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THE SOUTH AFRICAN MUSEUM'S
MEIRING NAUDE CRUISES
PART 12
CRUSTACEA DECAPODA
OF THE 1977, 1978, 1979 CRUISES

By

BRIAN KENSLEY

Cape Town Kaapstad

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PART 12

CRUSTACEA DECAPODA OF THE 1977, 1978, 1979 CRUISES

By

BRIAN KENSLEY

Smithsonian Institution, Washington, D.C.

(With 11 figures)

[MS. accepted 1 October 1980]

ABSTRACT

Ninety-five species of Macrura, Anomura, and Brachyura Decapoda from deep water off the east coast of South Africa are recorded. Of the fifteen new records for the area, *Odontozona spinosissima*, *Uroptychus edwardi*, and *Paralomis roeeveldae* are described as new, while the second record of *Sergia inequalis* Burkenroad is noted.

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INTRODUCTION

As a continuation of the reports on the South African Museum's *Meiring Naude* cruises on the east coast of South Africa, the present paper deals with the Decapoda taken during the three cruises of 1977, 1978 and 1979. The decapods of the two earlier cruises have already been reported (Kensley 1977a, 1977b).

The area of the continental shelf investigated during all these cruises stretches from Durban in the north to the Transkei coast (Fig. 1), in depths ranging from 100 to 2 800 m. Although abbreviated station data are provided for the stations mentioned in this paper, fuller information on these cruises may be obtained from Louw (1980).

Abbreviations used throughout: SAM—South African Museum catalogue number; SM—*Meiring Naude* station number; CL—carapace length; CW—carapace width; RL—rostral length; ovig.—ovigerous; juv.—juvenile.

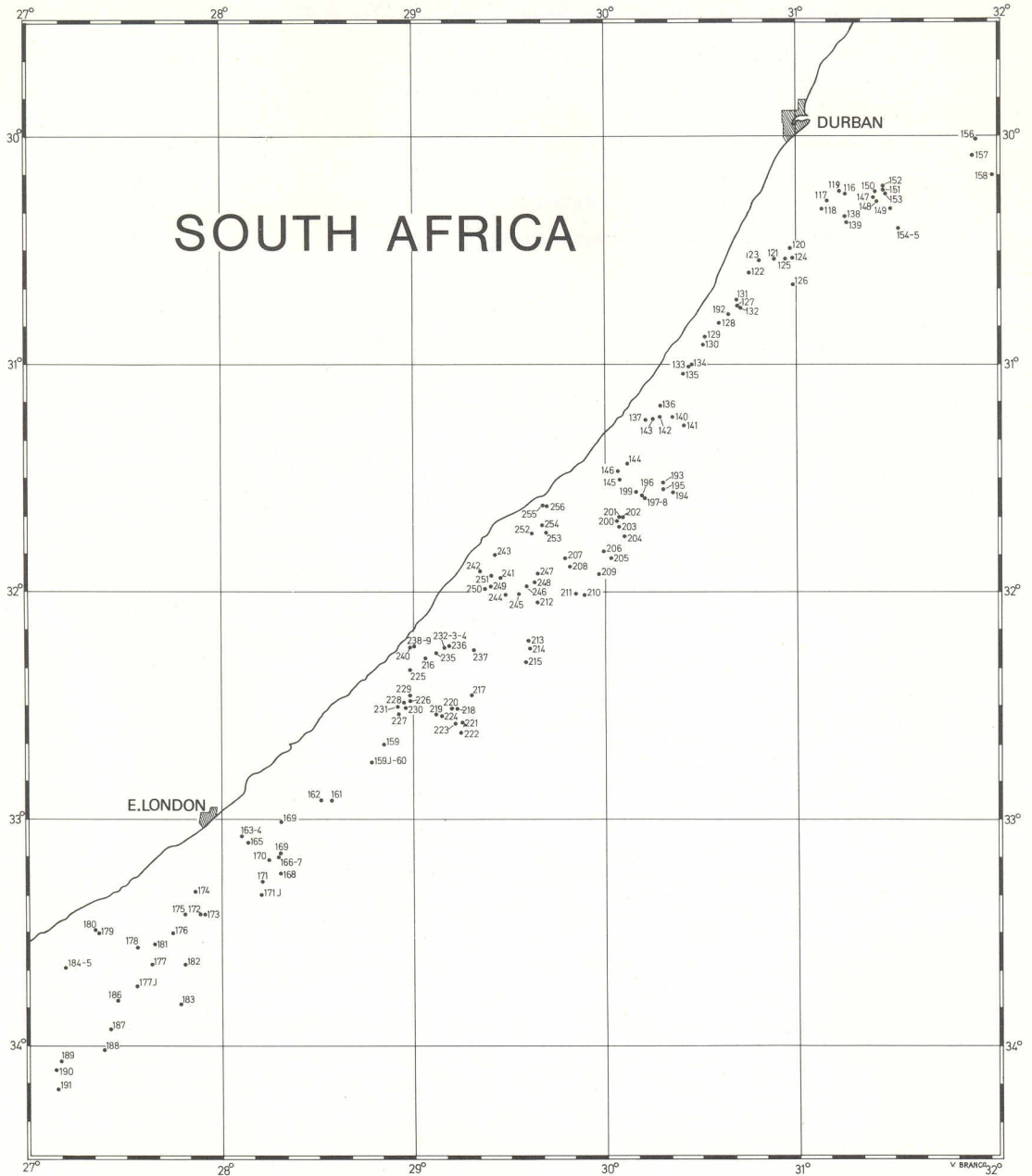


Fig. 1. Map showing localities of collecting stations.

SPECIES LIST

	<i>SM Station</i> <i>no.</i>	♂♂	ovig. ♀♀	♀♀	<i>juv.</i>
SUBORDER PENAEIDEA					
Family Aristeidae					
Subfamily Aristeinae					
<i>Aristaeomorpha foliacea</i> (Risso)	119	4	—	4	9
	121	—	—	1	—
<i>Plesiopenaeus edwardsianus</i> (Johnson)	121	1	—	—	—
	227	1	—	—	—
<i>Plesiopenaeus nitidus</i> Barnard	119	1	—	2	59
	121	9	—	6	—
	134	1	—	3	—
Subfamily Benthescyminae					
<i>Bentheogennema intermedia</i> (Bate)	145	1	—	—	—
	194	—	—	1	—
* <i>Bentheogennema pasithea</i> (De Man)	224	1	—	—	—
<i>Benthescymus investigatoris</i> Alcock & Anderson	134	—	—	4	—
<i>Gennadas bouvieri</i> Kemp	139	2	—	3	—
	140	1	—	3	—
	148	—	—	2	—
	160	1	—	—	—
	208	1	—	—	—
	218	—	—	2	—
	220	—	—	1	—
<i>Gennadas capensis</i> Calman	139	2	—	—	—
	140	—	—	1	—
	148	1	—	4	—
	153	1	—	2	—
	154	—	—	2	—
	211	1	—	—	—
	218	1	—	—	—
	224	1	—	—	—
<i>Gennadas gilchristi</i> Calman	119	2	—	1	—
	126	5	—	2	—
	132	1	—	—	—
	139	22	—	17	—
	140	8	—	8	—
	145	5	—	6	—
	148	48	—	30	—
	153	19	—	33	—
	154	23	—	24	—
	160	—	—	1	—
	167	2	—	1	—
	168	2	—	1	—
	173	2	—	3	—
	174	1	—	—	—
	182	4	—	2	—
	186	2	—	—	—
	187	—	—	2	—
	195	1	—	—	—
	205	—	—	1	—
	208	2	—	4	—
	209	11	—	4	—
	211	—	—	7	—

