

ARANEAE: SPIDERS OF SOUTH GEORGIA<sup>1</sup>By R. R. Forster<sup>2</sup>

*Abstract:* Detailed descriptions of the ♂ and ♀ are given for 4 species (1 new) of spiders, representing 4 genera (1 new) of Micryphantidae. The new species is *Neomaso claggi*.

A comprehensive study of the spiders of South Georgia was carried out by Tambs-Lyche who in 1954 examined 44 specimens from Grytviken. He recorded 4 species of which 1, *Tegenaria domestica*, was undoubtedly an introduction. Tambs-Lyche decided that the species represented by most specimens in his collection was the species described earlier by Banks (1914) as *Notiomaso australis* and later by Bristowe (1931) as *Myro frigida*. I concur with this synonymy and the present collections make it clear that this species is by far the most abundant and widespread on the island.

The present collection contains many hundreds of specimens which belong to 4 species all of which are placed in the family Micryphantidae. The 3 species recorded by Tambs-Lyche, *Notiomaso australis* Banks, *Perimaso grytvikensis* Tambs-Lyche and *Micromaso flavus* Tambs-Lyche are represented by specimens of both sexes. A 4th species for which a new genus *Neomaso* is established is described below. In this present paper I have described and figured both sexes of all the species now known from South Georgia.

The situation is now reached where 4 endemic species are recorded from South Georgia, each belonging to a monotypic genus. While at first glance this situation might be considered to reflect the rather chaotic generic splitting which prevails in the family Micryphantidae, a more detailed study does indicate that only 2 of the species, *Notiomaso australis* and *Perimaso grytvikensis*, could be considered closely related and might reasonably be considered congeneric. It is probable that as the fauna of the southern portion of South America becomes better known, species related to, and perhaps identical with, those recorded from South Georgia will be found.

Banks (1914) while establishing the genus *Perimaso* considered that the genus belonged in the subfamily Masoninae, which is otherwise a northern group. Tambs-Lyche also referred this genus, and the 2 genera which he established, to the Masoninae but noted that they could well represent a natural group in their own right. Due to a lack of detailed knowledge of subfamily classification of these spiders I am not able to clarify this situation although it may be noted that a number of characters are common to all of the genera recorded from South Georgia. There is no modification of the head region of the male. Both the superior and inferior claws are provided with teeth and 2 serrated bristles are present at the base of the claws. The female palp is without a claw. The paracymbium of the male palp is well developed and there is a prominent lobe on the retromargin of the cymbium. The legs are usually armed with a double row of bristles on the ventral surfaces of the femur, tibia, metatarsus and tarsus. The known fauna of the other subantarctic islands shows no direct relationship with South Georgia although three small species which might possibly be micryphantids but which have been placed in the family Linyphiidae, have been recorded. These are *Ringina antarctica* (Hickman) and *Ringina crozetensis* Tambs-Lyche from Possession, Crozets and *Porrhomma antarctica* Hickman from Kerguelen.

A description is given of a portion of the cephalothorax of a micryphantid spider collected

