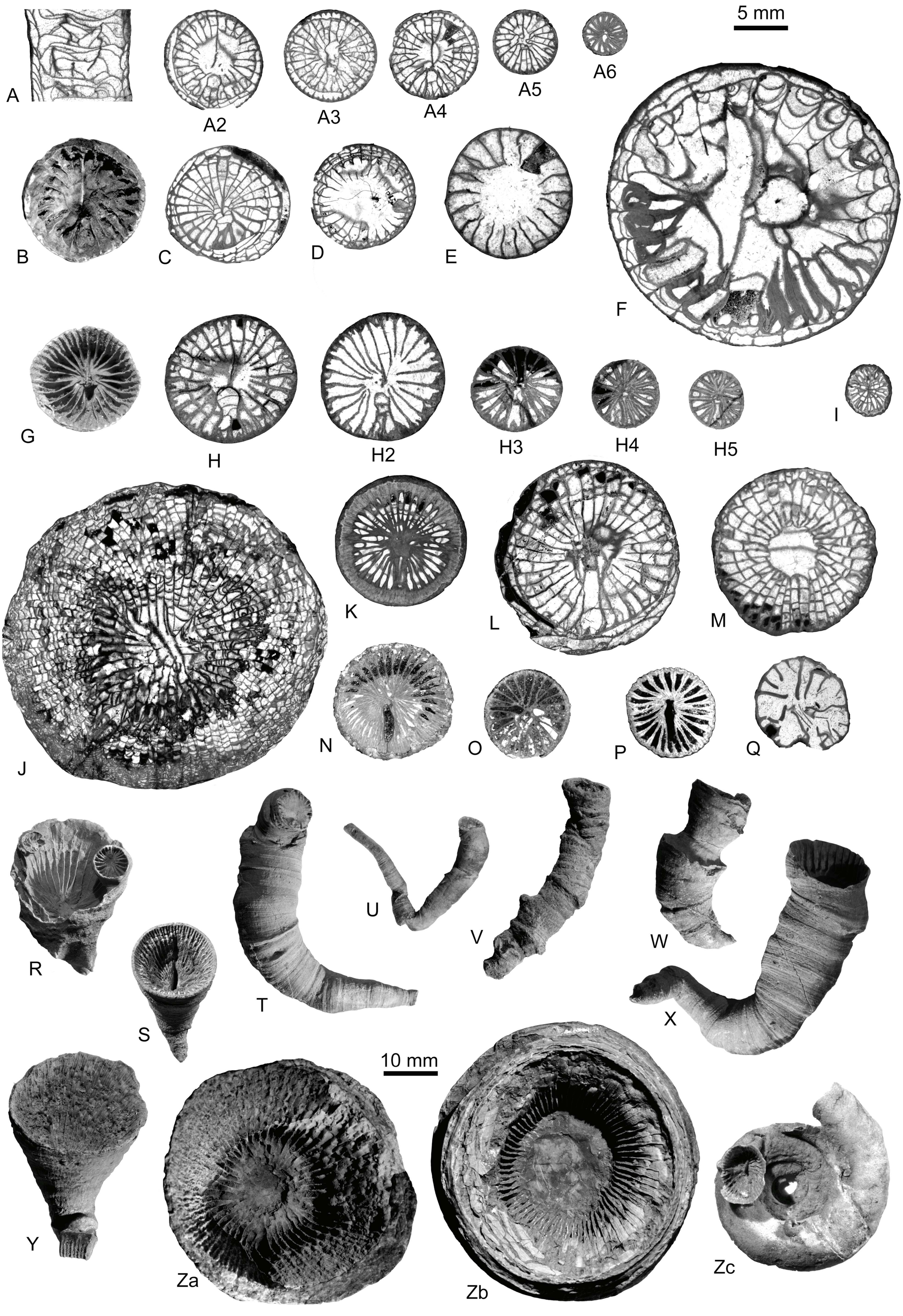
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PLATE 4

Rugose corals of the biozones RC3α-RC4α

Fig. A: ***Solenodendron*** **sp. nov.**
Royseux section (CSA), Yvoir Fm (RC3α), specimen Royseux VII/B/22 (scale: x 1,5)

Fig. B: ***Heterostrotion*** **sp.**
"Bocahut" quarry, Godin (ASA), Grives Fm (RC3α), specimen Godin-1995/48/b'

Fig. C: ***Keyserlingophyllum obliquum*** **(KEYSERLING, 1846)**
"Les Ornais" quarry, Pont-de-Bonne (CSA), Yvoir Fm (RC3α), specimen Pont de Bonne-2000/1/b

Fig. D: ***Zaphrentites*** **cf.** ***delanouei*** **MILNES-EDWARDS & HAIME, 1851**
"La Préale" quarry, Chanxhe (CSA), Ourthe Fm (RC3β), specimen Préale 2/a

Fig. E: ***Caninia*** **aff.** ***cornucopiae*** **MICHELIN** ***in*** **GERVAIS, 1840**
Paire section (CSA), Martinrive Fm (RC3γ), specimen Paire 11/b

Fig. F: ***Sychnoelasma hawbankense*** **MITCHELL & SOMERVILLE, 1988**
Engihoul quarry (NSA), Flémalle Mbr (RC4α), specimen Engihoul 8

Fig. G: ***Caninophyllum*** **sp. nov. B**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4α), specimen Folie 43/b

Fig. H: **Gen. et sp. nov. C**
"La Préale" quarry, Chanxhe (CSA), Martinrive Fm (RC3γ), specimen Préale 1/26

Fig. I: ***Cravenia rhytoides*** **HUDSON, 1928**
Chanxhe quarry (CSA), Martinrive Fm (RC3γ), specimen Chanxhe II/67/b

Fig. J: ***Caninophyllum*** **sp. nov. A**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4 α), specimen Folie 138/b

Fig. K: ***Caninia*** **sp. C**
Halloy section (DSA), Braibant Mbr (RC4α), specimen Halloy 156/c

Fig. L: ***Cyathoclisia modavensis*** **(SALÉE, 1913)**
Royseux section (CSA), Flémalle Mbr (RC4α), specimen Royseux VII/B/8/b

Fig. M: ***Caninia*** **sp. nov. A**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie 22/a

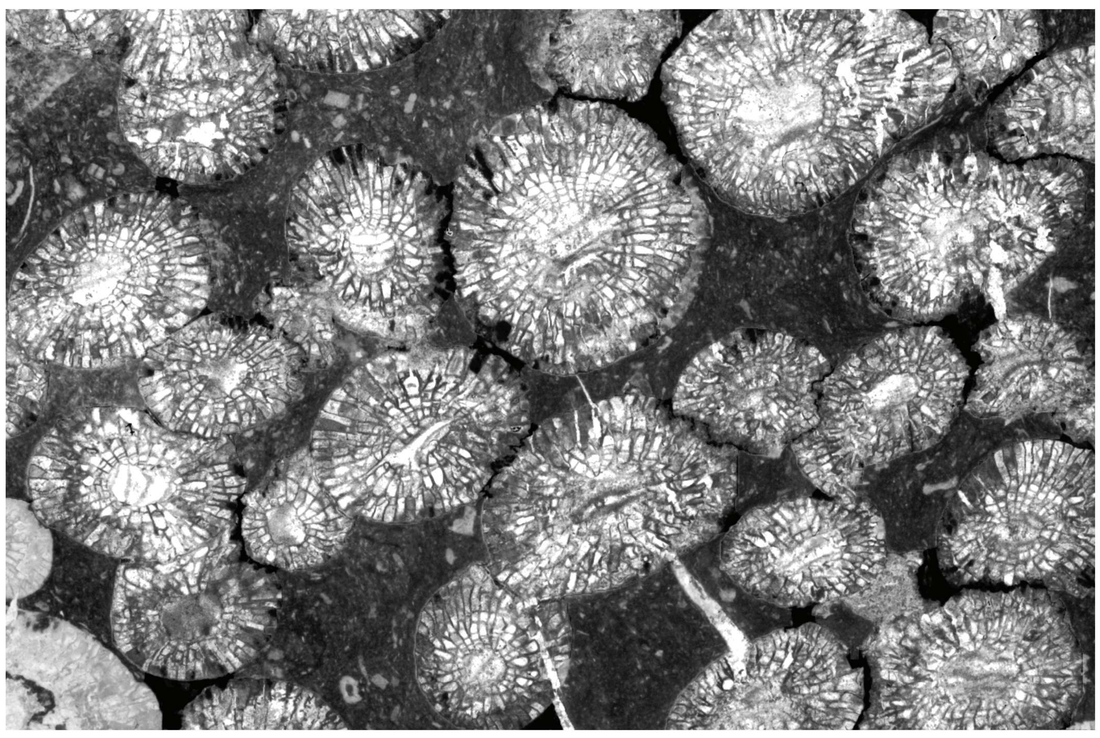
Fig. N: ***Aulokoninckophyllum*** **cf.** ***ngakoi*** **VUILLEMIN, 1990**
"Bocahut" quarry, Godin (ASA), top Grives Fm (RC4α), specimen Godin 128/a

Fig. O: ***Rotiphyllum*** **sp. nov.**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie 83/c

Fig. P: ***Rotiphyllum*** **? sp.**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie 147/b

Fig. Q: **"*Syringaxon*" *beruinensis*** **POTY, 1981**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie 7/a

Fig. R: ***Cravenia*** **sp. nov.**
Halloy section (DSA), Sovet Fm (RC4β1), specimen Halloy 168/d



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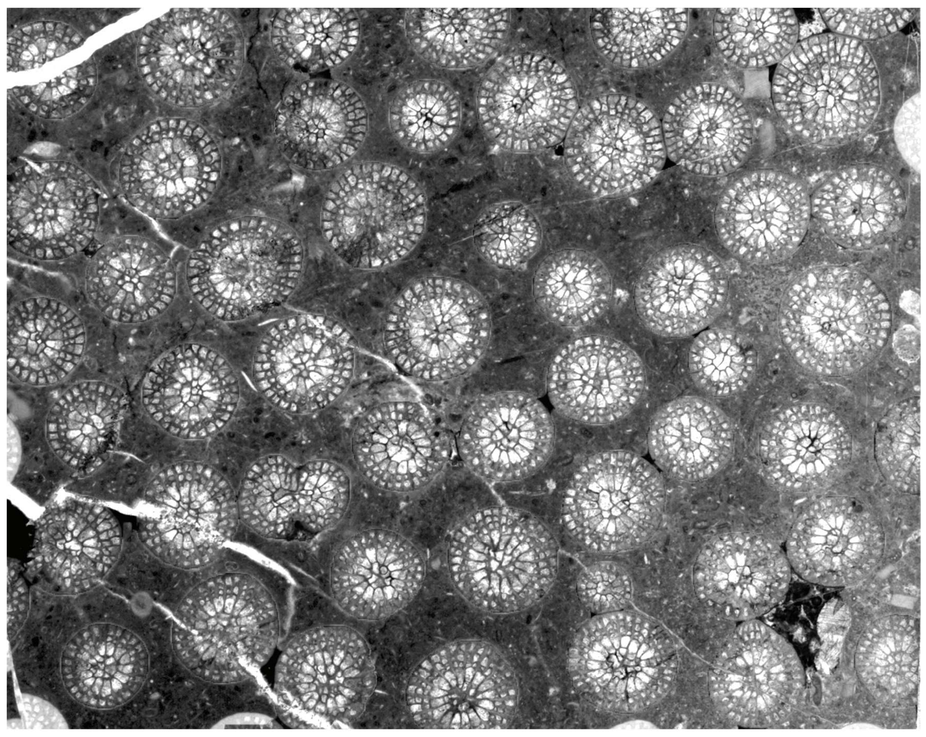

