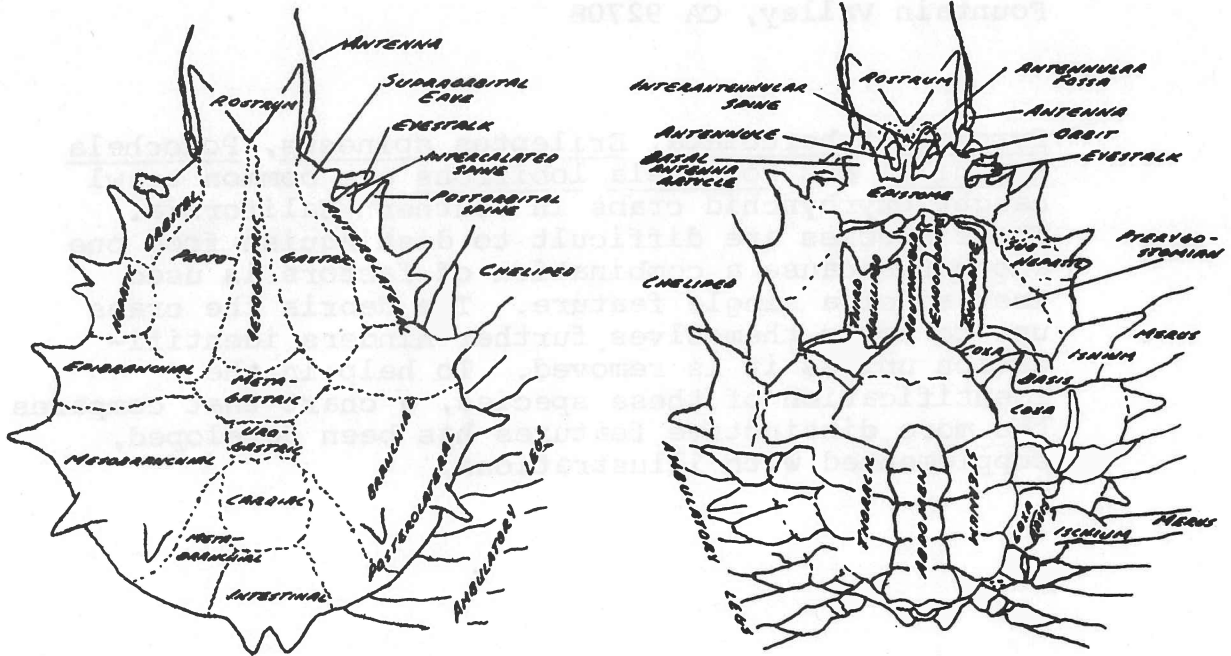


SOUTHERN CALIFORNIA PYROMAIA, ERILEPTUS, AND PODOCHELA

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Pyromaia tuberculata, Erileptus spinosus, Podochela hemphilli and Podochela lobifrons are common trawl caught Oxryrhynchid crabs in southern California. These species are difficult to distinguish from one another because a combination of factors is used instead of a single feature. The debris the crabs use to cover themselves further hinders identification unless it is removed. To help in the identification of these species, a chart that compares the more distinctive features has been developed, supplemented with illustrations.

MORPHOLOGY



DIAGRAMS REDRAWN FROM: GRIFFIN, D.J.G. 1966. THE MARINE FAUNA OF NEW ZEALAND: SPIDER CRABS, FAMILY MAJIDAE (CRUSTACEA, BRACHYURA). N.Z. DEP. SCI. INDUSTR. RES. BULL. 172.

