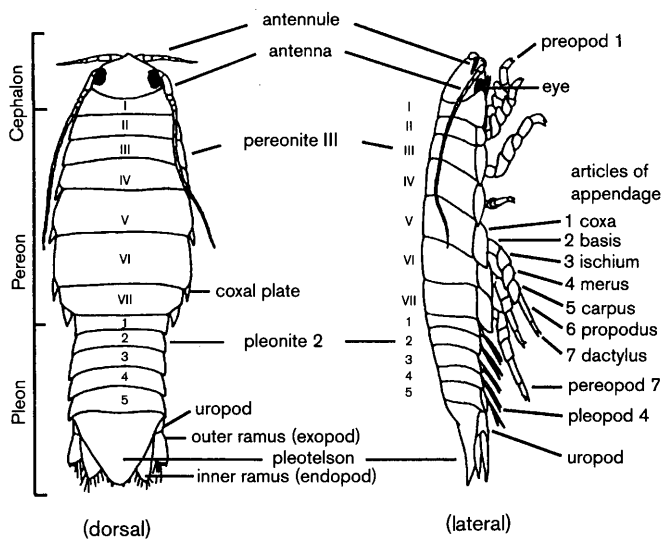


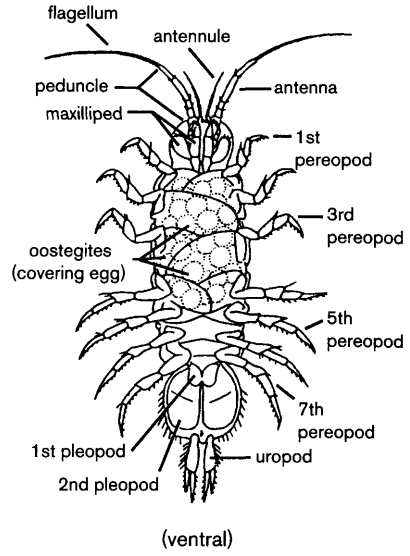
*Excerpted from:* Brusca, R.C., V. R. Coelho, and S. Taiti. 2007. Isopoda — Oniscidea (Terrestrial, Maritime Isopods). In: Carlton, J.T. (ed.) *The Light & Smith Manual: Intertidal Invertebrates from Central California to Oregon*, 4th Ed. p. 525–531.