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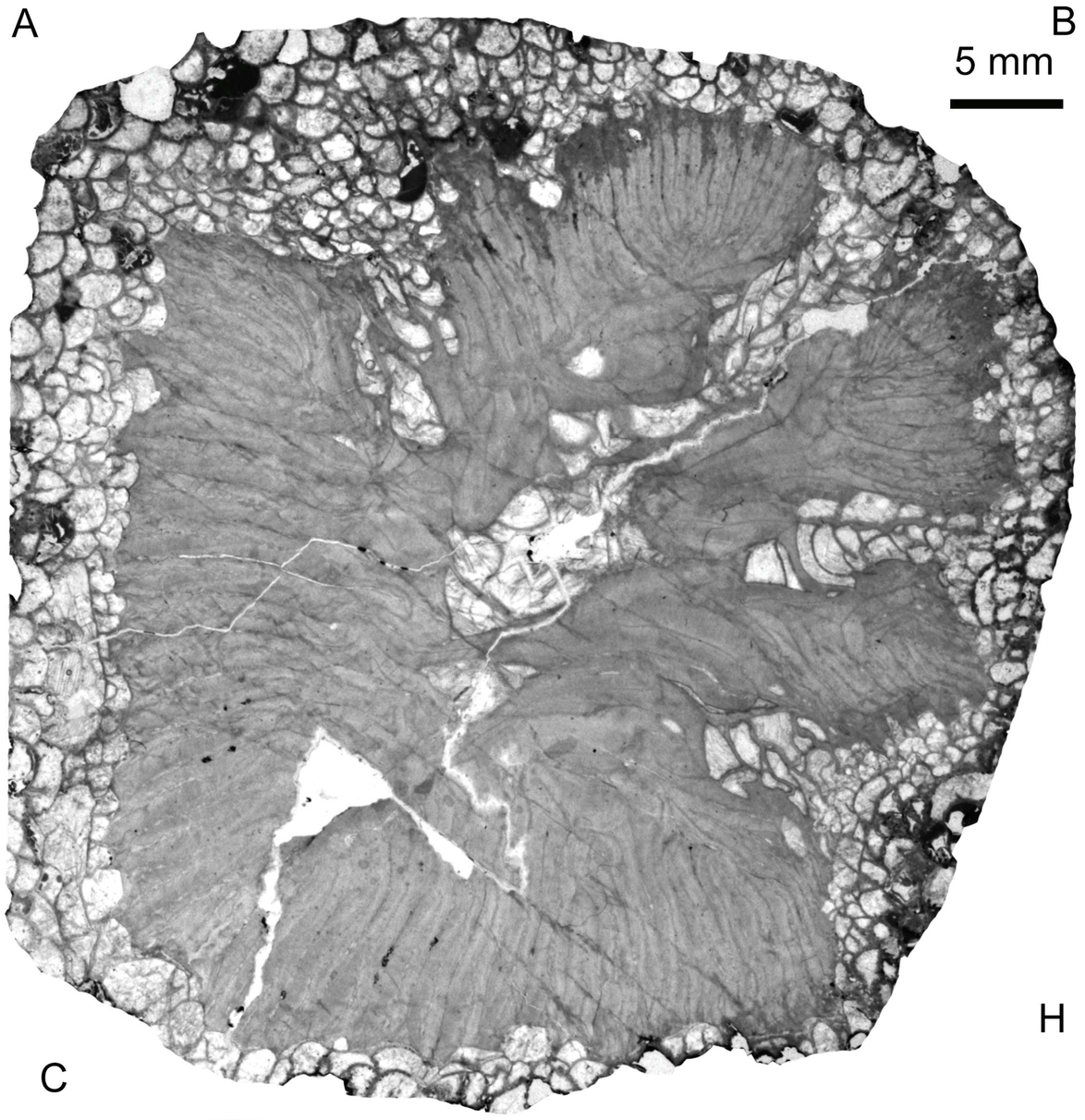

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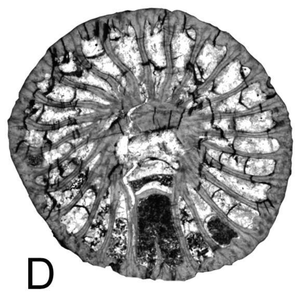

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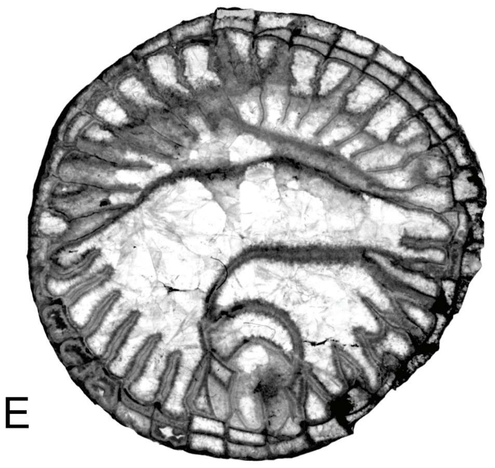

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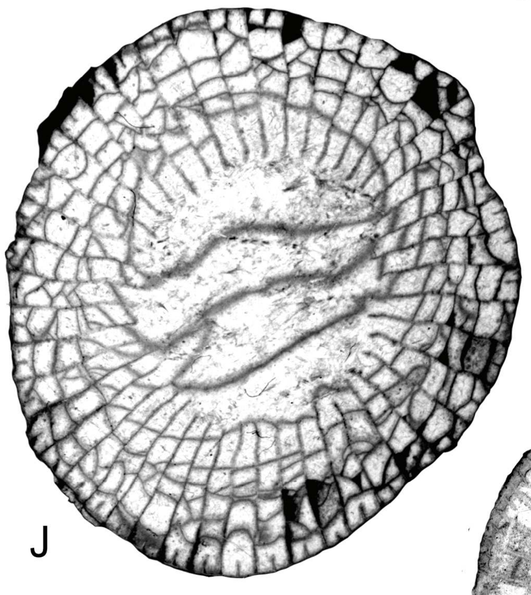

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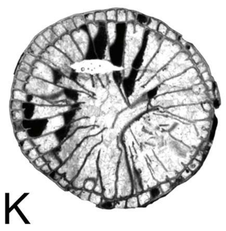

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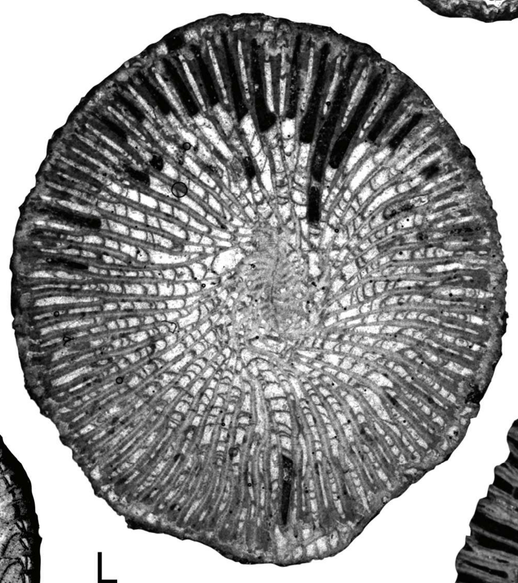

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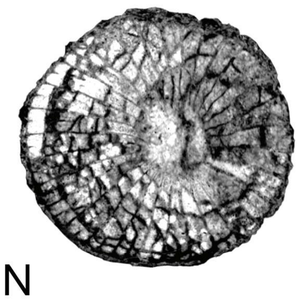

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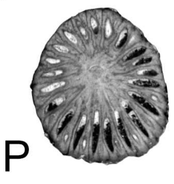

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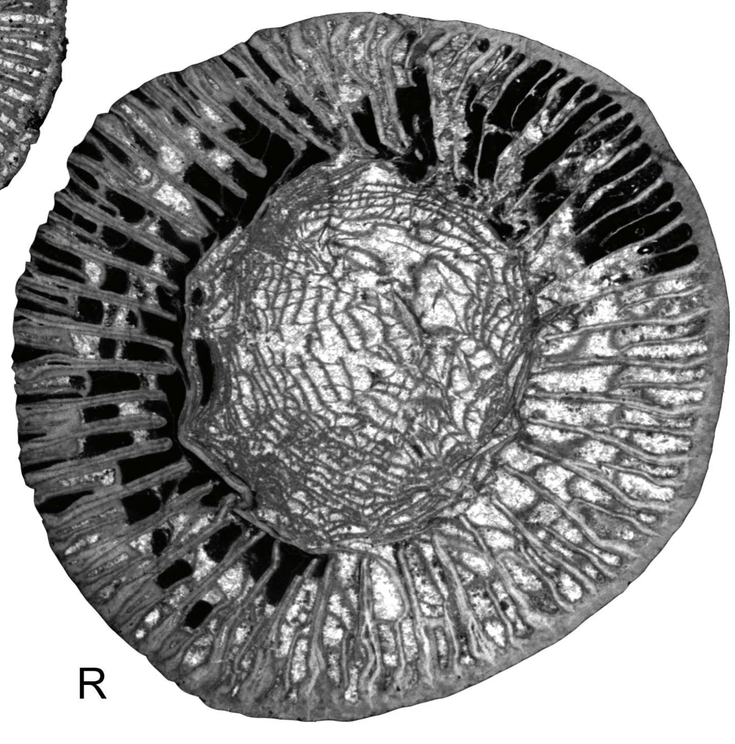

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PLATE 5

Rugose corals of the biozones RC4β1-RC4β2

Fig. A: ***Rylstonia* aff. *benecompacta* HUDSON & PLATT, 1927**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie 56/b

Fig. B: ***Siphonophyllia caninoides* (SIBLY, 1906)**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie 84/I/b

Fig. C: ***Siphonophyllia garwoodi* RAMSBOTTOM & MITCHELL, 1980**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie 2/a

Fig. D: ***Rylstonia* cf. *laxocolumnata* SEMENOFF-TIAN-CHANSKY, 1974**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie 125/b

Fig. E: ***Rylstonia benecompacta* HUDSON & PLATT, 1927**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie 115/b

Fig. F: ***Merlewoodia avesnensis* (DELEPINE, 1929), juvenile stage**
"Bocahut" quarry, Godin (ASA), Godin Fm (RC4β1), specimen Godin 37/b

Fig. G: ***Amygdalophyllum* sp. nov. B**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie 35

Fig. H: ***Amygdalophyllym*? cf. *vesiculosum* (GARWOOD, 1913)**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie 85

Fig. I: ***Amygdalophyllum sudeticum* ZOLYNSKI, 2000**
"Bocahut" quarry, Godin (ASA), Godin Fm (RC4β1), specimen Godin-2002/101/XVI/a

Fig. J: ***Palaeosmilia* sp. nov.**
Engihoul quarry (NSA), Avins Mbr (RC4β1), specimen Engihoul 7/a

Fig. K: ***Amygdalophyllum praecursor* (HOWELL, 1938)**
Argenteau Castle Rock (VSA), lower part of Visé Fm (RC4β2), specimen Argenteau-1989/24/V/c

Fig. L: ***Proheterelasma* sp.**
Halloy section (DSA), Sovet Fm (RC4β2), specimen Halloy 161/3/c

Fig. M: ***Merlewoodia avesnensis* (DELEPINE, 1929)**
"Bocahut" quarry, Godin (ASA), Godin Fm (RC4β1), specimen Godin 83/VII/b (scale: x 1.5)

Fig. N: ***Amygdalophyllum* sp. nov. C**
Argenteau Castle Rock (VSA), lower part of Visé Fm (RC4β2), specimen Argenteau-1989/14/XIV/a

Fig. O: ***Zaphrentites* aff. *crassus* HUDSON, 1944**
Argenteau Castle Rock (VSA), lower part of Visé Fm (RC4β2), specimen Argenteau 23

Fig. P: ***Amygdalophyllum* sp. nov. A**
Halloy section (DSA), Sovet Fm (RC4β2), specimen Halloy 163/2/c

Fig. Q: ***Sychnoelasma hawbankense* subsp. nov.**
Halloy section (DSA), Sovet Fm (RC4β2), specimen Halloy 162/1/g

Fig. R: ***Merlewoodia* sp. nov. C**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie V1/1

Fig. S: ***Merlewoodia* sp. nov. A**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie 134/I/a

Fig. T: ***Merlewoodia* sp. nov. B**
"Bocahut" quarry, Godin (ASA), Godin Fm (RC4β1), specimen Godin-1998/98

Fig. U: ***Corphalia* sp. nov.**
"La Belle-Roche" Comblain-au-Pont (CSA), Avins Mbr (RC4β1), specimen Belle-Roche-2002/4/19

Fig. V: ***Dorlodotia* ? sp.**
"La Folie" quarry, Visé (VSA), lower part of Visé Fm (RC4β1), specimen Folie 33/IV