<u>CHARACTERS</u>	<u>PYROMAIA TUBERCULATA</u>	<u>ERILEPTUS SPINOSUS</u>	<u>PODOCHELA HEMPHILLI</u>	<u>PODOCHELA LOBIFRONS</u>
Carapace	pyriform, very convex and tuberculate	moderately convex, cardiac, gastric and branchial tubercles more prominent in ♂	flattened, width approximately 2/3 of length, gastric region tumid, carmine coloration along side, may persist in freshly preserved specimens	same as <u>P. hemphilli</u>
Rostrum	"stout", width 2/3-3/4 of length	width 60% of length	slightly curved, width 60% of length	slightly curved, long, width 50% of length
Medial Tubercles	three	two, with prominent spines on the cardiac, gastric and branchial regions	two, cardiac poorly developed	same as <u>P. hemphilli</u>
Epistome	wider than long	about as wide as long	slightly longer than wide	same as <u>P. hemphilli</u>
Postorbital Spine	large, curved around eye, eye rests closely to spine	♀ pointing laterally, eye not resting on spine ♂ very small, a "bump"	small, sometimes more readily visible from the ventral side, located nearer to the eye than the hepatic spine	small but distinct, located nearer to the eye than the hepatic spine.
Hepatic Spine	Softly rounded, extending slightly beyond postorbital spine	prominent, extending beyond eyes	distinct, not reaching beyond eye, sometimes approaching strap-shaped	strap-shaped, reaching beyond eye

Chelipeds

♂ very inflated, ♀
and immature not
inflated, shorter
than 4th pair of
walking legs

♂ very elongated,
3x body length, ♀
and immature not
elongated, shorter
than 1st pair of
walking legs

