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On commensal Ostracoda from the wood-infesting isopod *Limnoria**)

by

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Three new ostracod species, each belonging to a new genus, were described by the first author (DE VOS, 1953). They had been found on the body and the legs of *Limnoria lignorum*, the well-known wood-burrowing isopod. Since then, we have been looking for commensals in several new lots of European *Limnoria*, and in this way we obtained valuable new data on morphology and distribution of two of the three ostracod species described.

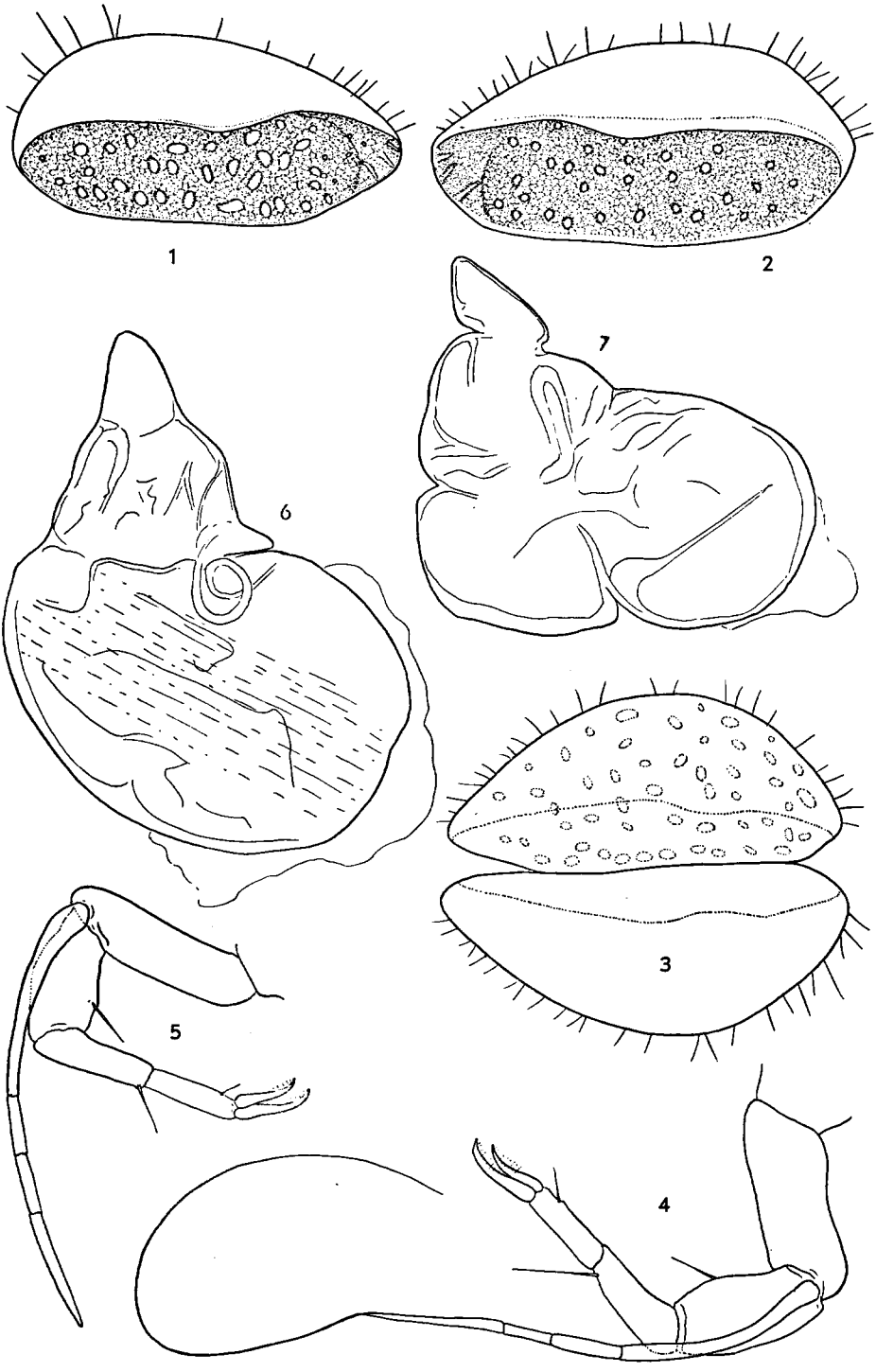
Moreover, Dr. Robert I. MENZIES, La Jolla, California, kindly sent us a beautiful lot of ostracods from *Limnoria tripunctata* MENZIES, an isopod species from the Pacific coast of America, found in test-blocks placed at about 7 feet below mean tide level, and collected in the course of the marine wood-borer studies, Project NR 163—084 at the Scripps Institution of Oceanography, which is supported by the U.S. Office of Naval Research.