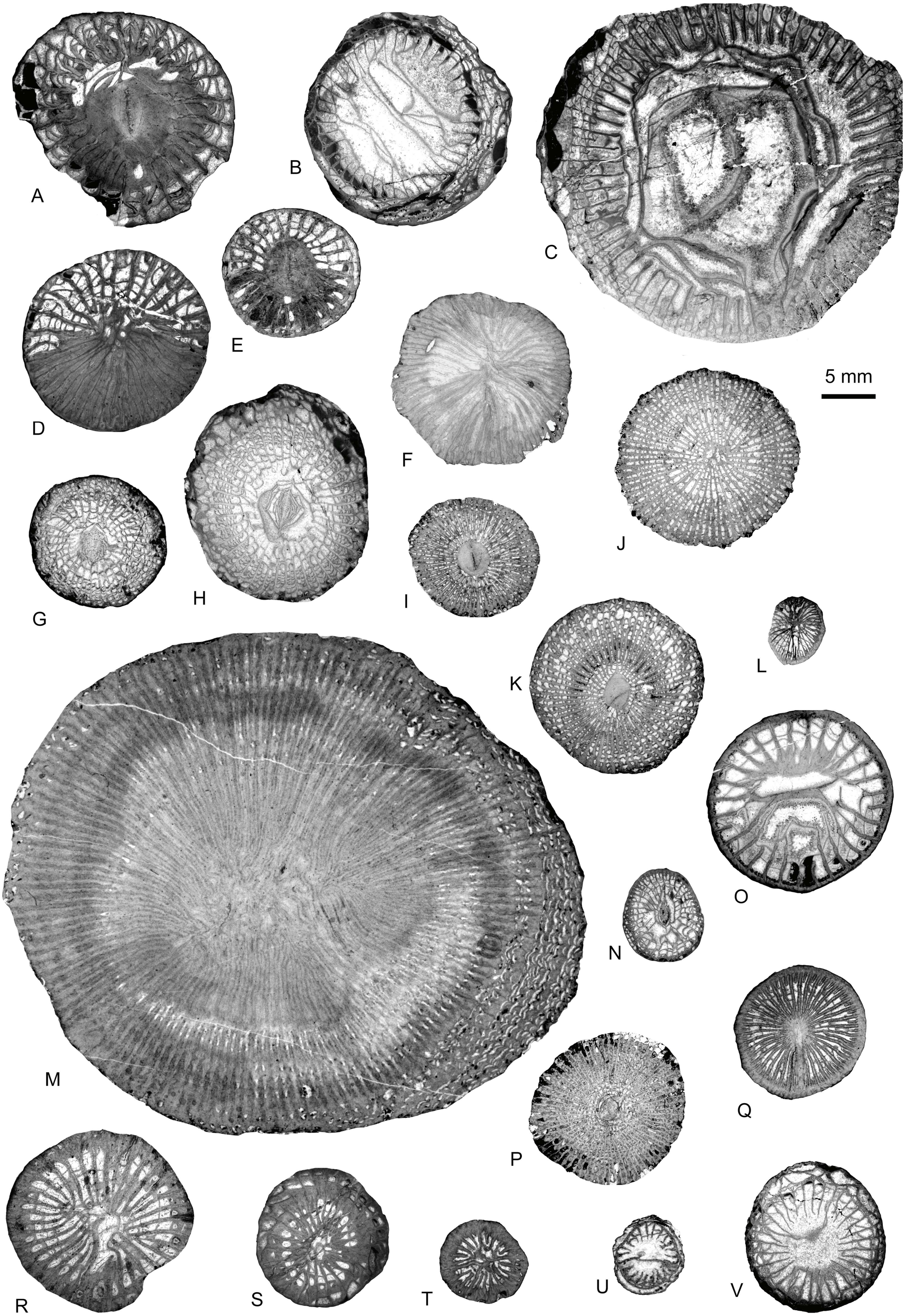
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PLATE 6

Rugose corals of the biozones RC4β2-RC5β

Fig. A: ***Haplolasma*** **sp.**
Argenteau Castle Rock (VSA), lower part of Visé Fm (RC4β2), specimen Argenteau 20

Fig. B: ***Clisiophyllum*** **sp. B**
Sovet section (DSA), Sovet Fm (RC4β2), specimen Sovet 1/140

Fig. C: ***Axophyllum simplex*** **(GARWOOD, 1913)**
Argenteau Castle Rock (VSA), lower part of Visé Fm (RC4β2), specimen Argenteau-1989/14/X/b

Fig. D: ***Axoclisia*** **cf.** ***cuspiforma*** **SEMENOFF-TIAN-CHANSKY, 1974**
Argenteau Castle Rock (VSA), lower part of Visé Fm (RC4β2), specimen Argenteau-1989/15/A/I/e

Fig. E: ***Corphalia mosae*** **POTY, 1975**
Corphalie quarry (NSA), top of Neffe Fm (RC5β), specimen Corphalie C/2

Fig. F: ***Axophyllum mendipense*** **(SIBLY, 1906)**
Lisogne section (DSA), Neffe Fm (RC5α), specimen Lisogne 4/2/c

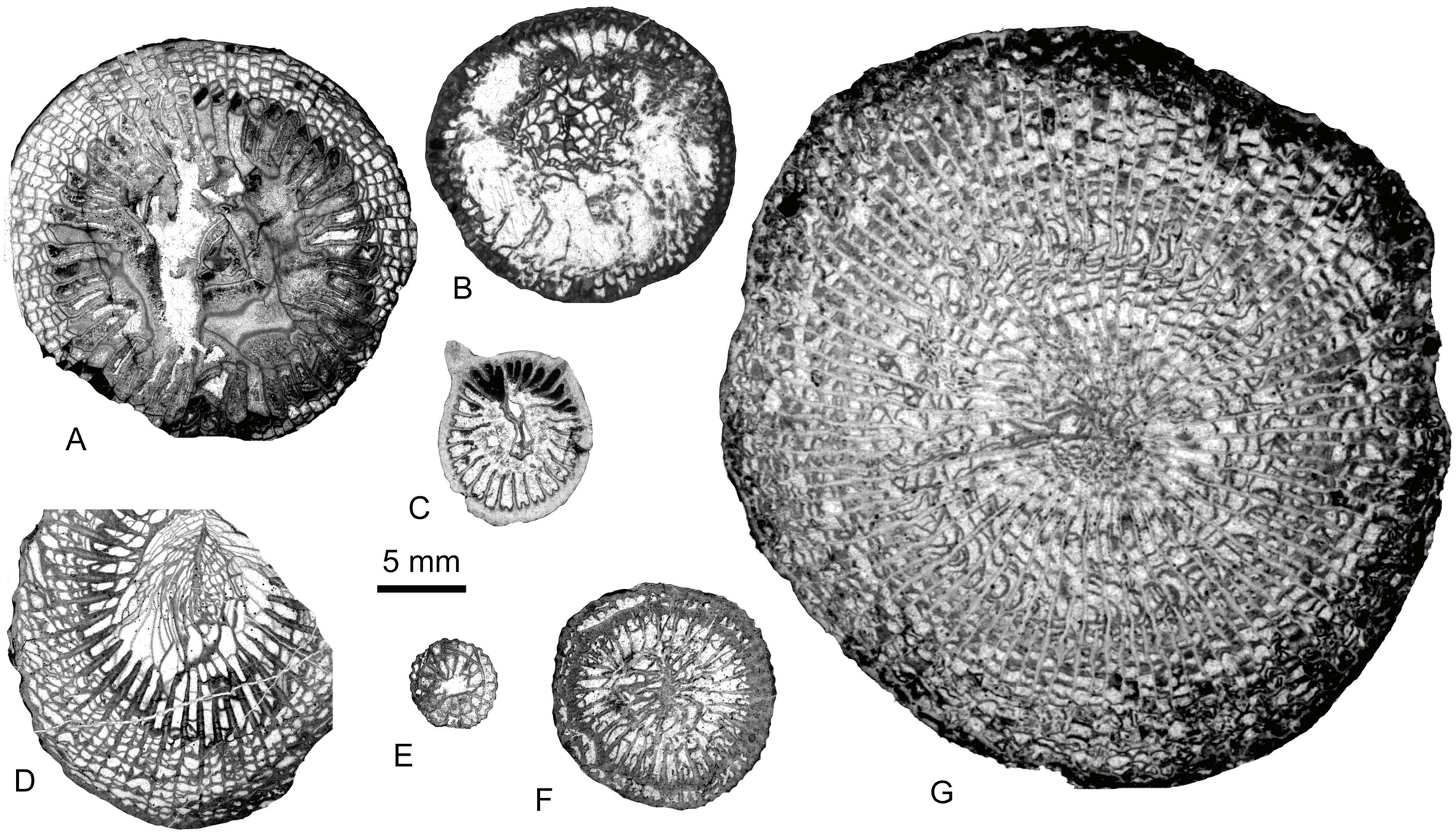
Fig. G: ***Palaeosmilia murchisoni*** **MILNE-EDWARDS & HAIME, 1848**
Lisogne section (DSA), Neffe Fm (RC5α), specimen Lisogne 8/a/a

Fig. H: ***Dorlodotia briarti densa*** **POTY, 1981**
Moha quarry (NSA), top of Terwagne Fm (RC5α), specimen Moha H/10

Fig. I: ***Dorlodotia briarti*** **SALÉE, 1920**
Vinalmont quarry (NSA), Neffe Fm (RC5α), specimen Vinalmont 14525

Fig. J: ***Siphonodendron ondulosum*** **POTY, 1981**
Corphalie quarry (NSA), top of Neffe Fm (RC5β), specimen Corphalie 45/a

Fig. K: ***Siphonodendron martini*** **(MILNE-EDWARDS & HAIME, 1851)**
Corphalie quarry (NSA), Awirs Mbr (RC6), specimen Corphalie R+1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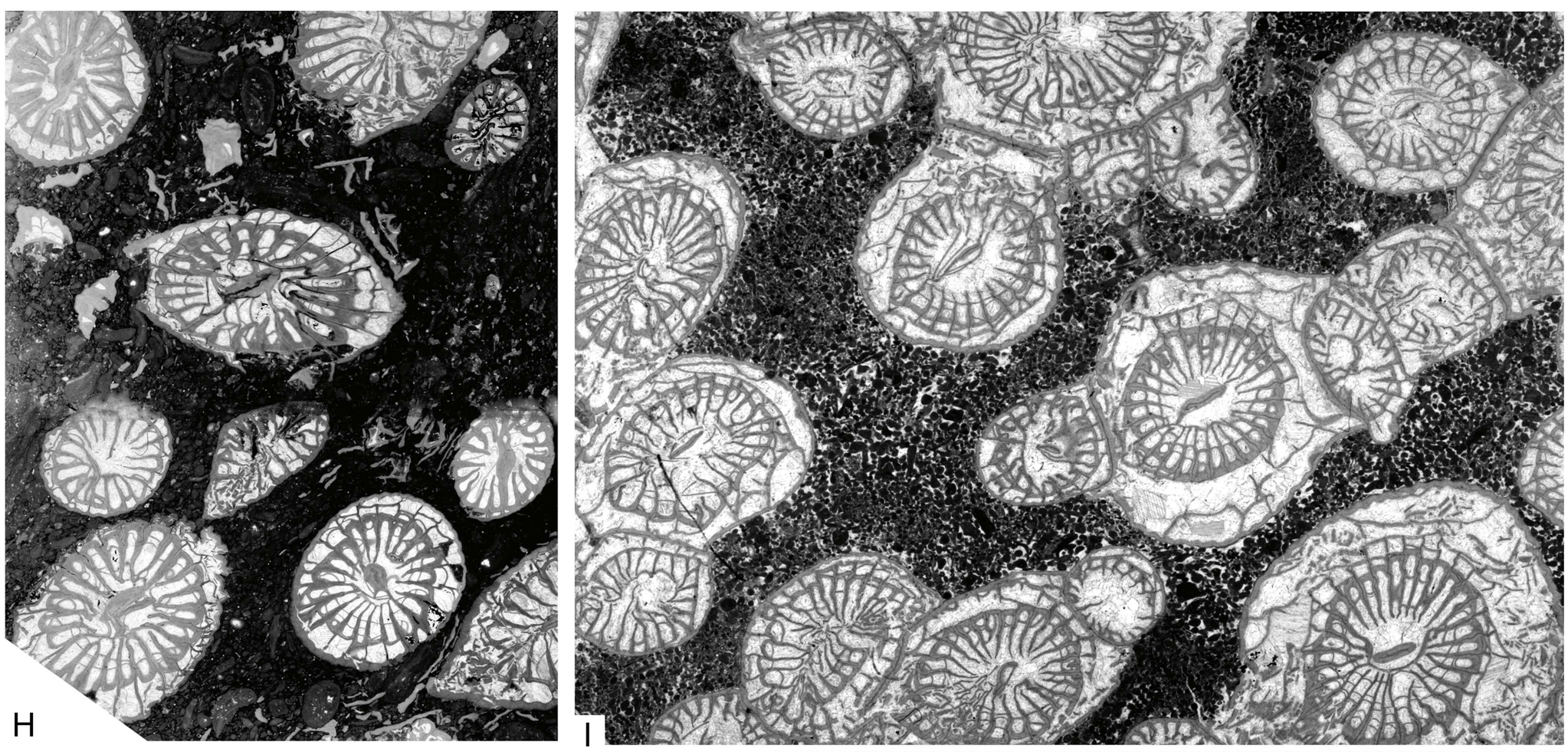
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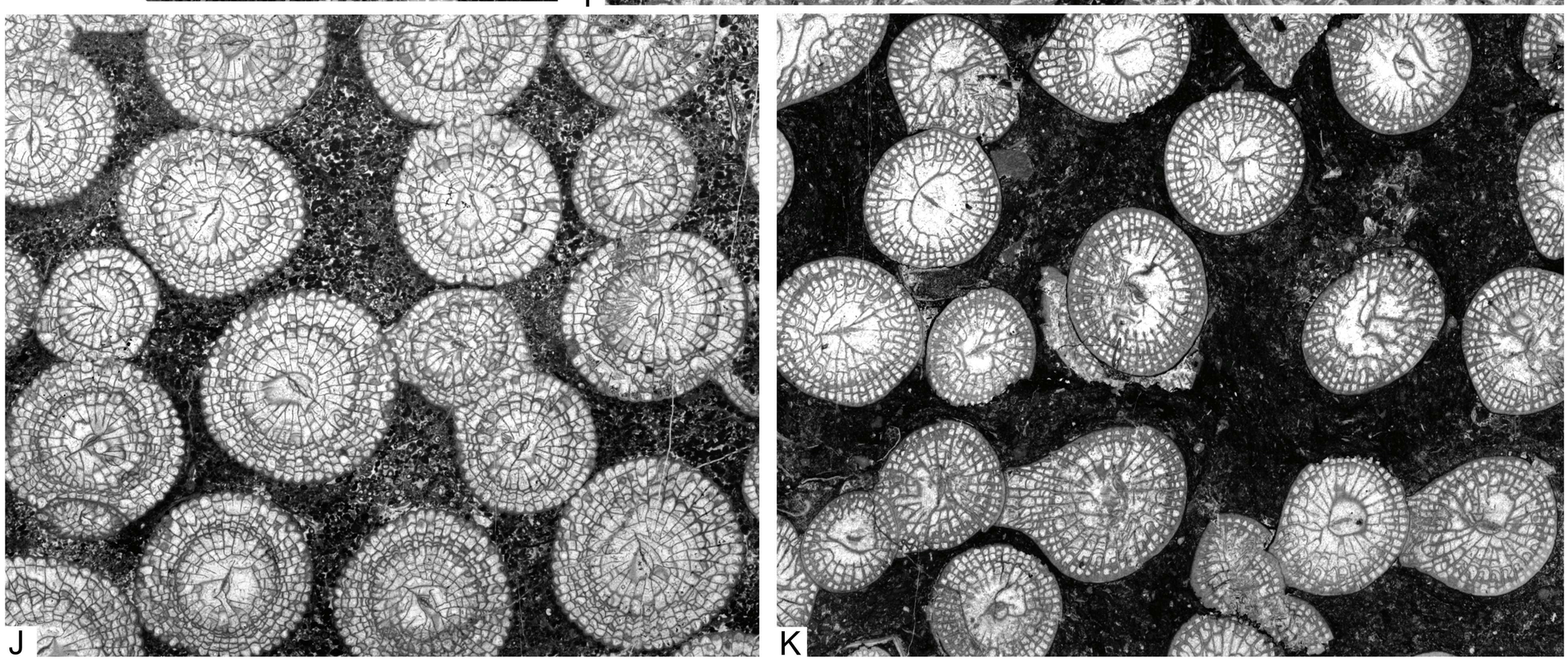
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PLATE 7