♂ curved inward,
♀ nearly straight,
shorter than 4th
pair of walking
legs

same as P. hemphilli

1st Abdominal
Segment

one spine, well
developed

one spine, well
developed

one small tubercle

two blunt, median
tubercles

SPECIMEN DATA

Collection
Date

♂ 5 April 1978
♀ 5 April 1978

♂ 5 April 1978
♀ 5 April 1978

♂ 5 April 1978

♀ 5 April 1978

Collection
Site

♂ 33°35.00'N
118°02.20'W
♀ 33°37.20'N
117°59.20'W

♂ 33°35.00'N
118°02.20'W
♀ 33°35.00'N
118°02.20'W

♂ 33°36.00'N
117°59.50'W

♀ 33°35.00'N
118°02.20'W

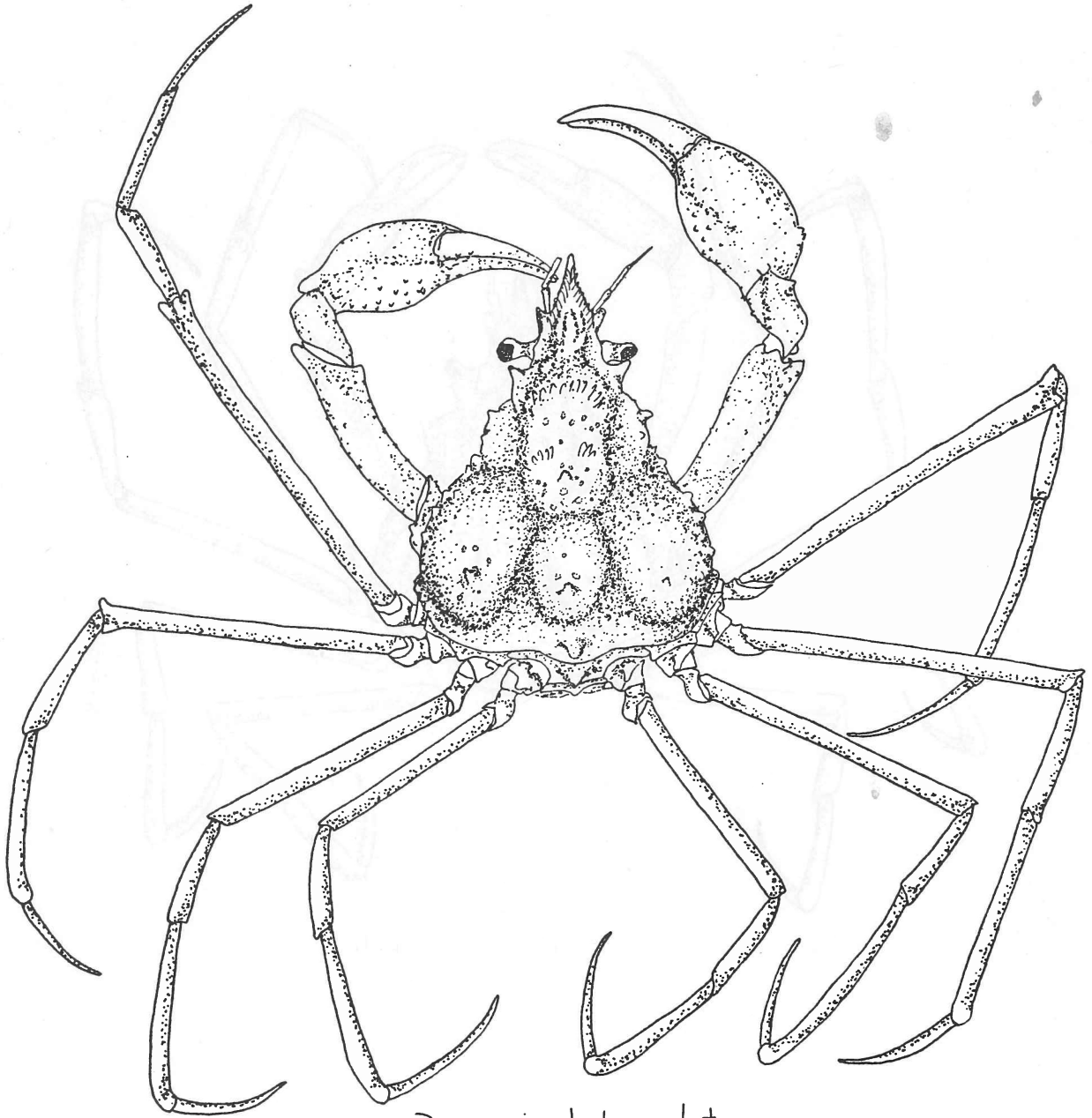
Carapace

♂ 15.0 x 11.8 mm
♀ 14.1 x 11.7 mm

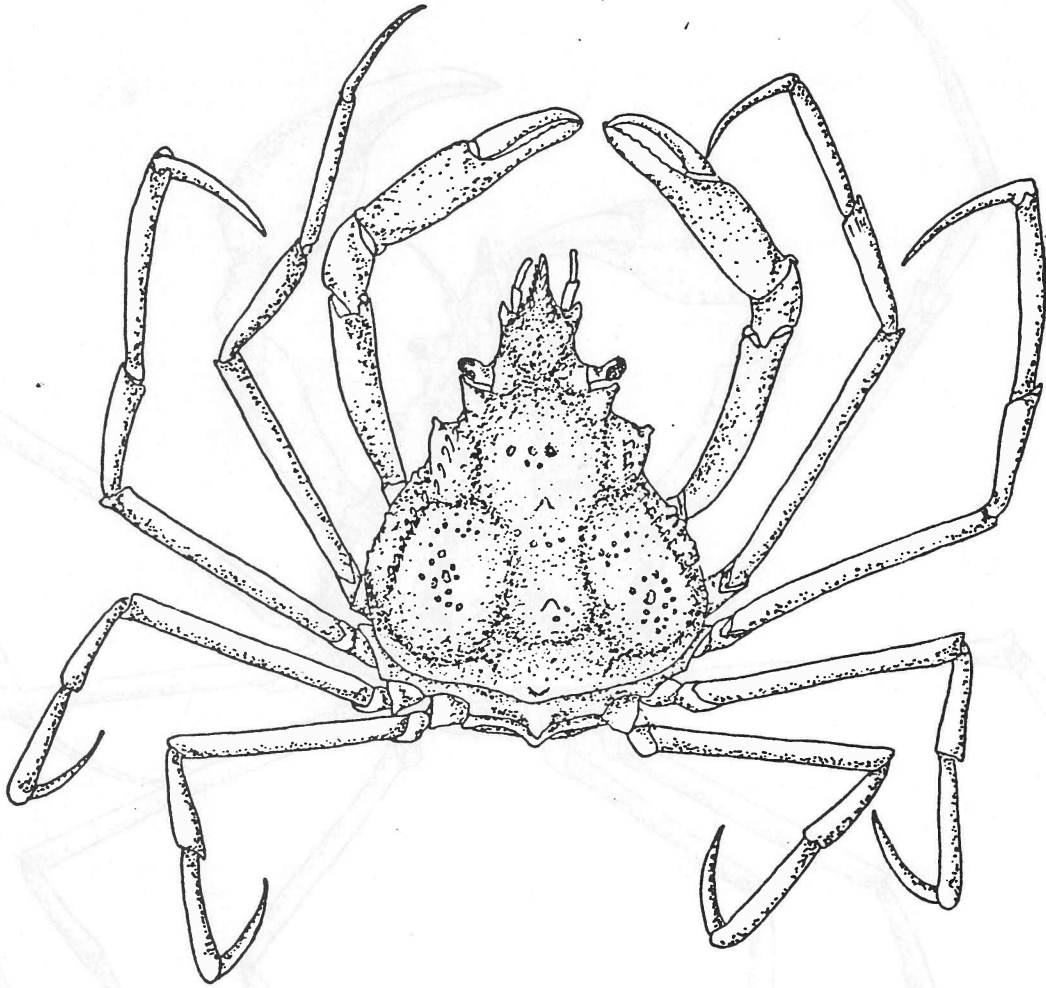
♂ 10.3 x 7.8 mm
♀ 7.3 x 5.4 mm
(Gravid)

