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SOME DECAPOD CRUSTACEA FROM NORTHERN
SOUTH WEST AFRICA, INCLUDING A NEW
SPECIES OF *HIPPOLYTE*

BRIAN KENSLEY

ABSTRACT

A small collection of decapod Crustacea from the north coast of South West Africa is discussed. Most of the species are recorded from the area for the first time, and represent considerable extensions of their known ranges of distribution. A new species of *Hippolyte* is described.

Series A: Natuurwetenskappe
Natural History
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SOUTH WEST AFRICA, INCLUDING A NEW
SPECIES OF *HIPPOLYTE*

by

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INTRODUCTION

In October, 1968, an expedition of the State Museum, Windhoek, South West Africa, accompanied by a member of the South African Museum, Cape Town, visited the northern coast of South West Africa, where a collection of shore fauna and flora was made. In June 1969, a similar combined expedition again visited this area. As this coastline is notoriously inhospitable and almost inaccessible by land, almost no biological collecting has been done here, and this collection is the largest yet made. It is not surprising that several new records of animals, as well as hitherto undescribed species have come to light.

BRACHYURA

Family Ocypodidae

Ocypode cursor (Linnaeus)

Ocypode cursor: Barnard, 1950: 88. Monod, 1956: 391. Guinot & Ribeiro, 1962: 65.

Localities — Near Kunene River mouth; Dunedin Star wreck site; False Cape Frio; Rocky Point; Westies Mine camp; 4 miles north of Mōwe Point.

Material — Numerous at all localities. Largest ♀ collected, carapace length 41.5 mm, carapace breadth 48.5 mm. Largest ♂ 39.0 x 45.2 mm.

Distribution — Mediterranean, entire west coast of Africa to Angola.

Remarks — These records extend the southerly range by about 250 miles.

Ocypode africana de Man

Ocypode africana: Monod, 1956: 395. Guinot & Ribeiro, 1962: 66.

Localities — Near Kunene River mouth; Dunedin Star wreck site; False Cape Frio; Rocky Point; Westies Mine camp; Mōwe Point.

Material — Numerous at all localities. Only juveniles appear to have been collected during the first trip. One adult male, carapace length 23 mm, carapace breadth 28 mm, was collected on the second trip.

Distribution — West African coast, from Mauritania to southern Angola.

Remarks — This species appears to be less common on the coast of South West Africa than *O. cursor*. These records extend the southern limit of the species by about 300 miles.

Family Majidae

Maja squinado (Herbst)

Maja squinado: Monod, 1956: 474. Guinot & Ribeiro, 1962: 75.

Localities — Near Kunene River mouth; Rocky Point.

Material — Many fresh dead specimens washed up at both localities. Largest ♂, carapace length 81.0 mm, carapace breadth 70.5 mm. Largest ♀ 76.0 x 65.0 mm.

Distribution — Mediterranean, North Sea, Cape Verde Islands, Guinea, Angola.

Remarks: These records extend the southerly limit of the species by about 400 miles.

Acanthonyx lunulatus (Risso)

Acanthonyx lunulatus: Monod, 1956: 518. Guinot & Ribeiro, 1962: 76.

Localities — Rocks just south of Kunene River mouth; Rocky Point; Möwe Point. Usually found in short algae carpeting rocks.

Material —	carapace length (mm) (excl. rostrum)	carapace breadth (mm)
♂♂	16.4	13.0
	14.0	12.2
	7.0	5.8
	5.6	4.5
♀♀	11.5 (ovig.)	9.8
	10.8 (ovig.)	9.2
	10.6 (ovig.)	8.9
	10.0 (ovig.)	8.2
	9.8	8.0

Distribution — Mediterranean, Portugal, West African coast to Angola.

Remarks — These records extend the southerly limit of the species by about 300 miles.

Family Grapsidae

Grapsus grapsus (Linnaeus)

Grapsus grapsus: Monod, 1956: 407. Guinot & Ribeiro, 1962: 68.

Localities — Rocky Point; Möwe Point.