* New record

	SM Station no.	♂♂	ovig. ♀♀	♀♀	juv.
	154	1	—	2	—
	157	—	—	1	—
	160	2	—	—	—
	167	1	—	—	—
	168	1	—	—	—
	182	2	—	2	—
	218	1	—	1	—
	221	1	—	—	—
<i>Gennadas tinayrei</i> Bouvier	119	1	—	—	—
	126	—	—	1	—
	132	—	—	1	—
	148	1	—	—	—
	153	1	—	1	—
	154	1	—	—	—
	157	1	—	—	—
	160	—	—	1	1
	168	1	—	—	—
	171	1	—	—	—
	189	2	—	—	—
	218	2	1	—	—
	220	1	—	—	—
	221	1	—	—	—
Family Solenoceridae					
<i>Haliporoides triarthrus</i> Stebbing	119	1	—	—	—
* <i>Hymenopenaeus halli</i> Bruce	119	—	—	—	4
	121	—	—	1	—
Family Sergestidae					
<i>Petalidium foliaceum</i> Bate	209	2	—	—	—
* <i>Petalidium obesum</i> (Krøyer)	139	—	—	3	—
	140	1	—	5	—
	157	1	—	1	—
	167	—	—	1	—
	195	1	—	1	—
	201	1	—	—	—
	203	—	—	3	—
	209	—	—	1	—
	214	1	—	2	—
	220	2	—	2	—
<i>Sergestes arcticus</i> Krøyer	132	—	—	—	1
	139	—	—	—	1
	148	—	—	1	—
	171	—	—	—	2
	187	1	—	—	—
<i>Sergestes armatus</i> Krøyer	126	—	—	1	—
	132	—	—	1	—
	138	—	—	1	—
	139	—	—	—	1
	140	—	—	2	1
	145	1	—	1	1
	148	3	—	4	—
	154	1	—	—	—
	157	1	—	2	—
	168	—	—	1	—
	183	—	—	—	1

* New record

	<i>SM Station</i>				
	<i>no.</i>	♂♂	ovig. ♀♀	♀♀	<i>juv.</i>
	190	—	—	1	—
	191	—	—	—	3
	195	1	—	—	—
	197	2	—	1	—
	199	—	—	2	—
	211	—	—	1	—
	218	—	—	1	—
	220	1	—	1	—
	221	1	—	1	—
	223	—	—	2	—
	224	2	—	—	—
<i>Sergestes atlanticus</i> H. Milne Edwards	119	1	—	—	—
	126	—	—	1	1
	132	1	—	1	1
	138	1	—	1	—
	140	1	—	—	—
	153	1	—	1	—
	154	2	—	1	—
	167	—	—	1	—
	168	1	—	—	—
	190	—	—	1	—
<i>Sergestes curvatus</i> Crosnier & Forest	133	—	—	1	—
	138	—	—	—	2
	144	—	—	1	—
	145	—	—	2	—
	148	1	—	—	—
	154	2	—	—	1
	157	—	—	—	1
	175	1	—	—	1
	218	—	—	1	—
	250	1	—	—	—
<i>Sergestes disjunctus</i> Burkenroad	126	—	—	—	3
	132	—	—	2	3
	139	1	—	2	—
	145	1	—	—	—
	148	1	—	—	—
	153	—	—	1	—
	154	—	—	—	1
	191	—	—	—	3
<i>Sergestes orientalis</i> Hansen	119	1	—	3	—
	126	1	—	2	—
	132	3	—	12	—
	139	—	—	4	—
	140	—	—	3	—
	145	—	—	3	—
	148	2	—	4	1
	153	2	—	9	—
	154	4	—	3	—
	159	—	—	2	—
	160	1	—	—	—
	168	1	—	3	3
	173	—	—	1	—
	183	1	—	1	—
	186	1	—	—	—
	190	1	—	—	—

	SM Station no.	♂♂	ovig. ♀♀	♀♀	juv.
	191	5	—	4	—
	221	—	—	1	—
	223	—	—	1	—
<i>Sergestes sargassi</i> Ortmann	119	—	—	1	—
	126	—	—	2	—
	132	—	—	2	1
	145	—	—	1	—
	154	1	—	1	—
	157	—	—	—	1
	168	1	—	1	—
<i>Sergestes pectinatus</i> Sund	126	—	—	1	—
	145	—	—	1	—
	148	—	—	1	—
	153	—	—	1	—
	168	—	—	1	—
	221	—	—	1	—
<i>Sergia creber</i> (Burkenroad)	148	—	—	1	1
* <i>Sergia gardineri</i> (Kemp)	63	1	—	1	—
	88	—	—	2	6
	126	—	—	1	—
	140	1	—	1	—
	153	—	—	1	—
	154	1	—	1	—
	157	1	—	3	—
<i>Sergia grandis</i> (Sund)	148	1	—	—	—
	173	—	—	1	—
	185	—	—	1	—
	190	1	—	—	—
* <i>Sergia inequalis</i> (Burkenroad)	194	1	—	—	—
<i>Sergia laminatus</i> (Burkenroad)	126	—	—	—	1
	132	—	—	—	2
	138	—	—	1	—
	139	—	—	—	3
	145	—	—	1	—
	148	2	—	1	—
	153	1	—	6	—
	154	1	—	—	—
	157	2	—	1	—
	160	—	—	1	—
	171	2	—	1	—
	173	1	—	1	—
	182	1	—	—	—
	187	1	—	2	—
	195	—	—	1	—
	208	—	—	1	—
	209	—	—	1	—
	218	5	—	24	—
	220	2	—	1	—
	223	4	—	3	—
<i>Sergia potens</i> (Burkenroad)	121	—	—	1	—
<i>Sergia prehensilis</i> (Bate)	119	1	—	3	—
	126	—	—	1	1
	132	4	—	5	—

* New record

	<i>SM Station</i>			
	<i>no.</i>	♂♂	ovig. ♀♀	♀♀
				<i>juv.</i>
	138	—	—	1
	139	1	—	—
	140	2	—	1
	145	1	—	1
	148	7	—	1
	153	1	—	3
	154	4	—	1
	157	5	—	—
	168	2	—	—
	171	—	—	1
	173	2	—	—
	174	—	—	2
	182	1	—	—
	190	3	—	1
	191	1	—	—
	194	1	—	3
	195	1	—	—
	197	3	—	6
	199	1	—	12
	204	1	—	—
	211	1	—	—
	214	1	—	—
	218	3	—	3
	220	2	—	1
	221	2	—	—
	223	4	—	1
	224	1	—	—
<i>Sergia regalis</i> (Gordon)	139	2	—	—
	140	—	—	1
	148	—	—	2
	153	—	—	1
<i>Sergia scintillans</i> (Burkenroad)	154	1	—	—
	119	—	—	1
	132	1	—	1
	138	—	—	1
	139	—	—	1
	140	—	—	1
	153	—	—	1
	154	1	—	—
	157	1	—	—
	159	—	—	1
	160	—	—	4
	167	—	—	19
	168	—	—	4
	170	—	—	1
	171	—	—	2
	191	—	—	1
	209	1	—	—
<i>Sergia talismani</i> (Barnard)	123	—	—	1
	140	—	—	1
	145	—	—	1
	153	—	—	1
	154	2	—	2
	157	1	—	—
	190	—	—	1

	SM Station no.	♂♂	ovig. ♀♀	♀♀	juv.
SUBORDER STENOPODIDEA					
Family Stenopodidae					
* <i>Odontozona spinosissima</i> sp. nov.	250	—	—	1	—
SUBORDER CARIDEA					
Family Oplophoridae					
<i>AcanthePHYra armata</i> A. Milne Edwards	119	—	—	11	—
	131	—	—	1	—
	134	—	—	1	—
* <i>AcanthePHYra curtirostris</i> Wood-Mason & Alcock	139	—	—	2	—
	157	—	—	4	2
	187	—	—	—	1
	208	—	—	1	—
	209	—	—	1	—
<i>AcanthePHYra eximia</i> Smith	119	—	—	—	2
	132	—	—	2	—
	145	—	—	3	—
	148	—	1	4	—
	153	2	—	—	—
	154	1	—	—	3
	157	—	2	1	—
	168	—	—	—	1
	173	—	—	2	—
<i>AcanthePHYra pelagica</i> (Risso)	194	2	—	—	—
	195	—	—	1	—
	208	1	—	2	6
	220	1	—	—	—
	221	—	—	1	1
* <i>AcanthePHYra prionota</i> Foxton	157	—	—	1	—
	201	—	—	1	—
	203	1	—	1	—
<i>AcanthePHYra quadrispinosa</i> Kemp	132	2	—	—	—
	138	2	—	1	9
	139	3	—	7	—
	140	4	—	1	4
	145	—	—	2	3
	148	8	23	11	37
	153	3	2	2	8
	154	1	2	2	9
	157	2	—	—	—
	160	1	1	2	4
	167	—	—	—	1
	170	3	—	—	1
	171	—	—	2	1
	173	—	—	1	1
	182	2	—	—	1
	197	1	2	1	3
	199	3	6	—	2
	201	1	—	—	—
	205	2	—	—	1
	208	—	1	—	—
	209	3	0	0	4
	211	1	1	—	14

