KEY TO SABELLIDAE GENERA COMMONLY (*i.e., not all genera!*) ENCOUNTERED FROM SOUTHERN CALIFORNIA SOFT BOTTOMS[1]

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1. Branchial skeleton absent; only 3 abdominal setigers.....2
   Branchial skeleton present; usually more than 3 abdominal setigers.....6

2. Pygidial eyes (usually a single pair) present.....3
   Pygidial eyes absent.....*Manayunkia*

3. Peristomial collar as a thin membrane encircling anterior end to some extent.....4
   Peristomial collar otherwise.....5

4. Collar with middorsal gap; nonvascularized, ventral filamentous appendages present.....*Fabriciola*
   Collar continuous middorsally (but might be slightly incised or with longitudinal depression; ventral filamentous appendages absent.....*Pseudofabriciola*

5. Collar only well developed ventrally as a triangular lobe.....*Novafabricia*
   Collar completely lacking.....*Fabricinuda*

6. Abdominal uncini form nearly complete cinctures around each segment; posterior peristomial ring collar absent, anterior ring developed ventrally as short, triangular lobe.....*Myxicola*
   Abdominal uncini in short, discrete tori.....7

7. Inferior thoracic notosetae composed only of bayonet setae; abdominal uncini only rasp-shaped plates without a distinctively larger main fang.....*Oriopsis*
   Inferior thoracic notosetae with paleate or broadly hooded setae as well as bayonet setae, or bayonet setae absent; distinctive main fang present in abdominal uncini.....8

8. Thoracic neuropodial companion setae present.....12
   Companion setae absent.....9

9. Abdominal uncini with long handles.....10
   Abdominal uncini without handles.....11

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[1] This key does *not* include all sabellid genera and is meant *only* as a general guide. Please do not rely upon this as your sole source of information! All structures mentioned here are explained in detail in Fitzhugh (1989: *A systematic revision of the Sabellidae-Caobangiidae-Sabellongidae complex (Annelida: Polychaeta)*, Bull. Amer. Mus. Nat. Hist., No. 192.

10. Distinct vascular coils present below dorsolateral margins of collar; inferior thoracic notosetae only paleate.....*Fabrisabella*
Vascular coils absent; inferior thoracic notosetae of two types: bayonet and paleate .....*Jasmineira*

11. Pygidium and several adjacent abdominal setigers with ventral anal depression .....*Euchone*
Pygidium and abdominal setigers not modified.....*Chone*

12. Thoracic uncini avicular in shape, but with very long handles (appear intermediate between acicular and avicular condition).....*Potamethus*
Thoracic uncini avicular with very short to medium-length handles.....13

13. Some or most radioles with *paired* compound eyes along the outer margins of their length; thorax and abdomen with single, dark, simple eyespots between noto- and neuropodial tori; abdominal neuropodial tori as erect, conical lobes with setae arranged in a tight semicircular pattern.....*Bispira*
Compound eyes on branchial crown absent or present in an unpaired arrangement; simple eyespots along thorax and abdomen absent; abdominal neuropodial tori as low, transverse ridges with setae in distinct transverse rows.....14

14. Notosetae of setiger 1 ("collar setae") arranged in very long fascicles.....*Notaulax*
All notosetal fascicles in short rows.....15

15. At least some radioles with *unpaired* compound eyes.....16
Compound eyes absent.....19

16. Compound eyes limited to inner margins of extreme distal ends of some radioles; middorsal margins of branchial lobes not developed into flanges.....*Megalomma*
When present, compound eyes limited to proximal half of radioles, along outer margins; middorsal margins of branchial lobes developed to some extent into stiff flanges.....17

17. Radioles very numerous (>20 pairs), crowded into two or more rows to give the appearance of being spiralled; radioles rarely branched.....*Eudistylia*
Radioles less than 20 pairs; arranged in a single row.....18

18. Radioles with numerous dichotomous branches.....*Schizobranchia*
Radioles not branched.....*Pseudopotamilla*

19. Thoracic neuropodial companion setae with distal end swollen, dentate, and with narrow mucro from a main fang.....*Demonax*
Distal ends of companion setae as thin, tear drop-shaped membranes.....20

20. Dorsal lips with dorsal radiolar appendages.....*Perkinsiana*
Dorsal radiolar appendages absent.....*Potamilla*

CHARACTERS TO CONSIDER FOR DISTINGUISHING SPECIES WITHIN SELECTED GENERA

Oriopsis:
- anterior peristomial ring collar (usually as a ventral lobe):
    1. overall shape.
    2. presence or absence of any distal incisions.
- posterior peristomial ring collar:
    1. absent or present.
    2. presence, distribution, and nature of any incisions or sculpturing.
    3. relative height of collar dorsally, ventrally, and laterally.
- branchial crown:
    1. degree of development of radiolar flanges and palmate membrane.
    2. number of ventral radiolar appendages.
    3. shape of distal ends of radioles.
    4. number of pairs of radioles.
- body in general:
    1. presence or absence of peristomial and pygidial eyes, as well as their collar and arrangement.
    2. number of abdominal setigers.
- setae:
    1. presence or absence of a large tooth above the main fang of thoracic uncini.
    2. degree of development and number of teeth in abdominal uncini.
- methyl green staining patterns.

