

Fig. 46. *Sylviocarcinus devillei* (SMF 18704), X-ray picture of endophragmal system.

Valdivia WHITE 1847

(Figs. 37, 47, 48)

1847 *Valdivia* WHITE, Ann. Mag. nat. Hist., 20: 206.

Type species: *Valdivia serrata* WHITE 1847 [by monotypy].

Diagnosis: Carapace with two or more anterolateral teeth. Abdominal segments III–V fused. Thoracic sternum relatively long and narrow. Endophragmal system with endosternite IV/V reaching the midline, V/VI and VI/VII do so only as low elevations; median plate present as a relatively low crest only in somites VII–VIII. Male plp 1 with the subdistal lobe faint or absent, subterminal spine field always well developed; rectangular basal lobe present, more or less developed, hardly visible in *V. novemdentata*; suture begins at the ventro-mesial side, in the last third of the appendage it is displaced dorsally, returning to the ventral side at the extreme tip where it meets the terminally situated distal opening (this distal part of the suture is sometimes hidden by terminal lobes at the mesio-ventral corner of the tip). Plp 2 longer than plp 1.

Distribution: Tropical and temperate South America from Venezuela to northern Argentina.

Remarks: *Valdivia* is broadly related to *Sylviocarcinus* and one of the species, *V. novemdentata*, has a male pleopod quite similar in shape to that of *S. australis*. In *Valdivia* the carapace is always flat and has an angular appearance; the male pleopod has a basal lobe and no subdistal one. In *Sylviocarcinus* the carapace of most species is clearly convex and the male pleopod lacks the basal lobe while it has usually a subdistal one. The two genera appear to represent two evolutionary lines with the species *V. novemdentata* and *S. australis* forming a link between the two lineages, as mentioned above. However, in any case those species can be grouped within one of the genera. This means of course, that both genera are closely related.

Following this definition of *Valdivia*, the species *V. camerani* has clearly to be included. For a long time it was treated as a species of *Trichodactylus*, because to date only subadult and young specimens were studied. RODRIGUEZ (1992) classified it with *Valdivia*, stating that it exhibits some peculiarities linking it with *Sylviocarcinus* and the Trichodactylinae. In fact, the pleopods figured in his paper are those of the immature form, as are those figured by LOPRETTO (1976). Therefore, the discussion on relationships in the former paper was misleading. After our examination of adult males (INPA-CR 363), we have no doubt about its proper classification into *Valdivia*. A full treatment of this problem will be given in a subsequent paper on the genus.

Species included: *camerani* (NOBILI 1896), *haraldi* BOTT 1969, *novemdentata* (PRETZMANN 1968), *serrata serrata* WHITE 1847 [= *serrata surinamensis* PRETZMANN 1968, *serrata cururuensis* BOTT 1969, *hartii gila* (PRETZMANN 1978)], *serrata harttii* (RATHBUN 1905).

Zilchiopsis BOTT 1969

(Figs. 38, 49, 50)

1969 *Zilchiopsis* BOTT, Abh. senckenb. naturf. Ges., 518: 34.

Type species: *Zilchiopsis sattleri* BOTT 1969 [by original designation].

Diagnosis: Carapace with 4 (exceptionally 5) or less anterolateral teeth, usually fading away in large specimens. Abdominal segments III–VI fused. Thoracic sternum relatively long and narrow, the furrows marking the endosternites do not reach the midline; median plate present exclusively in somites VII and VIII. Male plp 1 without a distinct subdistal lobe; its distal part strongly bent in a latero-ventral direction; subterminal spine field poorly developed and situated along the mesial and ventrolateral margins of the bent terminal part, respectively; suture displaced towards the dorsal side at the beginning of the mentioned bent terminal part of the appendage, torqued back again at the end of the spine field, and running along the ventral face, where it meets the terminally situated distal opening, thus, the suture shows a 3/4 torsion. Plp 2 longer than plp 1.

Distribution: Southern Amazon drainage of Brazil, Bolivia and Peru; Paraguay-Paraná drainage of Paraguay and northern Argentina.

Remarks: Identifying *Zilchiopsis* female specimens, on the base of carapace and abdomen morphology, is difficult because these characters are similar to those found in the *Sylviocarcinus pictus*-complex. However, the form of the female genital ducts appears to be a distinctive character for both genera. The duct of *Zilchiopsis* is cup-shaped and elevated above the sternal surface so that the opening can hardly be seen in a perpendicular view. In *Sylviocarcinus*, because the duct is relatively flat, the opening is freely visible in a perpendicular view. The posterior border of the duct can be elevated in large specimens of this genus, therefore approaching the shape of the *Zilchiopsis* duct. Even in this situation the duct opening remains visible and the separation of both genera remains possible.

Species included: *collastinensis* (PRETZMANN 1968) [= *sattleri* BOTT 1969], *cryptodus* (ORTMANN 1893), *oronensis* (PRETZMANN 1968).

