

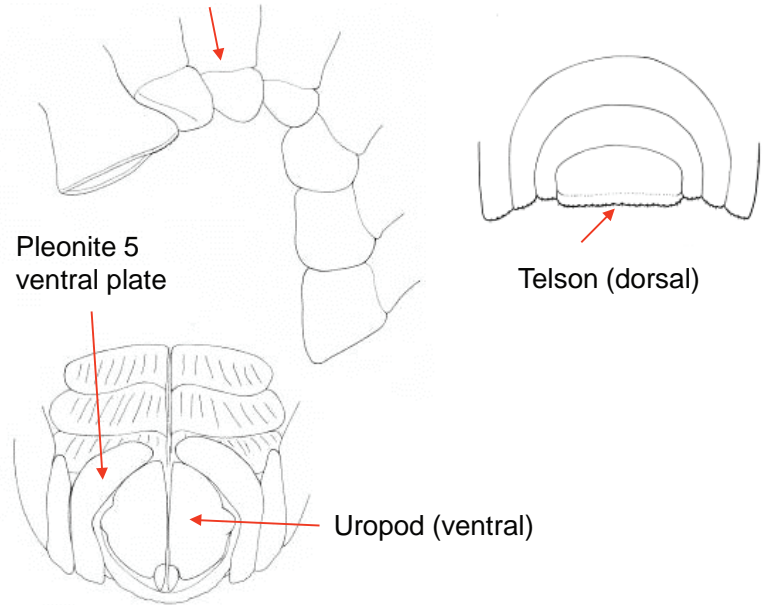
ILLUSTRATED KEY TO TERRESTRIAL ISOPODA OF NEW ZEALAND

Minor, M., Meyer V., Robertson A., Taiti, S. (2016 and updates), <http://nzslaters.massey.ac.nz>

- 1 Uropods not visible in dorsal view (fully covered by telson); epimera of pereonites 2-7 demarcated; pleonite 5 with ventral plate (Fig. 1) Fam. TYLIDAE (*Tylos neozelanicus* Chilton, 1901)



FIG. 1. *Tylos neozelanicus*



- 1' Uropods visible in dorsal view; pleonite 5 without ventral plates 2
- 2 Antennal flagellum conical, with articles indistinguishable under the stereomicroscope (Fig. 2) and eye composed of 1 or 3 ocelli 3

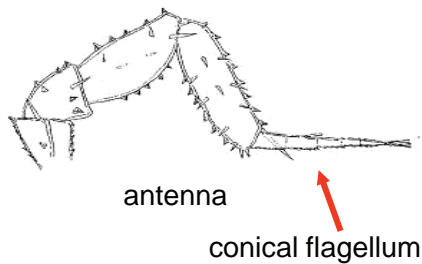


FIG. 2.



- 2' Antennal flagellum with articles clearly distinguishable under the stereomicroscope (Fig. 3) 4

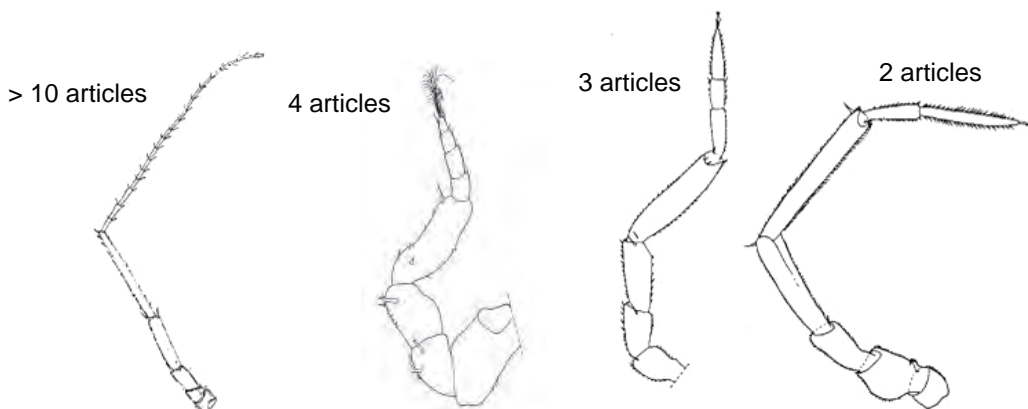


FIG. 3.