Jasmineira:
- posterior peristomial ring collar:
    1. presence, distribution, and nature of any incisions or sculpturing.
    2. relative height of collar dorsally, ventrally, and laterally.
    3. shape of middorsal separation.
- thoracic notosetae:
    1. type of inferior thoracic notosetae, i.e., presence or absence of an anterior row of bayonet setae and the type of setae just posterior to this row (paleate or broadly hooded).
- abdominal notosetae:
    1. general shape of uncini, development of breast and handle.

- branchial crown:
    1. shape of distal ends of radioles.
    2. number and development of ventral radiolar appendages.
    3. development of dorsal lips.
    4. development of palmate membrane.
    5. number of pairs of radioles.
- caudal furca:
    1. presence or absence.
    2. general length and shape.
- methyl green staining patterns.

Euchone:
- posterior peristomial ring collar:
    1. presence, distribution, and nature of any incisions or sculpturing.
    2. relative height of collar dorsally, ventrally, and laterally.
    3. shape of middorsal separation.
- thoracic notosetae:
    1. type of inferior thoracic notosetae, i.e., the type of setae just posterior to bayonet setae (paleate or broadly hooded).
- abdominal notosetae:
    1. general shape of uncini, development of breast and handle.
- branchial crown:
    1. shape of distal ends of radioles.
    2. number and development of ventral radiolar appendages.
    3. development of dorsal lips.
    4. development of palmate membrane.
    5. number of pairs of radioles.
- methyl green staining patterns.
- number of abdominal setigers comprising anal depression.
- total number abdominal setigers.

Chone:
- see attached notes.

Potamethus:
- degree to which peristomium is exposed above collar (this is usually extensive in this genus).
- posterior peristomial ring collar:
    1. presence, distribution, and nature of any incisions or sculpturing.
    2. relative height of collar dorsally, ventrally, and laterally.
    3. shape of middorsal separation.
    4. presence and development of parallel lamellae.

- thoracic notosetae:
    1. the thoracic uncini are very distinctive in this genus, showing an intermediate condition between the acicular and avicular forms.
- abdominal notosetae:
    1. general shape of uncini, development of breast and handle.
- branchial crown:
    1. shape of distal ends of radioles.
    2. number and development of ventral radiolar appendages.
    3. development of dorsal lips.
    4. development of palmate membrane.
    5. number of pairs of radioles.
- methyl green staining patterns and development of ventral shields.

References: Knight-Jones. 1983. Zool. J. Linn. Soc.

Bispira:
- posterior peristomial ring collar:
    1. presence, distribution, and nature of any incisions or sculpturing.
    2. relative height of collar dorsally, ventrally, and laterally.
    3. shape of middorsal separation.
    4. presence and development of parallel lamellae.
- branchial crown:
    1. shape of distal ends of radioles.
    2. development of dorsal lips.
    3. degree of branchial crown spiralling.
    4. distribution of eyes on radioles.
- methyl green staining patterns and development of ventral shields.
- pigmentation patterns might also be of use.

Megalomma:
- posterior peristomial ring collar:
    1. presence, distribution, and nature of any incisions or sculpturing.
    2. relative height of collar dorsally, ventrally, and laterally.
    3. shape of middorsal separation.
    4. presence and development of parallel lamellae.
- branchial crown:
    1. shape of distal ends of radioles.
    2. development of dorsal lips.
    3. number, distribution, and shape of eyes.
- methyl green staining patterns and development of ventral shields.
- pigmentation patterns might also be of use.

References: Perkins. 1984. Proc. Biol. Soc. Wash.

Pseudopotamilla:

- posterior peristomial ring collar:
    1. presence, distribution, and nature of any incisions or sculpturing.
    2. relative height of collar dorsally, ventrally, and laterally.
    3. shape of middorsal separation.
    4. presence and development of parallel lamellae.
    5. shape, length, and sculpturing of middorsal branchial lobe flanges.
- branchial crown:
    1. distribution, degree of development of eyes.
    2. development of dorsal lips.
- methyl green staining patterns and development of ventral shields.
- pigmentation patterns might also be of use.

References: Hartman. 1938, 1942, 1944; Knight-Jones. 1983. Zool. J. Linn. Soc.

Demonax:

- posterior peristomial ring collar:
    1. presence, distribution, and nature of any incisions or sculpturing.
    2. relative height of collar dorsally, ventrally, and laterally.
    3. shape of middorsal separation.
    4. presence and development of parallel lamellae.
- branchial crown:
    1. distribution, degree of development of eyes (if any).
    2. development of dorsal lips.
    3. degree of spiralling.
- methyl green staining patterns and development of ventral shields.
- pigmentation patterns might also be of use.

References: Perkins. 1984. Proc. Biol. Soc. Wash.