

## REVISED KEY TO THE SO. CALIFORNIA BIGHT BENTHIC PENAEOID SHRIMP

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(based on keys in Henrickx 1995, and Dall et al 1990)

1. Cervical sulcus reaching less than 2/3 the distance from the hepatic spine to the top of the carapace; postorbital spine absent; pereopod 4 lacks epipod . . . . . 2  
Cervical sulcus reaching the top of the carapace; postorbital spine present; pereopod 4 bearing an epipod . . . . . Solenoceridae 3
2. Third to 5th pleopods biramous; prosartema (eye brush) present; exopods on 2nd and 3rd maxillipeds . . . . . Penaeidae 4  
Third to 5th pleopods uniramous; prosartema absent; exopods lacking on 2nd and 3rd maxillipeds . . . . . Sicyoniidae 6
3. Petasma of male with medial projection truncate and lateral projection acute and elongate (return to lab for identification) . . . . . *Solenocera florea*\*  
Petasma of male with medial projection elongate and triangular, lateral projection short and blunt (return to lab for identification) . . . . . *Solenocera mutator*
4. Rostrum dentate both dorsally and ventrally . . . . . *Penaeus* 5  
Rostrum dentate only dorsally . . . . . *Metapenaeopsis* 6
5. Gastrofrontal carina well defined, reaching to orbital margin . . . . . *Penaeus californiensis*  
Gastrofrontal carina often inconspicuous anteriorly, not reaching orbital margin . . . . . *Penaeus brevirostris*\*
6. Rostrum with 7-9 dorsal teeth, thelycum plate on sternite XIII of female lacking anteriorly directed spine . . . . . *Metapenaeopsis kishinouyei*\*#  
Rostrum with 8-13 dorsal teeth, thelycum plate on sternite XIII of female bearing sharp anteriorly directed spine . . . . . 7
7. Adult females with thelycum having a broad anteriomedially indented crest on sternite XIV (between 5th legs) . . . . . *Metapenaeopsis mineri*#  
Adult females with thelycum having a narrow anteriomedially cusped crest on sternite XIV (between 5th legs) . . . . . *Metapenaeopsis beebei*\*#
8. Carapace bearing lateral "bull's-eye" marking or brown spot inside a larger light area in the posterior mid-portion of the carapace . . . . . 9  
Carapace without brown spot or other pronounced marking on the posterior mid-portion of the carapace . . . . . *Sicyonia ingentis*
9. Anterior dorsal tooth of first abdominal segment sub-equal in size to posterior-most tooth of carapace dorsal carina . . . . . *Sicyonia penicillata*  
Anterior dorsal tooth of first abdominal segment much larger than posterior-most tooth of carapace dorsal carina . . . . . *Sicyonia disedwardsi*\*

\*=not yet reported from area, but may range into it during strong ENSO events. Included for differentiation from closely related species known to occur in the southern California Bight.

#=adult males separable only on details of petasma structure (consult Hendrickx 1995)