

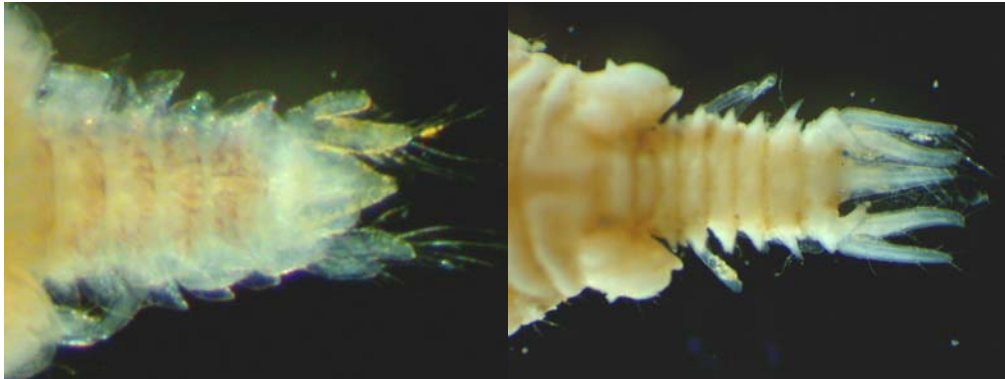
Key to Male Northeastern Pacific Gnathiid Isopods

All males have been observed; please refer to the species photo comparison on last page as a reference

- 1) Eyes present.....2
Eyes absent (frons with three central processes, laterals larger than middle; epimeres single, dorsal only, and laterally projected; telson distinctly triangular in shape).....**Gnathia coronadoensis**
- 2) Pleotelson distinctly triangular.....3
Pleotelson arrowhead shaped or T-shaped (see diagram below).....7
- 3) Epimeres not laterally expanded, barely visible.....4
Epimeres laterally expanded, highly visible.....5
- 4) Eyes dark brown; body mottled with brown pigment; cephalon with setae and tuberculations; frons with three processes (median process largest of the three and shaped as a step-wise pyramid).....**Gnathia steveni**
Eyes reddish brown; body with no pigmentation; cephalon with setae but lacking tuberculations; frons with central 3-dimensional expansion in the shape of a box, with two large setae extending out from it centrally.....**Gnathia MBC1**
- 5) Eyes reddish brown; body with numerous setae but not hirsute; frons not transverse (lobes or processes present); pleopods with setae.....6
Eyes dark brown; body without numerous setae; frons transverse with crenulations (without lobes or processes); pleopods without setae**Caecognathia crenulatifrons**
- 6) Body mottled with brown pigment; mandibles split into two articles; frons forms centrally extended narrow lobe with crenulations.....**Caecognathia sp A**
Body with no pigmentation; mandibles not split into two articles (single article only); frons with three central subequal processes**Gnathia tridens**

- 7) Pleotelson distinctly T-shaped.....8
Pleotelson arrowhead-shaped.....10
- 8) Eyes sessile; eye lens with tuberculations; pleopods ovate, paddle-like; dorsal epimeres not subequal, last pair prominent and formed into spine.....9
Eyes pedunculate; eye lens without tuberculations; pleopods long and narrow; dorsal epimeres subequal (eyes without pigment; frons with two large medial lateral processes with four central subequal processes).....**Gnathia clementensis**
- 9) Eyes dark brown; dorsal sulcus absent; frons extended/produced into distinct large triangular lobe; body speckled with tiny black dots..... **Caecognathia sanctaecrucis**
Eyes present but without pigment; dorsal sulcus present; frons extended/produced as long, rounded lobe; body with no pigmentation.....**Caecognathia CS1**
- 10) Epimeres single (dorsal only)11
Epimeres double (dorsal and ventral) [eyes golden or amber; body with numerous setae but not hirsute; frons with three central processes, all subequal]..... **Gnathia trilobata**
- 11) Eyes golden/amber; body hirsute; cephalic dorsal carina present; frons as one broad truncate lobe with medial carina.....**Caecognathia SD1**
Eyes with red and white checkerboard pattern (see photo below); body with numerous setae but not hirsute; cephalic dorsal carina absent; frons with three central subequal processes.....
.....**Gnathia productatridens**