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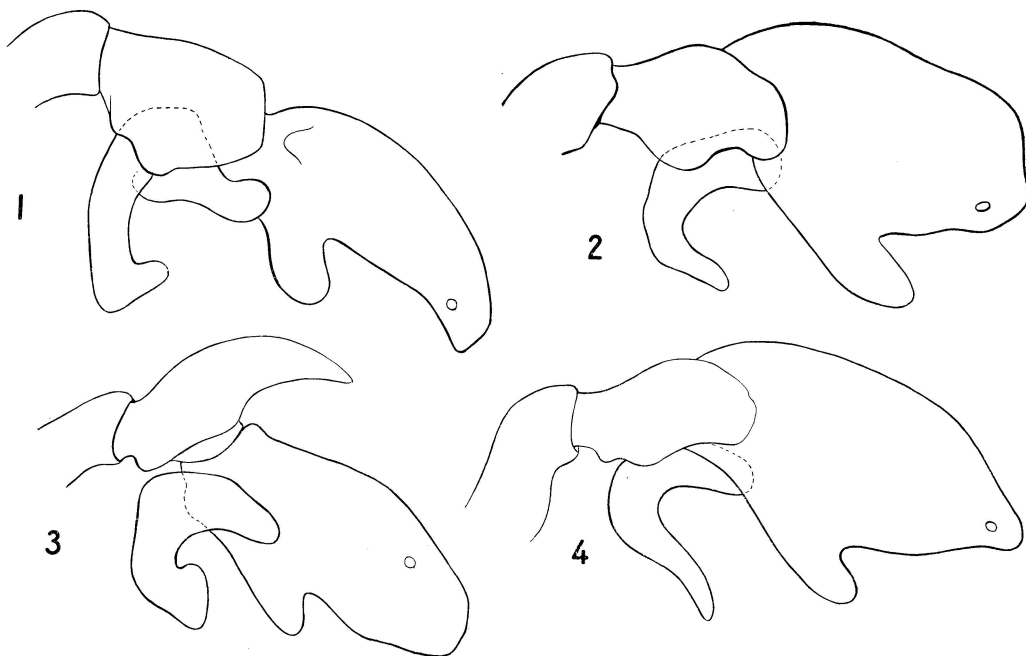


Fig. 1-4. Retrolateral view of tibia, cymbium and paracymbium of ♂ palp: 1, *Neomaso claggi* n. sp.; 2 *Micromaso flavus* Tambs-Lyche; 3, *Notiomaso australis* Banks; 4, *Perimaso grytvikensis* Tambs-Lyche.

from Terra Nova Bay, Antarctica and it is noted that this may be related to the spiders found on South Georgia. It is not known whether this specimen indicates the presence of an Antarctic fauna or whether it is a wind blown specimen from elsewhere.

The illustrations for this paper have been prepared by Mr. Barry Weston. All specimens listed without a collector's name were collected by Mr H. B. Clagg.

Family MICRYPHANTIDAE  
Genus **Notiomaso** Banks, 1914

**Notiomaso australis** Banks Fig. 3, 5-10, 16.

*Notiomaso australis* Banks, 1914, *Sci. Bull. Mus. Brooklyn Inst. Arts. Sci.* 2(4): 79.—Tambs-Lyche, 1954, *Sci. Results Norw. Antarc. Exped.* 35: 6.

*Myro frigida* Bristowe, 1931, *Discovery Reports* 3: 266.

♂. *Measurements*: Carapace, Length 1.09; width 0.85. Abdomen, Length 1.33; width 0.88.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Leg 1	0.89	0.27	0.71	0.55	0.41	2.83
Leg 2	0.75	0.29	0.65	0.56	0.41	2.66
Leg 3	0.68	0.25	0.51	0.55	0.43	2.42
Leg 4	0.92	0.26	0.91	0.88	0.48	3.45
Palp	0.41	0.41	0.11		0.48	1.14

*Color*: The carapace is dark grayish brown shaded with black as shown in fig. 5. Appendages yellow-brown. Abdomen grayish black with 4 indistinct pale transverse bands on posterior 1/2 of dorsal surface.  
*Carapace*: Relatively low. Fovea distinct. *Eyes*: From above, posterior row straight and anterior row