* New record

	SM Station no.	♂♂	ovig. ♀♀	♀♀	juv.
	218	7	11	3	17
	220	1	—	1	9
	221	1	1	1	6
	223	8	6	1	7
	224	1	1	—	6
<i>Acanthephyra stylostrata</i> (Bate)	203	1	—	—	—
	208	1	—	1	—
<i>Hymenodora gracilis</i> Smith	220	1	—	—	2
* <i>Meningodora miccylla</i> (Chace)	96	1	—	—	—
	139	1	—	—	—
	157	1	—	—	—
	224	1	—	—	—
<i>Meningodora mollis</i> Smith	194	—	1	—	—
	203	—	—	4	—
	214	—	—	2	—
	218	1	—	—	—
	221	—	—	1	—
	223	—	—	2	—
* <i>Meningodora vesca</i> (Smith)	145	1	—	—	—
<i>Notostomus auriculatus</i> Barnard	208	—	—	—	1
	209	1	—	—	—
	220	—	—	1	—
<i>Notostomus elegans</i> A. Milne Edwards	148	—	—	1	—
	157	—	—	—	1
	221	—	—	1	—
<i>Notostomus gibbosus</i> A. Milne Edwards	209	—	—	1	—
<i>Oplophorus gracilirostris</i> A. Milne Edwards	119	—	—	1	—
<i>Oplophorus spinicauda</i> A. Milne Edwards	119	—	—	—	1
	126	—	—	—	3
	132	—	—	1	1
	145	—	—	1	—
	183	—	—	1	2
	191	—	—	1	—
	211	—	—	1	—
<i>Oplophorus typus</i> H. Milne Edwards	237	—	1	—	—
* <i>Systellaspis cristata</i> (Faxon)	139	—	—	—	2
	157	—	—	—	1
	218	—	—	1	—
<i>Systellaspis debilis</i> (A. Milne Edwards)	132	1	—	—	5
	139	2	2	3	—
	140	1	—	—	—
	145	1	1	2	1
	148	2	2	1	3
	153	—	—	2	1
	154	—	1	—	1
	157	3	1	5	—
	159	—	1	—	—
	160	2	3	6	—
	167	3	—	3	—
	168	—	—	1	3
	171	—	—	—	1
	182	—	—	3	—
	187	3	2	14	—

* New record

	<i>SM Station</i> <i>no.</i>	♂♂	ovig. ♀♀	♀♀	<i>juv.</i>
	190	1	3	12	—
	197	—	1	1	—
	199	3	2	1	—
	209	1	1	1	—
	218	—	1	—	—
	221	2	—	1	—
	223	1	—	—	—
	224	1	—	—	—
Family Stylodactylidae					
<i>Styloactylus stebbingi</i> Hayashi & Miyake	132	—	—	—	1
Family Pasiphaeidae					
<i>Eupasiphae gilesii</i> Wood-Mason & Alcock	224	—	—	1	—
<i>Leptochela robusta</i> Stimpson	184	—	—	—	1
<i>Parapasiphae sulcatifrons</i> Smith	195	—	—	1	—
	208	—	—	1	—
	218	—	—	—	4
<i>Pasiphaea meiringnaudei</i> Kensley	119	—	—	2	—
	121	—	—	2	1
	209	—	—	—	1
	227	1	—	1	—
<i>Pasiphaea sivado</i> (Risso)	119	7	—	2	3
	139	—	—	—	1
	148	—	—	—	1
	153	—	—	—	1
	157	—	—	—	1
	209	—	—	—	1
Family Pandalidae					
<i>Heterocarpus dorsalis</i> Bate	121	2	—	—	—
	129	—	—	1	—
<i>Heterocarpus laevigatus</i> Bate	129	—	—	—	1
	131	1	—	1	—
<i>Heterocarpus tricarinatus</i> Alcock & Anderson	237	—	—	1	—
<i>Parapandalus richardi</i> (Coutière)	119	—	—	—	1
	126	1	—	—	—
	145	—	1	—	—
	148	1	—	—	—
	154	—	1	—	—
	168	—	—	—	1
	187	—	1	—	—
<i>Plesionika longirostris</i> (Borradaile)	132	—	—	1	—
	160	—	—	—	1
<i>Plesionika martia</i> (A. Milne Edwards)	119	9	—	5	48
	121	2	1	1	—
	123	1	—	—	—
	134	—	—	1	—
	226	—	—	—	4
	227	1	—	—	—
	232	2	—	—	—
	233	6	1	7	1
	237	1	2	2	—
Family Crangonidae					
<i>Metacrangon jacqueti bellmarleyi</i> (Stebbing)	174	—	—	1	—
<i>Pontophilus sculptus</i> (Bell)	179	—	—	1	—
	185	1	1	—	—

	SM Station no.	♂♂	ovig. ♀♀	♀♀	juv.
SUBORDER PALINURA					
Family Polychelidae					
<i>Stereomastis sculpta</i> (Smith)	134	—	1	—	—
Family Palinuridae					
<i>Projasus parkeri</i> (Stebbing)	131	1	—	—	—
	233	1	—	1	1
	237	5	—	2	4
SUBORDER ANOMURA					
Family Axiidae					
<i>Calocaris alcocki</i> McArdle	150	—	—	1	—
Family Lithodidae					
* <i>Paralomis roeleveldae</i> sp. nov.	121	—	—	1	—
Family Galatheidae					
<i>Munida sanctipauli</i> Henderson	237	1	—	1	—
<i>Munida</i> sp.	129	—	1	—	—
Family Chirostylidae					
* <i>Uroptychus edwardi</i> sp. nov.	134	—	1	—	—
<i>Uroptychus nitidus</i> (A. Milne Edwards)	117	1	—	1	—
	121	1	4	16	—
<i>Uroptychus simiae</i> Kensley	233	1	—	—	1
SUBORDER BRACHYURA					
Family Dromiidae					
<i>Pseudodromia spinosissima</i> Kensley	163	1	—	1	—
	233	1	—	—	—
Family Cymonomidae					
<i>Corycodus disjunctipes</i> (Stebbing)	232	1	—	1	—
<i>Cymonomus trifurcus</i> Stebbing	129	—	—	1	—
	162	1	—	—	—
	232	—	—	3	—
	250	1	—	—	—
	226	1	—	—	—
Family Homolidae					
* <i>Homolochunia valdiviae</i> Doflein	237	1	—	—	—
Family Dorippidae					
<i>Ethusa</i> sp.	121	1	—	—	—
Family Calappidae					
<i>Mursia armata</i> De Haan.	239	1	—	—	—
Family Majidae					
<i>Inachus guentheri</i> (Miers)	185	1	1	—	—
<i>Macropodia formosa</i> Rathbun	239	1	—	—	—
<i>Pleistacantha moseleyi</i> (Miers)	234	2	—	—	—
Family Hymenosomatidae					
<i>Hymenosoma orbiculare</i> Desmarest	180	—	—	—	1

* New record

	SM Station no.	SM Station				juv.
		♂♂	ovig. ♀♀	♀♀		
Family Atelecyclidae						
* <i>Trachycarcinus glaucus</i> Alcock & Anderson	121	1	—	—	—	—
Family Geryonidae						
<i>Geryon</i> sp.	121	—	—	1	—	—
	233	2	—	2	—	—
Family Goneplacidae						
<i>Goneplax rhomboides</i> (Linnaeus)	237	1	—	—	—	—
<i>Litocheira kingsleyi</i> (Miers)	233	—	2	1	1	1
	237	2	2	—	1	—
<i>Pilumnoplax heterochir</i> (Studer)	226	2	—	—	—	—
	232	1	1	—	—	—
	237	1	—	—	—	—

STATION DATA

B — Bongo net
 BT — Beam trawl
 HD — Heavy dredge
 RMT — Rectangular midwater trawl

SM Station no.	Position	Depth (m)	Gear
63	27°10'S 33°14'E	140	RMT
88	27°51'S 32°55'E	297	RMT
96	28°14'S 32°49'E	465	RMT
99	28°23'S 32°41'E	920	BT
119	30°14'S 31°13'E	750	RMT
121	30°32'S 30°52'E	900-625	BT
123	30°33'S 30°48'E	690	HD
126	30°39'S 30°59'E	464	RMT
129	30°53'S 30°31'E	850	HD
131	30°43'S 30°40'E	780	BT
132	30°45'S 30°42'E	830	RMT
133	31°01'S 30°26'E	212	B
134	31°00'S 30°27'E	900	BT
138	30°21'S 31°15'E	830	RMT
139	30°22'S 31°16'E	250	RMT
140	31°14'S 30°20'E	1120	RMT
144	31°26'S 30°06'E	212	B
145	31°30'S 30°04'E	1129	RMT
148	30°17'S 31°25'E	750	RMT
150	30°14'S 31°25'E	1000	HD
153	30°15'S 31°28'E	664	RMT
154	30°24'S 31°32'E	500	RMT
157	30°05'S 31°57'E	750	RMT
159	32°40'S 28°50'E	690	RMT
160	32°45'S 28°47'E	583	RMT
162	32°55'S 28°31'E	630	HD
163	33°04'S 28°06'E	90	HD
167	33°10'S 28°17'E	1091	RMT
168	33°14'S 28°18'E	816	RMT
170	33°10'S 28°14'E	708	RMT