Epimeres



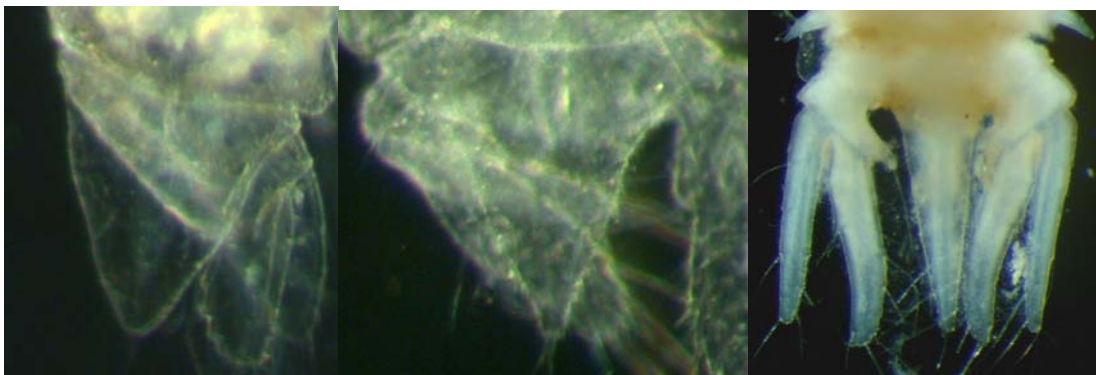
Single Dorsal Epimeres
Laterally expanded

Double Epimeres (Dorsal & /Ventral)
Laterally expanded



Single Dorsal Epimeres Barely Visible
Not Laterally expanded

Pleotelson Shape (Males)

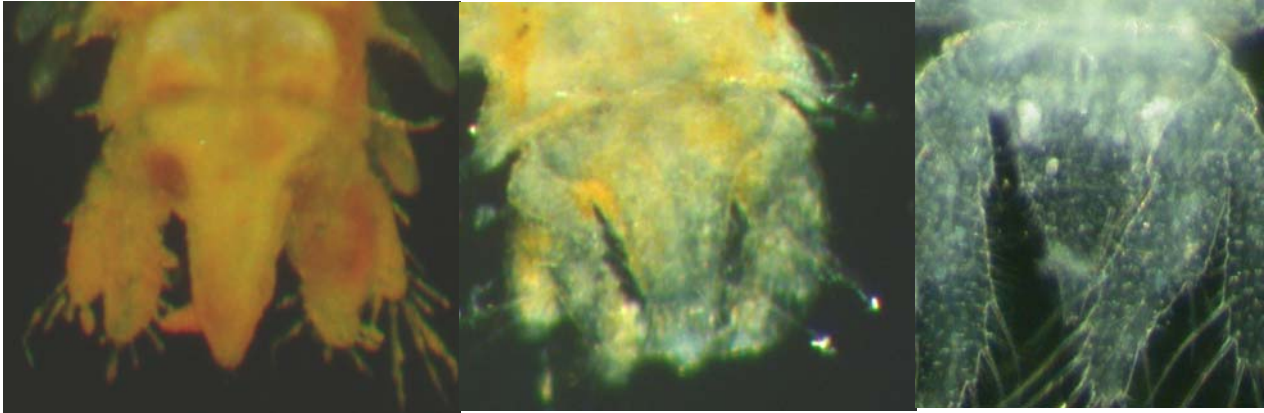


Triangular

Arrowhead-shaped

T-shaped

Arrowhead Shaped Pleotelsons (Males)

