KEY FOR HIGHER LEVEL IDENTIFICATION OF SUBTIDAL BENTHIC OPHIUROIDS FROM SCBPP SAMPLES
(modified from Fell 1960)
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1a. plates of oral field not differentiated ................................ Ophiuroidea, unid.
b. plates of oral field differentiated .............................................. 2

2a. spiniform tooth-papillae forming a cluster at the apex of each jaw .............. 3
b. single or paired infradental papillae at the apex of each jaw ...................... 4

3a. with oral papillae ................................................................. Ophiocomidae
b. without oral papillae ............................................................. Ophiotrichidae

4a. infradental papillae paired ...................................................... Amphiuridae
b. infradental papillae single ....................................................... 5

5a. disk cap present ........................................................................ 6
b. disk cap absent ........................................................................ Ophiuroidea, unid.

6a. arms inserted laterally into the disk cap and firmly fused to it ................. 7
b. arms inserted ventrally below the disk cap and partly covered by it ........ 8

7a. disk cap granulated dorsally and ventrally - often also on jaws ............. Ophiodermatidae
b. disk cap scales not granulated .................................................. Ophiuroidea

8a. free margins of jaw bear a continuous series of oral papillae ................. 9
b. oral papillae not continuous ..................................................... Ophiacanthidae

9a. dorsal scales bearing spines, granules, or spiny tubercles ...................... Ophiacanthidae
b. dorsal scales without ornamentation ........................................... Ophionereidae

Note: this key is intended to standardize separatory characters used in processing of SCBPP benthic samples. It can not be reliably applied outside the Southern California Bight, or in other than benthic soft sediment habitats (ie. intertidal collections). If a specimen cannot be definitely placed in one of the family level taxa because of it’s condition IT SHOULD BE IDENTIFIED ONLY TO CLASS LEVEL. Individual taxonomists may be able to identify such specimens to a lower taxon based on their experience or presence of a series of comparative specimens. Even if this is possible the reported identification should be based only on the above key. This restrictive procedure will serve the purpose of standardizing treatment between laboratories for the SCBPP.