ANNALS

OF THE SOUTH AFRICAN MUSEUM

CAPE TOWN

ANNALS OF THE SOUTH AFRICAN MUSEUM ANNALE VAN DIE SUID-AFRIKAANSE MUSEUM

Volume 67 Band October 1975 Oktober

Part 10 Deel



FIVE SPECIES OF JAEROPSIS FROM THE SOUTHERN INDIAN OCEAN (CRUSTACEA, ISOPODA, ASELLOTA)

Ву

BRIAN KENSLEY

Cape Town

Kaapstad

The ANNALS OF THE SOUTH AFRICAN MUSEUM

are issued in parts at irregular intervals as material becomes available

Obtainable from the South African Museum, P.O. Box 61, Cape Town

Die ANNALE VAN DIE SUID-AFRIKAANSE MUSEUM

word uitgegee in dele op ongereelde tye na beskikbaarheid van stof

Verkrygbaar van die Suid-Afrikaanse Museum, Posbus 61, Kaapstad

OUT OF PRINT/UIT DRUK

1, 2(1, 3, 5-8), 3(1-2, 4-5, t.-p.i.), 5(1-2, 5, 7-9), 6(1, t.-p.i.), 7(1-3), 8, 9(1-2), 10(1), 11(1-2, 5, 7, t.-p.i.), 15(5), 24(2), 27, 31(1-3), 33

Price of this part/Prys van hierdie deel R1.85

Trustees of the South African Museum © Trustees van die Suid-Afrikaanse Museum 1975

ISBN 0 949940 76 3

Printed in South Africa by The Rustica Press, Pty., Ltd., Court Road, Wynberg, Cape

In Suid-Afrika gedruk deur Die Rustica-pers, Edms., Bpk., Courtweg, Wynberg, Kaap

FIVE SPECIES OF *JAEROPSIS* FROM THE SOUTHERN INDIAN OCEAN (CRUSTACEA, ISOPODA, ASELLOTA)

By

BRIAN KENSLEY

South African Museum, Cape Town

(With 10 figures)

[MS accepted 10 March 1975]

ABSTRACT

Five species of *Jaeropsis* are figured and diagnosed. These include *J. waltervadi*, a new species from Walter's Shoal, and *J. beuroisi*, a new species from St Paul and Amsterdam Islands, as well as *J. paulensis* Vanhöffen from St Paul and Amsterdam Islands, and *J. curvicornis* (Nicolet) from Marion Island. The common intertidal South African species, which was previously misidentified, is given a new name, i.e. *J. stebbingi*.

CONTENTS

			PAGE
Introduction			367
Description of material			367
References			380

INTRODUCTION

Material of the genus *Jaeropsis* from the following sources necessitated this short report:

Two specimens from Walter's Shoal (33.13S, 43.51E) collected by the R/V Anton Bruun during the International Indian Ocean Expedition in 1964.

One specimen from Marion Island (46.53S, 37.52E) collected by the third South African Biological Expedition to the island in 1972–3.

Numerous specimens of two species from St Paul Island (38.44S, 77.30E) and Amsterdam Island (37.55S, 77.40E) collected by the French Expedition to these islands in 1970-2.

In addition, the species commonly found intertidally around both the west and east coasts of South Africa was found to be misidentified, and has been included in this report.

In the accompanying figures, dimensions are in millimetres.

DESCRIPTION OF MATERIAL

Family Jaeropsidae

Genus Jaeropsis Koehler

Jaeropsis waltervadi sp. n.

Figs 1-2

Diagnosis

Cephalon dorsally broadly convex, with frontal plate anteriorly slightly concave, lateral margins smooth. Lateral margins of pleotelson bearing 7 small