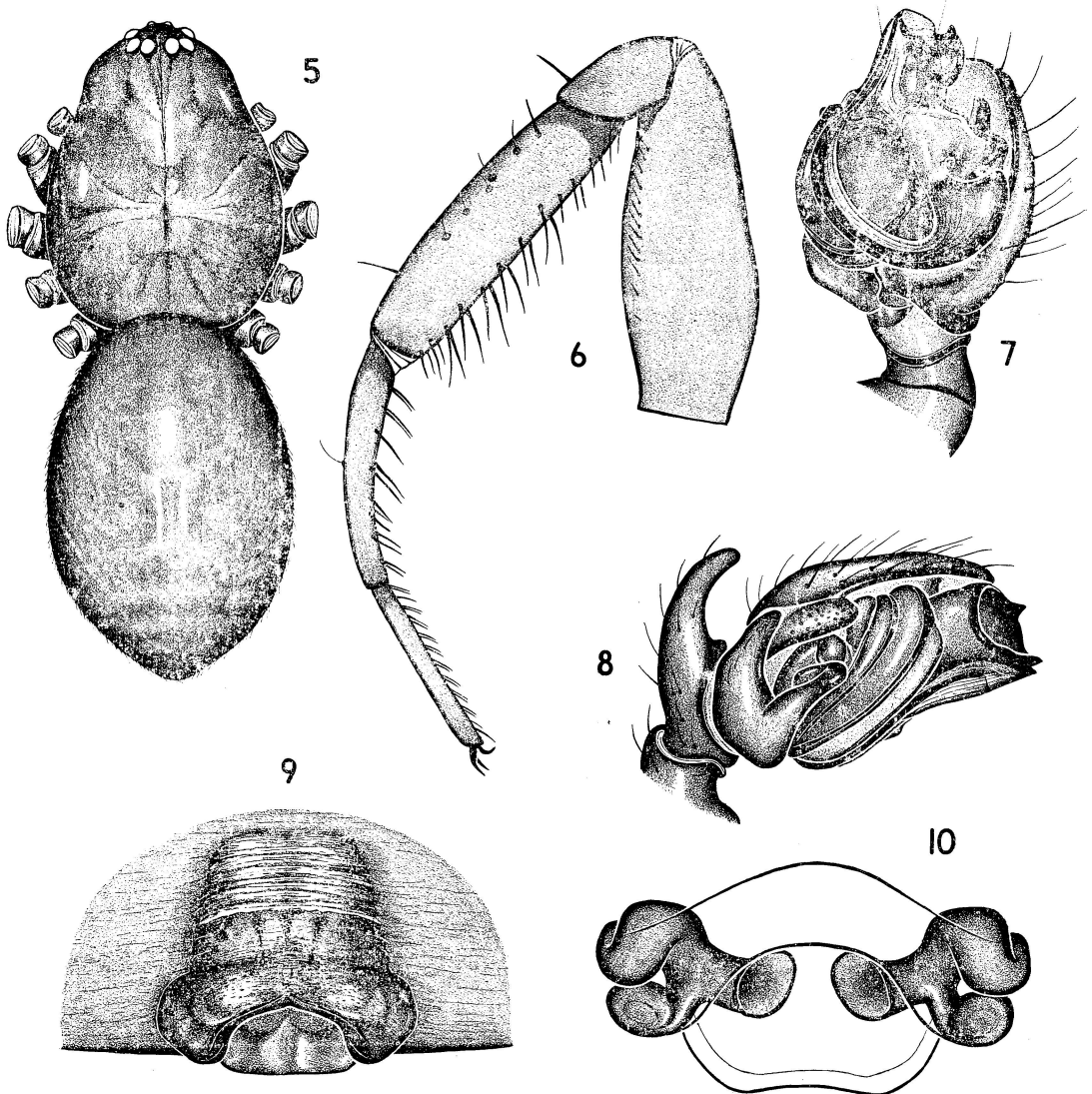


Fig. 5-10, *Notiomaso australis* Banks: 5, dorsal surface of body, ♀; 6, prolateral view of leg 1, ♂, showing ventral bristles; 7, ventral view of ♂ palp; 8, retrolateral view of ♂ palp; 9, epigynum; 10, internal genitalia from below.

gently recurved. From in front, anterior row straight and posterior row gently procurved. Ratio of AME: ALE:PME:PLE = 2 : 3 : 4 : 4. The AME are separated from each other by a distance equal to  $1/2$  and from ALE by  $1.5 \times$  diameter of an AME. Lateral eyes sub-contiguous. PME separated from each other by a distance equal to diameter of an AME and from the PLE by  $1/2$  of this distance. Median ocular quadrangle wider behind than in front in ratio of 11 : 5 and as wide behind as long. Height of clypeus equal to  $2.5 \times$  width of an AME. *Sternum*: Longer than wide in ratio of 10 : 9. Anterior margin straight, lateral margins slightly indented at base of coxae. Posterior projection broadly pointed between coxae 4 which are separated