In European waters, it may be borne in mind, members of two monospecific ostracod genera are known as commensals of *Limnoria*, viz., *Aspidoconcha limnoriae* DE VOS, and *Redekea perpusilla* DE VOS. The former species is very common on the body, particularly the abdomen, of *Limnoria lignorum*, and occasionally of *L. quadripunctata*, found in pieces of wood or cork washed ashore on the Dutch coast. Besides, we found recently autochthoneous specimens in Brittany, France.

The other species, *Redekea perpusilla*, is exceedingly rare in western Europe. The original description was based upon a few specimens only, and afterwards we obtained but two or three more specimens.

The American material collected by Dr. MENZIES consists of representatives of the same two genera. Here, however, the *Redekea*-species is more common than the *Aspidoconcha*-species. The *Redekea* from California apparently is a new species, but in the case of *Aspidoconcha* we were unable to find any differentiating character between the Cali-

*) Received December 15, 1955.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fornian specimens and the European ones. The variation range within a single lot from a single locality of *Aspidoconcha* appears to be rather wide, so that we are inclined to consider both the Pacific and the Atlantic specimens belonging to one variable species.

No new material was reported of the third ostracod genus recorded from *Limnoria*, the West Indian *Laocoon*. Yet we have to insert in this paper a nomenclatural note on that genus.

Aspidoconcha limnoriae DE VOS (figs. 1—7)

Aspidoconcha limnoriae DE VOS, 1953, Beaufortia 4 (34): 22—25, figs. 1—3.

MATERIAL EXAMINED :

(a) Zandvoort. May 30, 1952. On *Limnoria lignorum*, burrowing in cork, washed ashore. J. H. Stock collector. (Types ; Z.M.A. Ost. 105.046—047).

(b) N. of Katwijk. Feb. 20, 1949. On *Limnoria lignorum*, burrowing in wood, washed ashore. J. A. W. Lucas collector. (Rijksmus. Nat. Hist. Leiden and Z.M.A. Ost. 105.048).

(c) Island of Texel, Northsea shore. April 13, 1953. On *Limnoria lignorum*, burrowing in beam, washed ashore. J. H. Stock collector. (Z.M.A. Ost. 105.106).

(d) Between Zandvoort and Bloemendaal. Jan. 16, 1954. On *Limnoria lignorum* and *L. quadripunctata*, in beam washed ashore. J. H. Stock collector. (Z.M.A. Ost. 105.304).

(e) Roscoff (Brittany), in front of the Biological Station, in wooden pole between the tide marks. On *Limnoria* sp. July 3, 1953. A. P. C. de Vos & J. H. Stock collectors. (Z.M.A. Ost. 105.303).

(f) U. S. Naval Repair base, San Diego Harbor, S.D., California. On *Limnoria tripunctata*. Sept. 11, 1953 (Z.M.A. Ost. 105.306—307) and Dec. 14, 1953 (Z.M.A. Ost. 105.649). R. I. Menzies collector.

The localities (a), (c), and (d) are in the province of North Holland, the locality (b) in the province of South Holland of the Netherlands. The locality (e) is in de dept. Finistère, France, the locality (f) in California, U.S.A.

There is little to add to the original description. We may only state, that the claws at the end of the posterior antennae bear some fine, short setae at the inner margin (fig. 5). The flagellum of the posterior antennae sometimes bears at its distal end a long thread of coagulated secretion (fig. 4). The statement in the original description (p. 25) that the palp of the maxilla bears only one seta, is not correct. The palp terminates in 3 setae, just as the endites.

Number, size and shape of the pores in the shell vary: sometimes these pores are circular, sometimes they are ovate in outline (fig. 3).

The structure of the copulatory organ too, is subject to a considerable variation. Figs. 6 and 7 show some extremes to the variation range.

FIGURES 1—7. *Aspidoconcha limnoriae* DE VOS.

1. Shell of Californian specimen, female, side view.
2. Shell of Dutch specimen, female, side view.
3. Shell of Californian specimen, female, dorsal view.
4. Second antenna, Californian specimen, female.
5. Second antenna, Dutch specimen, male.
6. Copulatory organ of Californian specimen.
7. Copulatory organ of Dutch specimen.

