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Systematic Descriptions of the Scleractinia
Family Rhipidastreaeidae

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PART F, REVISED, VOLUME 2, CHAPTER 12: SYSTEMATIC DESCRIPTIONS OF THE SCLERACTINIA FAMILY RHIPIDASTRAEIDAE

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The Rhipidastreaeidae consist of only the nominate genus and three nominal species (BARON-SZABO, 2002, p. 113; and updated herein). They are exclusively fossil. So far, representatives of the Rhipidastreaeidae have been reported from a very small number of localities in Europe and Central America. The taxonomic relationship of this family to other groups still remains largely unknown because it contains structures that show affinities to characteristics of families which have been placed in different suborders, such as neorhipidacanth microstructure (suggesting affinities to the Rhipidogyridae); septal porosity (present in families of various suborders); and wall structures that closely correspond to the type found in the Thecosmiliidae (genus *Isastrea* MILNE EDWARDS & HAIME, 1851; see e.g., LATHUILIÈRE, 1988; ELIÁŠOVÁ, 1991; BARON-SZABO, 2002; and herein).

Family RHIPIDASTRAEIDAE ELIÁŠOVÁ, 1991

[Rhipidastreaeidae ELIÁŠOVÁ, 1991, p. 168]

Colonial; septa have irregular and sparse pores; their lateral flanks are covered by a large variety of granulae, generally ranging between 100–250 µm; their shapes include spines, carinae-like structures, flat pennular-like forms, and rounded granulae; lateral spines are isolated or arranged in small clusters, standing off in various directions; pali and paliform lobes present or absent;

columella irregularly parietal, sublamellar, or made of twisted lamellar segments; wall arranged in a zigzag pattern; endothecal dissepiments and synapticulae present; microstructure made of neorhipidacanth trabeculae. *Cretaceous (upper Albian–lower Turonian, Campanian)*.

Rhipidastrea ELIÁŠOVÁ, 1991, p. 168 [**R. soukupi* ELIÁŠOVÁ, 1991, p. 169; OD]. Colonial, massive, cerioid, cerio-plocoid, submeandroid; budding intracalicular; corallites isolated or arranged in short (of up to 4 corallites in type species) meandroid series with corallite centers distinct or subdistinct; septa confluent to non-confluent, irregularly and sparsely perforated; septa generally arranged bilaterally due to elongation of calyx; septa more or less radially arranged found only in small-sized cerioid to cerio-plocoid corallites (lumen of up to around 3 mm in diameter in type species); septal flanks covered by a large variety of granulae, generally ranging between 100–250 µm; shapes include spines, carinae-like structures, flat pennular-like forms, and rounded granulae; lateral spines isolated or arranged in small clusters, standing off in various directions; pali and paliform lobes irregularly present, appear to be absent in some small-sized corallites; columella irregularly parietal, sublamellar, or made of twisted lamellar segments; trabecular extensions of axial edges sometimes fused with the columella; endotheca made of thin, vesicular dissepiments; synapticulae sparse; wall formed by a mix of synapticulae, and septal and dissepimental elements, arranged in a zigzag pattern; microstructure made of neorhipidacanth trabeculae. [The holotype, ÚÚG HF 1.751 and the thin sections ÚÚG 88896/II, 88897/II, and 97068–97070/I are housed at Ústředního Ústavu Geologického (Geological Institute, University of Prague). The genus is best described and discussed by ELIÁŠOVÁ 1991, p. 168–170, pl. II, 2, pl. IV, 3, pl. VI, 2, pl. VII, 1–2, pl. VIII, 1–2) and BARON-SZABO (2002, p. 113, pl. 79, 1–2, 4.