Rugose corals of the biozones RC5γ-RC6

Fig. A: ***Axophyllum vaughani*** **(SALÉE, 1913)**
Engihoul quarry (NSA), Awirs Mbr (RC6), specimen Engihoul 3/d

Fig. B: ***Axophyllum nanum*** **POTY, 1981**
Lives Rock (NSA), Corphalie Mbr (RC6), specimen Lives 155

Fig. C: ***Axophyllum*** **sp. B**
Lives quarry (NSA), Awirs Mbr (RC6), specimen Lives 162/a

Fig. D: ***Clisiophyllum garw*****oodi (SALÉE, 1913)**
Lives Rock (NSA), Corphalie Mbr (RC5γ), specimen Lives RO 38/c

Fig. E: ***Clisiophyllum*** **aff.** ***garwoodi*** **(SALÉE, 1913)**
Berneau section (VSA), Berneau Fm (RC6), specimen Berneau 5/1

Fig. F: ***Clisiophyllum*** **sp. nov. A**
Les Awirs quarry (NSA), Awirs Mbr (RC6), specimen Awirs 151

Fig. G: ***Caninophyllum archiaci*** **(MILNE-EDWARDS & HAIME, 1852)**
Lives Rock (NSA), Awirs Mbr (RC6), specimen Lives R+1/160/a (scale: x 1.5)

Fig. H: ***Amygdalophyllum*** **sp. E**
Berneau section (VSA), Berneau Fm (RC6), specimen Berneau 7/37/a

Fig. I: ***Haplolasma conili*** **POTY, 1981**
Lives quarry (NSA), Awirs Mbr (RC6), specimen Lives 121/b

Fig. J: ***Amygdalophyllum*** **sp. D**
Visé quarries (VSA), upper part of the Visé Fm (RC6), specimen Visé "K" 64/a

Fig. K: ***Koninckophyllum*** **sp.**
Berneau section (VSA), Berneau Fm (RC6), specimen Berneau 3/19/b

Fig. L: ***Siphonophyllia siblyi*** **SEMENOFF-TIAN-CHANSKY, 1974**
Thon-Samson (NSA), Seilles Mbr (RC6), specimen Thon-Samson 2

Fig. M: ***Lithostrotion araneum*** **(MCCOY, 1844)**
La Mallieue quarry (NSA), base of the Corphalie Mbr (RC6), specimen Mallieue 1/0

Fig. N: ***Siphonodendron irregulare*** **(PHILLIPS, 1836)**
Statte section (NSA), Seilles Mbr (RC6), specimen Statte 4056

Fig. O: ***Siphonodendron sociale*** **(PHILLIPS, 1836)**
Lives quarry (NSA), Awirs Mbr (RC6), specimen Lives 149/F

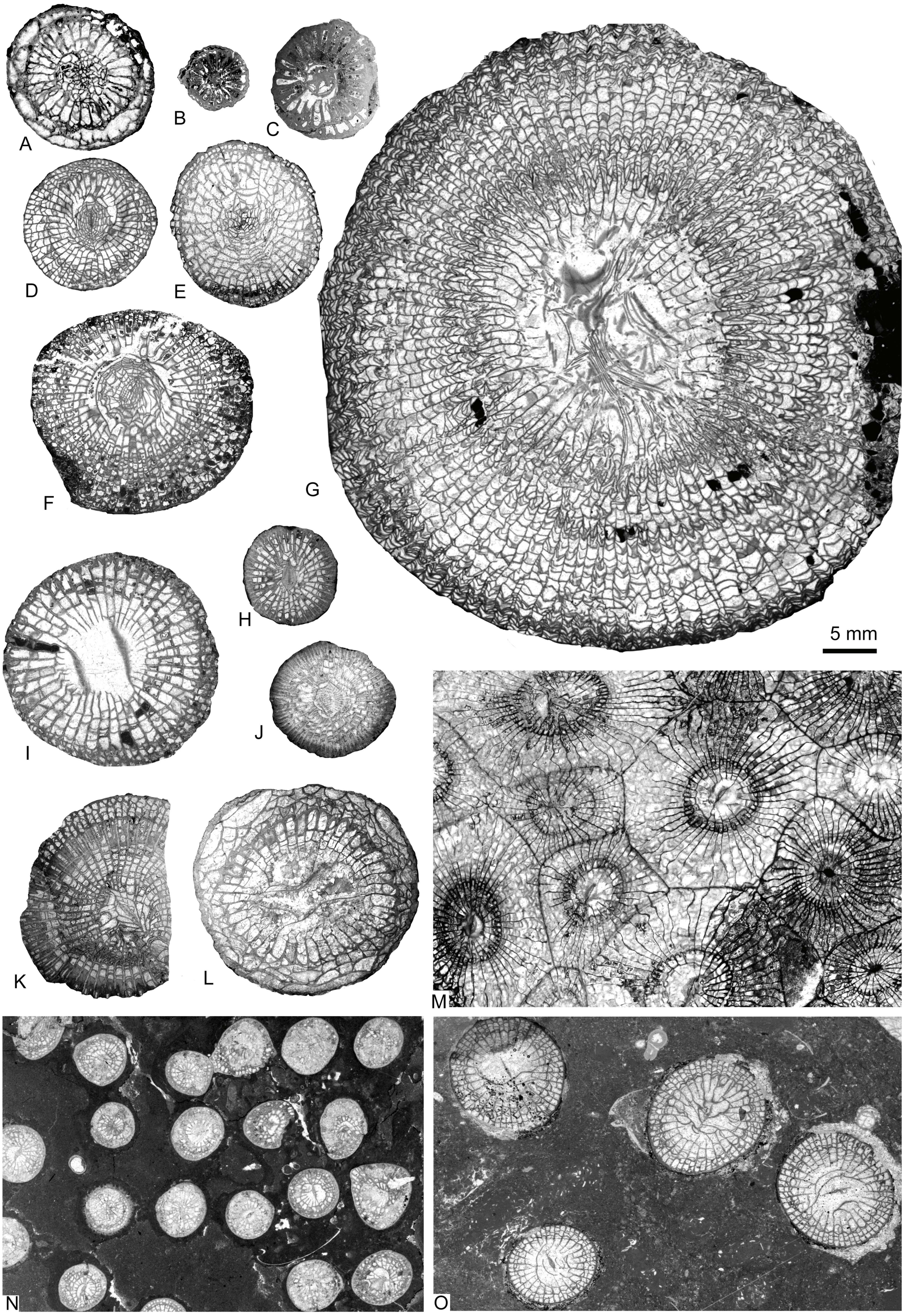
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PLATE 8

Rugose corals of the biozones RC7α

Fig. A: ***Arachnolasma* ? sp.**
Berneau section (VSA), Berneau Fm (RC7α), specimen Berneau 7/33/c

Fig. B: ***Arachnolasma* sp.**
Berneau section (VSA), Berneau Fm (RC7α), specimen Berneau 7/36/e

Fig. C: ***Neoclisiophyllum* aff. *ingletonense* (VAUGHAN, 1911)**
Fouron-le-Compte borehole (VSA), Berneau Fm (RC7α), specimen FLC 547.0

Fig. D: ***Axophyllum* aff. *kirsopianum* (THOMSON, 1880)**
Fouron-le-Compte borehole (VSA), Berneau Fm (RC7α), specimen FLC 299.30/I/c

Fig. E: ***Amygdalophyllum* aff. *etheridgei* DUN & BENSON, 1920**
Berneau section (VSA), Berneau Fm (RC7α), specimen Berneau 32/24/b

Fig. F: ***Aulokoninckophyllum ubaghsi* POTY, 1981**
"Transcar" quarry, Maizeret (NSA), Poilvache Mbr (RC7α), specimen Transcar 1/XV/b

Fig. G: ***Siphonophyllia samsonensis* (SALÉE, 1913)**
Samson valley (NSA), Thon-Samson Mbr (RC7α), specimen Samson 201 (scale: x 1)

Fig. H: ***Axoclisia* aff. *cuspiforma* SEMENOFF-TIAN-CHANSKY, 1974**
Berneau section (VSA), Berneau Fm (RC7α), specimen Berneau 3/25/c

Fig. I: ***Aulokoninckophyllum carinatum* (CARRUTHERS, 1909)**
Fouron-le-Compte borehole (VSA), Berneau Fm (RC7α), specimen FLC 476.0/I/a

Fig. J: ***Lithostrotion vorticale* (PARKINSON, 1808)**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/27

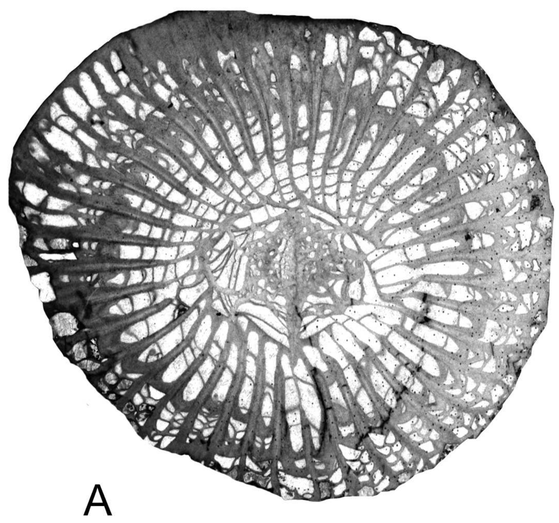
Fig. K: ***Koninckophyllum* cf. *variabile* SEMENOFF-TIAN-CHANSKY, 1974**
Berneau section (VSA), Berneau Fm (RC7α), specimen 7/53/b

Fig. L: ***Merlewoodia* sp. E**
Fouron-le-Compte borehole (VSA), Berneau Fm (RC7α), specimen FLC 299.30/II/b

Fig. M: ***Amplexocarinia* sp.**
"Transcar" quarry, Maizeret (NSA), Poilvache Mbr (RC7α), specimen Transcar 1/XI/a

Fig. N: ***Siphonodendron scaleberense* NUDDS & SOMERVILLE, 1987**
"Transcar" quarry, Maizeret (NSA), Poilvache Mbr (RC7α), specimen Transcar/7/e