1. Uropods ventral, hidden by pleotelson and not visible in dorsal view of the animal (plate 248A) ..... *Tylidae Tylus punctatus* 2
- Uropods terminal, clearly visible in dorsal view..... 2
2. Flagellum of antenna with more than 10 articles; eye with more than 50 ommatidia..... *Ligiidae* 3
- Flagellum of antenna with two to seven articles; eye with <30 ommatidia, or eyes absent ..... 6
3. Pleotelson with posterolateral projections; uropod with insertion of exopod and endopod at the same level ..... *Ligia* 4
- Pleotelson without posterolateral projections; uropod with insertion of exopod distinctly proximal to that of endopod ..... *Ligidium* 5
4. Distance between eyes equal to length of one eye; peduncle of uropod several times longer than broad (plate 248B) ..... *Ligia occidentalis*
- Distance between eyes equal to twice length of one eye; peduncle of uropod about as broad as long (plate 248C)..... *Ligia pallasii*
5. Surface of body smooth and shiny; eye ovoid, far from posterior margin of cephalon; endopod of second male pleopod with rounded apex (plate 248D) ..... *Ligidium gracile*
- Surface of body rough with sparse scales; eye subtriangular, almost reaching posterior margin of cephalon; endopod of second male pleopod with pointed apex (plate 248E) ..... *Ligidium latum*
6. Flagellum of antenna tapering to a point, with articles distinguishable only in micropreparations.... *Trichoniscidae* 7
- Flagellum of antenna with two to four clearly distinct articles ..... 8
7. Flagellum of antenna of three minute articles; eye consisting of a single black ommatidium (plate 249A) ..... *Haplophthalmus danicus*
- Flagellum of antenna of six or seven minute articles; eyes lacking (plate 249B) ..... *Brackenridgia heroldi*
8. Flagellum of antenna with four articles . *Detonidae* 9
- Flagellum of antenna with two or three articles ..... 12
9. Uropods with peduncle subcylindrical, exopod inserted terminally and distinctly protruding from body outline (plate 249C)..... *Detonella papillicornis*
- Uropods with peduncle lamellar, exopod inserted on medial margin and not protruding from body outline ..... 10
10. Body markedly convex and capable of rolling into a ball; cephalon with median lobe truncate (plate 249D)..... *Armadilloniscus lindahli*
- Body not markedly convex and incapable of rolling into a ball; cephalon with median lobe pointed ..... 11
11. Penultimate article of peduncle of antenna with spur-like process on lateral margin; dorsal body surface of adult female covered with conspicuous tubercles; seventh male pereopod with a strong spine caudally directed and a rounded lobe on carpus (plate 249E) ..... *Armadilloniscus coronacapitalis*
- Penultimate article of peduncle of antenna without spur-like process on lateral margin; dorsal body surface rough with low, rounded tubercles; seventh male pereopod without spine and lobe on carpus (plate 250A) ..... *Armadilloniscus holmesi*
12. Flagellum of antenna with three articles ..... 13
- Flagellum of antenna with two articles..... 15
13. Cephalon with cone-shaped lateral lobes protruding frontwards; pleon not abruptly narrower than pereon ..... *Alloniscidae Alloniscus* 14
- Cephalon without cone-shaped lateral lobes; pleon abruptly narrower than pereon (plate 250D) ..... *Halophiloscidae Littorophiloscia richardsonae*
14. Peduncle of uropod with posterolateral margin produced, rounded (plate 250C) ..... *Alloniscus mirabilis*
- Peduncle of uropod with posterolateral margin not produced, oblique (plate 250B) ..... *Alloniscus perconvexus*
15. Body moderately convex, unable to roll into a ball; uropod subcylindrical, distinctly protruding backwards compared with pleotelson tip ..... 16
- Body very convex, able to roll into a ball; uropod flattened, reaching pleotelson tip ..... 21

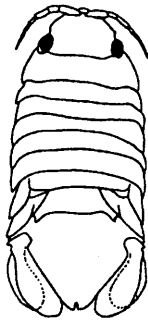
16. Dorsal surface of body covered with fine but distinct scales; first article of flagellum of antenna distinctly shorter than second.....Platyarthridae 17
- Dorsal surface of body with no distinctly visible scales; first article of flagellum of antenna as long or longer than second..... Porcellionidae 18
17. Eyes with about 10 ommatidia; pleotelson tip reaching distal margin of uropodal peduncle (plate 250E) ..... *Niambia capensis*
- Eyes lacking; pleotelson much shorter than uropodal peduncle (plate 250F) ..... *Platyarthrus aiasensis*
18. Cephalon with a V-shaped suprantennal line; pereonite 1 with regularly convex posterior margin (plate 251A).....*Porcellionides floria*
- Cephalon with no suprantennal line; pereonite 1 with posterior margin concave at sides.....*Porcellio* 19
19. Pleotelson with a rounded apex (plate 251B) .....*Porcellio dilatatus*
- Pleotelson with an acute apex.....20
20. Dorsal surface of body granulated; posterior margin of first pereonite distinctly concave at sides (plate 251C)..... *Porcellio scaber*
- Dorsal surface of body smooth; posterior margin of first pereonite slightly concave at sides (plate 251D) ..... *Porcellio laevis*
21. Cephalon with a triangular frontal scutellum; eyes with 20–25; posterolateral corner of first pereonite entire; uropod with large flattened exopod filling gap between pleotelson and fifth pleonite (plate 251E) ..... Armadillidiidae *Armadillidium vulgare*
- Cephalon with no triangular frontal scutellum; eyes with four to eight ommatidia; posterolateral corner of first pereonite cleft; uropod with large flattened peduncle filling gap between pleotelson and fifth pleonite, exopod minute inserted dorsally (plate 251F) ..... Armadillidae *Venezillo microphthalmus*