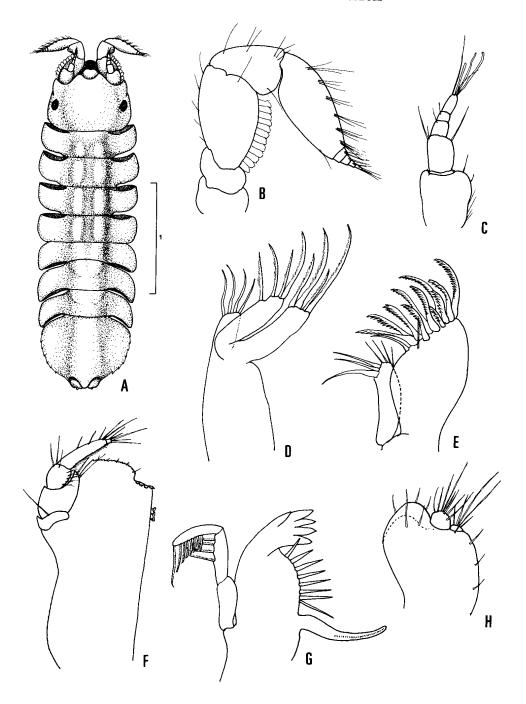


Fig. 1. Jaeropsis waltervadi sp. n.
A. Holotype in dorsal view. B. Antenna. C. Antennule. D. 2nd maxilla. E. 1st maxilla. F. Maxilliped. G. Mandible. H. Uropod.

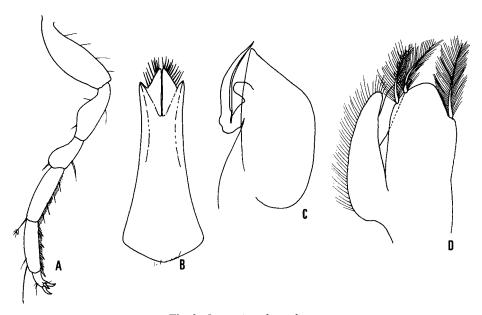


Fig. 2. Jaeropsis waltervadi sp. n.

A. VIIth peraeopod. B. 1st pleopod, 3. C. 2nd pleopod, 3. D. 3rd pleopod, 3.

denticulations. Uropodal basis about as long as broad, inner distal angle rounded, unarmed, hardly extending beyond narrowly rounded pleotelsonic apex. Body with broadly rounded median raised area on pleotelson and Vth to VIIth pereional segments, becoming a double, more defined ridge on perieonal segments I to IV.

Material

Holotype SAM-A13646 & 2,9 mm Walter's Shoal, 38-46 metres depth. Paratype SAM-A13646 & 2,4 mm Walter's Shoal, 38-46 metres depth.

Remarks

The median dorsal ridge, unarmed uropodal basis, and shape of the frontal plate of this species make it distinct from any previously described species of *Jaeropsis*.

Jaeropsis curvicornis (Nicolet)

Figs 3-4

Jaeropsis curvicornis (Nicolet), Menzies & Schultz, 1967: 174, figs 27-28 (complete synonymy). non J. curvicornis: Barnard, 1914: 224; 1940: 494.

Diagnosis

Cephalon with frontal plate bearing small median point, lateral margins smooth. Lateral margins of pleotelson with single incision and stout seta. Uropodal basis longer than wide, with small hook on inner distal angle,

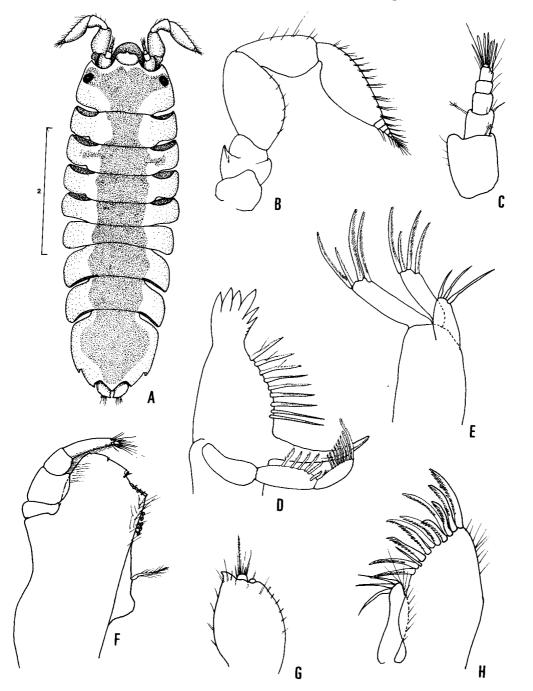


Fig. 3. Jaeropsis curvicornis (Nicolet)

A. & in dorsal view. B. Antenna. C. Antennule. D. Mandible. E. 2nd maxilla.

F. Maxilliped. G. Uropod. H. 1st maxilla.

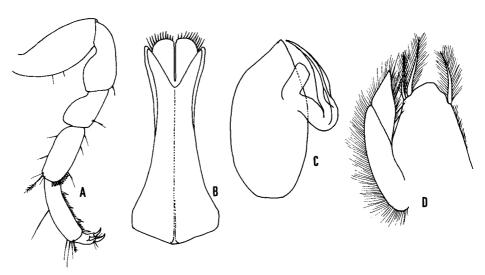


Fig. 4. Jaeropsis curvicornis (Nicolet)

A. VIIth peraeopod. B. 1st pleopod, &. C. 2nd pleopod, &. D. 3rd pleopod, &.

extending well beyond pleotelsonic apex. Body bearing broad band of red-brown pigment dorsally, expanded on cephalon to include eyes, also somewhat expanded on pleotelson.

