

Key to the Known and Hypothesized Females of the Northeastern Pacific Gnathiid Isopods

Lisa Haney LACSD

Species in parentheses and underlined represent females of species that have not yet been observed but are thought to follow character patterns represented by the males of that species. This trend holds true for female's of species that have been observed (noted in bold lettering).

- 1) Epimeres single (dorsal pairs only).....**2**
 Epimeres double (dorsal and ventral pairs).....**9**

- 2) Pleotelson shaped like an arrowhead (not distinctly triangular or T-shaped).....**3**
 Pleotelson distinctly triangular**4**

- 3) Eyes golden or amber; body with numerous setae; frons long, distally narrowing and medially cleft.....**Caecognathia SD1**
 Eyes red and white checkerboard (see photo below); body without numerous setae; frons not long but wide, with a non-narrowing rounded apex.....**Gnathia productatridens**

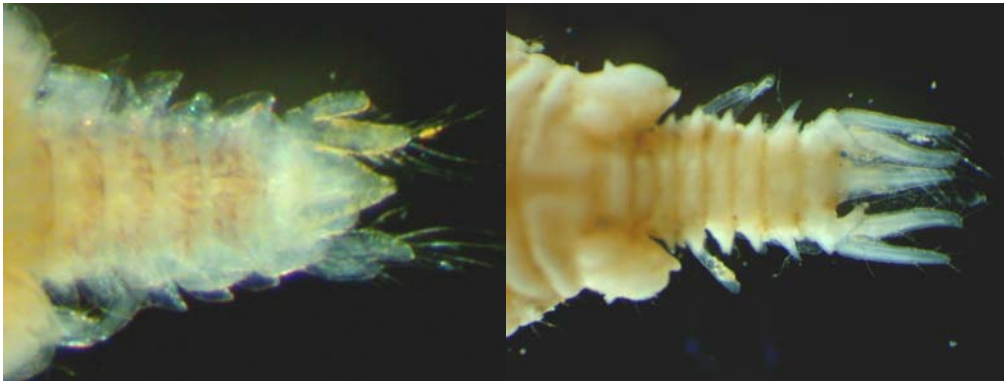
- 4) With pigmented or unpigmented eyes.....**5**
 Without eyes [frons shape unknown].....(G. coronadoensis)

- 5) Epimeres laterally projecting, easy to observe; mature female normal size (significantly larger than 2.5 mm).....**6**
 Epimeres not laterally projecting, difficult to observe; mature female very small (not larger than 2.5 mm).....**8**

- 6) Body with brown mottling pigment pattern (especially on pleon)**7**
 Body with no pigment pattern [frons medium in length, distally narrowing with rounded apex; eyes reddish brown].....**Gnathia tridens**

- 7) Eyes dark brown, oblong and flat; pleopods with just a few setae; pleotelson wide [frons long, distally narrowing, with rounded apex].....**Caecognathia crenulatifrons**
- Eyes reddish brown, round and convex; pleopods very setose; pleotelson narrow [frons shape unknown].....(Caecognathia sp. A)
- 8) Body with brown mottling; eyes dark brown [frons shape unknown].....
.....(Gnathia steveni)
- Body with no pigment; eyes reddish brown [frons shape unknown].....
.....(Gnathia MBC 1)
- 9) Pleotelson distinctly T-shaped; dorsal epimeres spine-like and becoming more prominent posteriorly.....**10**
- Pleotelson arrowhead shaped (not distinctly triangular or T-shaped); dorsal epimeres not noticeably more prominent posteriorly, subequal (eyes golden/amber; frons shape unknown).....(Gnathia trilobata)
- 10) Pleopods ovate, paddle-like, and lightly setose.....**11**
- Pleopods long and narrow, lacking setae [frons shape unknown; probably lacking eye pigment].....(Gnathia clementensis)
- 11) Body sprinkled with tiny black dots and setae; eyes dark brown; pleotelson medium (pleotelson base subequal to pleotelson length) [frons medium in length, wide and tri-lobed].....**Caecognathia sanctaecrucis**
- Body without pigmentation and without setae; eyes present but pigment absent; pleotelson long (pleotelson base shorter than pleotelson length) [frons short, wide, and tri-lobed].....**Caecognathia CS 1**