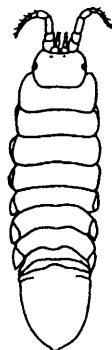
**A** Cirolanidae



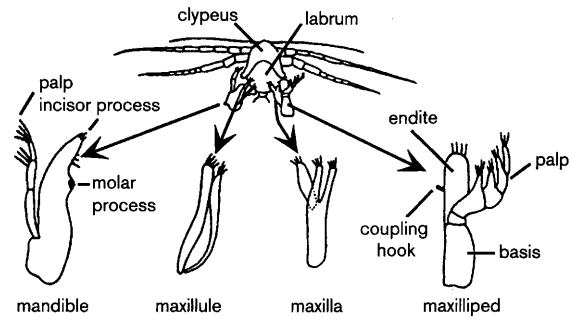
**B** Asellota



**C** Sphaeromatidae



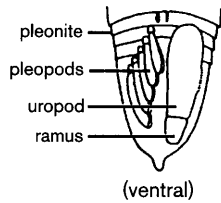
**D** Idoteidae



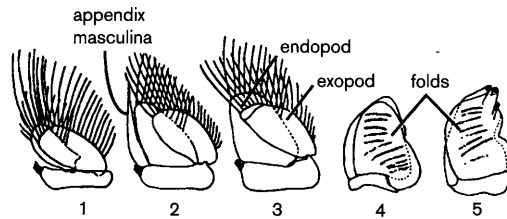
**E** mouthparts



**F** penes



**G** Idoteidae pleon



**H** pleopods

PLATE 231 Isopoda. Isopod anatomy in representative groups: A, Cirolanidae; B, Asellota; C, Sphaeromatidae; D, Idoteidae; E, generalized mouthparts; F, penes; G, pleon of Valvifera (ventral view); H, Generalized pleopods (after Van Name 1936; Menzies and Frankenberg 1966; Menzies and Glynn 1968).