Material

SAM-A13647 & 5,0 mm Marion Island.

Distribution

Patagonia, Falkland Islands, Macquarie Island, Chile, Magellan Straits, Fuegian Archipelago.

Remarks

The colour pattern of the present specimen agrees well with that given by Richardson (1909) for J. patagoniensis (= J. curvicornis). Slight differences in the mouthparts are apparent between the present specimen and the description given by Menzies & Schultz (1967). The Marion Island specimen has nine serrated spines on the mandible (13 in the Antarctic specimens) and five fringed setae on the middle segment of the mandibular palp (as opposed to eight). For the rest, the specimen agrees well with the figures in the abovementioned descriptions.

Jaeropsis paulensis Vanhöffen

Figs 5-6

Jaeropsis paulensis Vanhöffen, 1914: 531, fig. 59a-1. Barnard, 1965: 201, fig. 2b.

Diagnosis

Cephalon with frontal plate rounded, medially entire, lateral margins entire. Lateral margins of pleotelson entire, fringed with alternating long and short

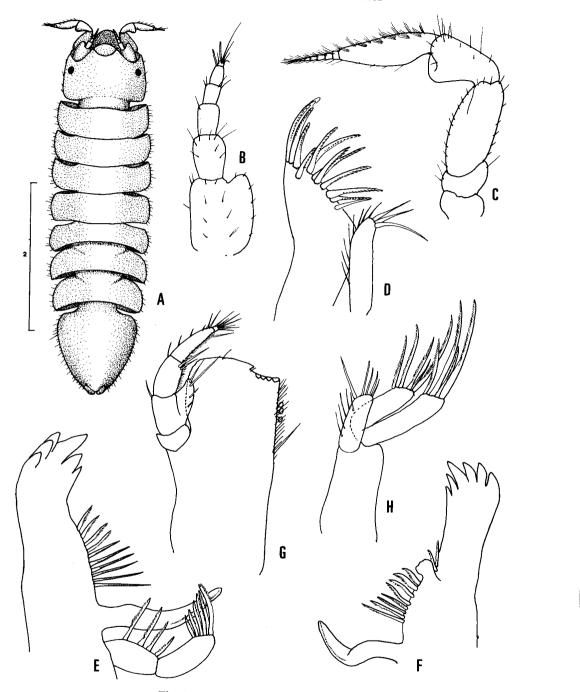


Fig. 5. Jaeropsis paulensis Vanhöffen
A. 3 in dorsal view. B. Antennule. C. Antenna. D. 1st maxilla. E. Mandible.
F. Mandible. G. Maxilliped. H. 2nd maxilla.

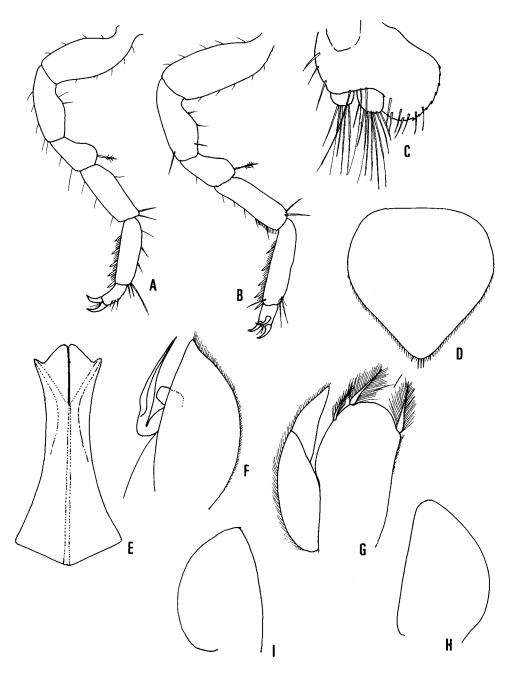


Fig. 6. Jaeropsis paulensis Vanhöffen

A. Ist peraeopod. B. VIIth peraeopod. C. Uropod. D. Operculum, \(\varphi \). E. 1st pleopod, \(\varphi \). F. 2nd pleopod, \(\varphi \). G. 3rd pleopod, \(\varphi \). H. 4th pleopod, \(\varphi \). I. 5th pleopod, \(\varphi \).

setae. Uropodal basis with broadly rounded lobe medially, unarmed, medio-distal margin serrulate.