* New record

SM Station no.	Position	Depth (m)	Gear
171	33°16'S 28°13'E	792	RMT
173	33°25'S 27°54'E	683	RMT
174	33°19'S 27°52'E	760	HD
175	33°25'S 27°49'E	212	B
179	33°30'S 27°22'E	80	HD
180	33°29'S 27°21'E	80	HD
182	33°38'S 27°49'E	1517	RMT
183	33°48'S 27°47'E	474	RMT
184	33°39'S 27°11'E	86	HD
185	33°39'S 27°11'E	90	HD
186	33°48'S 27°27'E	583	RMT
187	33°55'S 27°25'E	982	RMT
189	34°04'S 27°10'E	212	B
190	34°06'S 27°08'E	658	RMT
191	34°11'S 27°08'E	542	RMT
194	31°34'S 30°20'E	2166	RMT
195	31°33'S 30°18'E	1050	RMT
197	31°35'S 30°11'E	150	RMT
199	31°33'S 30°08'E	250	RMT
201	31°40'S 30°03'E	1333	RMT
203	31°42'S 30°03'E	1750	RMT
204	31°45'S 30°04'E	212	B
205	31°51'S 30°01'E	585	RMT
208	31°53'S 29°48'E	1320	RMT
209	31°55'S 29°57'E	1260	RMT
211	32°00'S 29°50'E	415	RMT
214	32°15'S 29°36'E	1390	RMT
218	32°30'S 29°13'E	916	RMT
220	32°31'S 29°11'E	1416	RMT
221	32°34'S 29°15'E	1170	RMT
223	32°34'S 29°13'E	670	RMT
224	32°33'S 29°09'E	663	RMT
226	32°28'S 28°58'E	710	HD
227	32°32'S 28°55'E	790	BT
232	32°14'S 29°10'E	620	HD
233	32°15'S 29°09'E	580	BT
234	32°15'S 29°09'E	520	BT
237	32°15'S 29°09'E	650	BT
239	32°14'S 29°00'E	90	BT
250	31°59'S 29°22'E	200	HD
254	31°42'S 29°40'E	860	BT

SYSTEMATIC DISCUSSION

Family Aristeidae

Bentheogennema pasithea (De Man)

Bentheogennema pasithea: Crosnier, 1978: 31, figs 13c-d, 14d. [Full synonymy.]

Previous records

Formosa; Caroline and Gilbert Islands; Indonesia; India; Somalia; Seychelle Islands; Nosy Be, Madagascar.

Material

1 ♂ CL (incl. rostrum) 12,5 mm SM 224 32°33'S 29°09'E 600–663 m.

Family *Sergestidae**Petalidium obesum* (Krøyer)

Fig. 2

Sergestes obesus Krøyer, 1859: 257, 279, pl. 4 (fig. 10a–f).

Sergestes sanguineus Chun, 1889: 538 (mastigopus larva).

Petalidium obesum: Hansen, 1896: 968; 1903: 56; 1922: 190, pl. 11 (figs 3–4). Burkenroad, 1937: 324. Wasmer, 1974: 165.

Petalidium foliaceum non Bate, Illig, 1927: 282, figs 1–5.

Previous records

Off Cape Verde, Canary Islands, Azores Islands (Hansen); off Lüderitz; Cape Point (Illig).

Remarks

Burkenroad (1937) noted that his new species *P. suspiriosum* differed from other species of the genus in the gill structure, in having two arthrobranchs above pereopod 4, instead of one as in *P. obesum*, or none as in *P. foliaceum* (see Wasmer 1974: 165). Hansen (1922: 193), in discussing the gill formula of *P. obesum*, mentioned that there was frequently a rudimentary gill above pereopod

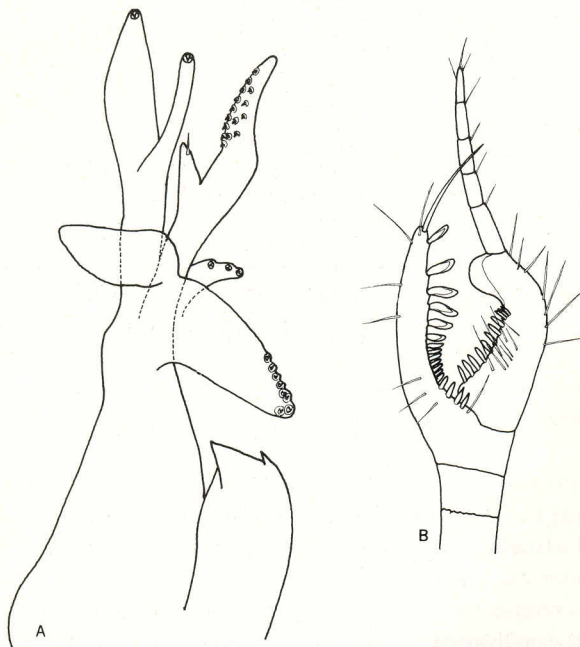


Fig. 2. *Petalidium obesum*. A. Petasma. B. Outer antennular flagellum ♂.

4, and that its absence was probably due to mutilation along with bad preservation. The thirty-one specimens in the present collection agree with *P. foliaceum* in lacking a gill above pereopod 4.

The petasma agrees well with Hansen's figures, although slight differences are noted: the longer lobe of the lobus terminalis has only a single terminal hook (three in Hansen's description), while the shorter lobe of the lobus armatus carries three (not two) hooks in the present material. Hansen's figure of the telsonic apex does not show the two distolateral spines seen in the Indian Ocean material.

The rostrum is variable, in fact, it shows the same range of variation as Illig (1927, fig. 1) illustrates for *P. foliaceum*. As Illig's figure of the petasma more closely resembles that of *P. obesum* (lacking the two distinctive stumpy lobus armatus lobes of *P. foliaceum* Bate), there is strong reason to believe that Illig's specimens from the South Atlantic were *P. obesum*.

As the integument of *Petalidium* is very delicate, carapace lengths are difficult to measure; however, the average carapace length of four males of *P. obesum* is 7.1 mm, while the two males of *P. foliaceum* have carapace lengths of 12.0 mm each.

Sergia inequalis (Burkenroad)

Fig. 3

Sergestes inequalis Burkenroad, 1940: 51.

Sergestes (*Sergia*) *inequalis*: Yaldwyn, 1957: 9.

Description

Male

Rostrum with relatively slender apical spine, lacking dorsal denticle, anterior margin oblique. Carapace with cervical sulcus becoming obsolete dorsally; postcervical sulcus distinct across dorsum; suprabranchial ridge strong. Cornea reaching beyond midpoint of basal antennular peduncle segment. Latter subequal in length to second segment; third segment somewhat shorter. Scaphocerite reaching to midpoint of third antennular peduncle segment, with twelve small opaque-spot photophores. Maxilliped 3 slender, slightly longer than pereopod 1. Outer uropodal ramus with spine on outer margin at about distal third, with twelve opaque-spot photophores near inner margin. Telson apically acute.