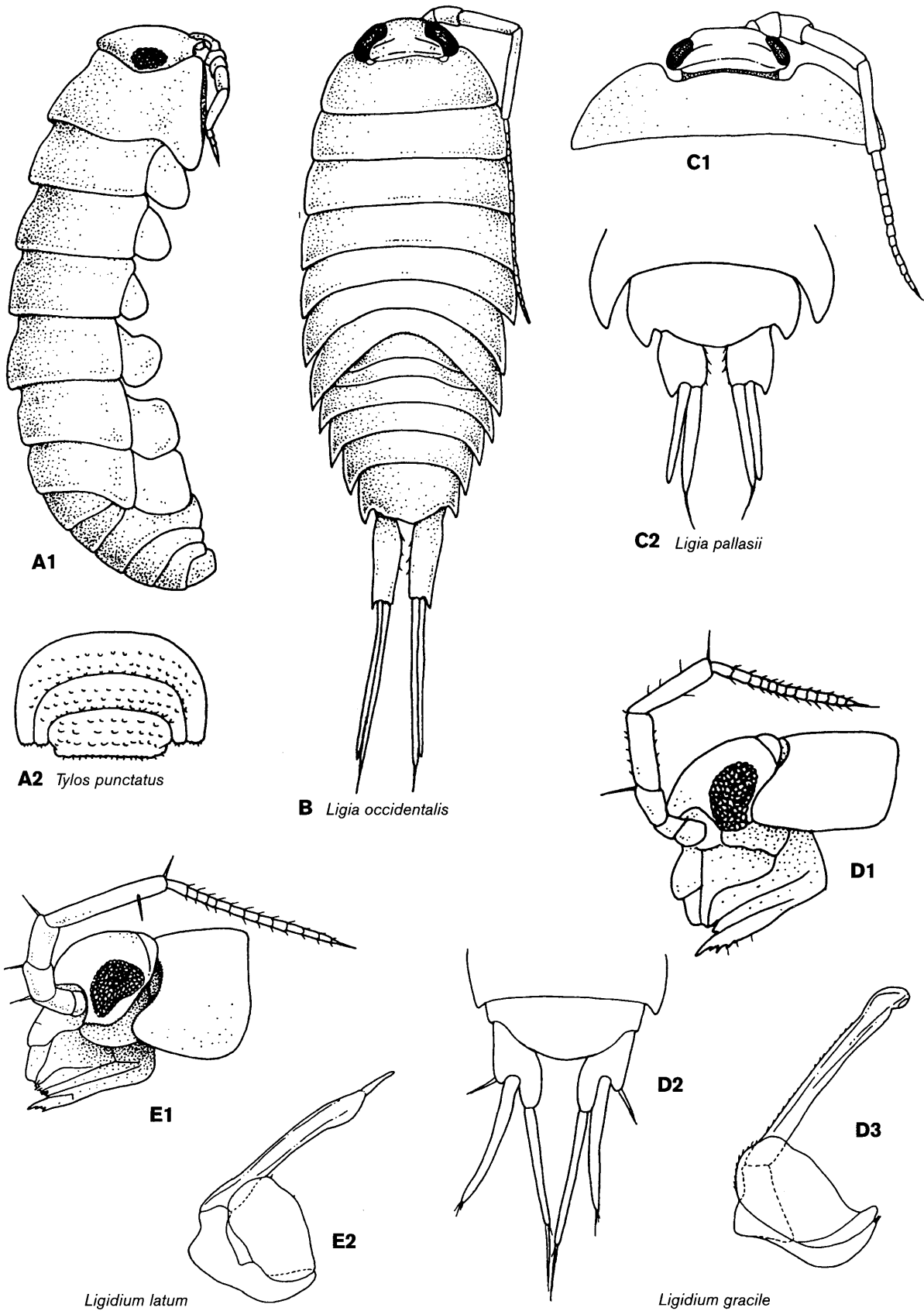