Material —	carapace length (mm)	carapace breadth (mm)
♂♂	31.5	35.1
	28.2	31.0
	17.0	18.5
	16.5	19.0
♀♀	62.0 (ovig.)	69.0
	30.2	33.2

Cimbebasia

Distribution — Cosmopolitan, in intertidal areas of tropical regions.

Remarks — This record extends the range on the African coast by about 300 miles.

Plagusia chabrus (Linnaeus)

Plagusia chabrus: Barnard, 1950: 136.

Localities — Near Kunene River mouth; Rocky Point; Möwe Point; Torra Bay.

Material — Numerous at all localities.

Distribution — Chile, Australia, New Zealand, west coast of southern Africa from Cape Point to Lüderitzbucht.

F a m i l y P o r t u n i d a e

Xaiva biguttata (Risso)

Xaiva biguttata: Monod, 1956: 168.

Portumnus biguttatus: Barnard, 1950: 142.

Localities — Möwe Point; Torra Bay.

Material —	carapace length (mm)	carapace breadth (mm)
♂♂	23.4	26.5
	16.0	18.8
	12.0	13.0
	9.1	9.9
♀♀	18.0	21.3
	9.0	9.5

Numerous juveniles also collected.

Distribution — Mediterranean, Britain, Cape Verde Islands. In southern Africa, known from Port Alfred to Swakopmund.

F a m i l y X a n t h i d a e

Pilumnoides perlatus (Poeppig)

Pilumnoides perlatus: Barnard, 1950: 257. Monod, 1956: 263.

Localities — Rocky Point; Möwe Point. Fairly common in kelp holdfasts and mussel clumps.

Material — largest ♂, carapace length 15.2 mm, carapace breadth 17.9 mm.

Largest 15.0 ♀ mm (ovig.) x 18.9 mm.

Distribution — Panama, Chile, Great Britain, southern African coast from Cape Peninsula to Walvis Bay.

MACRURA

Family Palaemonidae

Macrobrachium vollenhoveni (Herklots)

Macrobrachium vollenhoveni: Schmitt, 1927: 37. Holthuis, 1949: 184; 1951: 150.

Palaemon (Macrobrachium) jamaicensis var. *vollenhoveni* Herklots, de Man, 1904: 309.

Locality — Pool near mouth in Kunene River.

Material — 4 ♀♀, carapace length (excl. rostra) 45.5, 41.0, 40.5, 39.5 mm. Rostral formulae — 13/4, 14/4, 12/3, 13/4. Only two specimens possessed both the second pereopods, measurements for which are given.

	dactyl	pro- podus	carpus	merus	ischium
(c.l. 45.5) right	26.8	59.2	24.0	24.0	15.0
left	28.0	60.0	24.0	24.0	18.0
(c.l. 39.5) right	22.0	46.0	19.0	19.0	16.0
left	24.0	52.0	20.0	19.0	16.0

Remarks — It was noted by de Man (1904) that the Angolan form of this species appears to be more slender than the more northerly forms. Except for the more slender nature of the second pereopods, these specimens agree well with the descriptions of the species.

Distribution — Cape Verde Islands, Liberia, Angola (Kunene River).

Palaemon (Palaemon) pacificus (Stimpson)

Palaemon (Palaemon) pacificus: Barnard, 1955: 46. Holthuis, 1950: 87.

Leander pacificus: Barnard, 1950: 784.

Localities — Rocky Point; Möwe Point.

Material — 24 specimens were collected from rock pools. The largest had a carapace length of 12.5 mm. The rostral counts had the following range — 7/4, 8/4, 8/3, 9/3, 9/4, 10/3, 10/4, the first being the most common.

Family Hippolytidae

Hippolyte palliola n.sp.

Description: Male — Rostrum basally depressed, distally compressed, dorsally either with single small spine, sometimes vestigial, at about midpoint or unarmed, ventrally unarmed; length variable, about one-quarter carapace length or less, flanked at base by pair of prominent flattened supra-orbital spines. Infra-orbital angle rectangular, narrowly separated from small antennal spine. Branchiostegal spine much stronger. Antero-ventral angle of carapace rounded. Eyestalk about one third carapace length, cornea spherical, wider than stalk.