Petasma: processus uncifer with small apical spine; lobus armatus short, tapering, extended laterally, with eleven hooks; lobus accessorius subequal in length to lobus armatus, but broader, with about twenty hooks; processus ventralis broad, outer margin sinuous, apically acute, reaching to lobus accessorius and lower lobus connectens lobe; lobus connectens lower lobe slender, extending laterally, curved downwards, with ten to twelve terminal hooks, upper lobe short, extended upwards; lobus terminalis directed laterally, short, squat, with three

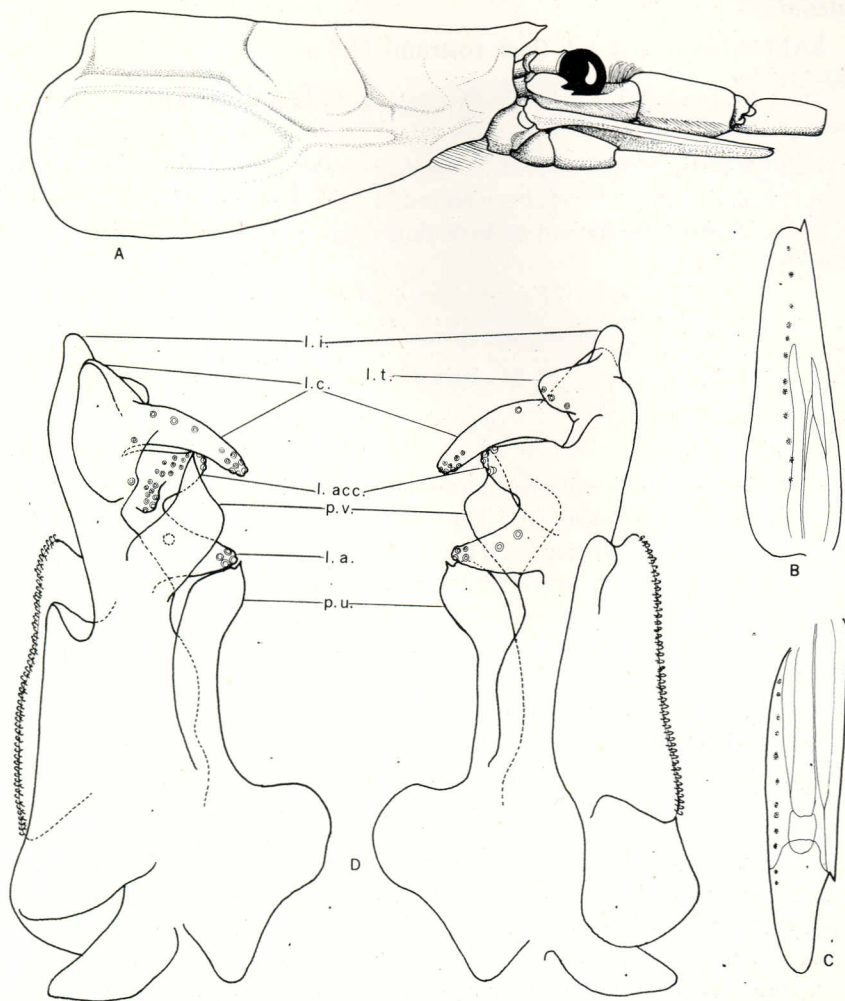


Fig. 3. *Sergia inequalis*. A. Carapace in lateral view. B. Scaphocerite. C. Outer uropodal ramus. D. Anterior and posterior view of petasma. l.a.—lobus armatus, l.acc.—lobus accessorius, l.c.—lobus connectens, l.i.—lobus inermis, l.t.—lobus terminalis, p.u.—processus uncifer, p.v.—processus ventralis.

terminal hooks; lobus inermis extending beyond lobus terminalis, short, distally rounded.

Previous records

Dana Expedition station 3768 7°33'S 115°22'E 810 m, off Sunda Islands, Java Sea.

Material

SAM-A16810 1 ♂ CL (incl. rostrum) 11,5 mm SM 194 31°34'S 30°20'E
1150-2166 m.

Remarks

Burkenroad (1940) described *S. inequalis* from a single male, but provided no figures. The species has not been recorded since. From Burkenroad's description of the petasma, there can be little doubt that the present male is the same species.

Family **Stenopodidae***Odontozona spinosissima* sp. nov.

Figs 4-5

*Description**Female*

Translucent integument bearing numerous flattened spines. Carapace with strong cervical, postcervical, and hepatic grooves; rostrum compressed, with twelve dorsal teeth, two ventrodiscal teeth, and strong ventrolateral ridge running into orbital margin posteriorly. Orbital spine set back from margin, larger than surrounding spines; strong antennal spine set slightly back from margin; pterygostomian spine marginal; forwardly-directed carapace spines posterior to cervical groove arranged in more or less vertical cinctures. Pleonal segments dorsolaterally bearing numerous closely packed ridges and grooves; pleonite 3 largest, dorsally smoothly convex; pleura of pleonites 1 and 2 ventrally rounded, pleuron 1 about one-third width of pleuron 2, bearing transverse ridges and grooves; pleuron 4 ventrally truncate, bearing spines and ridges, small marginal tooth posteroventrally, two posterolateral teeth; pleuron 5 with stronger posteroventral tooth plus three smaller posterolateral marginal teeth, bearing spines laterally; pleuron 6 ventrally truncate, with small posteroventral denticle, bearing spines laterally. Telson (apex damaged) with at least one pair of lateral spines; two strong, rounded dorsal ridges present.

Eye reaching to about midlength of rostrum; mediodorsal surface of eye-stalk armed with spines, those overlapping cornea relatively elongate. Basal segment of antennular peduncle with flattened apically acute lobe on outer margin. Scaphocerite with spines on outer margin, elongate setae on inner; basal peduncular segment with one ventral and two large dorsolateral marginal spines plus numerous smaller scattered spines; second and third segments with scattered ventral spines. Mandibular palp 3-segmented, first segment short, second and third segments subequal, latter with numerous setae. Maxilla 1 with slender palp; distal lobe with nine spines and several setae on straight inner margin, proximal lobe broadly rounded, setose. Maxilla 2 with broad scaphognathite, slender palp, four narrow endites. Maxilliped 1 with broad bilobed epipod, slender exopod, 3-segmented endopod. Maxilliped 2 exopod with peduncle equal in length to flagellum; endopod merus largest segment, equal in

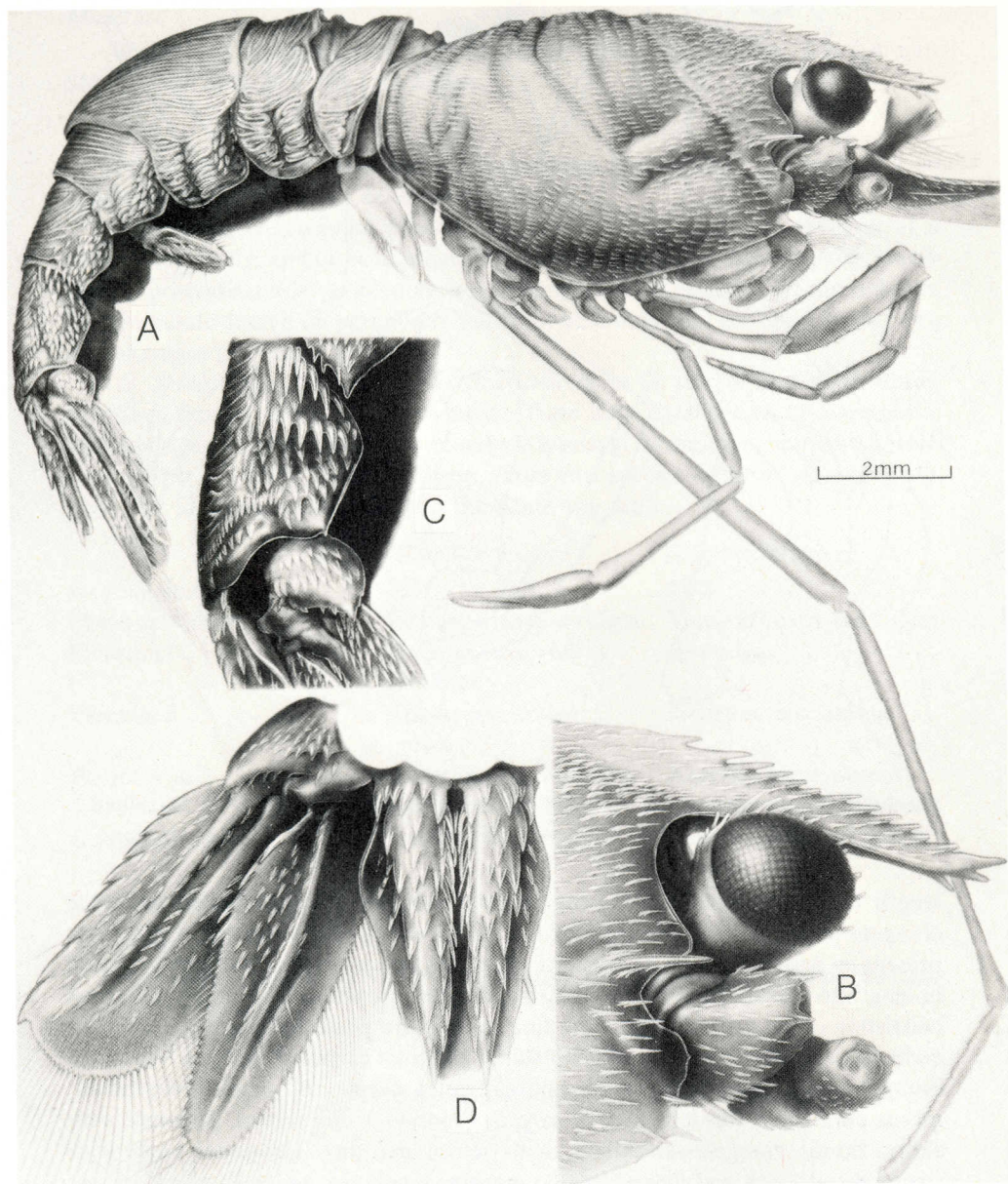


Fig. 4. *Odontozona spinosissima*. A. Holotype in lateral view. B. Anterior carapace. C. Pleonite 6 and uropodal base. D. Telson (damaged) and left uropod.