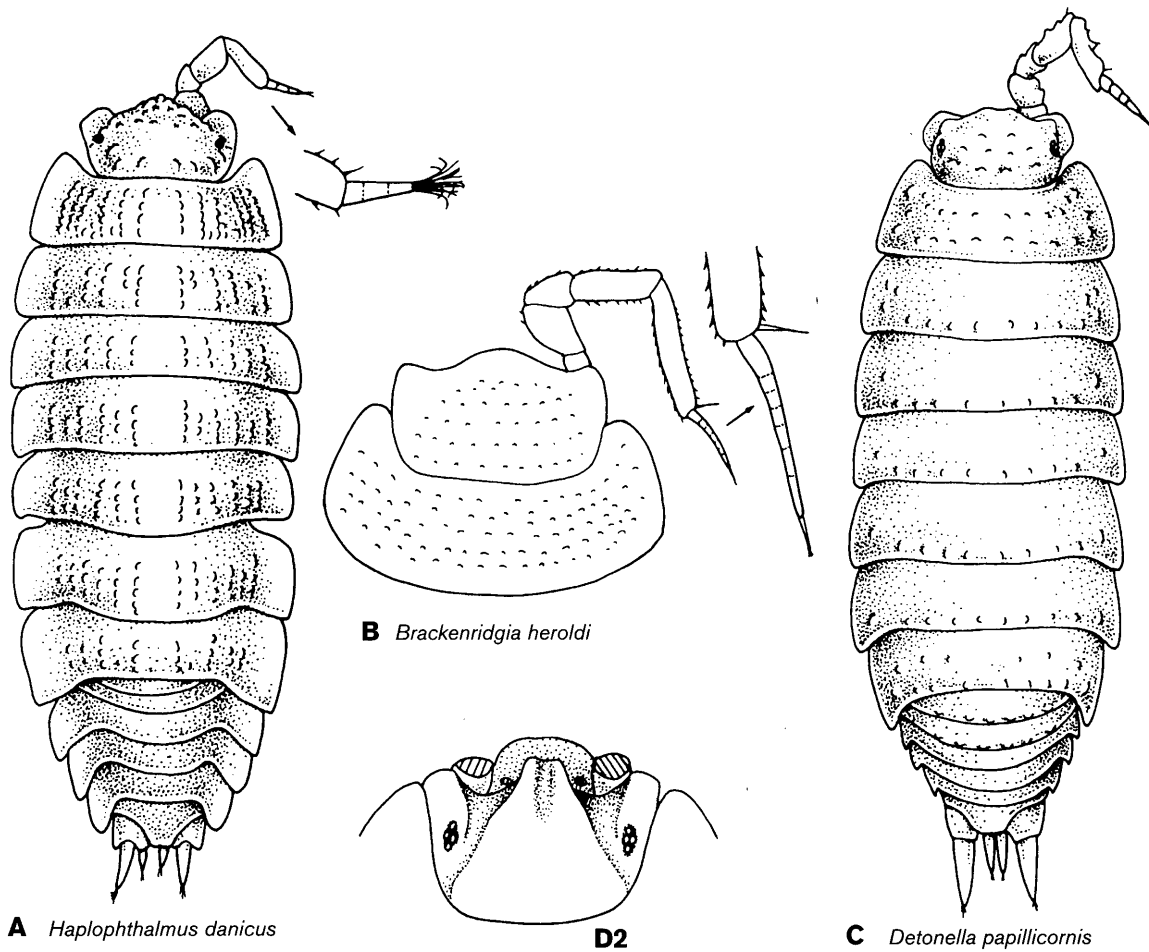


