



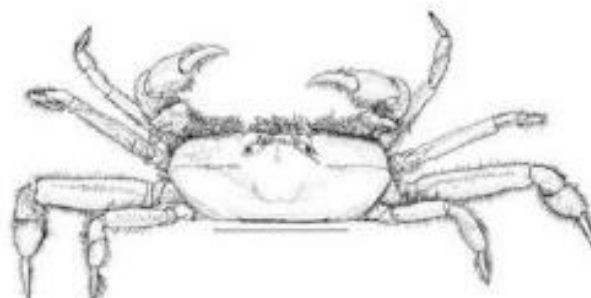
Pinnixa occidentalis Rathbun, 1894

Nomenclature	
Phylum	Arthropoda
Class	Malacostraca
Order	Decapoda
Family	Pinnotheridae
Common Synonyms (S) Previous Names (PN)	

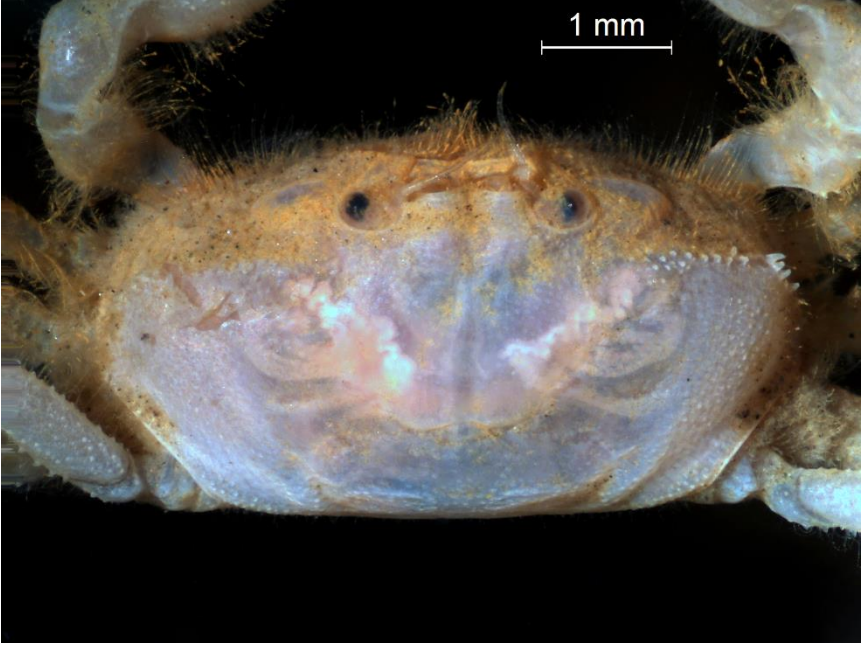
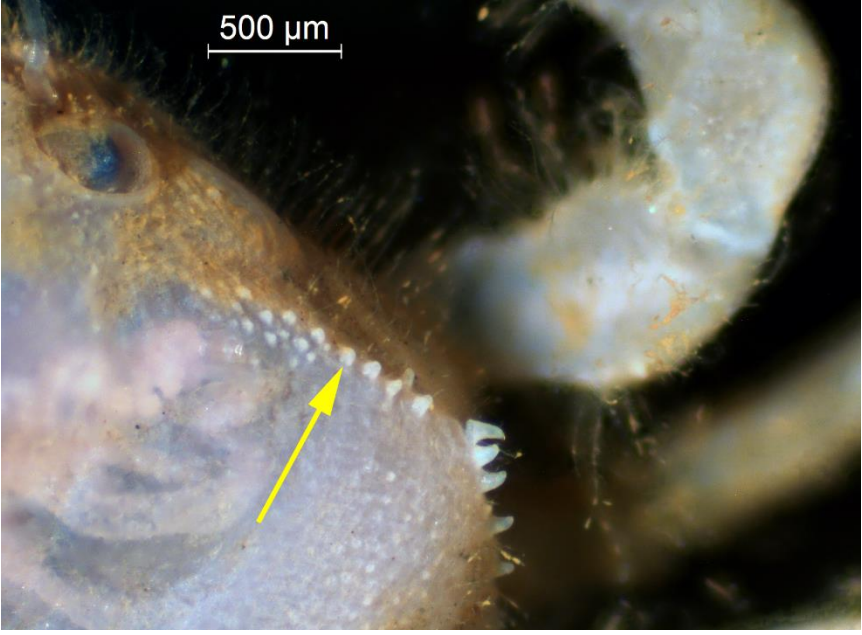