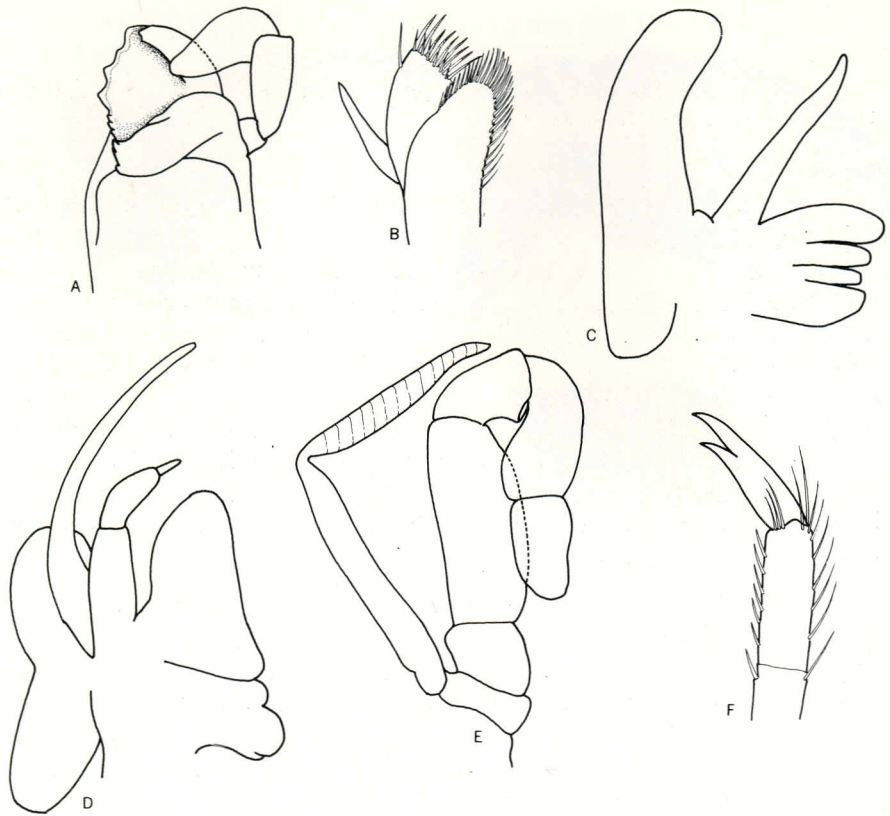


Fig. 5. *Odontozona spinosissima*. A. Mandible. B. Maxilla 1. C. Maxilla 2. D. Maxilliped 1. E. Maxilliped 2. F. Pereopod 5 dactylus.

length to dactylus and carpus together. Maxilliped 3 with elongate exopod; elongate setae on inner margins of five distal endopodal segments. Epipodites present on pereopods 1-4. Pereopod 1 chela three-quarters length of carpus, equal in length to merus. Pereopod 4 elongate, slender, propodus half length of carpus consisting of six subsegments, with fine spinules on posterior margin; carpus of eight subsegments; merus about two-thirds length of carpus. Pereopod 5 dactylus biunguiculate; propodus of six subsegments; carpus of nine subsegments; merus about two-thirds length of carpus. Pleopod 1 uniramous, peduncle very short, ramus elongate-lanceolate, with setose margins. Uropodal basis with strong distal tooth and several smaller marginal teeth plus several surface spines; outer ramus broader than inner, with eight teeth on outer margin, distally broadly rounded; dorsal surface with two strong rounded ridges, bearing scattered spines; inner ramus distally narrower than outer ramus, with four spines

on outer proximal margin, single rounded ridge dorsally, with scattered dorsal spines.

Material

Holotype SAM-A16811 1 ♀ CL (incl. rostrum) 7,0 mm RL 2,4 mm SM 250 31°59'S 29°22'E 150-200 m.

Remarks

Although only a single damaged specimen is available, this species is so markedly distinctive as to deserve description.

The genus *Odontozona* Holthuis is characterized by the possession of a compressed body, cinctures of anteriorly-directed spines on the carapace, maxilliped 3 possessing a large exopod, but lacking external spinules on the ischium, biunguiculate dactyli on pereopods 4 and 5, and a uropodal endopod having two dorsal ridges (Holthuis 1946: 5).

O. spinosissima bears a strong resemblance to *O. sculpticaudata* Holthuis, described from a single ovigerous female from Sape Straits, east of Soembawa, Indonesia, especially in the abdominal sculpturing. From examination of Holthuis's type and from the description, these two species differ in several easily-observed features, summarized in the following table.

	<i>O. sculpticaudata</i>	<i>O. spinosissima</i>
Rostral dentition . . .	5/2	12/2
Pleon sculpture . . .	Few grooves and ridges	Many grooves and ridges
Pleuron 1	Blunt anterior tooth present	Rounded
Pleonite 3	Transverse carina present	No transverse carina
Pleura 4 & 5	Anterior and posterior tooth present	Anterior tooth absent posterior tooth present
Uropodal rami	Lacking dorsal spines	Numerous dorsal spines present
Outer uropodal ramus . .	6 marginal teeth	8 marginal teeth

Etymology

The specific name derives from the extremely spinose condition of the carapace and pleon.

Family Chirostylidae

Uroptychus edwardi sp. nov.

Figs 6-7

Description

Female

Carapace middorsal length (excluding rostrum) almost three-quarters greatest carapace width; dorsally smooth, gently convex, widest across branchial