Fig. O-P: ***Siphonodendron kleffense* (SCHINDEWOLF, 1927)**
Berneau section (VSA), Berneau Fm (RC7α), O specimen Berneau 5/19; P specimen Berneau 14/21/c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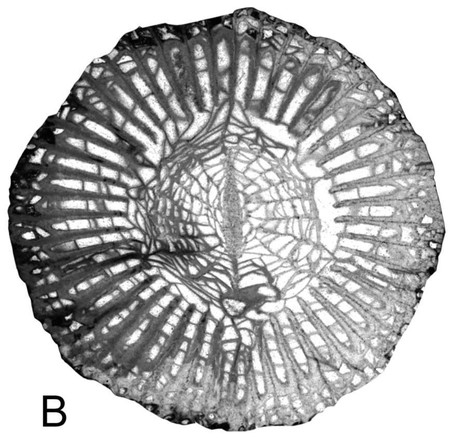
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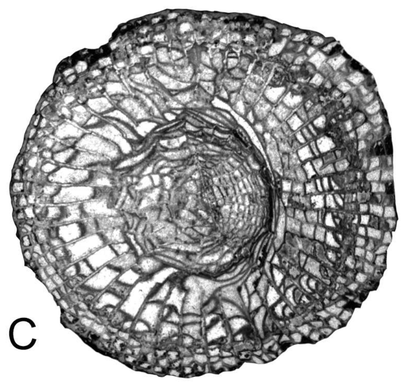
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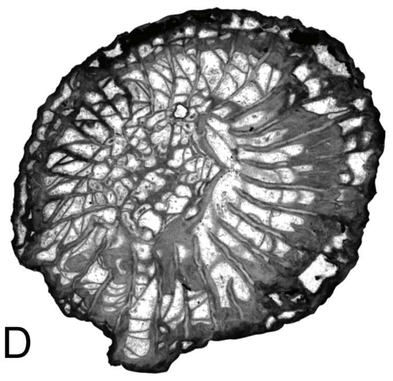
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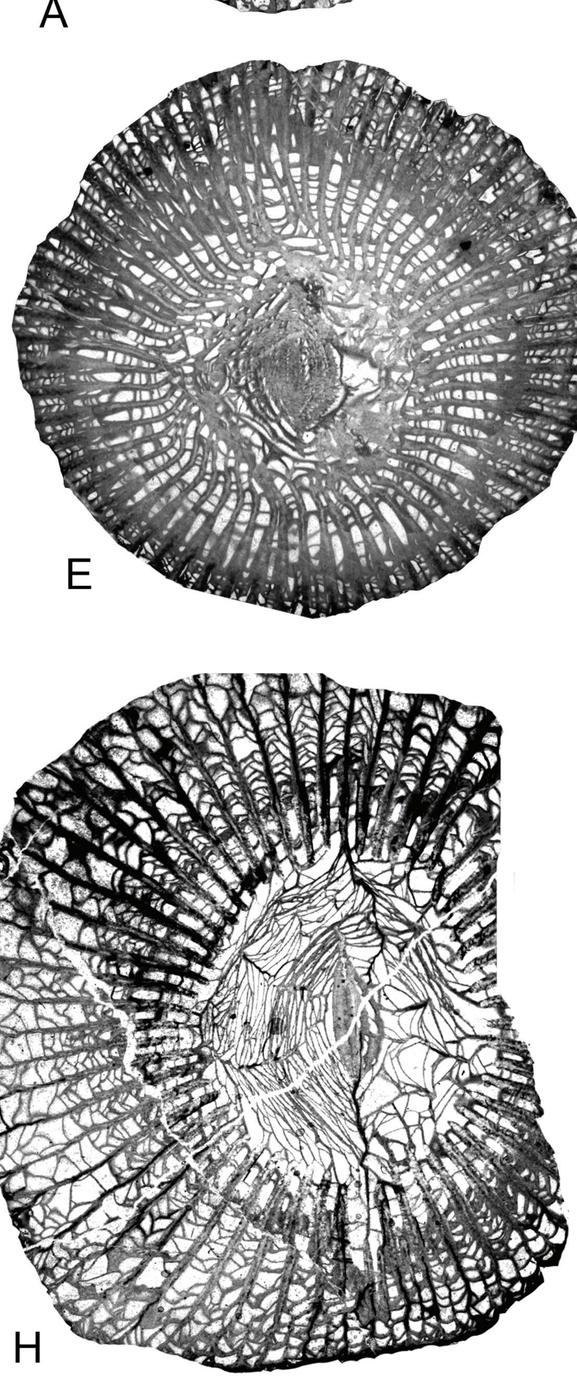
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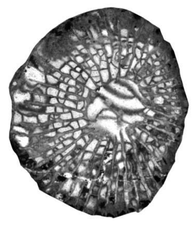
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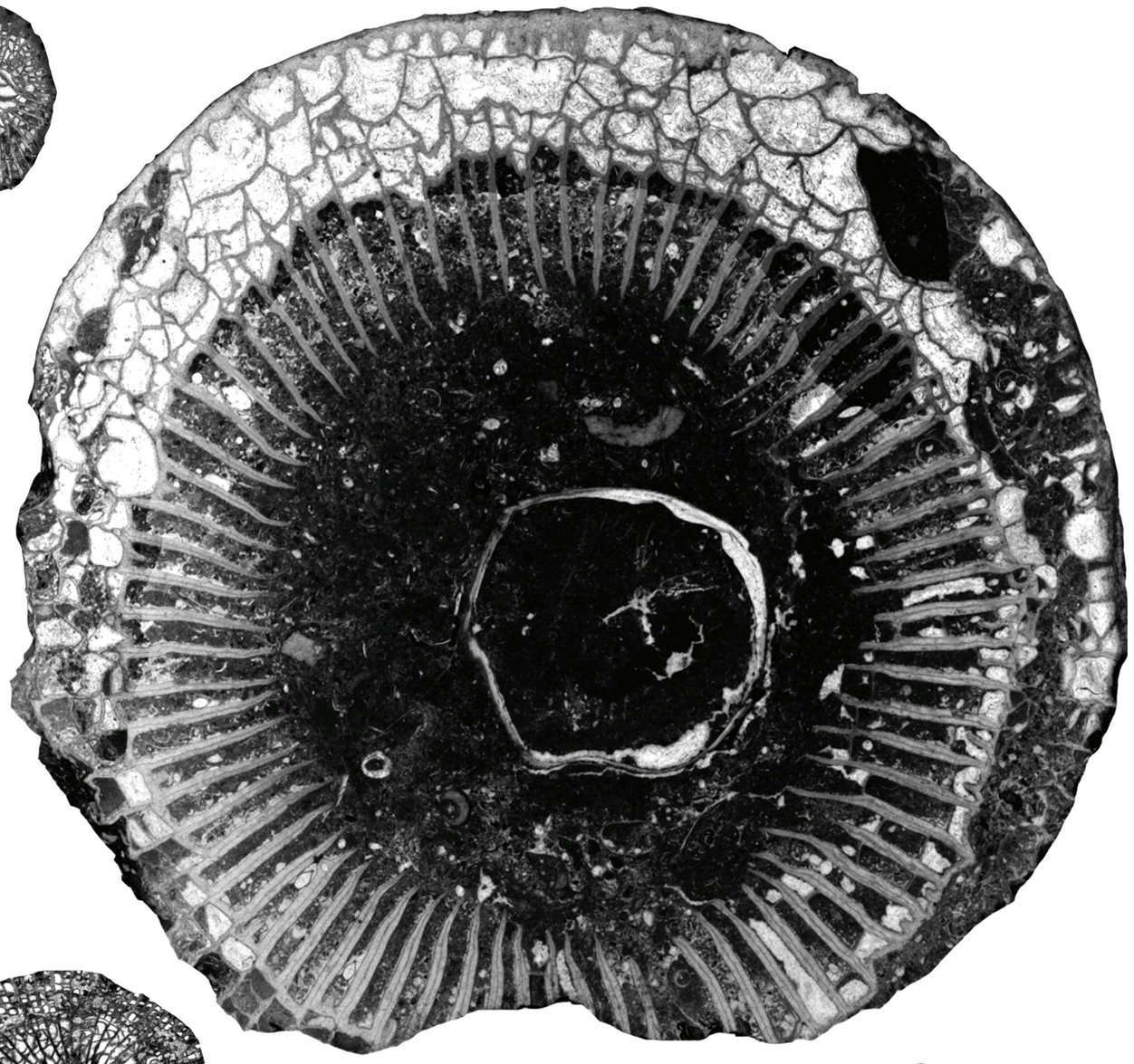
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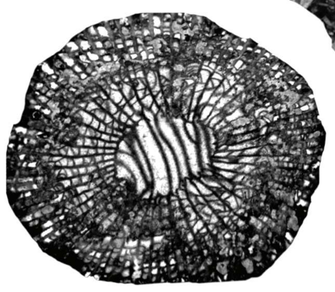
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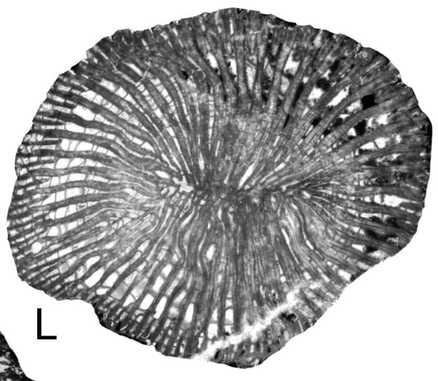
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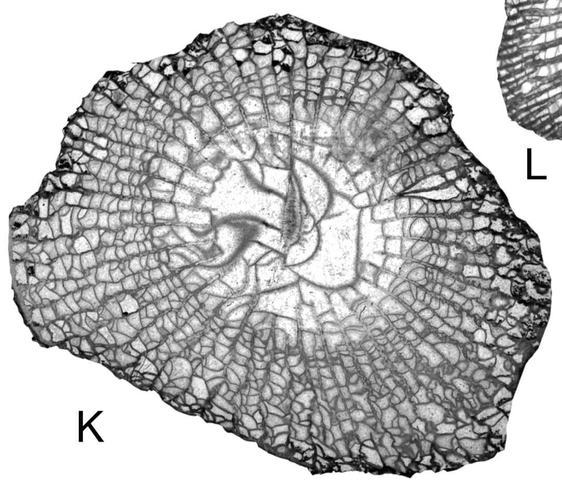
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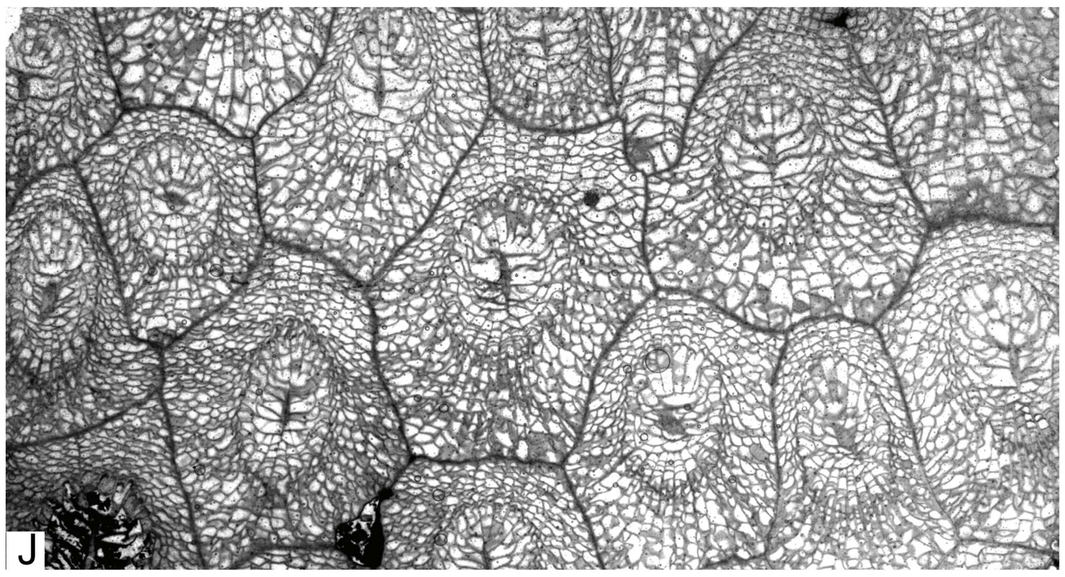
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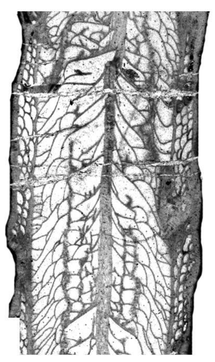
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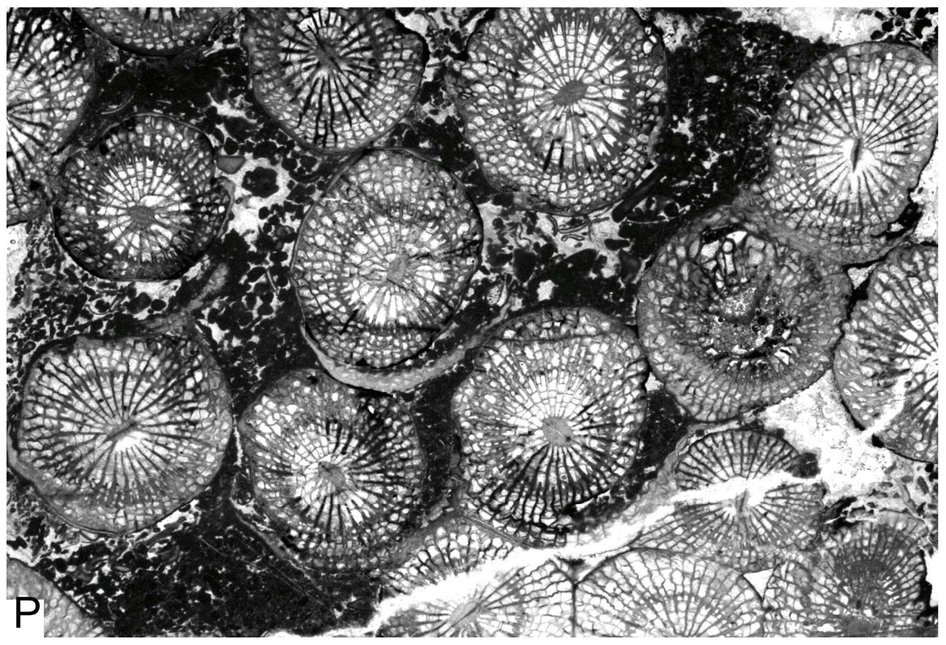
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PLATE 9