Distribution	
Type Locality	South of Unimak I., Alaska, 112 m (Zmarzly 1992)
Geographic Distribution	From Iliuliuk Harbor, Unalaska, to Magdalena Bay, Baja California (Wicksten 2012)
Habitat	In green sand or mud, free-living or symbiotic with echiuroid worms (<i>Echiurus alaskanus</i> Fisher 1948; <i>Listriolobus pelodes</i> Fisher, 1946); shallow subtidal zone to 439 m (Wicksten 2012). In Puget Sound, <i>P. occidentalis</i> prefers soft mud (Lie 1968).

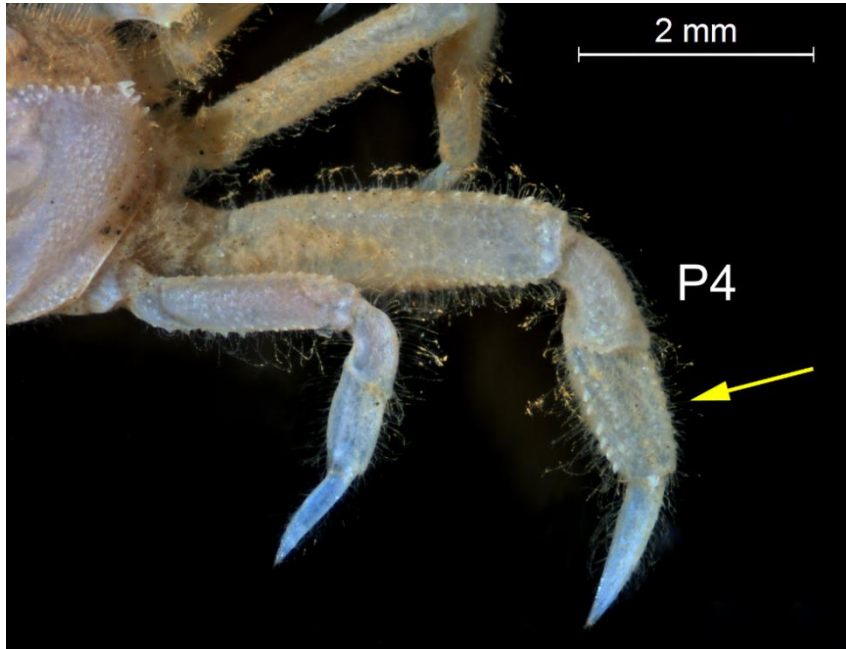
Description	
From Zmarzly 1992 (unless otherwise noted)	
Size: Large species; males to 19.5 mm carapace width (cw), females 20.5 mm cw. Male carapace length 9.5 mm, female 10.5 mm (Wicksten 2012).	
Carapace: About 2x as long as wide, dorsal surface pitted, irregular (Wicksten 2012). Longitudinal median groove from frontal margin to mesogastric region. Carapace with cardiac crest, crest bilobed in males; anterolateral margin with granulated ridge running from orbit diagonally outward, backward; crossing hepatic region. Ventral margin granulate, with long plumose setae.	
Chelipeds: Stout, setose, immovable finger short, markedly deflexed, stout tooth in middle, small tooth near apex; dactyl much curved, with or without tooth at middle. Male chela more robust than that of female, with shorter fixed finger having stout, flat tooth proximally (Wicksten 2012). Dactyl in male more curved with age; fingers gaping in mature male. Dorsal margin of palm granulate; line of granules above ventral margin on exterior face.	
Pereopods: Ambulatory legs fringed with plumose setae in adults. P2–5, dactyls slender. P2 shorter than chelipeds, P3 longer stronger than P2; P4 longest, P5 with dactyl as long as propodus, reaching carpus of P4 (Wicksten 2012).	
Abdomen: With 7 free somites.	