Material

SAM-A12285, Gough Island, 2 PP 1 3.

St Paul Island	Amsterdam Island
Station No.	Station No.
8a. 1 ovig. ♀, 5 ♀♀, 14 ♂♂	a4. 8 ovig. දද, 9 33
8b. 2 ovig. ♀♀, 1 ♀, 3 ♂♂	a8. 2 ♀♀
8c. 2 ovig. ♀♀, 3 ♀♀, 9 ♂♂	a9. 1 👌
93. 4 ovig. ♀♀, 2 ♀♀, 7 ♂♂	b3. ovig. ♀♀, 6 ♀♀, 3 ♂♂
	14. 1 ovig. 강, 2 우우, 2 강강
	27/3/1970/b. 1 ♂

Remarks

Barnard (1965) remarks that Vanhöffen figures the maxillipedal palp displaced, and with the second segment unlobed. Figure 5G above shows that in fact this segment is lobed on the inner margin.

Jaeropsis beuroisi sp. n.

Figs 7-8

Diagnosis

Cephalon with frontal plate obtusely angled, lateral margins with four or five spinules, more noticeable in smaller specimens, often lacking in adults. Lateral margins of pleotelson in male with one or two small serrations, in female with five or six serrations. Uropodal basis longer than wide, with medial lobe extending furthest distally, tipped with tiny hook; uropods extending beyond pleotelsonic apex.

Material

Holotype & 6,0 mm St Paul st.90.

Allotype 94,2 mm St Paul st.20.

Paratypes 12 ovig. ♀♀, 5 ♀♀, 22 ♂♂. St Paul 22a.

Paratypes 3 ovig. ♀♀, 5 ♀♀, 5 ♂♂. Amsterdam Island st.28.

).
••
우, 1 우
♂
ς. ♀, 1 ♂

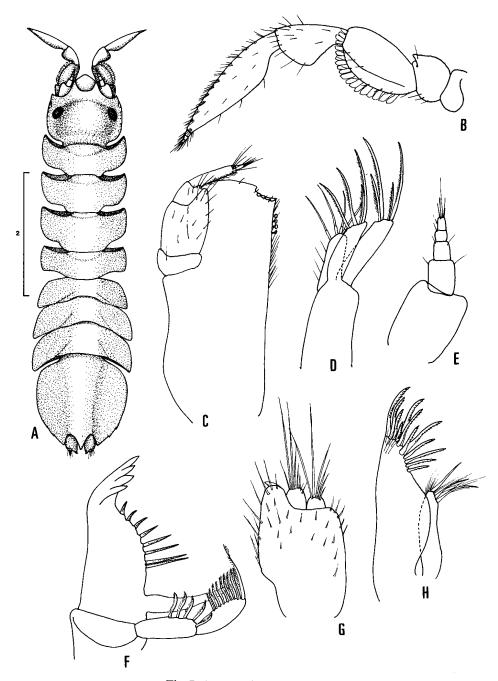


Fig. 7. Jaeropsis beuroisi sp. n.

A. Holotype in dorsal view. B. Antenna. C. Maxilliped. D. 2nd maxilla. E. Antennule. F. Mandible. G. Uropod. H. 1st maxilla.

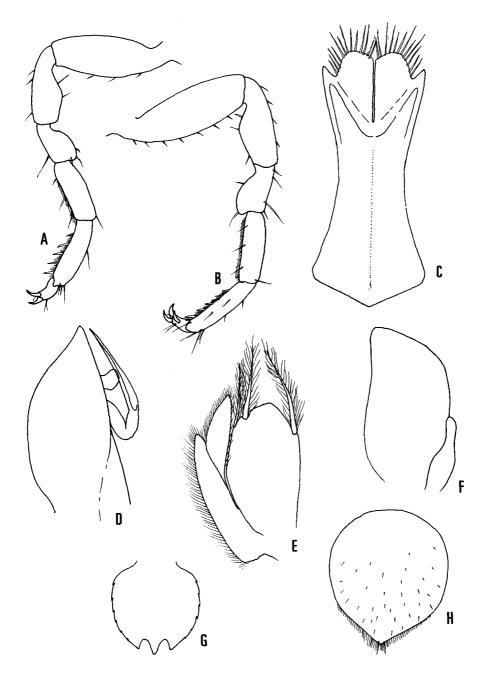


Fig. 8. Jaeropsis beuroisi sp. n.