Rugose corals of the biozones RC7α -RC7β (Visé región)

Fig. A: ***Gangamophyllum densitabulatum*** **POTY, 1981**
Berwine valley (VSA), upper part of the Visé Fm (RC7β), specimen Berwine car. A/1/e

Fig. B: ***Solenodendron furcatum*** **(SMITH, 1925)**
Visé quarries (VSA), upper part of the Visé Fm (RC7β), specimen Visé 113

Fig. C: ***Clisiophyllum keyserlingi*** **MCCOY, 1849**
Visé quarries (VSA), upper part of the Visé Fm (RC7β), specimen Visé 22/2/b

Fig. D: ***Axophyllum pseudokirsopianum*** **SEMENOFF-TIAN-CHANSKY, 1974**
Visé quarries (VSA), upper part of the Visé Fm (RC7β), specimen Visé 71/9

Fig. E: ***Axophyllum densum*** **(RYDER, 1930)**
Visé quarries (VSA), upper part of the Visé Fm (RC7 β), specimen Visé 509

Fig. F: ***Axophyllum lonsdaleiforme*** **(SALEE, 1913)**
Visé quarries (VSA), upper part of the Visé Fm (RC7β), specimen Visé IG/3440/3

Fig. G: ***Axophyllum expansum*** **MILNE-EDWARDS & HAIME, 1850**
Visé quarries (VSA), upper part of the Visé Fm (RC7 β), specimen Visé 79

Fig. H: **"*Botrophyllum*" sp.**
Visé (VSA), upper part of the Visé Fm (RC7β), specimen Visé 15

Fig. I: ***Semenoffia viseensis*** **POTY, 1981**
Visé (VSA), upper part of the Visé Fm (RC7β), specimen Visé 52

Fig. J: ***Merlewoodia*** **sp. D**
Visé quarries (VSA), upper part of the Visé Fm (RC7β), specimen Visé "F-L"/133

Fig. K: ***Kizilia*** **sp. nov.**
Visé quarries (VSA), upper part of the Visé Fm (RC7β), specimen Visé 57

Fig. L: ***Bradyphyllum rotiphylloides*** **POTY, 1981**
Visé quarries (VSA), upper part of the Visé Fm (RC7β), specimen Visé 58

Fig. M: ***Rotiphyllum rushianum*** **(VAUGHAN, 1908)**
Visé quarries (VSA), upper part of the Visé Fm (RC7β), specimen Visé 54

Fig. N: ***Caninia*** **sp. D**
Visé quarries (VSA), upper part of the Visé Fm (RC7β), specimen Visé 125

Fig. O: ***Amplexocarinia*** **cf. *muralis*** **SOSHKINA, 1941**
Richelle Rock (VSA), upper part of Visé Fm (RC7β), specimen Richelle RCA/2

Fig. P: ***Rotiphyllum*** **sp.**
Berneau section (VSA), Berneau Fm (RC7α), specimen Berneau 50/33

Fig. Q: **calicular view of *Dibunophyllum bipartitum* (MCCOY, 1849)**
Visé quarries (VSA), upper part of Visé Fm (RC7β), specimen D/V/1 (Salée's collection)

Fig. R-U: ***Amplexus coralloides*** **SOWERBY, 1814**
Visé quarries (VSA), upper part of Visé Fm (RC7β), specimens from old collections (scale: x 1)

Fig. V: **calicular view of *Axophyllum lonsdaleiforme* (SALÉE, 1913)**
Visé quarries (VSA), upper part of Visé Fm (RC7β-RC8), specimen D/V/7 (Salée's collection)

Fig. W: **cylindrical habitus of *Clisiophyllum keyserlingi* MCCOY, 1849, showing oblic growth ridges**
Visé quarries (VSA), upper part of the Visé Fm (RC7β), specimen from old collections (scale: x 0.75)

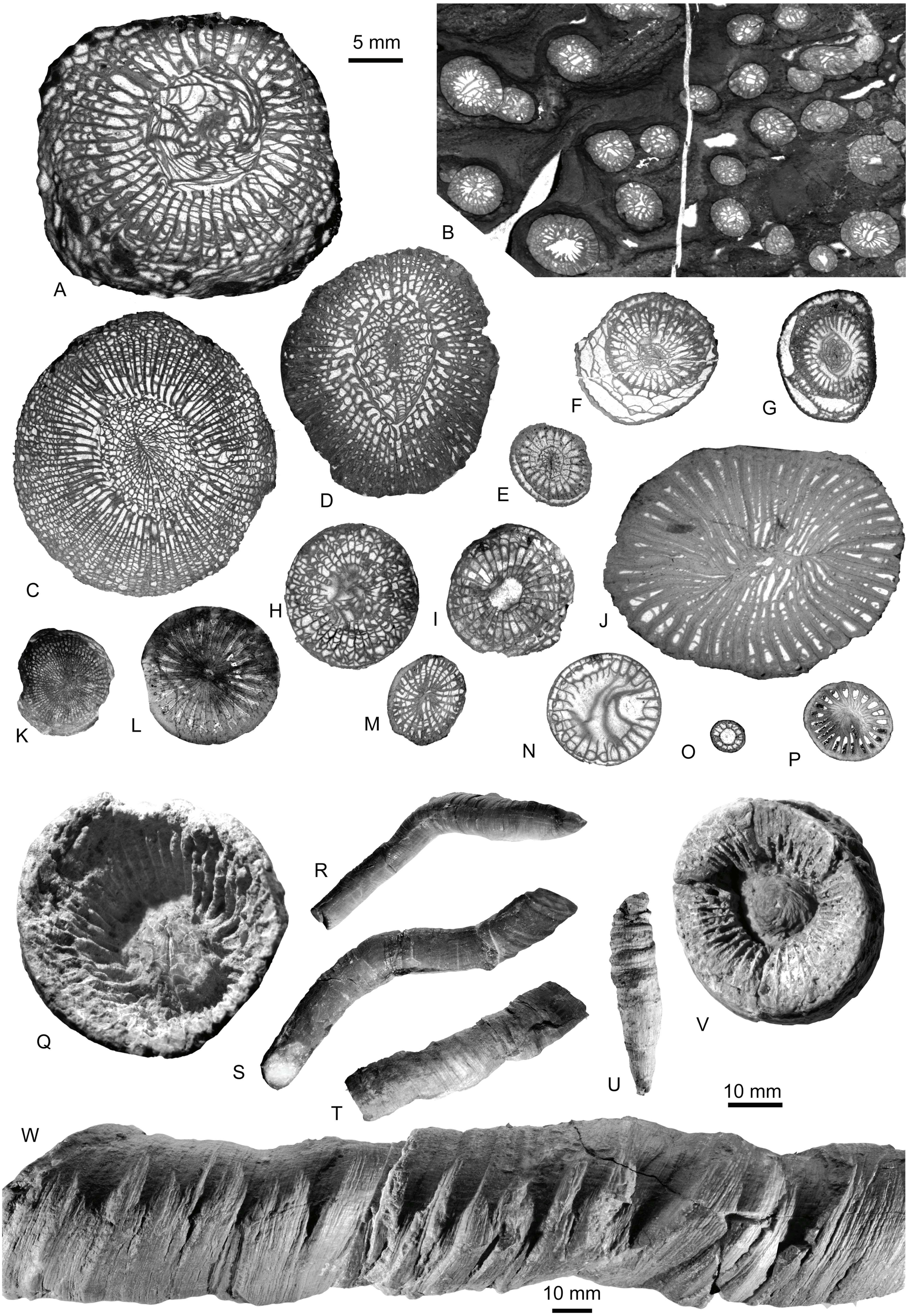
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PLATE 10

Rugose corals of the biozones RC7β (Royseux)

Fig. A: ***Diphyphyllum maximum*** **POTY, 1981**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/97/c

Fig. B: ***Diphyphyllum lateseptatum*** **MCCOY, 1849**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/30

Fig. C: ***Diphyphyllum furcatum*** **HILL, 1940**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/13

Fig. D: ***Diphyphyllum fasciculatum*** **FLEMING, 1828.**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/144/a

Fig. E: ***Siphonodendron intermedium*** **POTY, 1981**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III-2000/168/b

Fig. F: ***Siphonodendron pauciradiale*** **(MCCOY, 1844)**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux 8

Fig. G: ***Siphonodendron junceum*** **(FLEMING, 1828)**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/229

Fig. H: ***Lithostrotion decipiens*** **(MCCOY, 1849)**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/62

Fig. I: ***Lithostrotion mccoyannum*** **MILNE-EDWARDS & HAIME, 1851**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/3/74/a

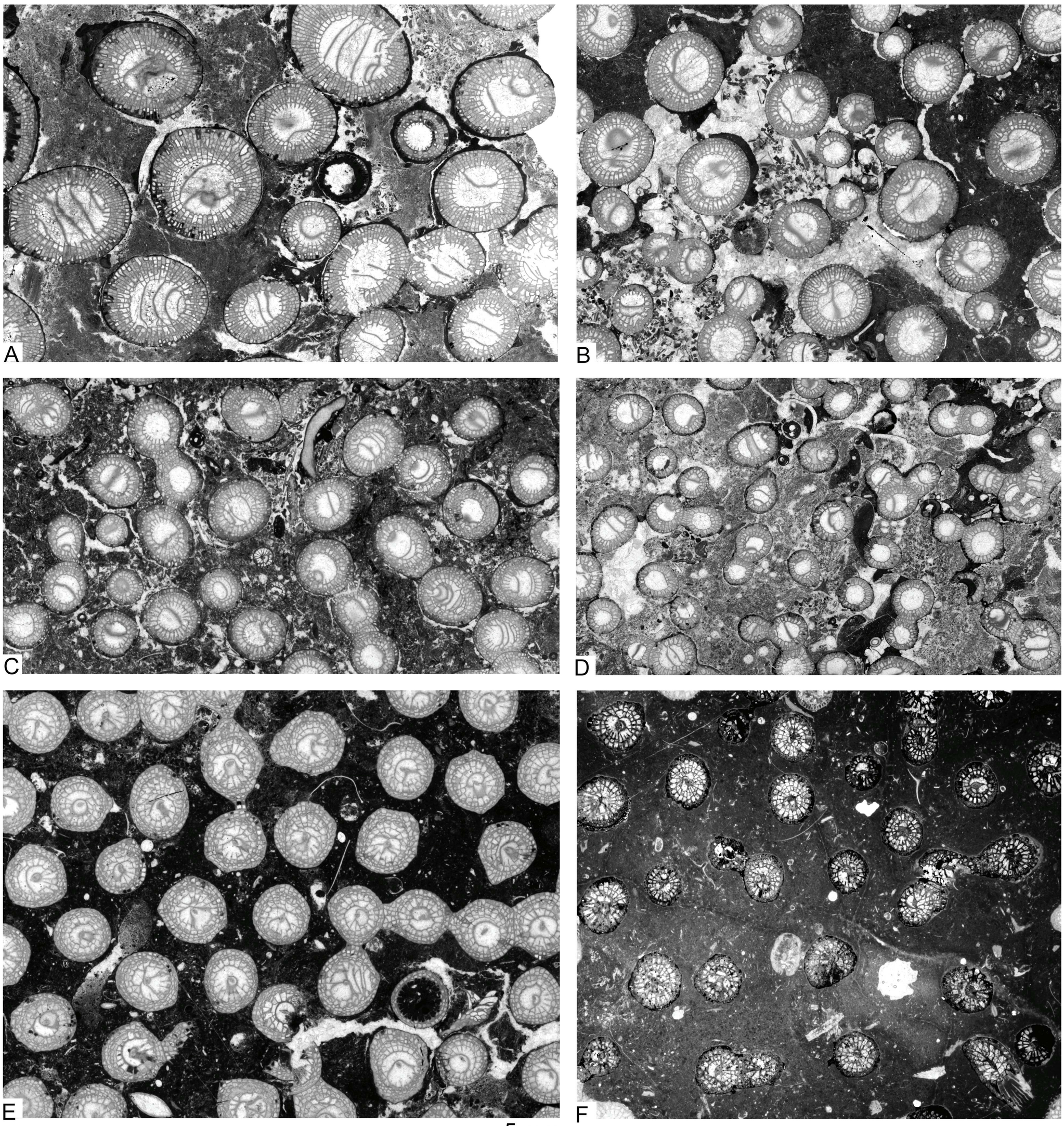
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PLATE 11