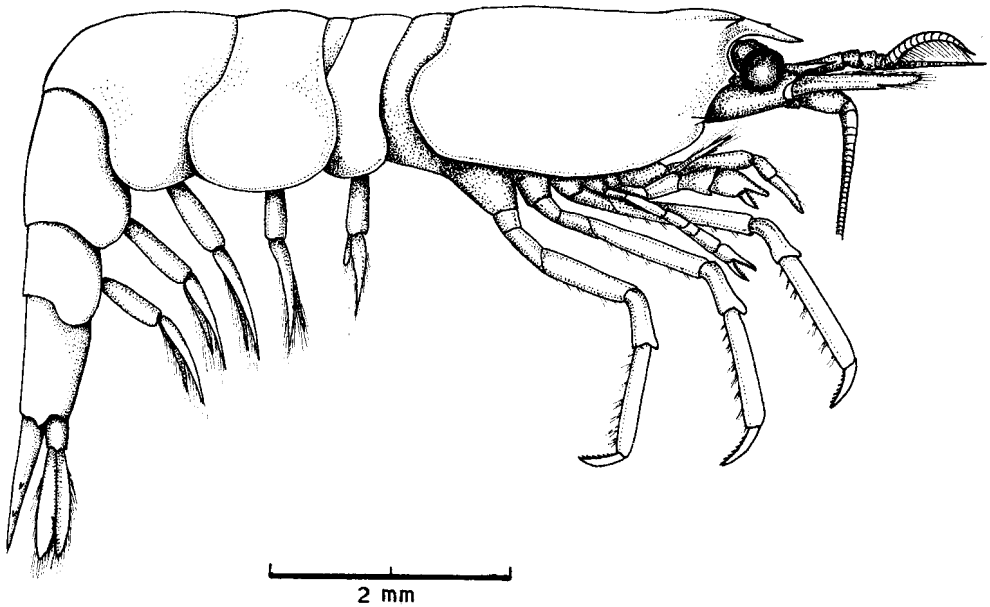


Figure 1. *Hippolyte palliola* n. sp. Holotype

Basal segment of first antenna with sharply pointed lateral process, latter not reaching end of segment. Basal segment longer than second and third segments together. Second and third segments equal in length. Scaphocerite of second antenna two-and-one-half times longer than broad, spine on outer margin about one third of length from apex. Mandible lacking palp, incisor process with 4 teeth. Maxillae typical of genus. First and second maxillipeds with epipodites, third maxilliped with exopodite. First pereiopods reaching end of carpus of second pereiopod, fingers of chela slightly shorter than palm, carpus as broad as long. Second pereiopod carpus (of 3 jointlets) and merus sub-equal in length. Second segment of carpus half length of first or third, which are equal in length. Fingers of chela equal in length to palm, entire chela about three quarters length of carpus. Third to fifth pereiopods similar, decreasing in length posteriorly, dactyls curved, inner edge armed with about 12 stout spines. Propodus about twice length of dactyl, armed on the ventral surface with row of 8 pairs of serrated spines. Appendix interna of pleopod 2 of male shorter than appendix masculina, apically rounded, armed with several blunt processes. Abdomen with third segment largest, sixth segment one-and-one-third length of fifth. Telson with 2 pairs of dorso-lateral spines, slightly shorter than uropods, apex almost truncate, with 3 pairs of spines.