♂ 11.6 x 8.0 mm

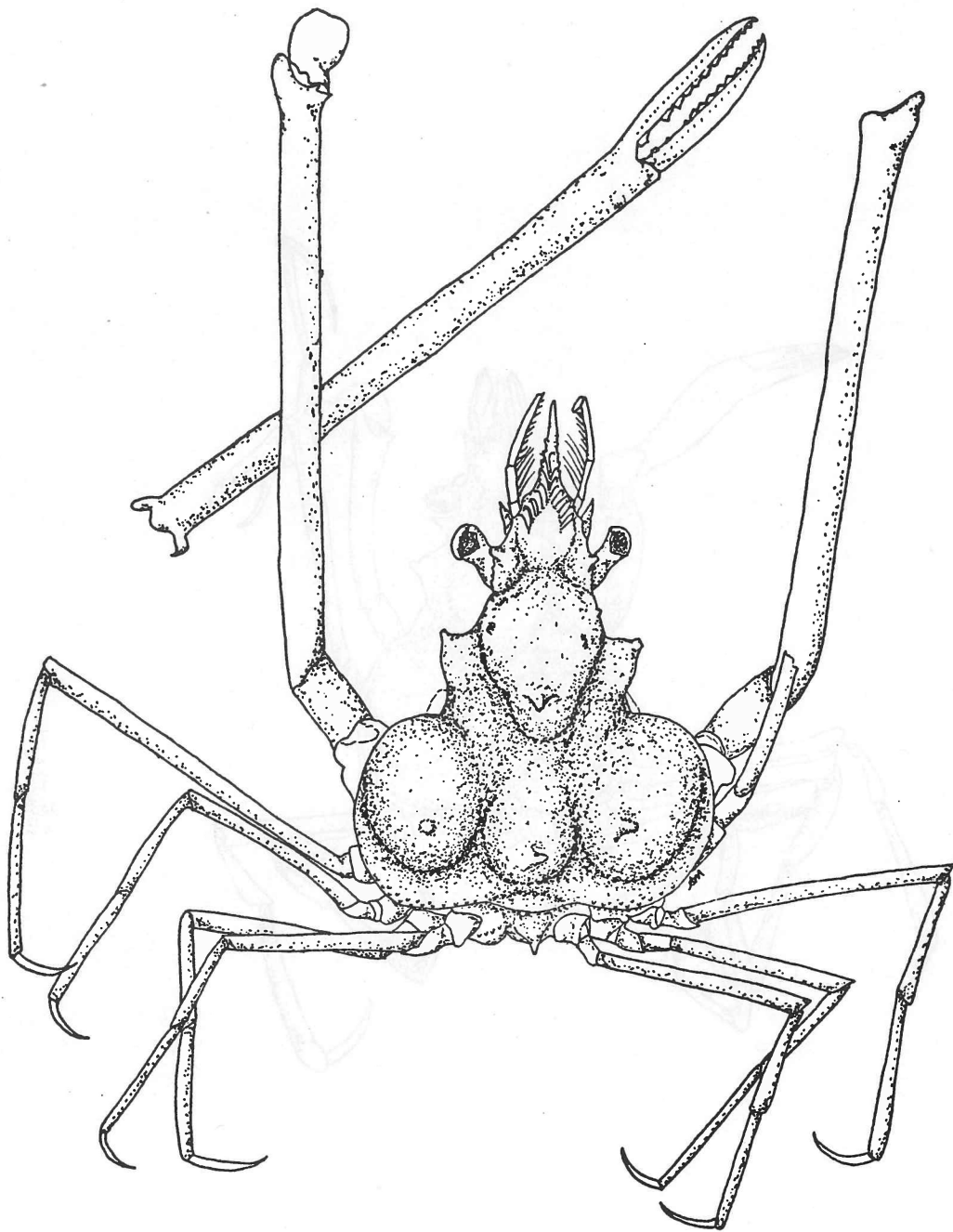
♀ 12.6 x 8.1 mm



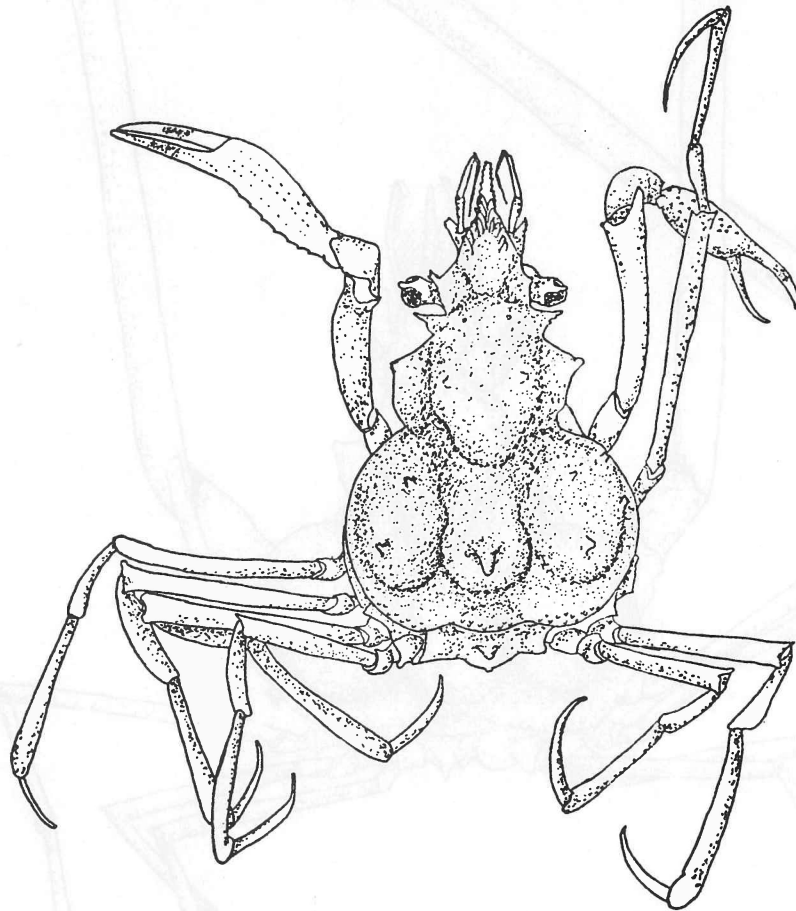