Epimeres



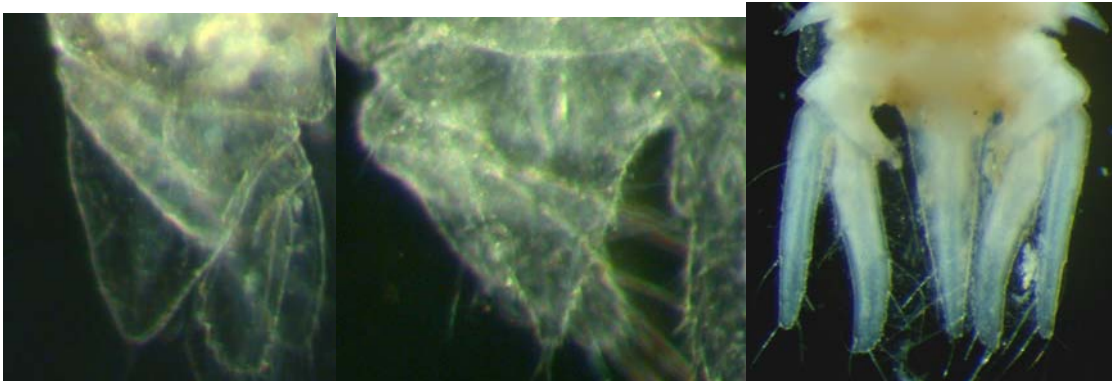
**Single Dorsal Epimeres
Laterally expanded**

**Double Epimeres (Dorsal & /Ventral)
Laterally expanded**



**Single Dorsal Epimeres Barely Visible
Not Laterally expanded**

Pleotelson Shape (Females)

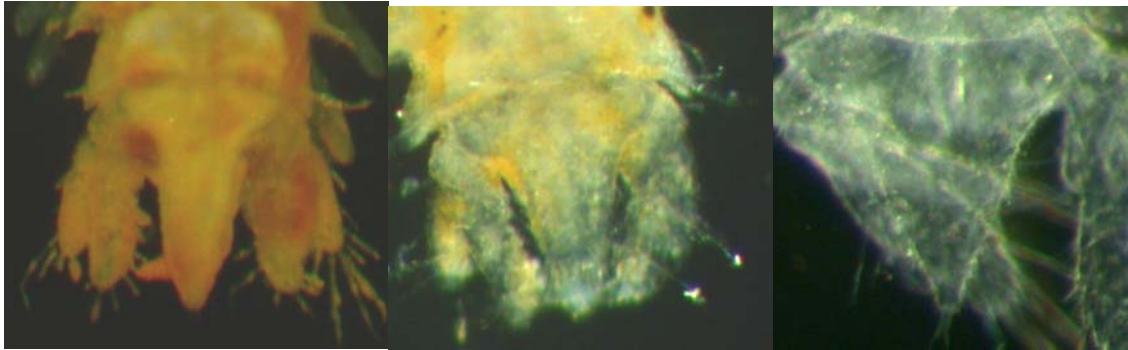


Triangular

Arrowhead-shaped

T-shaped

Arrowhead Shaped Pleotelsons (Females)