Female—rostrum similar to male, with single seta in place of small spine of male, at dorsal midpoint. Third to fifth pereiopods decreasing in size posteriorly. Fourth pereiopod reaching to middle of propodus of third pereiopod. Dactyls of

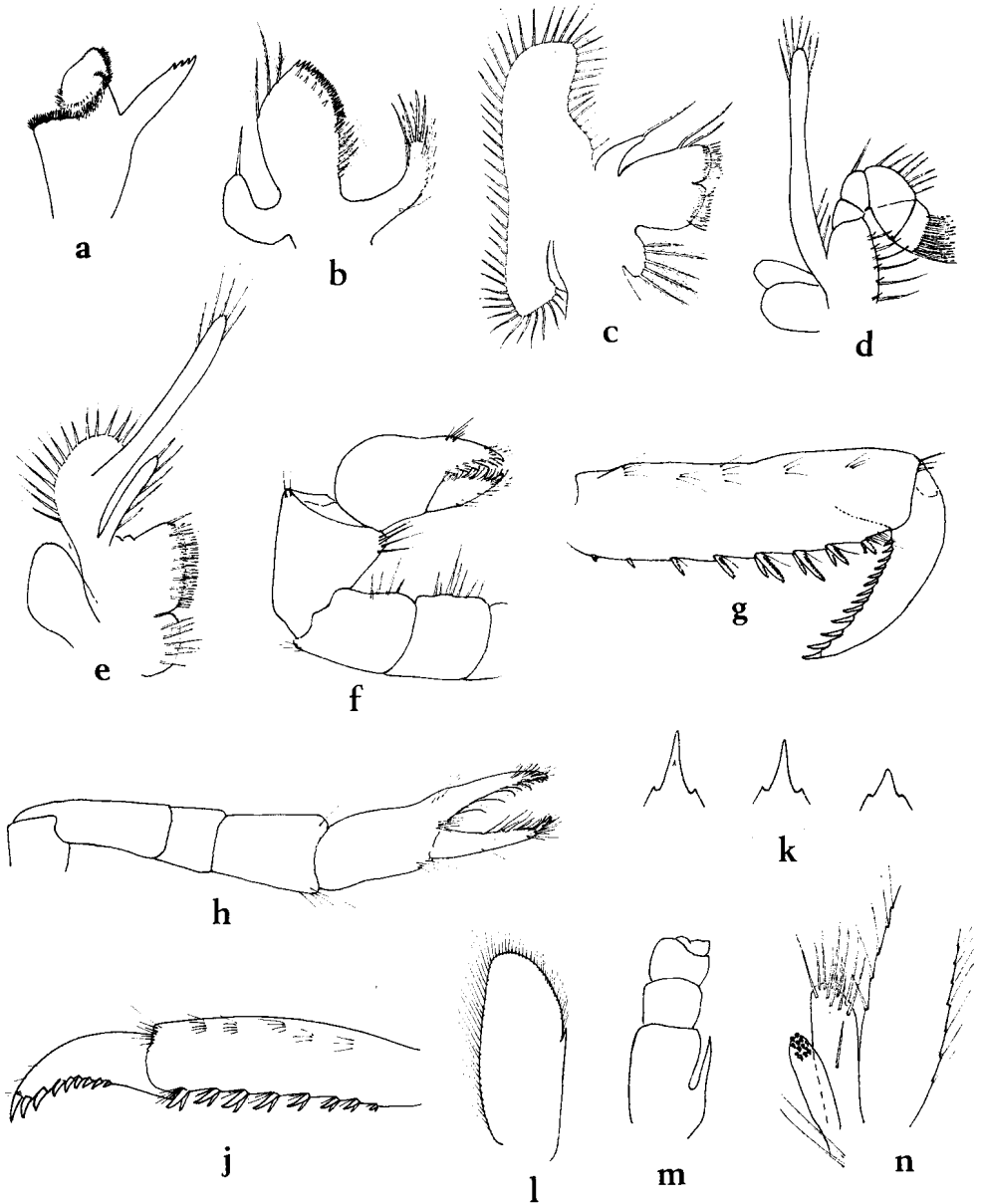


Figure 2. a. mandible; b. maxilla 1; c. maxilla 2; d. maxilliped 1; e. maxilliped 2; f. pereiopod 1; g. dactylus and propodus, pereopod 3, male; h. pereiopod 2; j. dactylus and propodus, pereopod 3, female; k. rostra in dorsal view, showing variation; l. scaphocerite; m. peduncle, antenna 1, dorsal view; n. appendix interna and appendix masculina, pleopod 2, male.

third to fifth pereopods with 9 stout spines, propodi with 7 or 8 pairs of non-serrated spines.