♂ *Pyromaia tuberculata*



♀ *Pyromaia tuberculata*

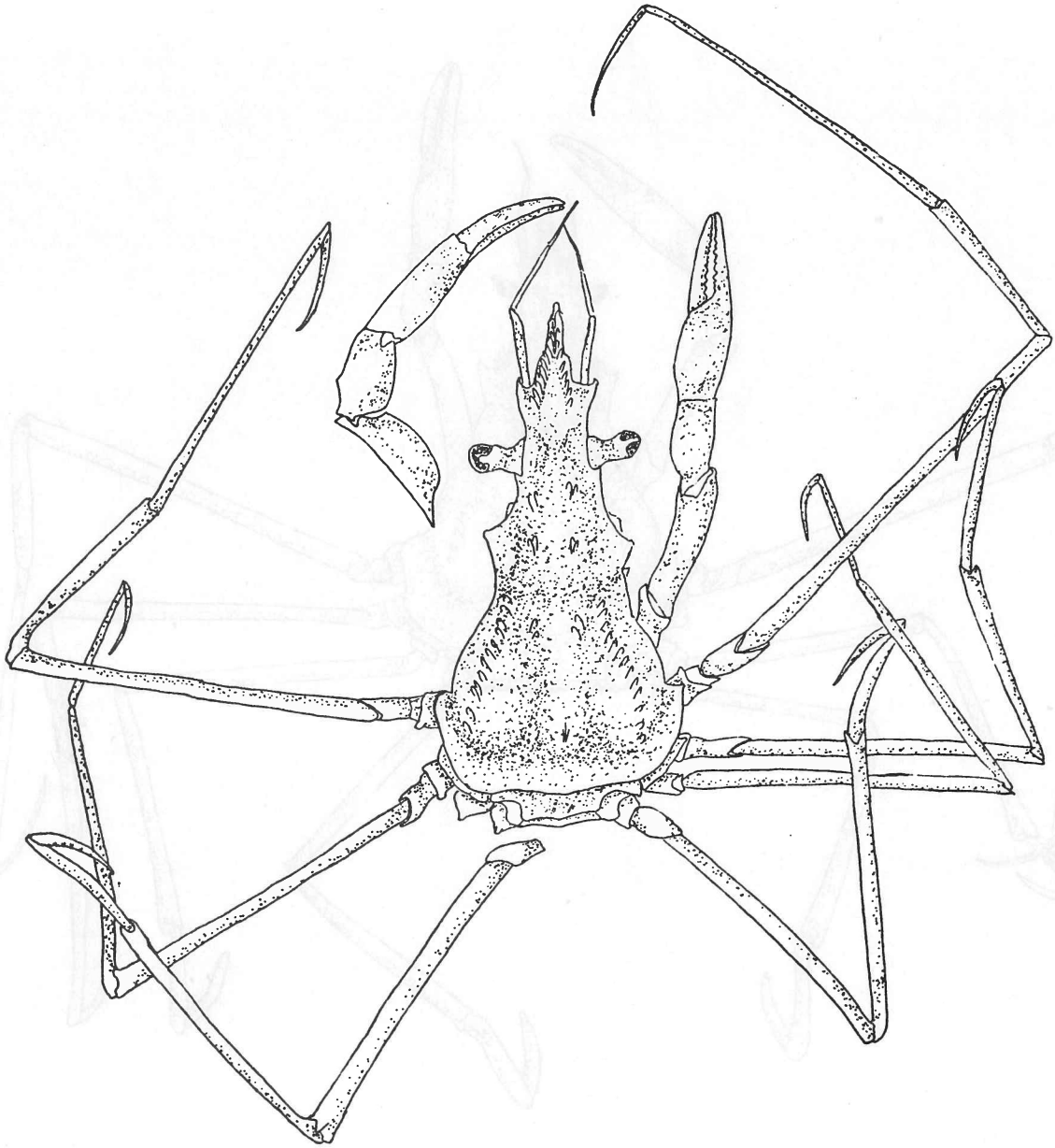


♂ *Erileptus spinosus*