Rugose corals of the biozones RC7β (Royseux)

Fig. A: ***Caninophyllum archiaci halkyense*** **LEWIS, 1929 (= *Bothrophyllum streeli* POTY, 1981)**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/109/a

Fig. B: **"*Bothrophyllum*" *lateseptatum* POTY, 1981**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/79/c

Fig. C: ***Koninckophyllum interuptum*** **THOMSON & NICHOLSON, 1876**
Royseux section (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux RG/214

Fig. D: ***Koninckophyllum magnificum*** **THOMSON & NICHOLSON, 1876**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/1998/162/b

Fig. E: ***Axophyllum*** **sp. A**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/172/b

Fig. F: ***Dibunophyllum bipartitum*** **(MCCOY, 1849)**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/155/a

Fig. G: ***Haplolasma*** **cf.** ***densum*** **(LEWIS, 1930)**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/107/b

Fig. H: ***Pseudozaphrentoides juddi*** **(THOMSON, 1893)**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/111

Fig. I: ***Clisiophyllum keyserlingi crassiseptatum*** **SEMENOFF-TIAN-CHANSKY, 1974**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/66/b

Fig. J: ***Aulophyllum fungites*** **(FLEMING, 1828)**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/177/b

Fig. K: ***Rylstonia*** **cf.** ***benecompacta*** **HUDSON & PLATT, 1927**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/77/b

Fig. L-M: ***Guadatia*** **sp.**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/1999/165

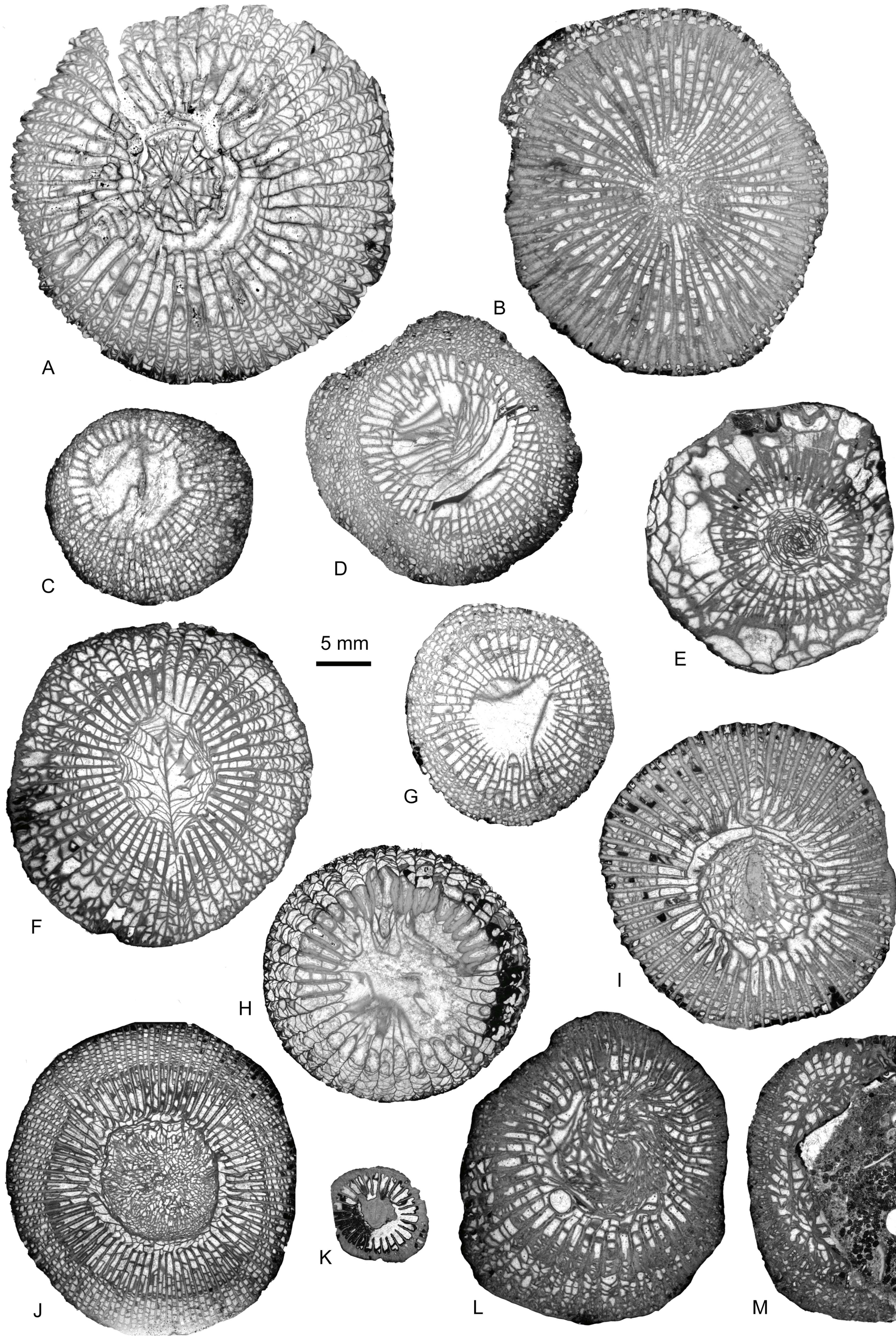
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PLATE 12

Rugose corals of the biozones RC7β-RC8

Fig. A: ***Kizilia* cf. *concavitabulata* DEGTJAREV, 1965**
Visé quarries (VSA), upper part of Visé Fm (RC7β), specimen Visé 16

Fig. B: ***Kizilia gregaria* (POTY, 1981)**
Visé quarries (VSA), upper part of Visé Fm (RC7β), specimen Visé 87/I/a

Fig. C: **cf. *Pareynia splendens* SEMENOFF-TIAN-CHANSKY, 1974**
Royseux trench (CSA), Anhée Fm, Chabôfosse Facies (RC7β), specimen Royseux III/181

Fig. D: ***Viseaulina singularis* POTY, 1981**
Visé quarries (VSA), upper part of Visé Fm (RC7β), specimen Visé 81

Fig. E: ***Pareynia splendens* SEMENOFF-TIAN-CHANSKY, 1974**
Visé quarries (VAS), upper part of Visé Fm, (RC7β), specimen Visé 41/b (scale: x 1)

Fig. F: ***Pentaphyllum* sp. B**
Visé quarries (VSA), upper part of Visé Fm (RC7β), specimen Visé 107/a

Fig. G: ***Cyathaxonia rushiana* VAUGHAN, 1906**
Visé quarries (VSA), Souvré Fm, (RC8), specimen Visé 4

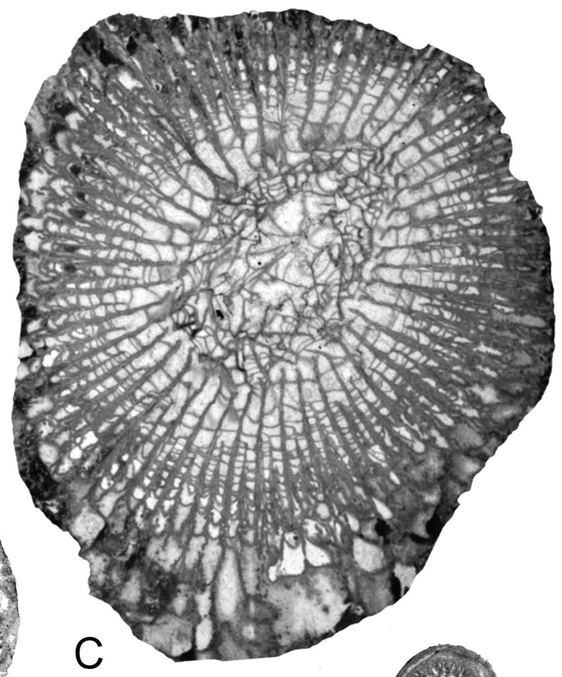
Fig. H: ***Palastrea* cf. *carbonaria* (MCCOY, 1851)**
Royseux section (CSA), Anhée Fm, Chabôfosse Facies (RC8), specimen Royseux RG/203 (scale: x 1)

Fig. I: ***Lonsdaleia* (*Lonsdaleia*) *duplicata* (MARTIN, 1809)**
Royseux section (CSA), Anhée Fm, Chabôfosse Facies (RC8), specimen Royseux RG/18

Fig. J: ***Lonsdaleia* sp. nov.**
Distribution: VSA, upper part of the Visé Fm, RC8.
Royseux section (CSA), Anhée Fm, Chabôfosse Facies (RC8), specimen Royseux RG/218/c/91

Fig. K: ***Lonsdaleia* (*Actinocyathus*) *floriformis floriformis* (MARTIN, 1809)**
Visé quarries (VSA), upper part of Visé Fm (RC8), specimen "Visé V3c"