by a distance equal to 7/10 width of a coxa. *Maxillae*: Longer than wide in ratio of 5 : 3. Lateral margins straight and parallel. Serrula well developed. *Labium*: Wider than long in ratio of 12 : 7. Anterior margin strongly incurved. *Chelicerae*: Retromargin with 3 and promargin with 6 teeth. Retromarginal teeth and basal and distal tooth of promargin relatively small. (Fig. 16) *Palp*: Distodorsal surface of the tibia produced into a stout sharp process, equal in length to basal portion. Paracymbium well developed with shape shown in fig. 3, 8. Cymbium bears a strong lobe on mid retrolateral surface. Tarsal organ distinct. The form of bulb is shown in fig. 7, 8. There are 3 trichobothria on tibia. *Legs* 4123. Legs 1-4 with a bristle on distodorsal surface of patella and 2 on dorsal surface of tibia. All segments of legs 1 and 2 except patella have a double row of strong bristles on ventral surface and these are also present on legs 3 and 4 in form of weaker bristles or hairs. Superior claws with from 5-7 teeth increasing in length distally. Inferior claw with from 2-3 teeth. There are 2 strong serrated bristles near base of claws. Tibia of legs 1-3 with 5 trichobothria arranged 1.2.1.1. Tibia 4 with 6 trichobothria arranged 1.1.1.2.1. There is a single trichobothrium on metatarsi 1-3 but this is absent from metatarsus 4. Tarsal organ present.

♀. *Measurements*: Carapace, Length 1.11; width 0.87. Abdomen, Length 1.72; width 1.17.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Leg 1	0.88	0.33	0.68	0.52	0.49	2.90
Leg 2	0.81	0.25	0.63	0.51	0.39	2.59
Leg 3	0.69	0.27	0.50	0.50	0.39	2.35
Leg 4	0.86	0.31	0.81	0.71	0.49	3.18
Palp	0.33	0.12	0.31		0.33	1.09

In general, structure as in ♂. Ventral bristles on legs not so strongly developed. Palp with a bristle on distodorsal surface of patella and tibia and proximal surface of tarsus. Tibia with a single trichobothrium. Claw absent. The epigynum is shown in fig. 9. Internal genitalia simple with 2 lobes (Fig. 10).

Type of *Notiomaso australis* Banks in the Museum of Comparative Zoology, Cambridge, Mass. Type of *Myro frigida* Bristowe in the British Museum (Nat. Hist.).

**RECORDS** (The specimens examined by Tambs-Lyche came from Grytviken): SOUTH GEORGIA: Royal Bay, Moltke Harbor, Lower Valley, 21.III.1964, from swift stream, handnet trawl, sealevel to 150 m, sg-263c; 6.III.1964, from *Acaena* near sealevel, hand collected, sg-219f; 3.IV.1964, under moss and rocks, sealevel to 150 m, hand collected, sg-224e; 3.IV.1964, under rocks in Gentoo Penguin colony, sealevel to 150 m, hand collected, sg-262b; 18.II.1961, on scree under rocks, sealevel to 150 m, N. V. Jones, sg-58d; 11.III.1964, under moss and rocks, sealevel to 150 m, hand collected, sg-232c; 13.III.1964, from rotting tussock grass, sealevel to 150 m, hand collected, sg-229c; 18.III.1964, from rotting tussock grass, hand collected, sg-241e; 17.III.1964, under rocks on beach, hand collected, sg-235d; 18.III.1964, under rocks on beach, sg-250c; 21.III.1964, from pond, waterfall bottom, sealevel to 150 m, sg-258b; 11.III.1964, from tussock grass, sealevel to 150 m; sg-231e; 18.III.1964, under moss and rocks, 150-300 m; 18.III.1964, under moss and rocks, sealevel to 150 m. Old German camp, 19.II.1961, from rotting wood, N.V. Jones, sg-61d. Mount Krokisius, 21.II.1961, 360 m, from rock crevices, N.V. Jones, sg-59b. Recession Valley, 18.III.1964, ex moss, 150-300 m. sg-243b.