PLATE 248 Isopoda. Oniscidea: A, *Tylos punctatus*, A1, lateral view of whole animal, A2, fourth and fifth pleonite and pleotelson; B, *Ligia occidentalis*; C, *Ligia pallasii*, C1, cephalon and first pereonite, C2, fifth pleonite, pleotelson, and uropods; D, *Ligidium gracile*, D1, lateral view of cephalon and first pereonite, D2, fifth pleonite, pleotelson, and uropods, D3, second male pleopod; E, *Ligidium latum*, E1, lateral view of cephalon and first pereonite, E2, second male pleopod.

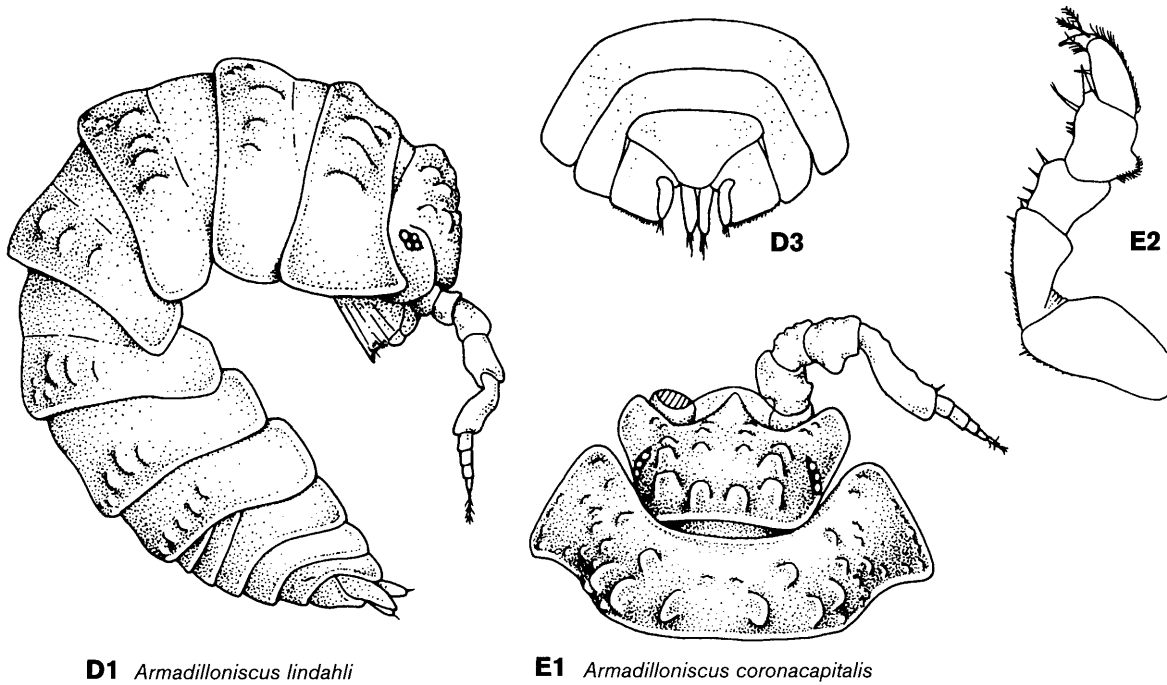


**A** *Haplophthalmus danicus*

**B** *Brackenridgia heroldi*

**C** *Detonella papillicornis*

**D2**

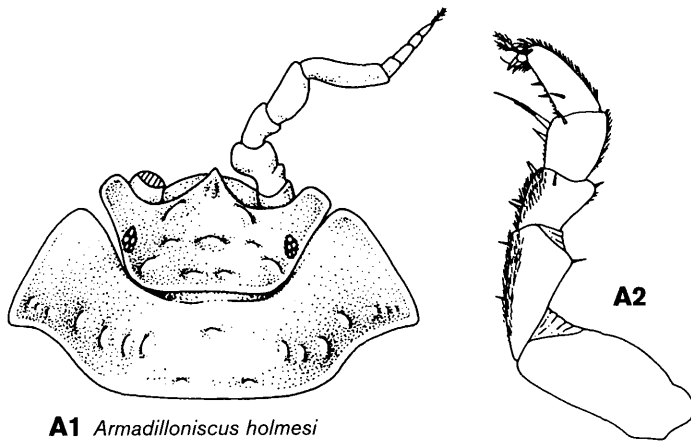


**D1** *Armadilloniscus lindahli*

**E1** *Armadilloniscus coronacapitalis*

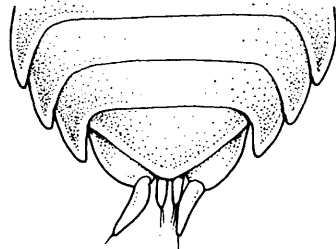
**E2**

PLATE 249 Isopoda. Oniscidea: A, *Haplophthalmus danicus*; B, *Brackenridgia heroldi*, cephalon and first pereonite; C, *Detonella papillicornis*; D, *Armadilloniscus lindahli*, D1, lateral view of whole animal, D2, dorsal view of cephalon, D3, fourth and fifth pleonite, pleotelson, and uropods; E, *Armadilloniscus coronacapitalis*, E1, female cephalon and first pereonite, E2, male seventh pereopod.

