KEY TO IDENTIFICATION OF AMPHIODIA SPP IN SCBPP SAMPLES
(partially based on Pasko 1994)
D. B. Cadien - Marine Biology Lab CSDLAC, 15 Oct 1994

1a. disk cap absent 2
b. disk cap present 5

2a. arm spines cylindrical, truncate, flattened in cross-section . . . . . *A. occidentalis*
b. arm spines tapered, pointed, round or oval in cross-section 3

3a. arm spines bluntly pointed, lacking hyaline tips . . . . . *A. psara*
b. arm spines acutely pointed, often with hyaline tips 4

4a. distal margin of dorsal arm plates straight*, no gap between lateral and dorsal arm plates . . . . . *A. digitata*
b. distal margin of dorsal arm plates angled up at the sides*, leaving a gap between the dorsal and lateral arm plates through which tissue is visible . . . . . *A. urtica*

5a. disk cap less than 2mm in diameter OR disk cap consists of primary scales and few other small scales, OR # of marginal scales 2 or less on either side of the mid-marginal scale, OR # of marginal scales indeterminate . . . . . *Amphiodia* sp
b. disk cap greater than 2 mm diameter 6

6a. primary and mid-marginal scales little or not different in size from other disk cap scales (cap regenerated) 7
b. primary and mid-marginal scales larger than other disk cap scales (original cap) . . . . . ~~10~~ 11

7a. some scales on disk cap produced into hyaline points 8
b. no scales on disk cap produced into hyaline points 9

8a. distal margin of dorsal arm plates straight, no gap between lateral and dorsal arm plates; all marginal scales of similar size . . . . . *A. digitata*
b. distal margin of dorsal arm plates angled up at the sides, leaving a gap between the dorsal and lateral arm plates through which tissue is visible; marginal scales largest near radial shields and decreasing in size towards mid-marginal scale . . . . . *A. urtica*

9a. arm spines cylindrical, truncate, flattened in cross-section . . . . . *A. occidentalis*
b. arm spines tapering, pointed, oval or round in cross-section 10

10a. arm spines bluntly pointed . . . . . *A. psara*
b. arm spines acutely pointed, often with hyaline tips . . . . . ~~*A. urtica*~~ ?

11a. some scales on disk cap produced into hyaline points 12
b. no scales on disk cap produced into hyaline points 15

12a. scales with hyaline points continuous in, and restricted to, marginal row . . . . . *A. digitata*
b. scales with hyaline points either not continuous in or not restricted to marginal row 13

13a. numerous rows of hyaline pointed scales present on disk cap, one of which may be marginal . . . *A. urtica*
b. no continuous rows of hyaline pointed scales on disk cap 14

14a. hyaline pointed scales restricted to margin of genital (bursal) slits . . . . . *A. urtica*
b. hyaline pointed scales present around bases of arms & scattered elsewhere on disk cap . . . . . *A. urtica*

15a. arm spines cylindrical, truncate, flattened in cross-section . . . . . *A. occidentalis*
b. arm spines tapering, bluntly pointed, oval or round in cross-section . . . . . *A. psara*

*= these characters best viewed on dried specimens

PLEASE NOTE - any specimen which fails to clearly fall into one of the choices in any couplet should be reported as *Amphiodia* sp. An undescribed species of *Amphiodia* occurs in this area according to Dr. Gordon Hendler. The species is from relatively coarse substrates in shallow water, and has probably been reported as *A. occidentalis* or *A. psara* in the past. It would probably key to one or the other of those species in the present key. Dr. Hendler has not seen southern California specimens of A. *occidentalis*, and believes the species does not occur here.