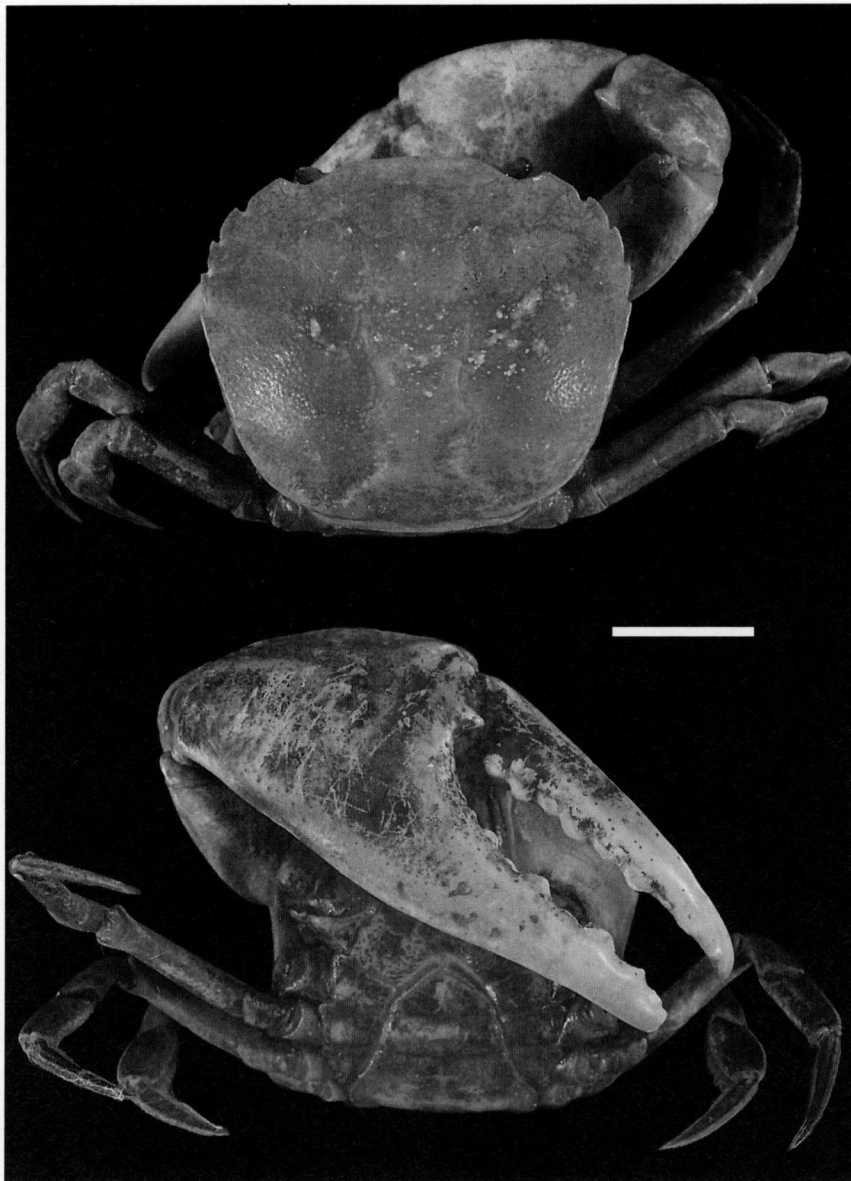


Fig. 47. *Valdivia serrata serrata* (holotype of *Rotundovaldivia barttii gila*, NHMW 4174), dorsal and ventral aspect. — Scale 20 mm.

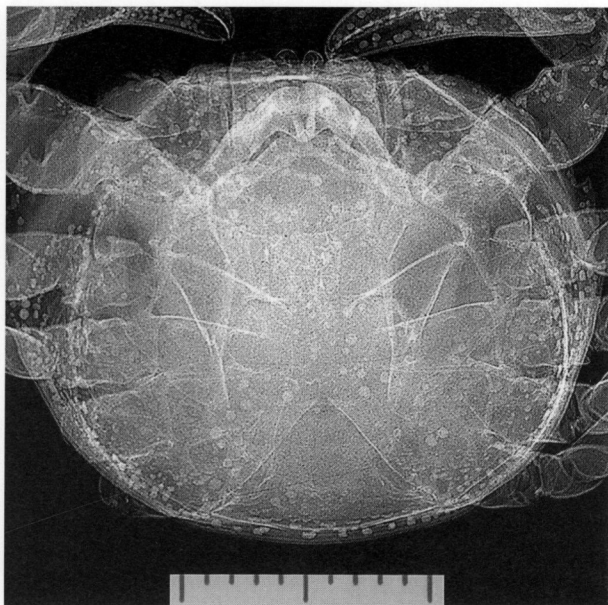


Fig. 48. *Valdivia serrata serrata* (SMF 4137), X-ray picture of endophragmal system.