Material	♂ or ♀	Carapace length (excl. rostrum)	S.A.M. or S.M.
Holotype	♂	2.5 mm	S.A.M.A12710
Allotype	♀	4.0 mm	S.A.M.A12711
	(ovig.)		
Paratype	♂	3.0 mm	S.M.N50001
Paratype	♂	3.0 mm	S.M.N50002
Paratype	♂	2.9 mm	S.M.N50003
Paratype	♂	2.9 mm	S.A.M.A12712
Paratype	♂	2.6 mm	S.A.M.A12712
Paratype	♂	2.5 mm	S.A.M.A12712
Material	♂ or ♀	Carapace length (excl. rostrum)	S.A.M. or S.M.
Paratype	♂	2.5 mm	S.A.M.A12781
Paratype	♂	2.5 mm	S.A.M.A12781
Paratype	♂	2.5 mm	S.A.M.A12781
Paratype	♂	2.5 mm	S.A.M.A12781
Paratype	♂	2.5 mm	S.A.M.A12781
Paratype	♂	2.3 mm	S.A.M.A12781
Paratype	♂	2.3 mm	S.A.M.A12781
Paratype	♂	2.2 mm	S.A.M.A12781

S.M. — State Museum, Windhoek.

S.A.M. — South African Museum, Cape Town.

Type locality — Four or five miles south of the Kunene River mouth, South West Africa. Found in brown algae growing on intertidal rocks. One male was found amongst coralline algae at Möwe Point.

Remarks — The shape and character of the rostrum of this species immediately separates it from both the South African and West African species of the genus *Hippolyte*. The typical *Hippolyte* rostrum is fairly long, often equal to the carapace in length, usually dorsally and ventrally toothed, whereas *H. palliola* has a short but variable and almost edentate rostrum. In shape, the rostrum most closely resembles that of *H. commensalis* Kemp, 1925, commensal with *Alcyonaria* from the Nicobar and Andaman Islands. Many differences (to be expected) exist between these species, especially in the appendages. For example, the scaphocerite of *H. commensalis* is relatively broader than the present species, while the telson and pereopods also differ. The species is named for Mr. C. G.

Coetzee, Director of the State Museum, Windhoek, South West Africa, by derivation from the heraldic crest of the family Coetzee.

Eualus sp.

Locality — Möwe Point, from amongst algae in rock pool.

Material — 1 ♀, carapace length, excluding rostrum — 2.2 mm.

Remarks — The lack of arthrobranchs on the pereiopods and supra-orbital spines on the carapace, and the presence of a 2-segmented mandibular palp, a 7-segmented carpus of the second pereiopod, and an exopod on maxilliped 3, places this specimen in the genus *Eualus*. The specimen most closely resembles *E. lebourae* Holthuis, 1951, from off French Guinea, but differs from this species in several respects. The more important differences include the apparent lack of an epipod on the third pereiopod, and the presence of four pairs of dorsal spines on the telson, as opposed to three pairs in *E. lebourae*. There are also differences in the spination of the pereiopods. The rostrum is relatively shorter than in the Guinea species, while the rostral dentition (2/0) also differs from *E. lebourae* (4/1). Further material is needed to determine the degree of variation in many of the characters, before the specific status of this specimen can be decided.

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GAZETTEER

Kunene River mouth	Rocky Point	— 18°59'S., 12°29'E
— 17°15'S., 11°45'E	Westies Mine camp	
Dunedin Star wreck site		— 19°12'S., 12°37'E
— 18°13'S., 11°56'E	Möwe Point	— 19°23'S., 12°42'E
False Cape Frio — 18°29'S., 12°01'E	Torra Bay	— 20°18'S., 13°15'E

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