A. Ist peraeopod. B. VIIth peraeopod. C. 1st pleopod, δ . D. 2nd pleopod, δ . E. 3rd pleopod, δ . F. 4th pleopod, δ . G. Pleotelson. H. Operculum, φ .

St Paul Island Station No. **B**7. 1 ♀ B19. 1 ♀, 1 ♂ D6. 1 ovig. ♀, 2 ♀♀, 5 ♂♂ 29/12/1970. 1 iuv. **29/1/1971.** 1 ♀

Amsterdam Island Station No. 119. 2 ovig. 99, 8 99, 11 33 142b. 2 ovig. ♀♀, 3 ♀♀, 2 ♂♂ 147. 1 ♀, 1 ♂ 173. 4 ovig. ♀♀, 6 ♀♀, 6 ♂♂ D12. 1 ovig. ♀, 1 ♀, 2 ♂♂

Remarks

Jaeropsis beuroisi resembles J. intermedius (Nicolet) recorded from Argentina to southern Chile, the Falkland Islands, and Antarctica, in the structure of the uropods, antennae (especially the fringed antennae), but differs in the degree of spination of the cephalic and pleotelsonic margins. The frontal plate in J. intermedius is more acute than in the present species. Several differences in the setation and spination of the mouthparts are also apparent.

There is some resemblance to J. marionis Beddard (1886a, 1886b), but the figures of this species are probably somewhat misleading. As the species was described from a single male, the specific definition needs to be supplemented.

The species is named for Dr J. Beurois of Marseilles, who collected most of the material.

Jaeropsis stebbingi sp. n.

Figs 9-10

Jaeropsis curvicornis non Nicolet, Barnard, 1914: 224, pl. 20c; 1940: 434, 494; 1965: 202, fig. 2c. Menzies & Schultz, 1967: 174. Stebbing, 1905: 51, pl. 11 (fig. C).

Diagnosis

Cephalon with frontal plate rounded, medially entire, lateral margins entire. Lateral margins of pleotelson usually with four very fine serrations on each side, often difficult to detect. Uropodal basis with broadly rounded medial lobe tipped with short hook, hardly interrupting pleotelsonic marginal outline; medio-distal margin serrulate. Cephalon bearing broad curved dark pigment band.

Material

Holotype SAM-A13649, & 5 mm. Mouille Point, Table Bay.

Allotype SAM-A13648, ovig. ♀ 3,6 mm. Lüderitz, South West Africa.

SAM-A12738 2 ovig. 99, 2 99, 1 & Lüderitz, intertidal.

SAM-A12405 1 & Lüderitz.

SAM-A12406 1 & Lüderitz.

SAM-A12588 a ♀ Lüderitz.

SAM-A10381 1 ovig. ♀, 1 ♂ Lambert's Bay.

SAM-A2617 5 ovig. 99, 7 99, 6 33 Mouille Point, Table Bay.

SAM-A2687 1 ovig. ♀ St James, False Bay.

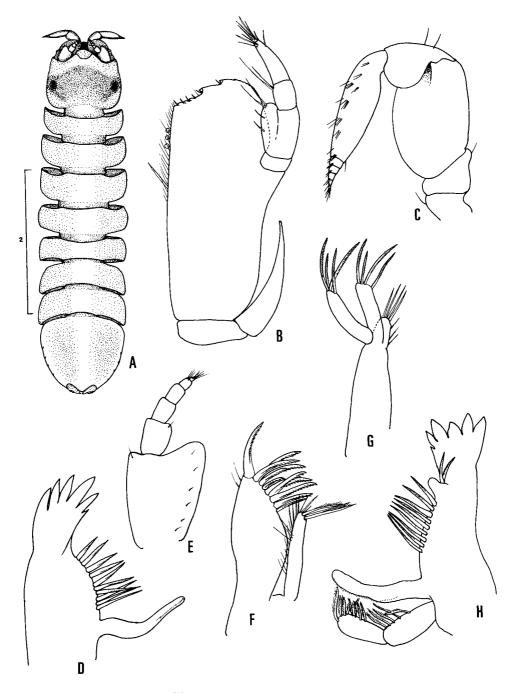


Fig. 9. Jaeropsis stebbingi sp. n.

A. Holotype in dorsal view. B. Maxilliped. C. Antenna. D. Mandible. E. Antennule. F. 1st maxilla. G. 2nd maxilla. H. Mandible.