Grytviken Peninsula, Maiviken, 11.XII.1963, under moss and rocks 150 m, hand collected, sg-80c. Maiviken, 14.II.1961, from rock crevices near waterfall, sg-48d. Cumberland West Bay, 17-21.XI.1963, under rocks, sealevel to 150 m, hand collected, sg-85c. Hestesletten, 12.XII.1963, under rocks, sealevel to 150 m, hand collected under moss and grass, sg-88c. Hestesletten, 3.IV.1961, near shore, N.V. Jones, sg-71e. Cumberland, East Bay, 24.II.1964, from nest material of Light-mantled Sooty Albatross (*Phoebastria palpebrata*), hand collected, sg-206d. Shackleton's Cross, 27.XI.1963, under paper sack among tussock grass, near sealevel, sg-74a. King Edward Cove, 14.XI.1963, under rocks on beach, sg-8e. Brown Mountain, 14.XI.1963, from tussock grass, sealevel to 150 m, sg-32d. Gun Plain, 4.XII.1963, under board on *Rostkovia* meadow, hand

collected, sg-83b. King Edward Cove, 14.XI.1963, from rock crevices near beach, sg-12e. Brown Mountain, 14.XI.1963, under moss and rocks, sealevel to 150 m, sg-30b. Gull Lake, 13.XI.1963, under moss and rocks, sealevel to 150 m.

Stromness Peninsula, Husvik, 25.XI.1963, under moss and rocks, sealevel to 150 m, sg-76c. Husvik Valley, 21.XII.1963, under rocks, sealevel to 150 m, sg-95b. Husvik, 9.I.1964, from moss, sealevel to 150 m, sg-116. Husvik Valley, 21.XII.1963, from nest material of Dominican Gull (*Larus dominicanus*), Berlese funnel, sg-45c. Husvik Valley, 21.XII.1963, under rocks, sealevel to 150 m, sg-105 b. Fortuna Bay Pass, 8.I.1964, on snow surface, 300–450 m, sg-161c. Husvik, under rocks, bones and boards, sealevel to 150 m, sg-60b. Stromness Valley, 7.I.1964, under rocks, sealevel to 150 m, sg-152d. Husvik Valley, Bay of Isles, I.1961, moss from sample drier, sg-55e. Husvik Valley, from moss, sealevel to 150 m, sg-113b. Husvik, under stones by waste guard near ground, sg-34b. Leith Harbor Valley, 26.XII.1963, from pond, sg-129a. Alert Cove, 20.XII.1963, under rocks, sealevel sg-97d. Busen Peninsula, Olsen Valley, 21.XII.1963, under rocks, 150–300 m. Olsen Valley, 27.XII.1963, under rocks sealevel to 150 m, sg-1266. Allan Bay Valley, 3.I.1964, under rocks, sealevel to 150 m, sg-148d, sg-139d, sg-147c. Carlita Bay, 31.XII.1963, under rocks near beach, sg-131d, sg-131b. The Crutch, 3.I.1964, under rocks, sealevel to 150 m, sg-141d. Enten Bay, 7.XI.1963, from tussock grass and *Acaena* near sealevel, sg-27c. Jasen Harbor, 3.I.1964, under rocks, sealevel to 150 m, sg-146d.

Barff Peninsula, Sorling Valley, 21.I.1964, under moss and rocks, sealevel to 150 m, sg-178e. Ocean Harbor Beach, 16.I.1964, under rotting kelp and rocks on beach, sg-180b. Ocean Harbor Valley, 16.I.1964, under moss and rocks, 150–300 m, sg-176e. Lönnberg Valley, 25.I.1964, under moss and rocks, 300–450 m, sg-181d.