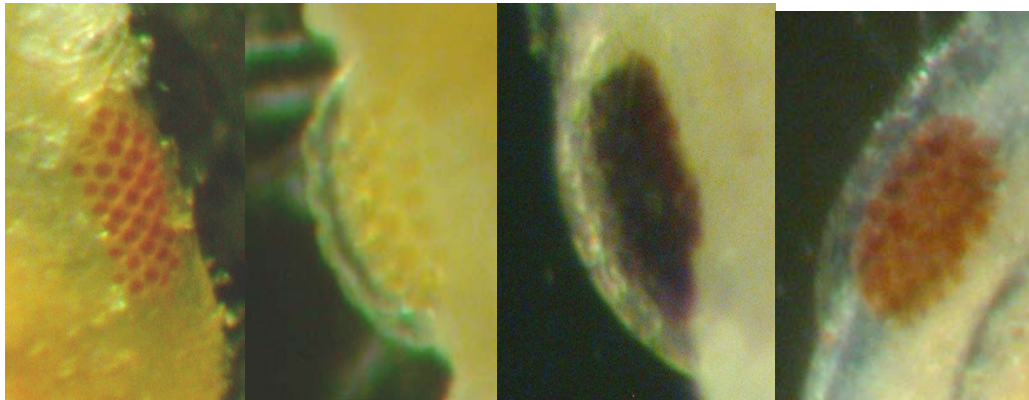


Gnathia trilobata

Gnathia productatridens

Caecognathia SD1

Eye Color



**Red & White
Checkerboard**

No Pigment

Dark Brown

Reddish Brown

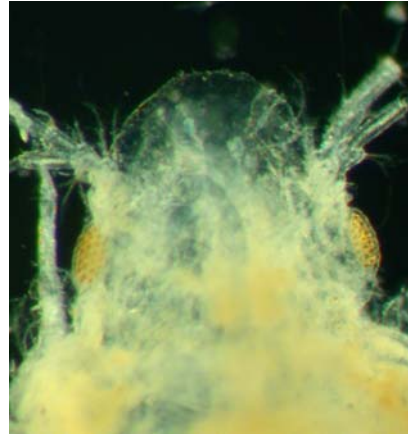


Golden or Amber

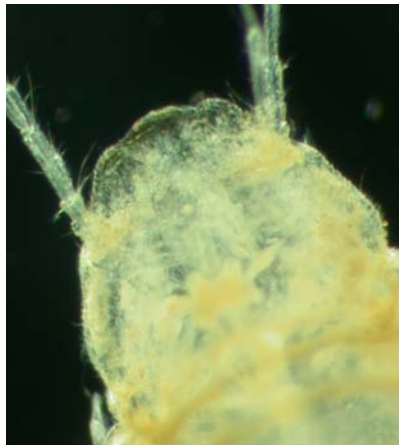
Frons Morphology of Known Females



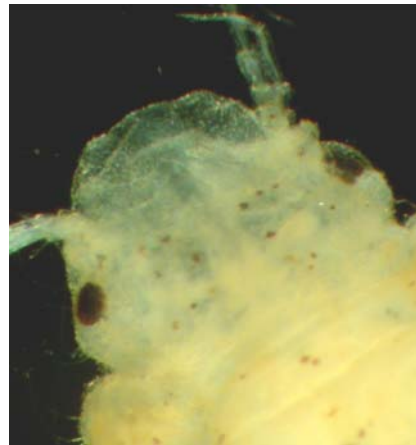
Caecognathia crenulifrons



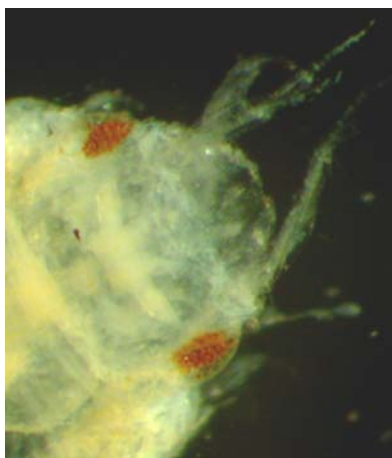
Gnathia productatridens



Caecognathia CS1



Caecognathia sanctaerucis



Gnathia tridens



Caecognathia SD1