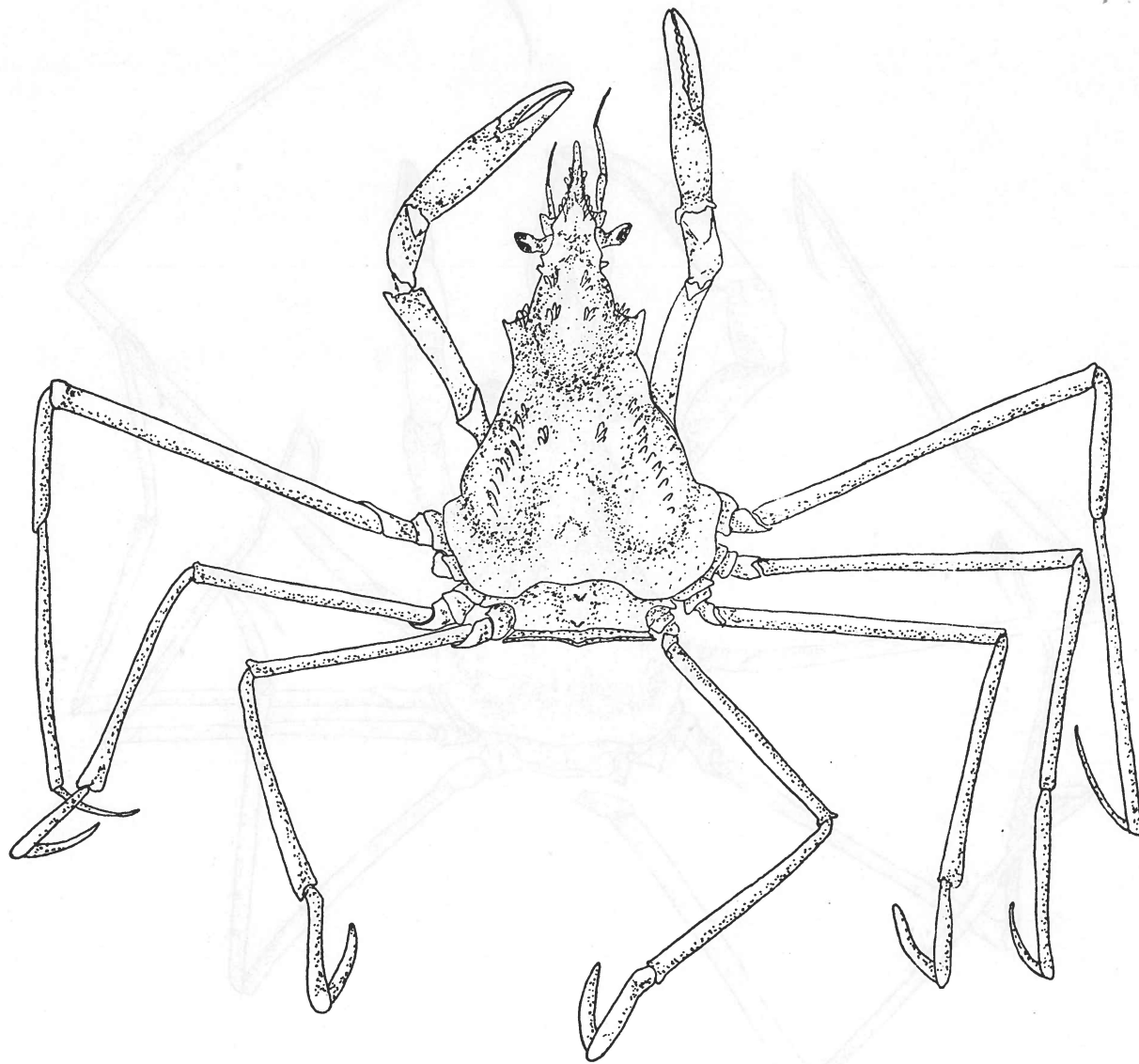


♀ *Erileptus spinosus*

Erileptus spinosus



♂ *Podochela hemphilli*



♀ *Podochela lobifrons*