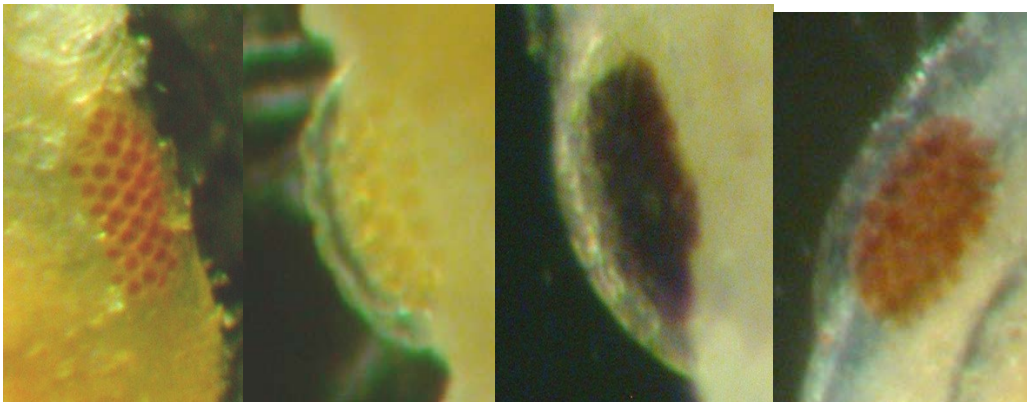


Gnathia trilobata

Gnathia productatridens

Caecognathia SD1

Eye Color



**Red & White
Checkerboard**

No Pigment

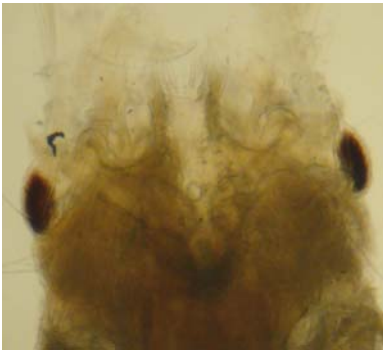
Dark Brown

Reddish Brown

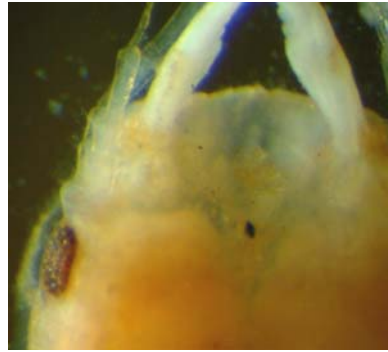


Golden or Amber

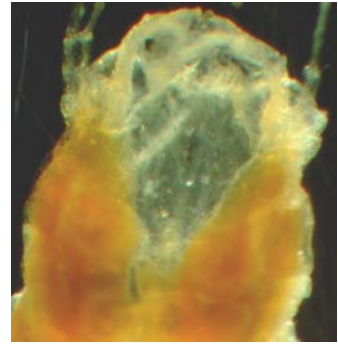
Frons Shape (Males)



Caecognathia sp. A



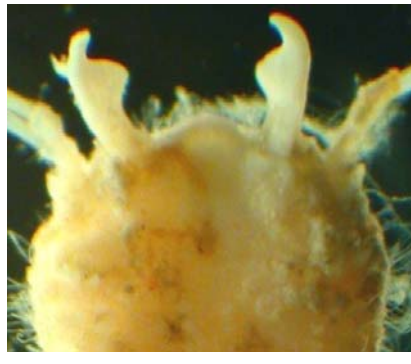
Caecognathia crenulatifrons



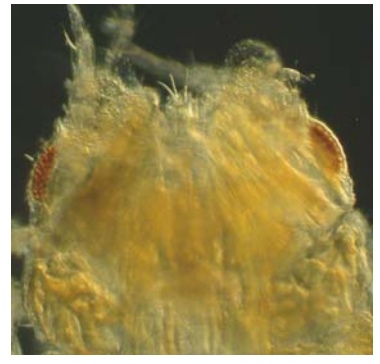
Gnathia coronadoensis



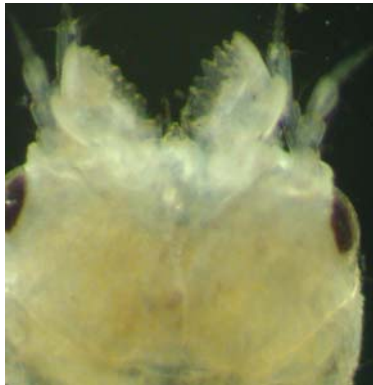
Caecognathia CS1



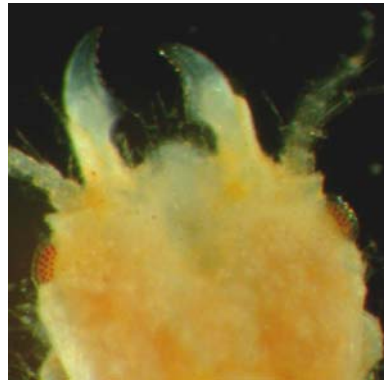
Gnathia clementensis



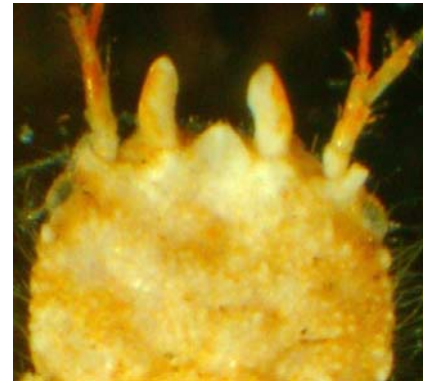
Gnathia MBC1



Gnathia steveni



Gnathia productatridens



Caecognathia sanctaecrucis



Gnathia tridens



Gnathia trilobata



Caecognathia SD1