Redekea perpusilla DE VOS (figs. 8—12, 19)

Redekea perpusilla DE VOS, 1953, Beaufortia 4 (34): 25—27, figs. 4—5.

MATERIAL EXAMINED :

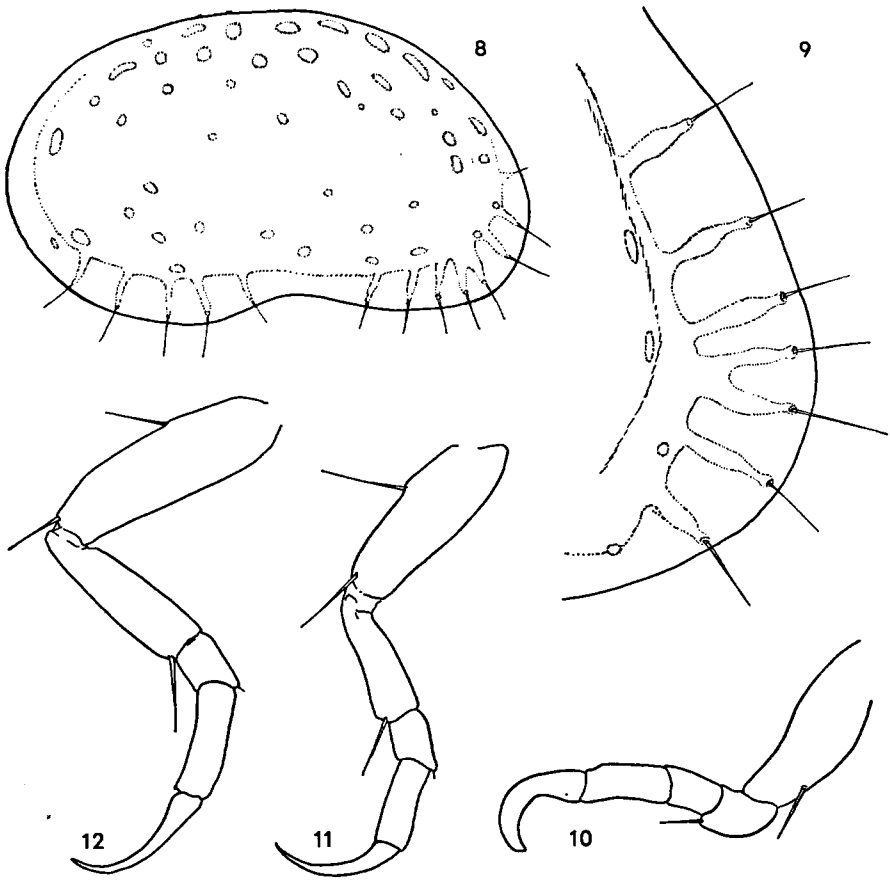
(a) Zandvoort. May 30, 1952. On *Limnoria lignorum,* burrowing in cork, washed ashore. J. H. Stock collector. (Z.M.A. Ost. 105.049—050 ; types).

(b) Between Zandvoort and Bloemendaal, Jan. 16, 1954. On *Limnoria lignorum* and *L. tripunctata,* in beam, washed ashore. J. H. Stock collector. (Z.M.A. Ost. 105.305).

(c) Roscoff, just in front of the Biological Station. July 3, 1953. On *Limnoria lignorum,* in pole between the tide marks. A. P. C. de Vos & J. H. Stock collectors. (Z.M.A. Ost. 105.310).

The localities (a) and (b) are in the province of North Holland, Netherlands, the locality (c) is in the dept. Finistère, France.

We may complete the original description with the following notes. The length - height ratio of the shell varies between 1.6 and 1.8. The