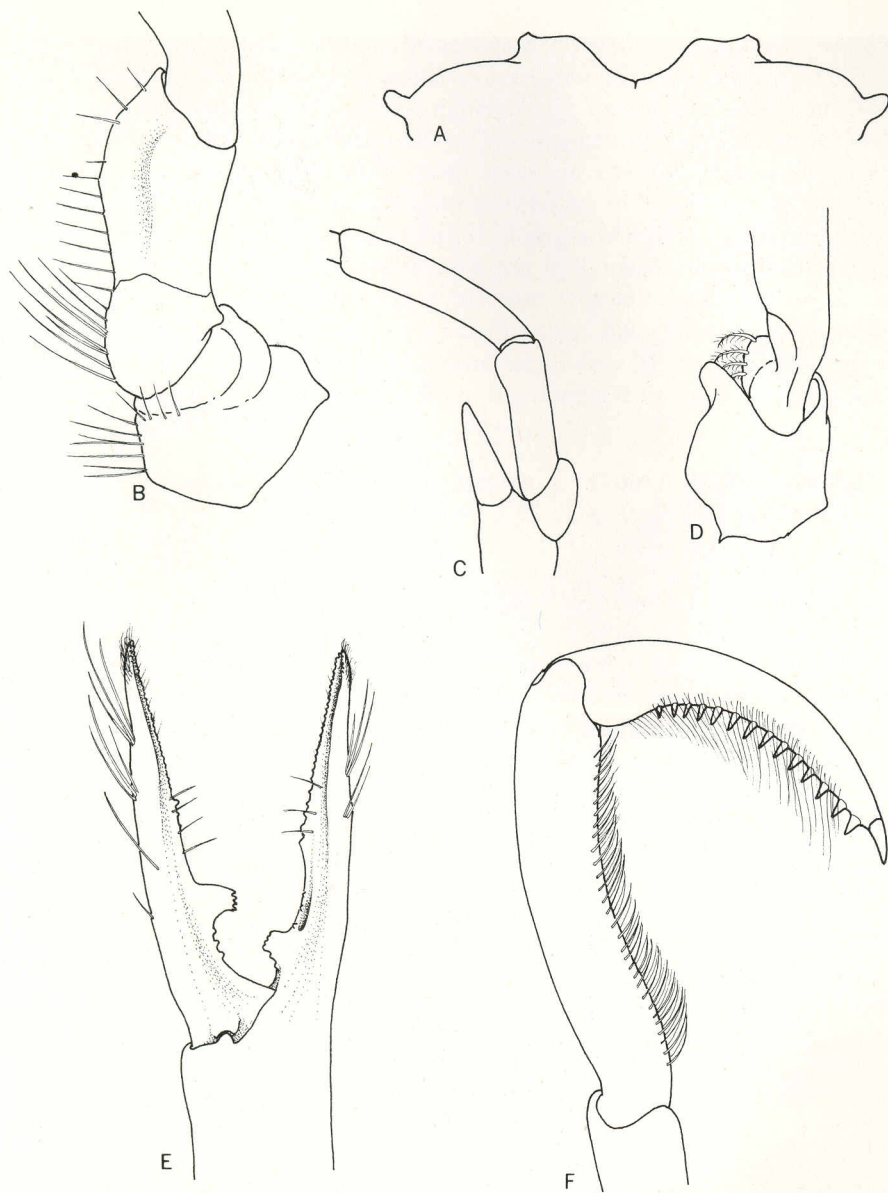


Fig. 7. *Uroptychus edwardi*. A. Anterior sternum. B. Three basal segments of maxilliped 3 endopod. C. Antennal peduncle. D. Basal antennular segment. E. Chela. F. Dactylus and propodus of ambulatory pereopod.

regions; anterior margins somewhat sinuous between spiciform rostrum and anterolateral spines; posterodorsal margin concave. Ventrolateral carapace plate ending anteriorly in short spine. Sternum with smoothly even median concavity, with tiny median slit. Sternites of maxilliped 3 and pereopod 1 laterally rounded.

Basal antennular segment with unarmed rounded distal lobe. Antennal peduncle segments unarmed, acicle not reaching end of second segment. Chelipeds slender, five and a half times length of carapace (including rostrum); dactylus about half length of propodal palm; distal half of finger and thumb distinctly narrowed, grooved on inner faces, with outer cutting edges finely denticulate; proximal half of dactylus bearing strong, finely denticulate process on cutting margin, fitting closely against and distal to similar process on fixed finger; carpus four-fifths length of propodus (including fixed finger), two distal spines present, four or five low tubercles medioventrally; merus about two-thirds length of carpus, with strong distodorsal spine. Propodi of ambulatory pereopods slightly curved, with dense band of setae on ventral margin; dactyli curved, with row of conical spines and numerous fine setae on ventral margin.

Material

Holotype SAM-A16033 1 ovigerous ♀ CL (incl. rostrum) 7,0 mm CW 8,0 mm SM 134 31°00'S 30°27'E 900 m.

Remarks

Although only a single female of this species is available, it is sufficiently distinct to warrant description.

U. edwardi belongs to that group of species of *Uroptychus* possessing a carapace wider than long, and lacking dorsal spination. The spiciform rostrum and anterolateral spines distinguish *U. edwardi* from all other species of this group, including *U. siraji* Tirmizi, *U. onychodactylus* Tirmizi, *U. foulisi* Kensley, *U. suluensis* Van Dam, *U. setosidigitalis* Baba, *U. scambus* Benedict, and *U. glyphodactylus* MacGilchrist. The two latter species most closely resemble the present species, especially in the short but spiciform anterolateral carapace spines, but both species possess broadly triangular rostra.

Etymology

Station SM 134, at which *U. edwardi* was captured, lies on the continental shelf off Port Edward, hence the specific name.

Family **Lithodidae**

***Paralomis roeleveldae* sp. nov.**

Figs 8-9

Description

Female

Carapace (including rostrum) slightly longer than wide, covered with short, rounded tubercles of varying sizes; regions well defined. Gastric region strongly convex, with large acute tubercle at middorsal point and two smaller tubercles in posterior part; margin with two or three strong spines; cardiac region defined by grooves; branchial region with large acute tubercle at about midpoint,

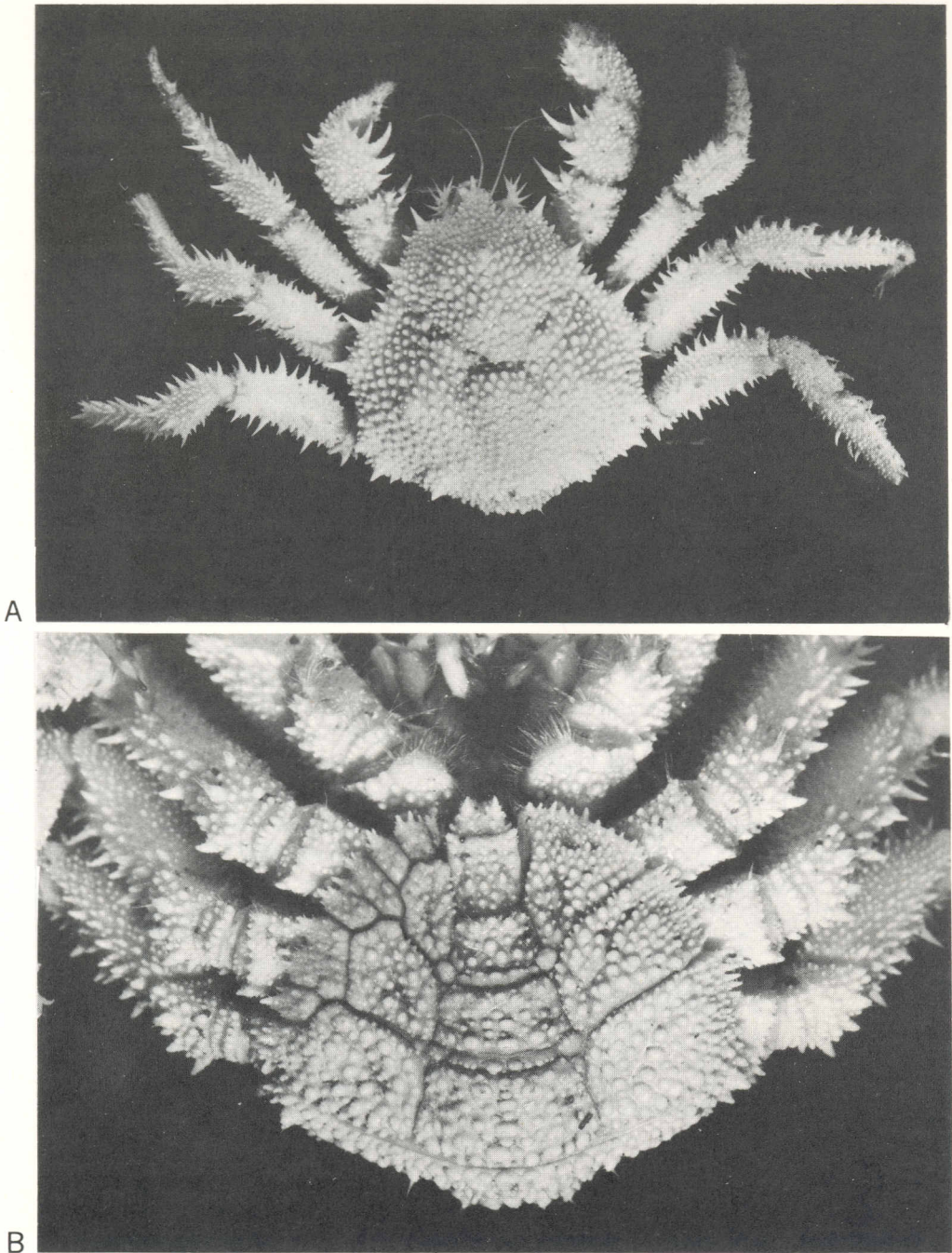


Fig. 8. *Paralomis roeleveldae*. A. Holotype in dorsal view. B. Holotype, abdomen.

anterior margin with two strong spines; two large contiguous spinose tubercles at posterolateral angle, single large tubercle between posterolateral angle and midpoint of posterior margin. Rostrum of strong inferior median spine with three small median spines dorsal to median spine, and two strong dorsolateral spines with a pair of small anterior spines at base. Abdomen with second somite a single plate covered with conical tubercles. Median and lateral plates of somites 3-5 bearing rounded-flattened and smaller conical tubercles. Lateral plates of left side bearing short spinose tubercles. On right side, lateral plate of somite 3 bearing small marginal plate at distal angle. Somite 4 with two marginal plates, each divided marginally and carrying fine spines. Somite 5 similar to somite 4. Somite 6 rectangular, terminal somite short, with two terminal spines. Median plates 4 and 5 each with deep transverse groove proximally.