Bird I., Wanderer Valley, 25.V.1963, on snow surface, bi-272b. Wanderer Valley, from tussock grass debris, 23–30 m. Berlese funnel, bi-16c. Wanderer Valley, 29.VII.1963, from nest material of Wandering Albatross, 7.6–17.5 cm depth, Berlese funnel, bi-317c. Wanderer Valley, 19.IV.1963, from tussock grass, 60 m, bi-210c. Wanderer Valley, 19.IV.1963, from tussock grass, 113 m, bi-212c. Wanderer Valley, 18.I.1963, bi-26c. Wanderer Valley, 26.III.1963, under rocks on scree, bi-107b. Bandersnatch, 27.II.1963, under rocks, 150 m, bi-44b. Bandersnatch, 13.III.1963, ex surface of moss (5.8°C) 40 m, bi-69c. Bandersnatch, 18.III.1963, ex moss surface (6.5°C.) 30 m, bi-68e. Bandersnatch, 26.II.1963, under rocks, over 90 m, bi-42c. Bandersnatch, 25.III.1963, under rock, very wet conditions, 80 m, bi-106c. Sound Coulm, 14.III.1963, on moss surface, (5.5°C.) 30 m, bi-73c. Sound Coulm, 24.V.1963, on snow surface, 60 m, bi-267e. Sound Coulm, 7.III.1963, under rocks and moss 60–90 m, bi-61d. Mountain Coulm, 8.III.1963, under rocks and moss, 90 m, bi-64f. Molly Hill, 13.III.1963, bi-65c, bi-63b. Freshwater Bay, 3.V.1963, from snow surface, bi-118c. North Valley, 22.IV.1963, under rocks in scree, 110 m, bi-225c. Top meadows, 22.IV.1963, from tussock by handnet sweeps, c.75 m bi-227e.

Right Whale Bay, 6.XI.1963, under moss and rocks, sealevel to 150 m, sg-15c. Right Whale Bay, 30.XI.1962, under moss and rocks and in tussock, sealevel to 150 m, sg-1d. Doris Bay, 7.II.1964, on scree under rocks, sealevel to 150 m. sg-194c. Johan Bay, 23.I.1961, from moss, N.V. Jones, sg-21d. Bay of Isles, Murphy Wall, 22.I.1961, from moss on scree, N.V. Jones, sg-131c. Kelpbugten, 15.I.1961, from moss drier, sg-15e. Ocean Harbor, 14.I.1961, from antlers in tussock grass, N.V. Jones, sg-11b, sg-17d.

#### Genus *Perimaso* Tambs-Lyche, 1954

*Perimaso grytvikensis* Tambs-Lyche Fig. 4, 11–15.

*Perimaso grytvikensis* Tambs-Lyche, 1954, *Sci. Res. Norw. Antarc. Exped.* **35**: 9.

