

General Key to California Demospongiae

Prepared for SCAMIT by Karen Green December, 1991

- 1a. No skeleton.....Dendroceratida (e.g., Halisarca)
- 1b. Skeleton present.....2
- 2a. Spongin fiber skeleton.....3
- 2b. Spiculo-fiber skeleton.....4
- 3a. Primary and secondary fibers form branching network.....  
.....Dictyoceratida (e.g., Dysidea)
- 3b. Fibers arranged on a dendritic pattern, but without cross-  
connections (anastomoses).....Dendroceratida (e.g., Aplysilla)
- 3c. Fibers reduced, dense collagenous matrix.....  
.....Verongida (e.g., Verongia)
- 4a. Spicules include three or four rayed megascleres.....5
- 4b. No multi-rayed megascleres.....8
- 5a. One ray (rhabdome) much longer than other rays (clads),  
radial skeleton.....6
- 5b. Triacts or tetracts with near equal rays, various skeletons..7
- 6a. Microscleres asters.....  
.....Choristida (e.g., Geodia, Penares, Stelletta)
- 6b. Microscleres sigmoid.....Spirophorida (e.g., Tetilla)
- 7a. With asterose microscleres, radial skeleton.....  
.....Choristida (e.g., Poecillastra)
- 7b. Without microscleres, with lophate multi-rayed spicules,  
unorganized skeleton.....Homosclerophorida (e.g., Plakina)
- 7c. Without microscleres, triacts with spines on one ray,  
axial skeleton.....Axinellida (e.g., Cyamon)

- 8a. Skeleton without organization, or organized only at surface, megascleres monactinal (styles) or diactinal of various sizes, no microscleres.....Halichondrida (e.g., Halichondria, Hymeniacion)
- 8b. Skeleton organized.....9
- 9a. Radial skeleton of monactinal spicules (tylostyles, substylostyles), microscleres absent or asters.....Hadromerida (e.g., Cliona, Polymastia, Suberites, Tethya)
- 9b. Axial skeleton of monactinal (styles) and/or diactinal (oxeas, strongyles) spicules, microscleres absent, microxeas, raphides, or asters.....Axinellida (e.g., Axinella, Hemectyon)
- 9c. Skeleton reticulate, plumose, or plumoreticulate.....10
- 10a. Microscleres absent, sigmas, toxas, and/or microxeas.....11
- 10b. Microscleres include chela or diancistras and additionally may include other types.....12
- 11a. Skeleton reticulate, megascleres diactinal (oxeas or strongyles) and uniform in size, microscleres absent, sigmas, or toxas .....Haplosclerida (e.g., Haliclona, Sigmadocia)
- 11b. Skeleton plumoreticulate, megascleres monactinal (styles, subtylostyles), microscleres- sigmas, toxas, or microxeas.....Poecilosclerida (e.g. Biemna)
- 11c. Skeleton plumoreticulate, megascleres include diacts (tylotes), microscleres- onychaetes.....Poecilosclerida (e.g., Tedania)
- 12a. With diancistras.....Poecilosclerida (e.g., Zygherpe)
- 12b. With anisochelas.....Poecilosclerida (e.g., Asbestopluma, Mycale, Iophon)
- 12c. With isochelas.....Poecilosclerida (e.g., Acarnus, Hymedesmia, Lissodendoryx, .....Microciona, Myxilla, Ophlitaspongia, Plocamia)