

Key to the Ampeliscidae Reported by SCAMIT Agencies from the Southern California Bight

Lisa Haney
Los Angeles County Sanitation Districts

Dean Pasko
City of San Diego

Ampeliscidae Bate 1857

Ampelisca Kroyer 1842

<i>Ampelisca agassizi</i>	(Judd 1896)
<i>Ampelisca brachycladus</i>	Roney 1990
<i>Ampelisca brevisimulata</i>	J.L. Barnard 1954
<i>Ampelisca cf brevisimulata</i>	SCAMIT 1995
<i>Ampelisca careyi</i>	Dickinson 1982
<i>Ampelisca coeca</i>	Holmes 1908
<i>Ampelisca cristata cristata</i>	Holmes 1908
<i>Ampelisca cristata microdentata</i>	J.L. Barnard 1954
<i>Ampelisca furcigera</i>	Bulycheva 1936
<i>Ampelisca hancocki</i>	J.L. Barnard 1954
<i>Ampelisca indentata</i>	J.L. Barnard 1954
<i>Ampelisca lobata</i>	Holmes 1908
<i>Ampelisca milleri</i>	J.L. Barnard 1954
<i>Ampelisca pacifica</i>	Holmes 1908
<i>Ampelisca plumosa</i>	Holmes 1908
<i>Ampelisca pugetica</i>	Stimpson 1864
<i>Ampelisca romigi</i>	J.L. Barnard 1954
<i>Ampelisca unsocalae</i>	J.L. Barnard 1960

Byblis Boeck 1871

<i>Byblis barbarendis</i>	J.L. Barnard 1960
<i>Byblis bathyalis</i>	J.L. Barnard 1966
<i>Byblis millsi</i>	Dickinson 1983
<i>Byblis veleronis</i>	J.L. Barnard 1960

- 1) Head as long as deep; pereopod 7, basal lobe not expanded distally, posterior margin nearly vertical ***Haploops***
- Head longer than deep; pereopod 7, basal lobe expanded distally, posterior margin oblique **2**
- 2) Pereopod 7, dactyl narrow, spine-like and anterior edge of postero-ventral lobe of basis bearing setae near junction with article 3; pereopods 5–6, dactyl simple; antero-ventral corner of head excavate for insertion of antenna 2 (***Byblis***)..... **3**
- Pereopod 7, dactyl broad at base, not spine-like and anterior edge of postero-ventral lobe of basis lacking setae near junction with article 3; dactyls of pereopods 5–6 hook-like; antero-ventral corner of head not excavate (***Ampelisca***)..... **6**
- 3) Pigmented eyes lacking ***Byblis barbarentis***
- Pigmented eyes (usually brown) well developed..... **4**
- 4) Antenna 1, article 2 reaching the end of, or beyond, article 3 of antenna 2 . ***Byblis bathyalis***
- Antenna 1, article 2 reaching only to midpoint of article 3 of antenna 2..... **5**
- 5) Antenna 1 flagellum reaching beyond antenna 2 peduncle; postero-distal corner of coxae 2–3 obliquely truncated with anterior edge longer than posterior edge; coxa 1 distinctly longer than coxa 2 and with concave anterior edge; uropod 1, outer ramus with row of lateral setae only ***Byblis veleronis***
- Antenna 1 flagellum just reaching to the end of antenna 2 peduncle; postero-distal corner of coxae 2–3 evenly truncated with anterior edge as long as posterior edge; coxa 1 only slightly longer than coxa 2 and with straight anterior edge; uropod 1, outer ramus with both dorso-lateral spines and lateral setae..... ***Byblis millsii***
- 6) Epimeron 3 with an acute tooth (may be small) on lower posterior corner..... **7**
- Epimeron 3 with blunt/rounded tooth or no tooth on lower posterior corner **17**
- 7) Pereopod 7, article 5 with notch on anterior margin..... **8**
- Pereopod 7, article 5 without notch on anterior margin..... **10**

- 8) Corneal lenses absent; pereopod 7, posterior lobe of article 4 short, not extending the full length of article 5 *Ampelisca coeca*
- Corneal lenses present; pereopod 7, posterior lobe of article 4 long, extending full length of article 5 or beyond **9**
- 9) Pereopod 7, article 6 broad (width approx two-thirds length); epimeron 3 with minute posterior tooth *Ampelisca indentata*
- Pereopod 7, article 6 slender (width approx one-half length); epimeron 3 with prominent posterior tooth *Ampelisca pugetica*
- 10) Uropod 3 rami broadly rounded (not lanceolate) distally *Ampelisca pacifica*
- Uropod 3 rami tapered (lanceolate) distally **11**
- 11) Uropod 2 lacking long subapical spine on outer ramus *Ampelisca hancocki*
- Uropod 2 with long subapical spine on outer ramus **12**
- 12) Urosomite 1, dorsal carina strongly produced, tall, thin (laminar), rounded proximally and distally; females with double carina dorsally on pleonite 3, males with single, strong carina dorsally on pleonite 3 **13**
- Urosomite 1, dorsal carina slightly produced, short; thick (not laminar), not rounded, tapering to an acute corner distally; pleonite 3 without dorsal carina in both males and females **14**
- 13) Epimeron 3 with prominent posterior tooth; postero-ventral margin of epimeron 2 generally bearing distinct tooth, sometimes with quadrate corner *Ampelisca cristata cristata*
- Epimeron 3 with minute posterior tooth; postero-ventral margin of epimeron 2 without tooth, completely rounded *Ampelisca cristata microdentata*
- 14) Apex of telson notched with subapical spine; postero-distal end of pereopod 7, article 5 with fascicle of long setae **15**
- Apex of telson tapered (lanceolate); postero-distal end of pereopod 7, article 5 with spine or one long seta **16**