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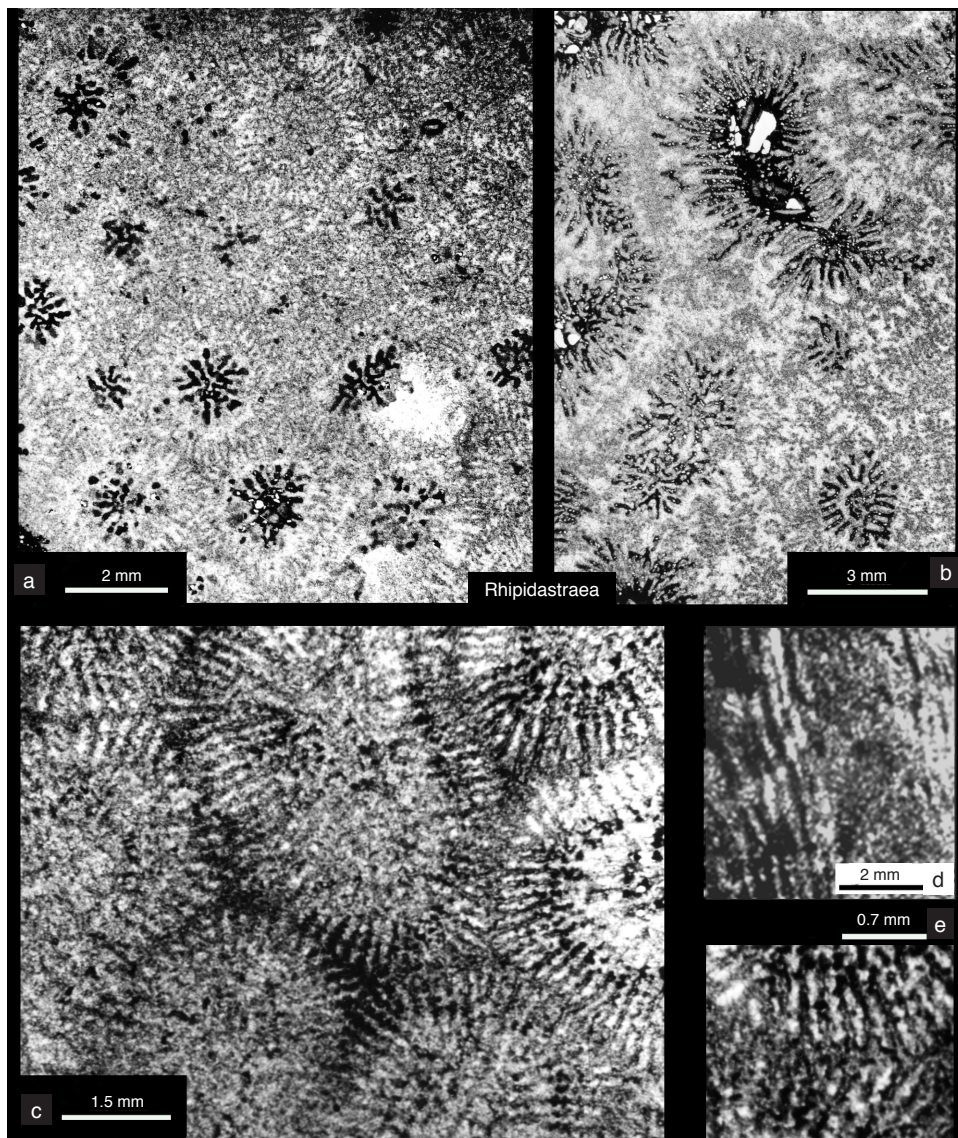


FIG. 1. Rhipidastraeidae (p. 1–2).

Material assigned to the genus *Thalamoceniopsis* in FILKORN & PANTOJA-ALOR, 2009, p. 112–114, fig. 42, 1–6, from the upper Albian–lower Cenomanian of Mexico, is grouped with this genus]. *Cretaceous* (upper Albian–lower Turonian, Campanian): Central America, upper Albian–lower Cenomanian; Eastern Europe, upper Cenomanian–lower Turonian; Southern Europe, Campanian.—FIG. 1a–e. **R. soukupi* ELIÁŠOVÁ, 1991, upper Cenomanian–lower Turonian, Czech Republic (all images courtesy of Helena Eliášová); a, cross-section view of holotype, thin section, ÚÚG 97069/I, (Baron-Szabo, 2002, pl. 79,2); b, cross-section view of topotype, thin

section, 97066/I (new); c, cross-section view of holotype, thin section ÚÚG 88896/II, (Eliášová, 1991, pl. VIII,1); d, lateral view of holotype, thin section, ÚÚG 88897/II (Eliášová, 1991, pl. VIII,2); e, close-up view of c.

ABBREVIATIONS FOR MUSEUM REPOSITORIES

ÚÚG: Ústředního Ústavu Geologického (Geological Institute, University of Prague), Prague, Czech Republic

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