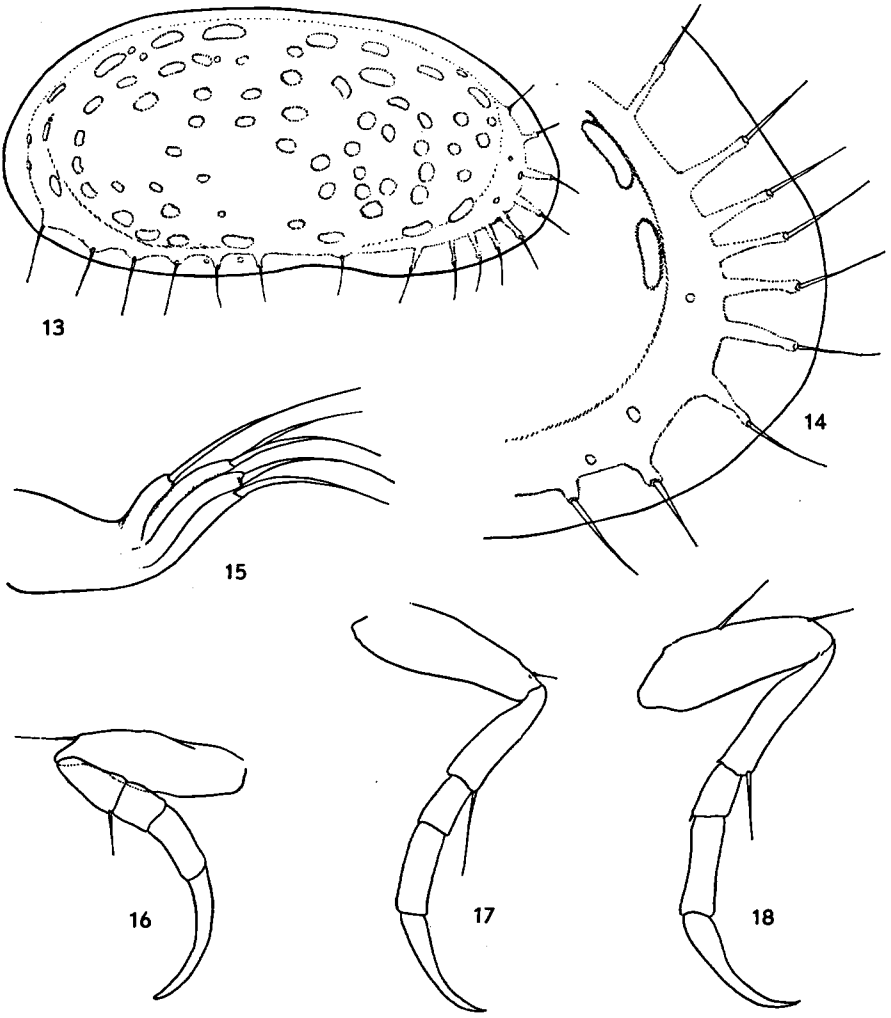


FIGURES 8—12. *Redekea perpusilla* DE VOS.

8. Shell of male, side view.
9. Anterior margin of shell of male.
10. First leg of male.
11. Second leg of male.
12. Third leg of male.

marginal zone of the shell is well-marked, crossed by pore-canals. At the anterior margin of the shell of the adult there are 8 pore-canals, of which the 4th and the 5th form together a forked structure. This forked structure is highly characteristic for the species. The pore-canals themselves are fairly robust, slightly swollen at about half their length. At the posterior margin about 5 pore-canals are present, the posterior ones all terminate in a seta.

The original figure of the copulatory organ was not too good, owing to the angle under which the structure was drawn. A revised figure is published here (fig. 19).



FIGURES 13—18. *Redekea californica* n.sp.

13. Shell of female, side view.
14. Anterior margin of shell of female.
15. Maxilla.
16. First leg of male.
17. Second leg of male.
18. Third leg of male.

Redekea californica nov. spec. (figs. 13—18, 20)

MATERIAL EXAMINED :

Many specimens, males and females, from *Limnoria tripunctata* MENZIES. U.S. Naval Target Repair Base, San Diego Harbor, S.D., California, from test-blocks. Sep. 11, and Dec. 14, 1953. R.I. Menzies collector. A male has been selected as holotype (Z.M.A. Ost. 105.308), 16 other specimens are paratypes (Z.M.A. Ost. 105.309), the remaining specimens have received Z.M.A. Ost. 105.650.

DESCRIPTION : Male. The shell is distinctly slenderer than that of *R. perpusilla,* the length - height ratio varying between 1.9 and 2.1. There are more pits in the shell than in the European species (cf. figs. 8 and 13). The structure of the marginal zone is, moreover, highly distinctive. The anterior pore-canals, 8 to 9 in number, are quite slender, not swollen in the middle. The forked combination of the 4th and 5th pore-canals, which forms a characteristic feature of the European species, lacks in the Pacific material. The posterior pore-canals are very short, nothing but slight excavations of the marginal zone.

Antennae and mouth-parts agree exactly with those of *R. perpusilla.*

The 1st pair of legs offers a distinctive character (fig. 16) in the shape of the claw. *R. perpusilla* possesses a robust, strongly curved claw, whereas the proposed new species has a slender, feebly curved claw. (In the female sex, this character is not developed).