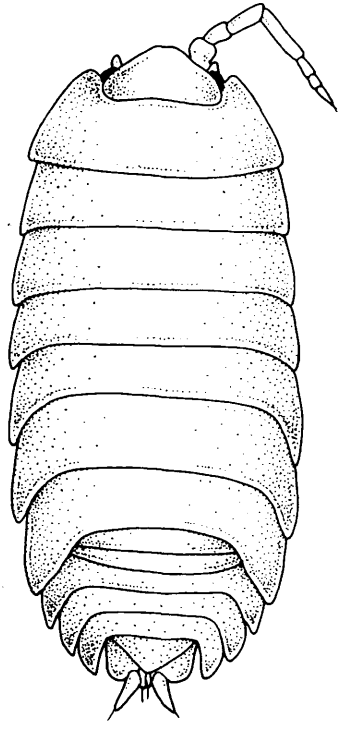


**A1** *Armadilloniscus holmesi*

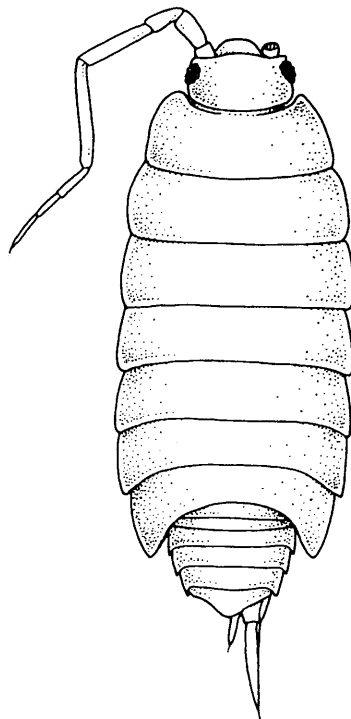
**A2**



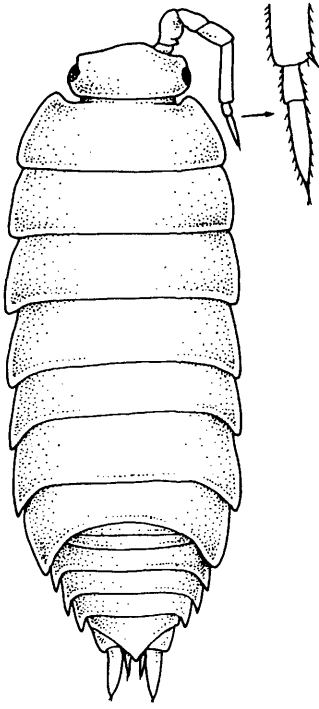
**B** *Alloniscus perconvexus*



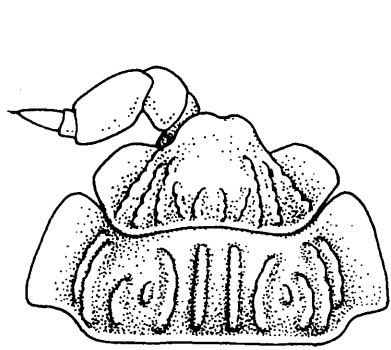
**C** *Alloniscus mirabilis*



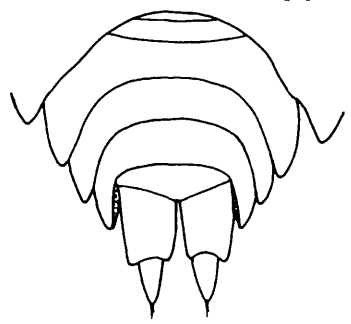
**D** *Littorophiloscia richardsonae*



**E** *Niambia capensis*



**F1**



**F2** *Platyarthrus aiasensis*

PLATE 250 Isopoda. Oniscidea: A, *Armadilloniscus holmesi*, A1, cephalon and first pereonite, A2, male seventh pereopod; B, *Alloniscus perconvexus*, third to fifth pleonite, pleotelson and uropods; C, *Alloniscus mirabilis*; D, *Littorophiloscia richardsonae*; E, *Niambia capensis*; F, *Platyarthrus aiasensis*, F1, cephalon and first pereonite, F2, pleon, pleotelson and uropods.

