

Genus 4. *Craniella*, O. Schmidt.

Craniella, O. Schmidt, Spong. Atlant. Gebiet., p. 66, 1876.

„ Sollas, Ann. and Mag. Nat. Hist., ser. 5, vol. ix. p. 149, 1882; Sci. Proc. Roy. Dubl. Soc., p. 181, 1886.

The cortex is differentiated into an inner fibrous layer, traversed radially by cortical oxeas; and an outer collenchymatous layer, excavated by intercortical cavities.

The pores lie in groups, perforating the roofs of the intercortical cavities; the oscules are distinguishable from the pores, and are usually few in number.

The mesoderm of the choanosome consists of sarcenchyme. The chamber-system is aphodal.

Type—*Craniella cranium*, Lamarck.

Family II. SAMIDÆ, Sollas.

Samidæ, Sollas, Encyclopædia Britannica, vol. xxii. p. 423.

History.—The genus *Samus*, on which this family is founded, was included by Gray in the family Cloniadæ, Gray.¹ With *Cliona*, the type of this family, it has evidently no near relation. Carter having founded a family very similar to the Cloniadæ, viz., the Eccelonidæ,² to contain the three genera, *Cliona*, *Thoosa*, and *Alectona*, subsequently added *Samus* to it and another new genus *Dotona*.³ The family Eccelonida not being established on morphological characters, but on a peculiarity of habit only, could scarcely be expected to stand, and a very slight examination is sufficient to convince us of the want of morphological affinity between its components. The family evidently cannot be defended, but even were this not the case, the genus *Samus* would have to be removed from it, since it possesses no essential character in common with its associates. The presence of the amphitriæne, the only megasclere it possesses, indicates its place with the Tetractinellida; the sigmaspire similarly with the Sigmatophora; within this demus it must be included as the representative of a distinct family.

Definition.—Sigmatophora in which the characteristic megasclere is an amphitriæne.

Genus *Samus*, Gray.

Samus, Gray, Proc. Zool. Soc. Lond., p. 526, 1867.

„ Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. vi. p. 59, 1880.

With the definition of the family.

Type—*Samus anonymus*, Gray.

¹ Gray, Proc. Zool. Soc. Lond., p. 526, 1867.

² Carter, Journ. Roy. Micr. Soc., vol. ii. p. 496, 1879.

³ Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. vi. p. 56, 1880.