The 2nd and 3rd pairs of legs are of the very same pattern in both species.

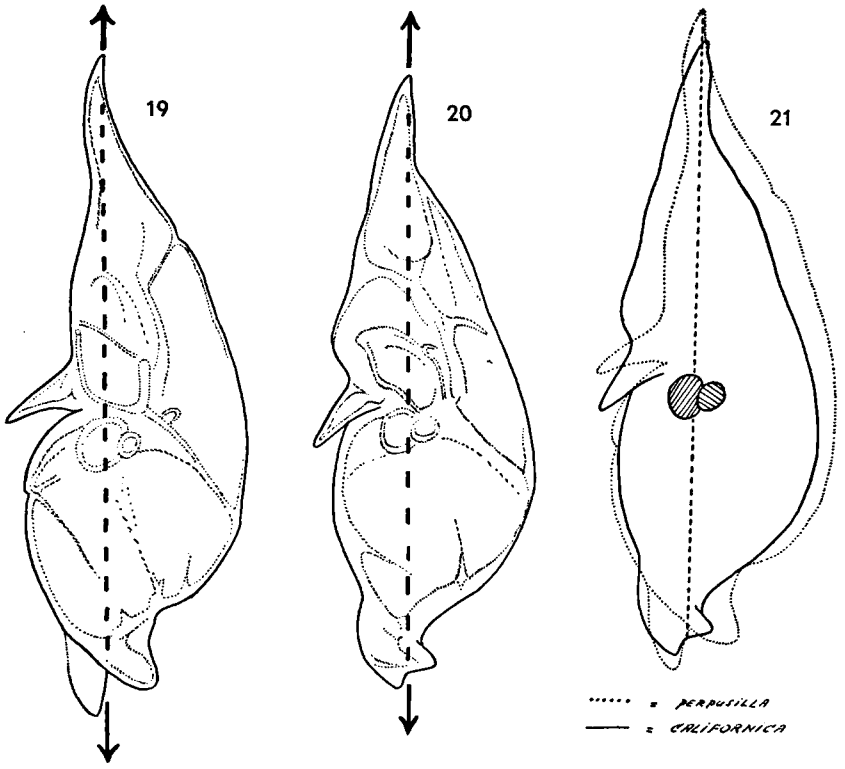
The copulatory organ shows some slight differences in outline. The apex of that of *R. californica* is bent much more backwards than in *R. perpusilla.* The line connecting the apex of the copulatory organ with the forked basis, divides the organ in two parts of about the same size in *californica,* whereas in *perpusilla* the interior part of the organ is much smaller than the exterior part. The differences between the copulatory organs of the two species are shown in fig. 21, in which the outlines of each have been drawn.

The length of the shell of *R. californica* is exactly the same as in *R. perpusilla,* about 0.2 mm.

PROPOSED NEW GENERIC NAME FOR THE OSTRACOD GENUS *LAOCOON* DE VOS, 1953, PREOCCUPIED.

Though NEAVE (Nomenclator Zoologicus, 1939, 1950) does not record the generic name *Laocoon,* we found quite accidentally that this name was used once in zoological literature. NIERSTRASZ & ENTZ, 1922 (Tijdschr. Ned. Dierk. Ver., ser. 2, dl. XVIII, pp. CXXXII—CXXXIII) give a preliminary description of *Laocoön paradoxus,* which they think to be a parasitic mollusc of the starfish *Hippasterias phrygiana* (spelt *H. phrygina* in the publication of NIERSTRASZ & ENTZ). PELSENEER, 1928 (Bull. Soc. Zool. France, tome 53, p. 175) mentions this *Laocoön paradoxus,* but on verbal communication by ENTZ, considered it only part of the body of *Hippasterias.*

At any rate, the name *Laocoon* once having been used, regardless whether correctly or not, cannot be used again.



FIGURES 19—20. Copulatory organs of *Redekea*-species. 19. *R. perpusilla*. 20. *R. californica*.

FIGURE 21. Semi-diagrammatic drawing showing the differences between *perpusilla* and *californica*.

We therefore propose to replace the name *Laocoon* DE VOS, 1953, for an ostracod commensal of *Limnoria lignorum* from Anna Bay, Curaçao, by

Laocoonella nom. nov.

The genotype remains *Laocoon commensalis* DE VOS, 1953.

For sale at the Administration of the Zoological Museum, Amsterdam.
Price *f* 0,60 (Dutch Guilders).