Diagnostic Characteristics

Diagnostic Characteristics (From Wicksten 2012)	Photo, Illustrations	Photo, Illustration Credit
<p>Carapace not strongly calcified, >1.5 times wider than long.</p>	 <p><i>Carapace (dorsal view); specimen from 2014 PSEMP Long-term Station 3 Rep 1</i></p>	<p>Marine Sediment Monitoring Team</p>
<p>Anterolateral area of carapace with granulate or serrate ridge</p>	 <p><i>Carapace, right anterolateral margin (dorsal view); specimen from 2014 PSEMP Long-term Station 3 Rep 1</i></p>	<p>Marine Sediment Monitoring Team</p>

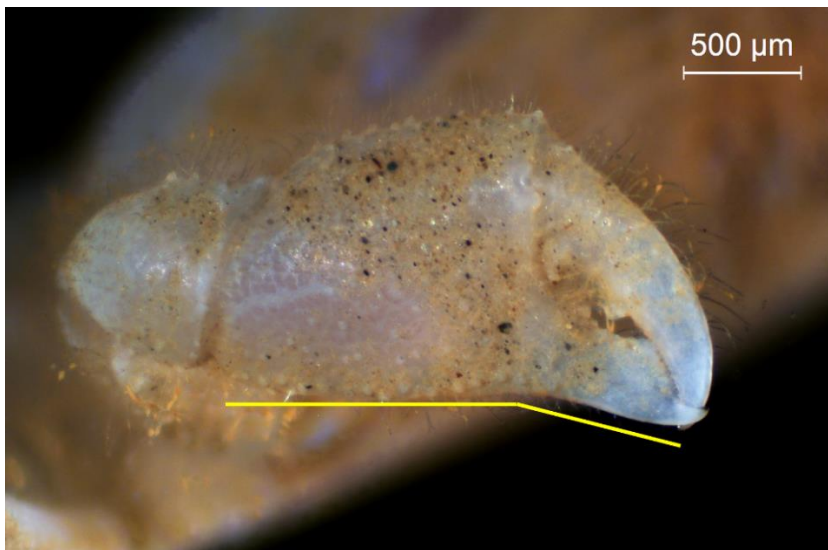
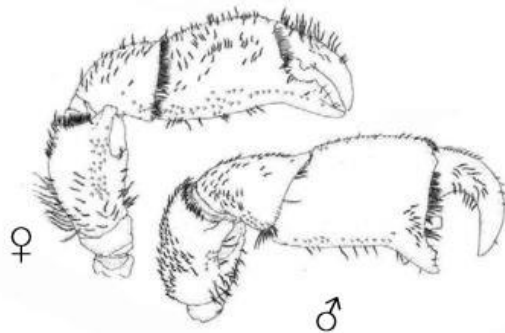
P4 (3rd walking leg) distinctly longer and larger than other legs; dactyl subequal to or exceeding length of propodus (length of propodus 1.5-2x width)



Right walking legs (dorsal view); specimen from 2014 PSEMP Long-term Station 3 Rep 1

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Fixed finger of chela deflexed (more pronounced in some specimens, especially adult males)



Right cheliped (external view); specimen from 2014 PSEMP Long-term Station 3 Rep 1

After Zmarzly 1992, p. 701

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Related Species and Characteristic Differences

Species Name	Diagnostic Characteristics
<i>Pinnixa scamit</i>	Carapace with a well-developed granular cardiac ridge; larger, acute, slightly curved teeth along the anterolateral margin of carapace; a well-developed subhepatic tooth; length of propodus of P4 at least 2.5 times width. <i>Note: This is a southern California species, not recorded north of Point Arguello, CA (Wicksten 2012).</i>
<i>Pinnixa schmitti</i>	Fixed finger of chela straight, not deflexed (Wicksten 2012).

Comments

Hart (1982) suggested that *P. occidentalis* might in fact represent a species complex (Wicksten 2012).

Literature

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More Information

More information about Puget Sound benthic invertebrates is available at:

<http://www.ecy.wa.gov/programs/eap/psamp/index.htm>

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This document is available on the Department of Ecology's website at <https://fortress.wa.gov/ecy/publications/SummaryPages/1603208.html>

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