Eyestalks with single relatively strong terminal spine extending beyond cornea and several tiny spines dorsally. Antennules unarmed. Basal antennal peduncle segment with single distal spine; second segment with laterodistal spine and three or four smaller spines at base; acicle with five strong spines (including terminal spine) on outer margin, several smaller spines dorsally and on inner margin. Maxilliped 3 with small spine on inner distal margin of second endopod segment (ischium); outer surface of merus granular.

Left cheliped slightly shorter and less robust than right, spination and granulation similar; spines of upper distal region of merus becoming stronger than

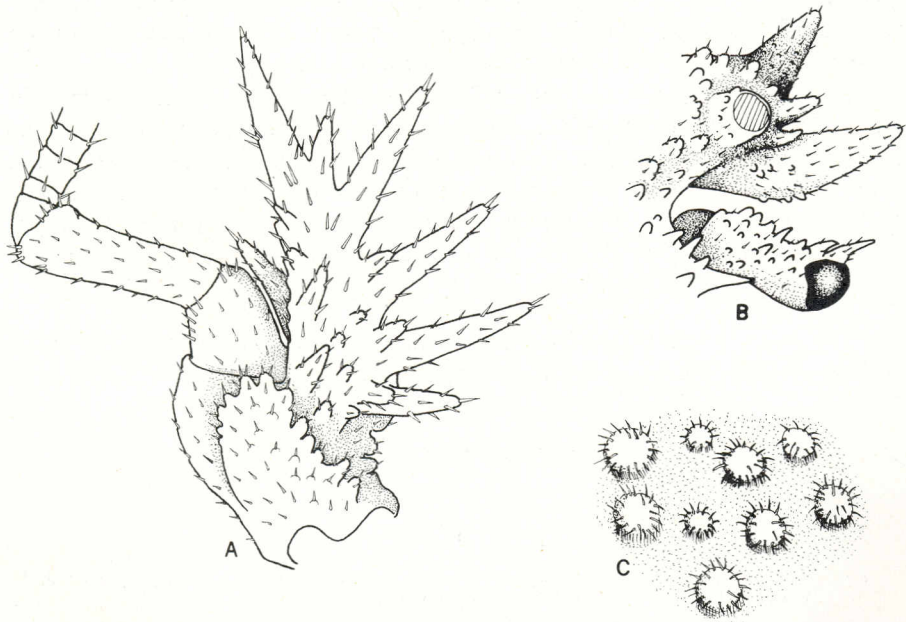


Fig. 9. *Paralomis roeleveldae*. A. Basal antennal segments. B. Rostrum (lateral spine broken) and eyestalk. C. Carapace tubercles enlarged.

spinose-granulations of outer face, with several elongate spines on inner and dorsal surfaces; fingers of chela subequal to palm in length; propodi with several elongate spines on inner margin. Right chela with two or three rounded proximal cusps on cutting edges of finger and thumb, tips subacute, corneous; left chela lacking cusps, tips subacute, corneous. Ambulatory pereopods 2-4 with strong spines on dorsal margins of carpi and meri, surfaces granulate-spinose, lower margins with strong spines, dactyli unarmed except for single proximal tubercle.

Material

Holotype SAM-A16045 1 ♀ CL (incl. rostrum) 50,0 mm CW 45,0 mm SM 121 30°32'S 30°52'E 625-900 m.

Remarks

The present species appears to be most closely related to *Paralomis investigatoris* Alcock & Anderson, 1899, from deep water off the coast of Travancore, India. This resemblance lies especially in the overall carapace shape, similarity of the carapace and abdominal tuberculation, and pereopodal armature. Several differences separate the two species, however, including the lack of stronger spinose tubercles on the carapace and marginal abdominal spines in the Indian species, and the lack of basal rostral spines and the relatively more slender chelipeds in *P. roeleveldae*. Alcock & Anderson (1899) mention the similarity of their species to *P. aspera* Faxon from the Pacific coast of Panama. Although Faxon's species resembles *P. roeleveldae* in the general shape and carapace armature, it lacks longer carapace tubercles, elongate marginal spines, the inferior rostrum is multidentate, and the pereopods lack elongate spines.

Paralomis seagranti Eldredge (1976) from Guam, although superficially similar to the present species, possesses a relatively more elongate carapace, elongate setae on the appendages, relatively short marginal carapace spines, fewer antennal acicle spines, shorter spines on the setose ambulatory pereopods, while lacking a large gastric spine and spines on the posterior carapace margin.

This is the first record of the genus from the South-western Indian Ocean.

Etymology

The species is named for Martina Roeleveld of the South African Museum, in thanks for her help during the *Meiring Naude* cruises.

Family Atelecyclidae

Trachycarcinus glaucus Alcock & Anderson

Figs 10-11

Trachycarcinus glaucus Alcock & Anderson, 1899: 8. Alcock, 1899: 59, pl. 2 (fig. 2). Alcock & MacGilchrist, 1905: pl. 76 (figs 1-2). Guinot & Sakai, 1970: 203.

Previous records

Off Travancore coast, southern India, 860 m.

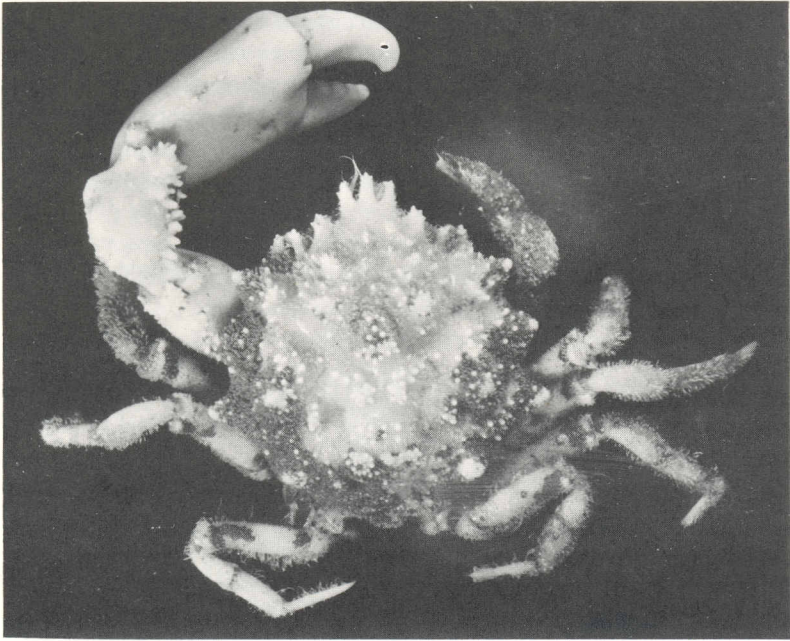


Fig. 10. *Trachycarcinus glaucus*. Male in dorsal view.

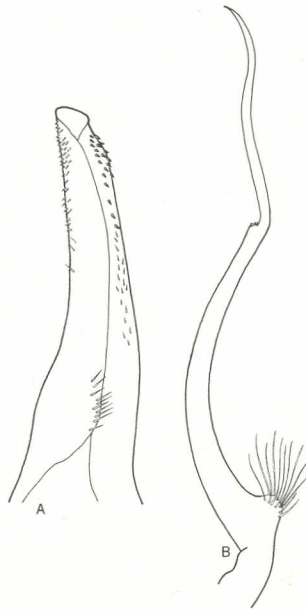


Fig. 11. *Trachycarcinus glaucus*. A. Pleopod 1 ♂. B. Pleopod 2 ♂.

Material

SAM-A16018 1 ♂ CL (incl. rostrum) 23,7 mm CW 22,0 mm SM 121
625-900 m.

Remarks

The largest male from Travancore measured CL 18,5 mm, CW 14,5 mm. The present male is thus probably the largest known.

ACKNOWLEDGEMENTS

My sincere thanks are due to Captain G. Foulis and the crew of the R.V. *Meiring Naude* and to my scientific colleagues on the cruises; to the Trustees and Director of the South African Museum, Cape Town, for making the decapod material available to me; Dr D. Platvoet of the Zoologisch Museum, Amsterdam, for the loan of type material of *Odontozona*; Carolyn Bartlett Gast (Smithsonian Institution) for the beautiful figures of *Odontozona spinosissima*; Messrs Michael Carpenter (Smithsonian Institution) and Sidney Kannemeyer (South African Museum) for assistance with the photographs; and to Drs F. A. Chace, Jr., and R. B. Manning of the Department of Invertebrate Zoology, Smithsonian Institution, for critically reading and commenting on the manuscript.

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