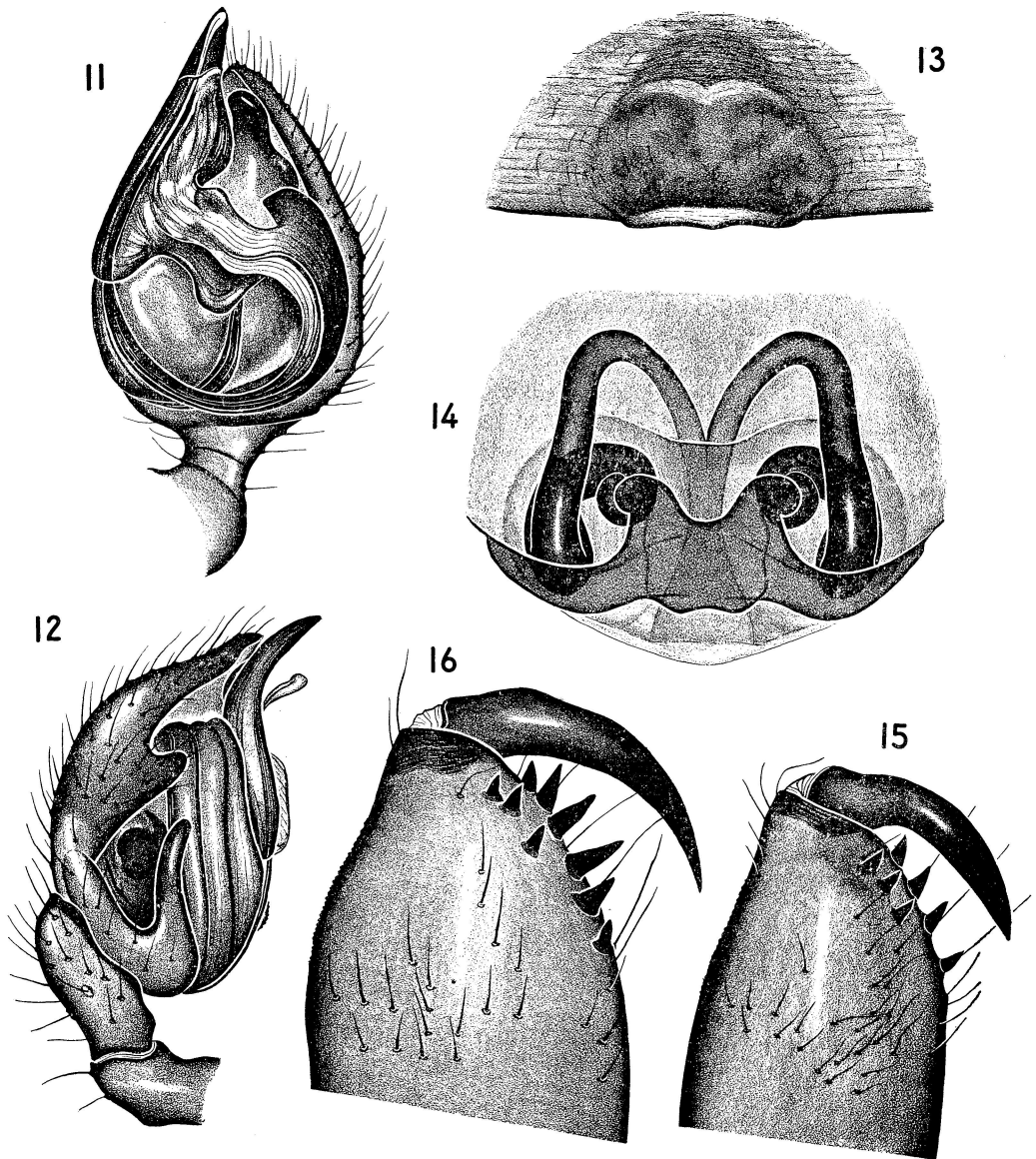


Fig. 11-15, *Perimaso grytvikensis* Tambs-Lyche: 11, ventral view, ♂ palp; 12, retrolateral view, ♂ palp; 13, epigynum; 14, internal genitalia from above; 15, Chelicera, ♀. 16, *Notiomaso australis* Banks, ♀ Chelicera.

♀. *Measurements*: Carapace, Length 1.33; width 1.01. Abdomen, Length 2.34; width 1.53.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Leg 1	1.06	0.39	0.95	0.84	0.53	3.77
Leg 2	1.04	0.36	0.91	0.84	0.53	3.68
Leg 3	0.93	0.34	0.81	0.81	0.53	3.42
Leg 4	1.21	0.33	1.21	1.08	0.65	4.48
Palp	0.41	0.17	0.28		0.46	1.32