A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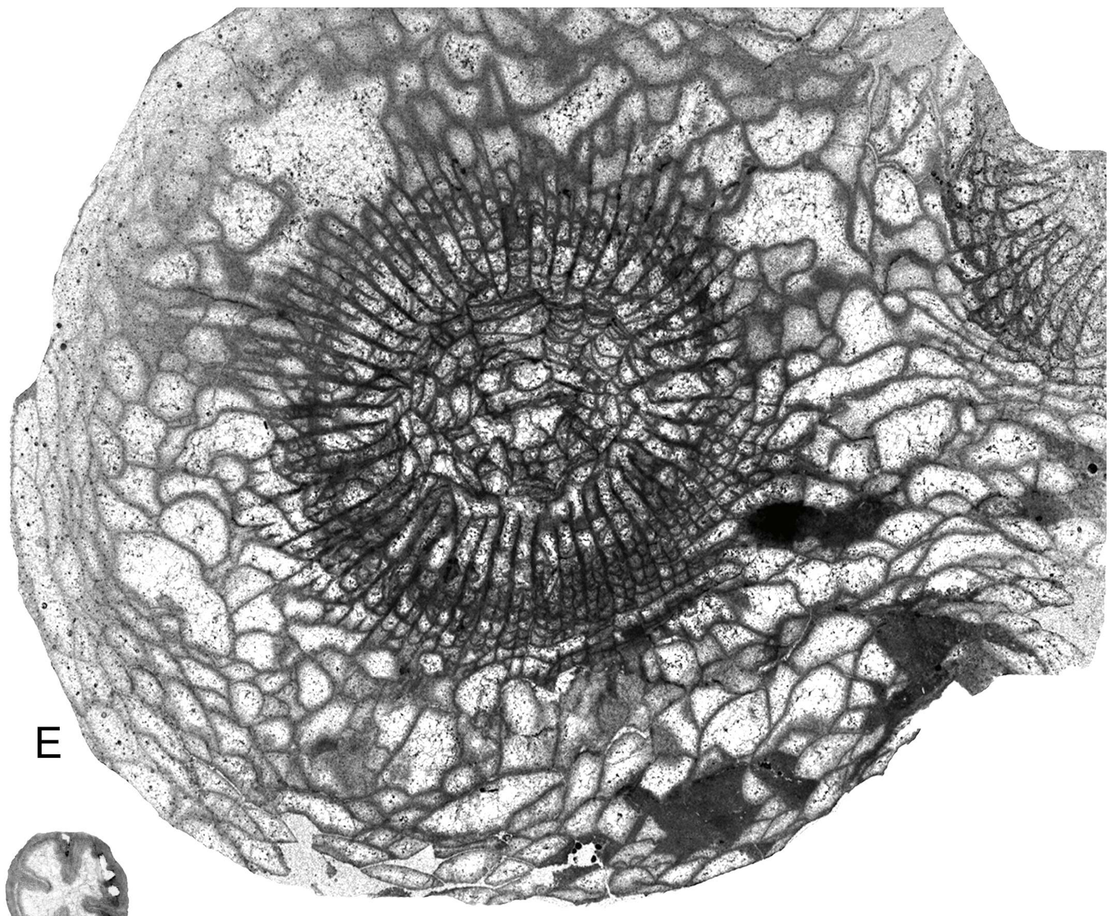
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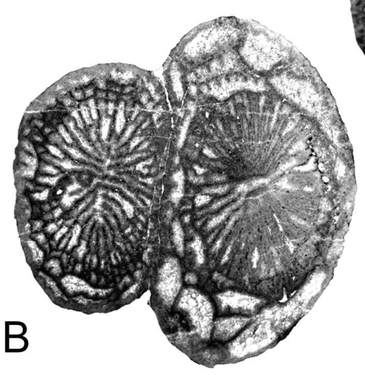
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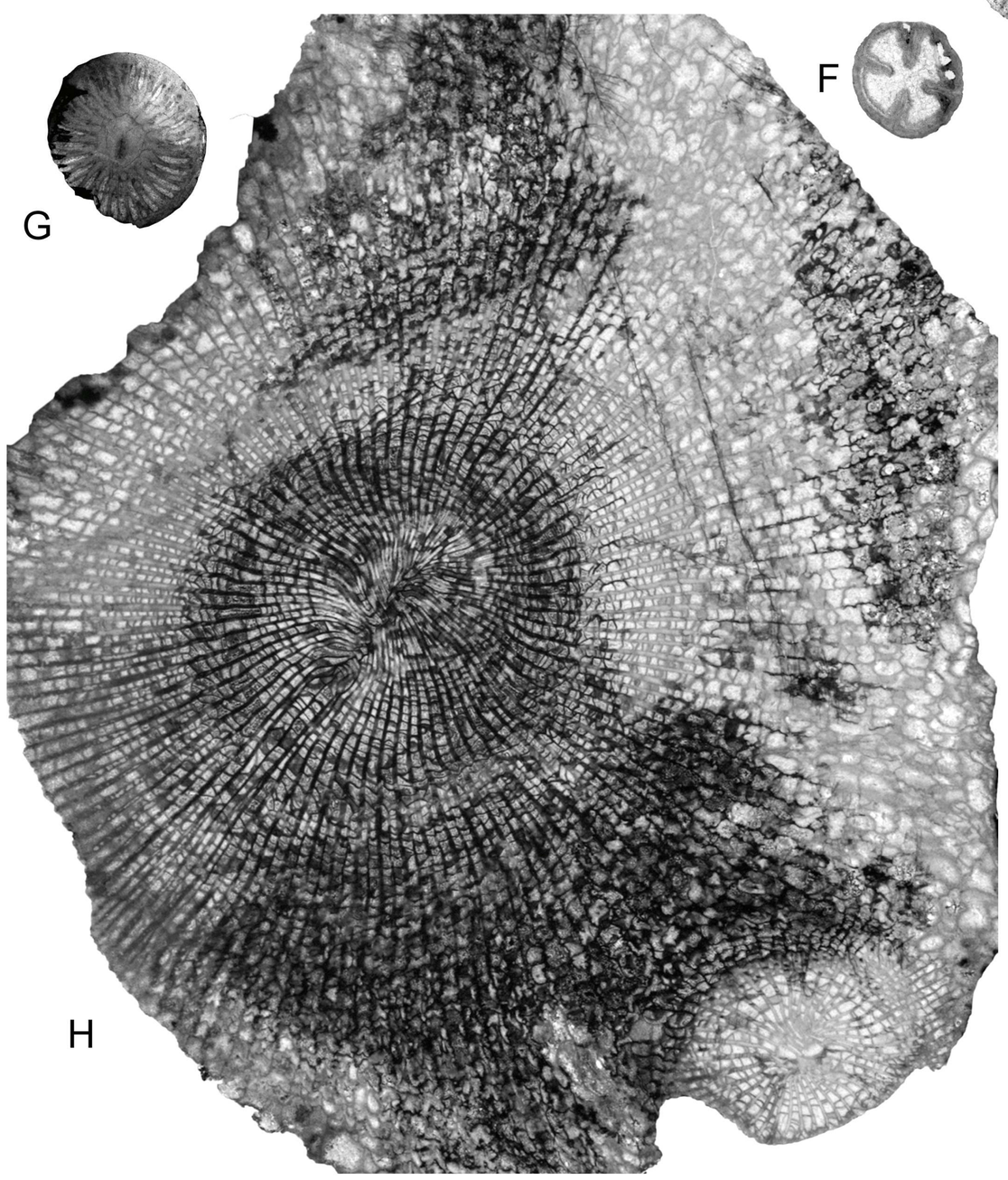
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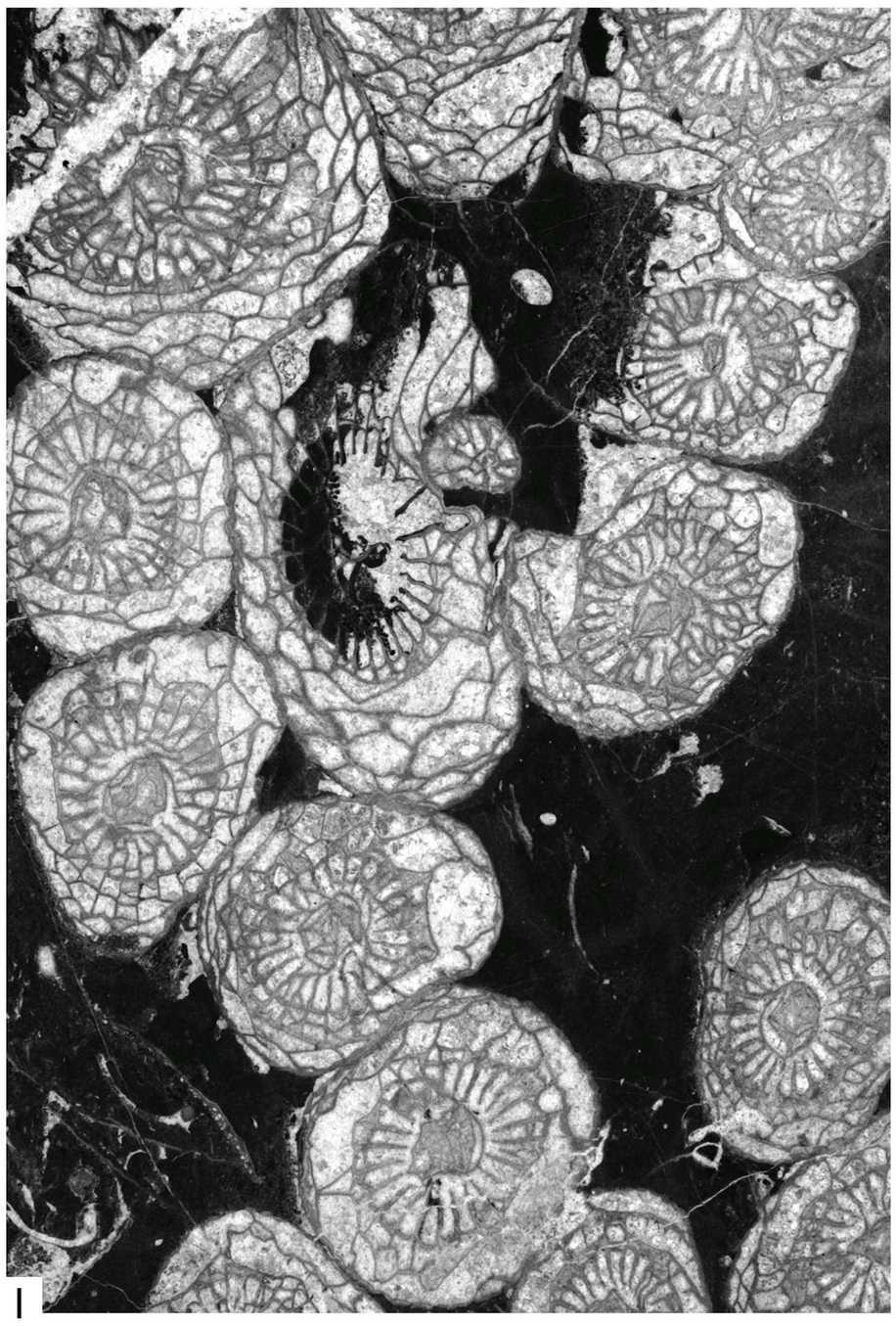
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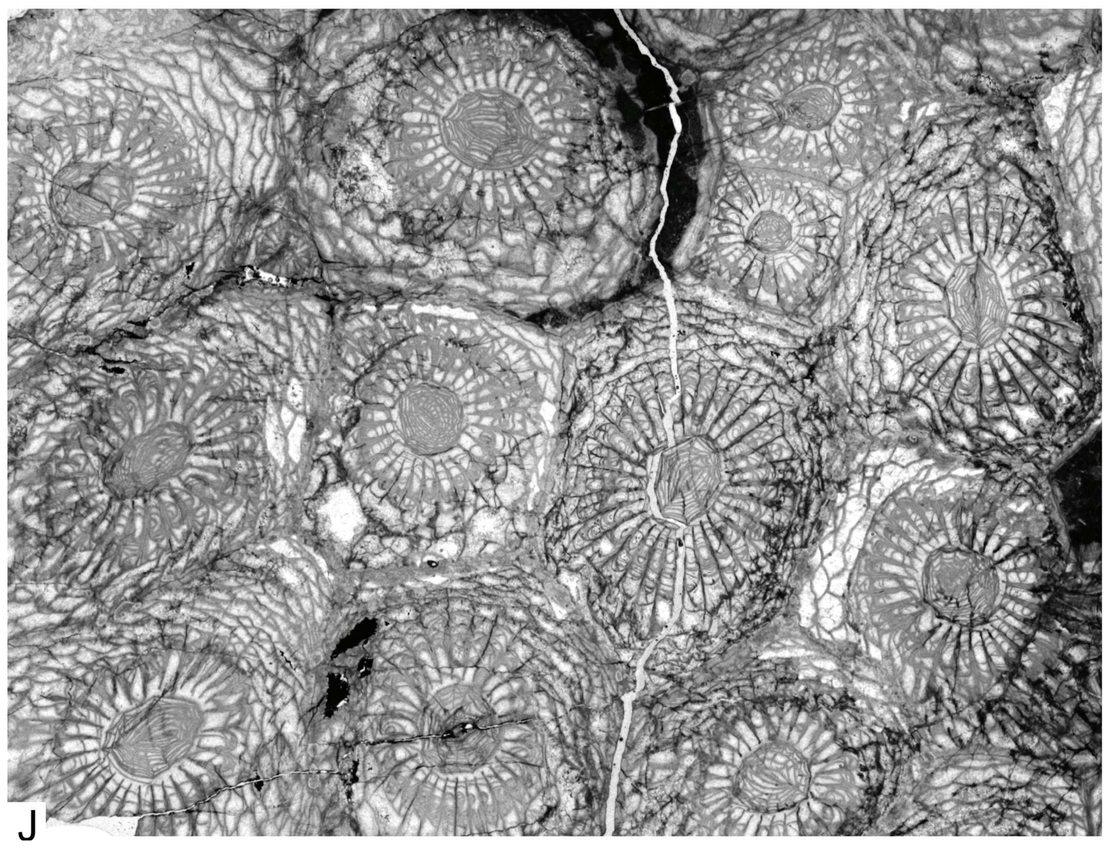
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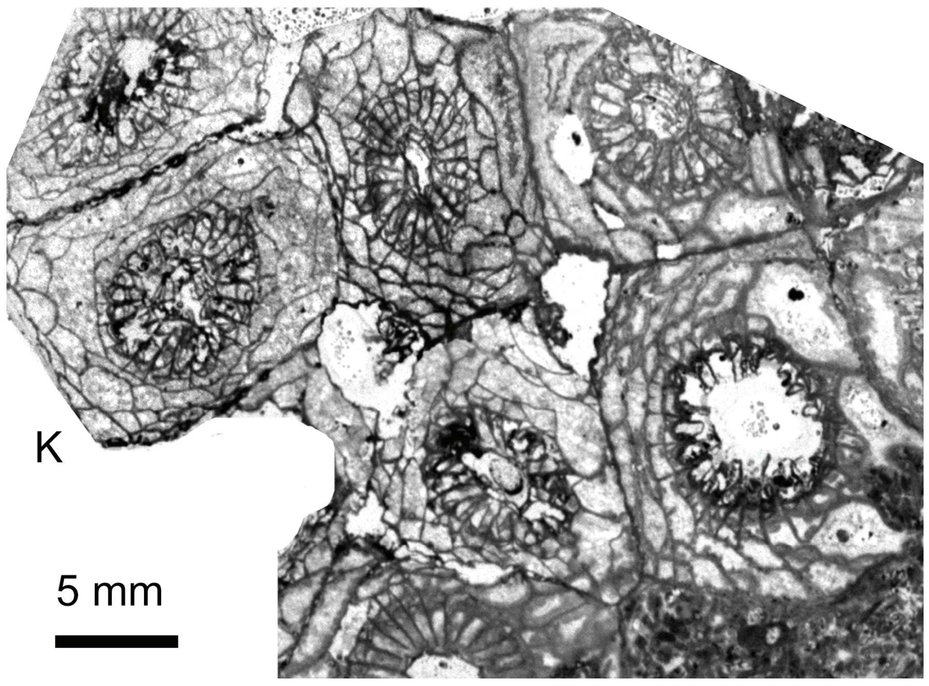
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