3 Eye composed of a single ocellus (Fig. 4)
 Fam. TRICHONISCIDAE ([Haplophthalmus danicus](#) Budde-Lund, 1877)



FIG. 4. *Haplophthalmus danicus*

3' Eye composed of three ocelli set in a triangle (can be wide apart) (Fig. 5) Fam. [STYLONISCIDAE](#)

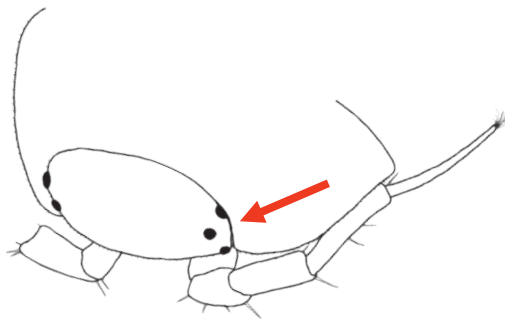


FIG. 5.

3'a. Body strongly convex laterally and heavily sculptured, with prominent tubercles and/or longitudinal ribs on pereon (Fig. 6A) *Notoniscus* spp.

3'b. Body less convex, dorsal surface smooth or granulated (Fig. 6B) *Styloniscus* spp.



FIG. 6 (A) *Notoniscus helmsii*

(B) *Styloniscus* sp.

- 4 Antennal flagellum of >10 articles; eyes large, subquadrate, composed of several hundred ocelli; uropods elongated, rami long and narrow (styliform) (Fig. 7) Fam. [LIGIIDAE](#) (*Ligia* spp.)

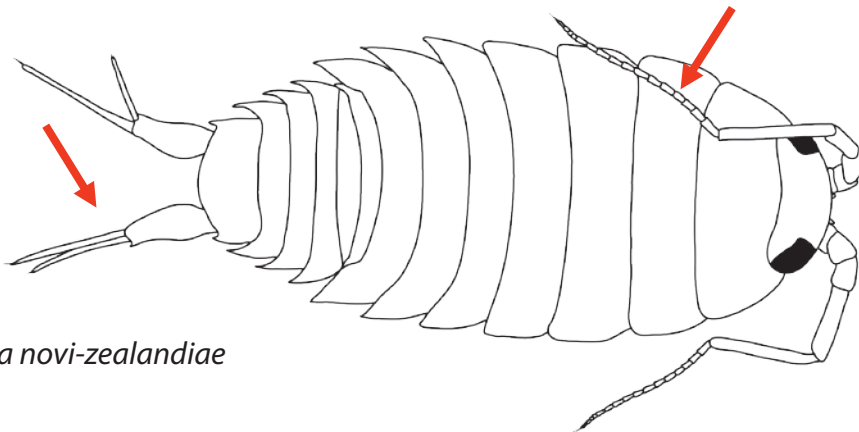


FIG. 7. *Ligia novi-zealandiae*

- 4' Antennal flagellum of fewer than 6 articles 5
- 5 Antennal flagellum of 2 articles (Fig. 8A) 6
- 5' Antennal flagellum of 3-4 articles (4th article may be much smaller than others) (Fig. 8B) 8

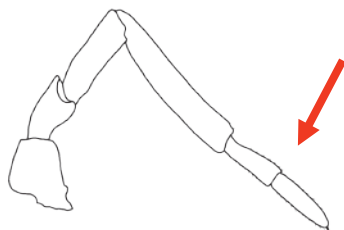
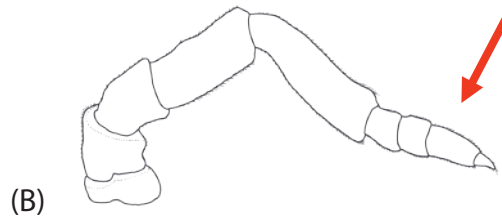