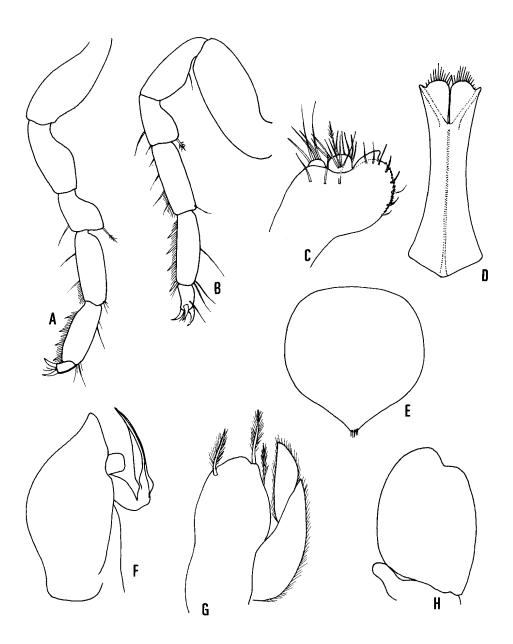


Fig. 10. Jaeropsis stebbingi sp. n.

A. Ist peraeopod. B. VIIth peraeopod. C. Uropod. D. 1st pleopod, σ . E. Operculum, φ . F. 2nd pleopod, σ . G. 3rd pleopod, σ . H. 4th pleopod, σ .

Remarks

As noted by Barnard (1965) and Menzies & Schultz (1967), the Jaeropsis curvicornis described by Stebbing (1905) from Ceylon and later recorded from South Africa was probably not the same as J. curvicornis described by Nicolet (1849) from Chile. From the excellent figures provided by Menzies & Schultz (1967) of J. curvicornis (Nicolet), from the Antarctic, it is immediately apparent that the South African species is not the same as the Antarctic-Subantarctic species. The most obvious differences are to be seen in the uropods (curved and hooked in J. stebbingi, straight and elongate in J. curvicornis), the rostral plate (evenly convex in J. stebbingi, truncate with small median tooth in J. curvicornis) and in the lateral margins of the pleotelson (serrate in J. stebbingi, with a single strong incision in J. curvicornis).

REFERENCES

- BARNARD, K. H. 1914. Contributions to the crustacean fauna of South Africa. 1. Additions to the marine Isopoda. Ann. S. Afr. Mus. 10: 197-230.
- BARNARD, K. H. 1940. Contributions to the crustacean fauna of South Africa. XII. Further additions to the Tanaidacea, Isopoda, and Amphipoda, together with keys for the identification of the hitherto recorded marine and fresh-water species.—Ann. S. Afr. Mus. 32: 381-543.
- BARNARD, K. H. 1965. Isopoda and Amphipoda collected by the Gough Island Scientific Survey.—Ann. S. Afr. Mus. 48: 195-210.
- BEDDARD, E. F. 1886a. Preliminary notice of the Isopoda collected during the Voyage of H.M.S. 'Challenger'. Part III.—Proc. zool. Soc. Lond. 1886: 97-122.
- BEDDARD, E. F. 1886b. Report on the Isopoda collected by H.M.S. Challenger during the years 1873-76. Part II.—Rep. scient. Results Voy. Challenger 17: 1-178.
- MENZIES, R. J. & SCHULTZ, G. A. 1967. Antarctic isopod Crustacea. II. Families Haploniscidae, Acanthaspidiidae, and Jaeropsidae, with diagnoses of new genera and species.—Antarctic Res. Ser. Washington 11: 141-184.
- NICOLET, H. 1849. Crustaceos. In: GAY, C. Historia fisica y politica de Chile, Zool. 3: 1-547. Paris & Santiago: The Author.
- RICHARDSON, H. 1909. Description of a new isopod of the genus *Jaeropsis* from Patagonia.— *Proc. U.S. natn. Mus.* 36: 421-422.
- STEBBING, T. R. R. 1905. Report on the Isopoda collected by Professor Herdman at Ceylon in 1902. In: HERDMAN, W. A. Report to the government of Ceylon on the pearl oyster fisheries of the Gulf of Manaar, with supplementary reports upon the marine biology of Ceylon, by other naturalists. Part IV. Supplementary report no. 23: 1-64. London: Royal Society.
- Vanhöffen, E. 1914. Die Isopoden der Deutschen Südpolar-Expedition 1901-1903.—Dt. Südpol.-Exped. 15: 449-598.