- 15) Head produced anteriorly into dome-shaped process above antenna 1, lower front margin concave..... *Ampelisca careyi*
- Head not produced into dome-shaped process, lower front margin of head nearly straight *Ampelisca unsoclae*
- 16) Epimeron 2 with acute tooth on postero-distal corner; pereopod 7, basis with multiple spines (4–8 in adults; 1–2 in juveniles) proximally along posterior margin..... *Ampelisca brevisimulata*
- Epimeron 2 without acute tooth, postero-distal corner rounded; pereopod 7, basis without spines (i.e., juveniles), or with very few (1–2 in adults) proximally along posterior margin *Ampelisca cf brevisimulata*
- 17) Uropod 1 outer ramus twice the length of inner ramus *Ampelisca brachycladus*
- Uropod 1 rami subequal 18
- 18) Corneal lenses absent..... 19
- Corneal lenses present..... 20
- 19) Pereopod 7, basal lobe short, not extending the length of article 3, and article 5 longer than article 6..... *Ampelisca plumosa*
- Pereopod 7, basal lobe long, extending well beyond the length of article 3, and article 5 subequal to article 6 *Ampelisca furcigera*
- 20) Pereopod 7, article 5 with notch on anterior margin..... 21
- Pereopod 7, article 5 without notch on anterior margin..... 22
- 21) Apex of uropod 3 rami tapered (lanceolate); pereopod 7, basis broadly rounded distally *Ampelisca agassizi*
- Apex of uropod 3 rami upturned distally (uncinate); pereopod 7, basis narrowed distally, with strongly oblique postero-distal margin *Ampelisca romigi*

- 22) Apex of telson deeply notched with inserted spine; uropod 3 inner ramus with distinct spine-bearing serrations; pereopod 7, article 3 sub-equal to or shorter than article 4; epimeron 3 rounded postero-distally *Ampelisca lobata*
- Apex of telson tapered (lanceolate); uropod 3 inner ramus smooth; pereopod 7, article 3 longer than article 4; epimeron 3 with minute, blunt tooth postero-distally
..... *Ampelisca milleri*

Literature cited

Barnard, J.L.

1954. Amphipoda of the family Ampeliscidae collected in the eastern Pacific Ocean by the Velero III and Velero IV. Allan Hancock Pacific Expedition. 18 (1):1–13.
1960. New bathyal and sublittoral ampeliscid amphipods from California, with an illustrated key to *Ampelisca*. Pacific Naturalist. 1 (16):1–36.
1966. Submarine canyons of southern California Part V. Systematics: Amphipoda. Allan Hancock Pacific Expeditions. 27:52–60.
1967. New species and records of Pacific Ampeliscidae (Crustacea: Amphipoda). Proceedings of the United States National Museum. 121 (3576):1–20.

Bousfield, E.L.

1973. Shallow-water Gammaridean Amphipoda of New England. Cornell University Press.

Dickinson, J.J.

1982. The systematics and distributional ecology of the family Ampeliscidae (Amphipoda: Gammaridea) in the northeastern Pacific region. I. The genus *Ampelisca*. National Museum of Natural Sciences (Ottawa). Publications in Biological Oceanography. 10:1–39.
1983. The systematics and distributional ecology of the superfamily Ampeliscoidea (Amphipoda: Gammaridea) in the northeastern Pacific region. II. The genera *Byblis* and *Haploops*. National Museum of Natural Sciences (Ottawa). Publications in Biological Oceanography. 1:1–38.

Holmes, S.J.

1908. The amphipoda collected by the U.S. Bureau of Fisheries Steamer “Albatross” off the west coast of North America, in 1903 and 1904, with descriptions of a new family and several new genera and species. Proceedings of the U.S. National Museum. 35:489–543.

Roney, J.D.

1990. A new species of marine amphipod (Gammaridea: Ampeliscidae) from the sublittoral of southern California. Bulletin of Southern California Academy of Sciences. 89 (3):124–129.

Watling, L.

1995. The families Ampeliscidae, Amphilochidae, Liljeborgiidae, and Pleustidae. In: Blake, J.K., L. Watling, and P.H. Scott, eds. Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 12. The Crustacea, Part 3 – The Amphipoda. pp:137–176.