FIG. 8 (A)



(B)

- 6 Uropods projecting beyond body outline, spear-shaped. Body only moderately convex; animals cannot roll into a ball Fam. [PORCELLIONIDAE](#)
- 6a. Body outline uninterrupted oval; dorsal surface covered with raised tubercles (bumps); front margin of the head strongly tri-lobed (Fig. 9A) [Porcellio scaber](#) Latreille, 1804
- 6b. Body outline interrupted between pereon and pleon; front margin of head not tri-lobed; dorsal sculpture of raised bumps absent (Fig. 9B) [Porcellionides pruinosus](#) (Brandt, 1833)



FIG. 9 (A) *Porcellio scaber*



(B) *Porcellionides pruinosus* (image by Ken Walker, Museum Victoria, www.padil.gov.au, CC BY 3.0 AU)

6' Uropods broad and flattened, not projecting beyond body outline (Fig. 10). Body strongly convex; animals can roll into a ball 7



FIG. 10

7 Telson hour-glass shaped or with quadrangular distal part (Fig. 11). Exopod is small, inserted dorsally on protopod (very rarely absent). Body surface smooth or sculptured
 Fam. [ARMADILLIDAE](#)

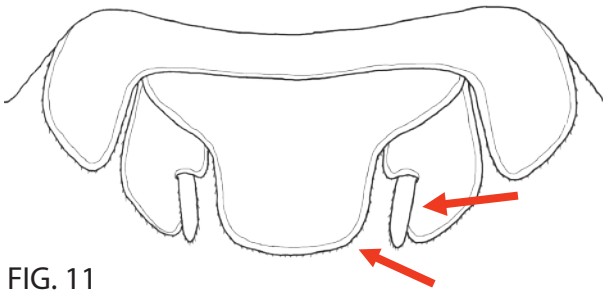


FIG. 11

7' Telson trapezoidal, narrowing distally (Fig. 12). Basal part of uropod (protopod) small, exopod broad and flattened. Two pairs of pleopodal lungs Fam. [ARMADILLIDIIDAE](#)

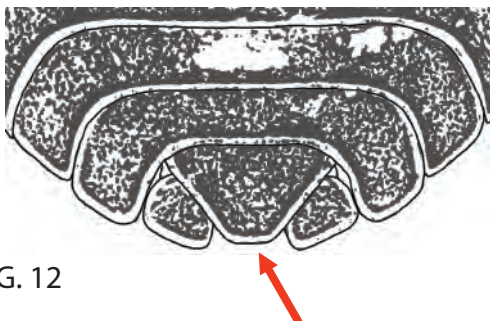


FIG. 12

7'a Eye composed of numerous ocelli. Body surface smooth
 [Armadillidium vulgare](#) (Latreille, 1804)

7'b Eye is a single large ocellus. Body surface covered with coat of fine fuzzy hair
 [Eluma caelatum](#) (Miers, 1877)

- 8 Eye rounded or bean-shaped, composed of fewer than 30 ocelli (Fig. 13A) 9
- 8' Eye very large, crescent-shaped, composed of >80 ocelli (Fig. 13B). Seashore species
 Fam. SCYPHACIDAE

