Genus 6. *Amphibleptula*, O. Schmidt.

Amphibleptula, O. Schmidt, Spong. Meerb. Mexico, p. 28, 1879.

Azoricidæ with a single oscule at the summit, and poriferous areas borne at the ends of short cylindrical processes, irregularly and generally distributed over the sides.

Type—*Amphibleptula madrepora*, O. Schmidt (p. 351).

(?) Genus 7. *Tremaulidium*, O. Schmidt.

Tremaulidium, O. Schmidt, Spong. Meerb. Mexico, p. 31, 1879.

Founded on a single species.

Type—*Tremaulidium geminum*, O. Schmidt (p. 352).

Genus 8. *Leiodermatium*, O. Schmidt.

Leiodermatium, O. Schmidt, Spong. Meerb. Mexico, p. 28; Spong. Atlant. Gebiet., p. 22, 1870.
„ Zittel, Abhandl. d. k. baier. Akad. d. Wiss., Bd. i. p. 103, 1878.

Azoricidæ of vasiform shape, with comparatively large oscules situated on the outer surface; pores distributed over the inner surface.

Type—*Leiodermatium lynceus*, O. Schmidt (p. 352).

Genus 9. *Sympyla*, n. gen.

Azorica (*p.p.*), O. Schmidt, Spong. Meerb. Mexico, p. 89.

Azoricidæ in which the poral terminations of the excurrent canals are collected into separate areas, which are distributed over one side of the sponge; the oscules are simple, and are distributed over the side opposite to that bearing the pores.

Type—*Sympyla cribrifera* (O. Schmidt, p. 353).

Family II. Anomocladidæ, Zittel.

Anomocladina, Zittel, Abhandl. d. k. baier. Akad. d. Wiss., Bd. i. pp. 97, 100, 1878.
„ Sollas, Proc. Roy. Irish Acad., ser. 2, vol. iv. p. 486, 1885.

Anoplia in which the desma is acrepid, a variable number of smooth cylindrical cladi radiate from a thickened centrum, zygosis occurs between the expanded ends of the cladi of one desma and the centrum of another.

Genus 1. *Vetulina*, O. Schmidt.

With a single species—*Vetulina stalactites*, O. Schmidt (p. 354).