A Key to Hexactinellid Families

by

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1a. Hexactinellida with amphidiscs, without hexasters[3] 2
1b. Hexactinellida with hexasters, without amphidiscs 5

2a. Xylostyles present[2] ..... Corythophoridae Hernandez,1932
2b. Xylostyles absent 3

3a. Sceptres present[3] ..... Pheronematidae Gray,1870
3b. Sceptres absent 4

4a. Uncinates present, tauractins common[2]..... Monorhaphididae Ijima,1927
4b. Uncinates nearly always absent, tauractins absent or rare .....
..... Hyalonematidae Gray,1857

5a. Rhabdodiactins present[2] 6
5b. Rhabdodiactins absent 9

6a. Goblet or mushroom-like body ..... Sympagellidae (Ijima,1903)
6b. Ovoid, cup-like, tubular or sacciform body 7

7a. Dermal pentactins present[2] 8
7b. Dermal pentactins absent ..... Alcyoncellidae (Gray,1867)

8a. Oxyhexasters present[3] ..... Lanuginellidae (F.E. Schulze,1886
8b. Oxyhexasters absent ..... Placoplegmidae (Ijima,1904)

9a. Main skeletal hexactins all lychniscs, or lychniscs common[3] .....
..... Aulocystidae F.E. Schulze,1904
9b. Main skeletal hexactins never lychniscs 10

10a. Clavules, lonchioles or sarules present[3] ..... Farreidae F.E. Schulze,1886
10b. Clavules, lonchioles or sarules absent, scopules often present[3] 11

11a. With radial canals that occupy the interstices of a honeycomb-like skeleton .
..... Aphrocallistidae Gray,1858
11b. Without a honeycomb or hexagonal skeleton 12

12a. Skeletal framework irregularly meshed, being made up of hexactins with rays frequently curved and elongated, and oriented without regularity in relation to one another ..... Aulocalycidae Ijima,1927
12b. Skeletal framework often regularly meshed, or if irregular, hexactins are straight rayed and as a rule no longer than the side they form of the mesh 13

13a. With cleft-like or canal-like gaps extending from the dermal membrane to the spongocoel ..... Hexactinellidae (F.E. Schulze,1886)

13b. Without cleft-like or canal-like gaps ..... Euretidae F.E. Schulze,1886

Footnotes:

2. figure(s) on page 2 of spicule drawings
3. figure(s) on page 3 of spicule drawings