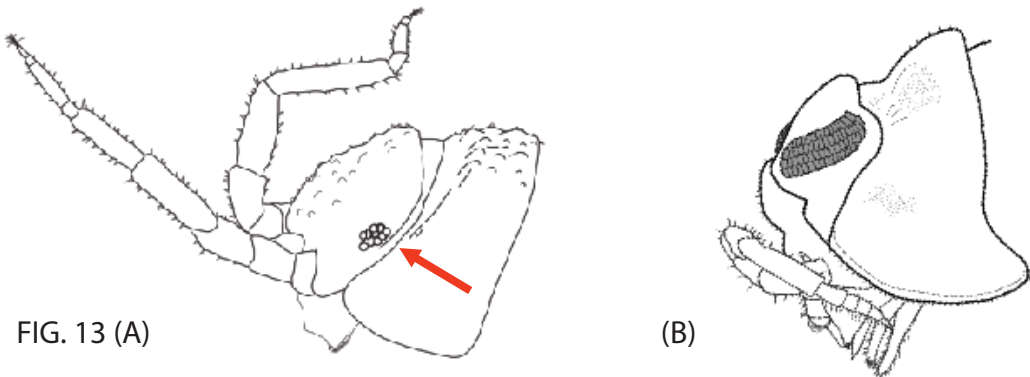


FIG. 13 (A)

(B)

- 8'a Uropods broad and flattened, not projecting beyond body outline (Fig. 14A). Body strongly convex; animals can roll into a ball [Actaecia euchroa](#) Dana, 1853
- 8'b Uropods projecting beyond body outline, rami pointed (Fig. 14B). Body only moderately convex; animals cannot roll into a ball [Scyphax ornatus](#) (Miers, 1877)



FIG. 14 (A) *Actaecia euchroa*

(B) *Scyphax ornatus*

- 9 Dorsal body surface sculptured with tubercles and/or ridges (Fig. 15A); flagellum of antennae with 4 articles (4th article can be very small). Sea shore species (Fam. DETONIDAE) 10
- 9' Dorsal body surface smooth or punctate (Fig. 15B); flagellum of antennae with 3 articles 11



FIG. 15 (A)

(B)

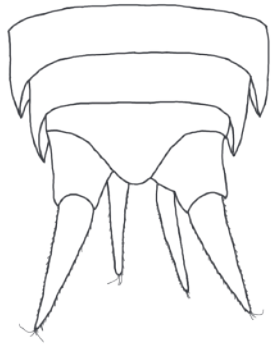


FIG. 16 (A)



(B)

- 10 Rami of uropod unequal - exopod is thick, cone-shaped, endopod thin, pencil-like (Fig. 16A) *Scyphoniscus* spp.
- 10a Small species (males 3.5 mm, females 4-4.5 mm); dorsal surface with small tubercles arranged in rows. Sea shores and estuaries of mainland NZ (North and South Islands) [Scyphoniscus waitatensis](#) Chilton, 1901
- 10b Body length 7-10 mm; dorsal surface with small, irregular tubercles. Sub-Antarctic islands (Auckland and Campbell Islands) [Scyphoniscus magnus](#) Chilton, 1909
- 10' Both rami of uropod thick, similar in length, or exopod shorter (Fig. 16B). Large, robust, sexually dimorphic species *Deto* spp.
- 10'a Males with very thick, hyper-developed antennae; dorsal surface with transverse rows of tubercles which on pereon are elongated to form blunt spines; body length 20-24 mm. Females with slender antennae; dorsal surface with transverse rows of tubercles; epimera of segments 2-4 of pereon are demarcated by a groove (in males this groove is absent); female body length 12-19 mm [Deto aucklandiae](#) (Thomson, 1879)
- 10'b Similar to above, but males with the first segment of pereon dilated laterally into two bladder-like structures; females with segments 2-4 of pereon not demarcated *Deto bucculenta* (Nicolet, 1849)



FIG. 17 (A) Oniscidae



(B) Philosciidae

- 11 Epimera of pleonites 3-5 projected, expanded and curved (Fig. 17A); head with frontal lateral lobes Fam. [ONISCIDAE](#) (*Phalloniscus* spp.)
- 11' Epimera of pleonites 3-5 reduced (Fig. 17B); head without frontal lateral lobes Fam. [PHILOSCIIDAE](#)