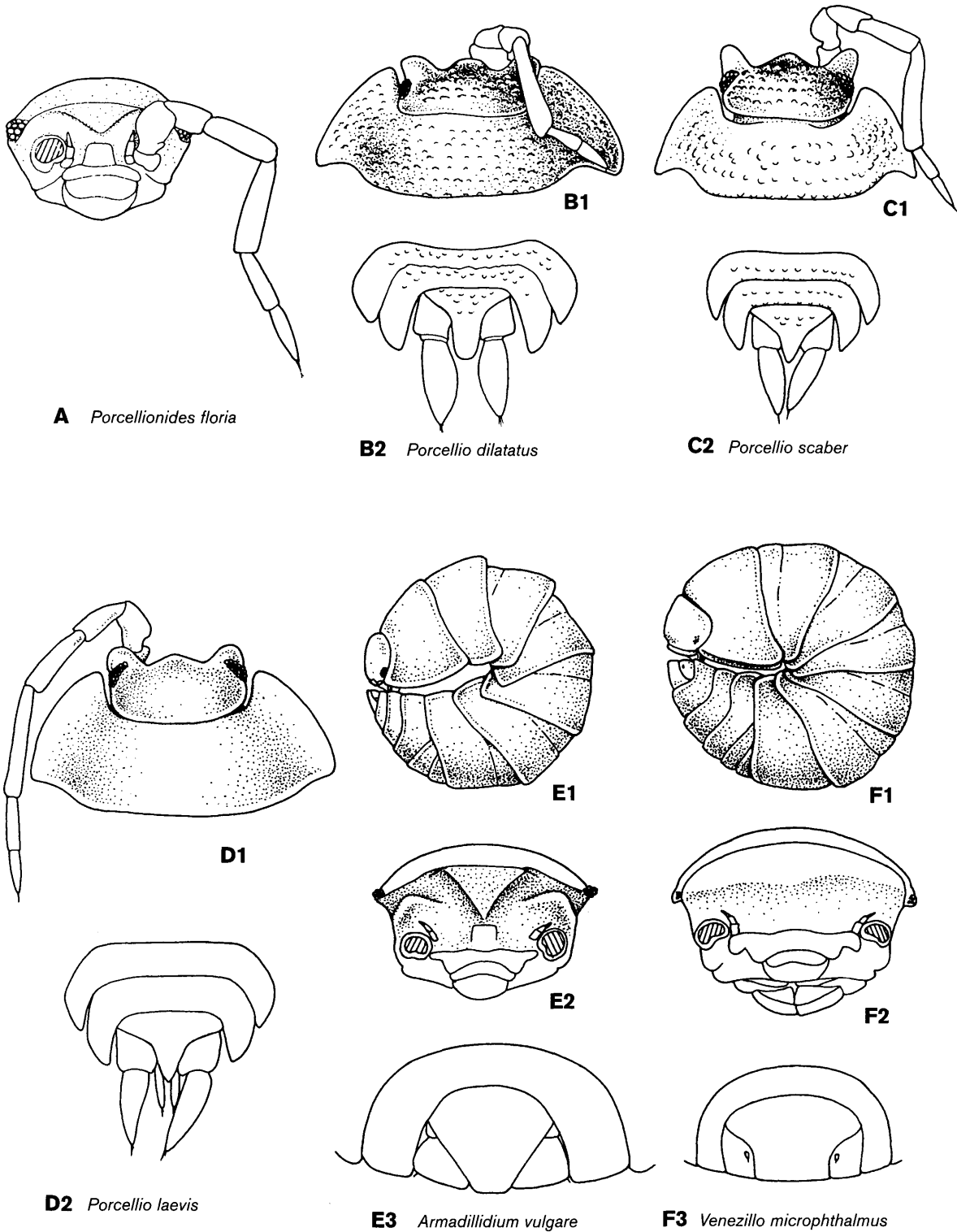


PLATE 251 Isopoda. Oniscidea: A, *Porcellionides floria*, frontal view of cephalon; B, *Porcellio dilatatus*, B1, cephalon and first pereonite, B2, fourth and fifth pleonite, pleotelson, and uropods; C, *Porcellio scaber*, C1, cephalon and first pereonite, C2, fourth and fifth pleonite, pleotelson, and uropods; D, *Porcellio laevis*, D1, cephalon and first pereonite, D2, fourth and fifth pleonite, pleotelson, and uropods; E, *Armadillidium vulgare*, E1, lateral view of whole animal, E2, frontal view of cephalon, E3, fifth pleonite, pleotelson, and uropods; F, *Venezillo microphthalmus*, F1, lateral view of whole animal, F2, frontal view of cephalon, F3, fifth pleonite, pleotelson, and uropods (F3 after Arcangeli 1932).