*Color:* Carapace dark brown with 3 black bands extending back from eyes to fuse with a median patch on posterior surface of head. A median dark band on thoracic region extends through fovea from which 3 further bands extend out on each side. Abdomen steel-gray without chevrons on dorsal surface but somewhat paler on ventral surface. Appendages yellow-brown. *Carapace:* Low, highest behind eyes. Cephalic groove absent. Fovea distinct. *Eyes:* From above, anterior row recurved and posterior row slightly procurved. From in front, anterior row gently recurved and posterior row equally procurved. Ratio of AME:ALE. PME:PLE = 3:5:5:5. The AME separated from each other by 3/3 and from ALE by 5/3 of diameter of an AME. Lateral eyes contiguous. PME separated from each other by 5/3 and from PLE by 3/3 of the diameter of an AME. Median ocular quadrangle is wider behind than in front in ratio of 15:9 and wider behind than long in ratio of 15:13 Height of clypeus equal to  $3 \times$  diameter of an AME. *Sternum:* Longer than wide in ratio of 13:12. Anterior margin straight and lateral margins slightly indented at base of coxae. Posterior projection broadly truncate and separates coxae 4 by a distance equal to width of a coxa *Maxillae:* Longer than wide in ratio of 7:4. Lateral margins straight and parallel and anterior margin rounded. *Labium:* Strongly rebordered. Wider than long in ratio of 12:7. *Chelicerae:* Promargin with 4 and retromargin with 3 teeth. Teeth strong and evenly spaced (Fig. 15). *Palp:* Bristles present on distodorsal surface of the patella and proximal and distal surfaces of tibia. Tibia with 4 trichobothria arranged 1.2.1. Tarsal organ subdistal. Tarsal claw absent. *Legs:* Ventral bristles on legs 1 and 2 barely differentiated from normal hairs and not discernible on legs 3 and 4. Bristles present on distodorsal surface of patella and proximo- and distodorsal surfaces of tibia of all legs. There are 5 trichobothria on tibia of legs 1 and 2 arranged 1.1.2.1. and 6 on tibiae 3 and 4 arranged 1.1.1.2.1. There is a single trichobothrium on metatarsi of 1st 3 pairs of legs but none on metatarsus 4. Superior claws with 7 teeth increasing in length distally; inferior claw with 2 teeth. There are 2 serrate bristles at base of claws. Tarsal organ at 2/3. *Abdomen:* Colulus triangular with a transverse row of 3 hairs. The epigynum is in the form of a simple plate with posterior margin rebordered. The internal genitalia are tubiform and are shown in fig. 14.

♂. *Measurements:* Carapace, Length 1.17; width 0.91. Abdomen, Length 1.71; width 1.09.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Leg 1	0.92	0.38	0.76	0.58	0.53	3.17
Leg 2	0.86	0.34	0.72	0.65	0.51	3.08
Leg 3	0.90	0.33	0.74	0.68	0.51	3.16
Leg 4	1.07	0.33	1.09	1.08	0.56	4.13
Palp	0.53	0.19	0.16		0.49	1.37

Similar in structure to ♀. Double row of bristles present on ventral surfaces on femur, tibia and metatarsus of 1st 2 pairs of legs. There seems to be only 3 trichobothria on tibia of 1st 2 pairs of legs while legs 3 and 4 are as described for ♀. Palp shown in fig. 11, 12. Tibia extends over cymbium for a short distance but does not form a process. There are 2 trichobothria on tibia. The paracymbium and retrolateral lobe of the cymbium is well developed and is shown in fig. 4, 12.

Holotype ♀ (Zoological Museum, Oslo), South Georgia, Grytviken, 25.XII.1909.

RECORDS. SOUTH GEORGIA: Unknown locality, I-III, 1961, N.V. Jones, sg-67-2d. Royal Bay, Moltke Harbor, 18.III.1964, under rocks on beach. Upper Valley, 18.III.1964, under moss and rocks 150-300 m. Recession Valley, 18.III.1964, under rocks, 300-450 m, Grytviken Peninsula, Hestesletten, 12.XII.1963, under rocks, sealevel to 150 m. Brown Mountain, 14.XI.1963, under rocks, sealevel to 150 m, sg-35c. sg-33c. Gull Lake, 13.XI.1963, under moss and rocks, sealevel to 150 m, sg-40. Gull Lake, under rocks, sealevel to 150 m, hand collected next to stream, sg-79c. Husvik Valley, 27.I.1961, under rocks and in rock crevices next to stream between Husvik and reservoir, sg-35e. Busen Peninsula, Jasen Harbor, 3.I.1964, under rocks, sealevel to 150 m, sg-144d.

#### Genus *Micromaso* Tambs-Lyche, 1954

*Micromaso flavus* Tambs-Lyche

Fig. 17-21.

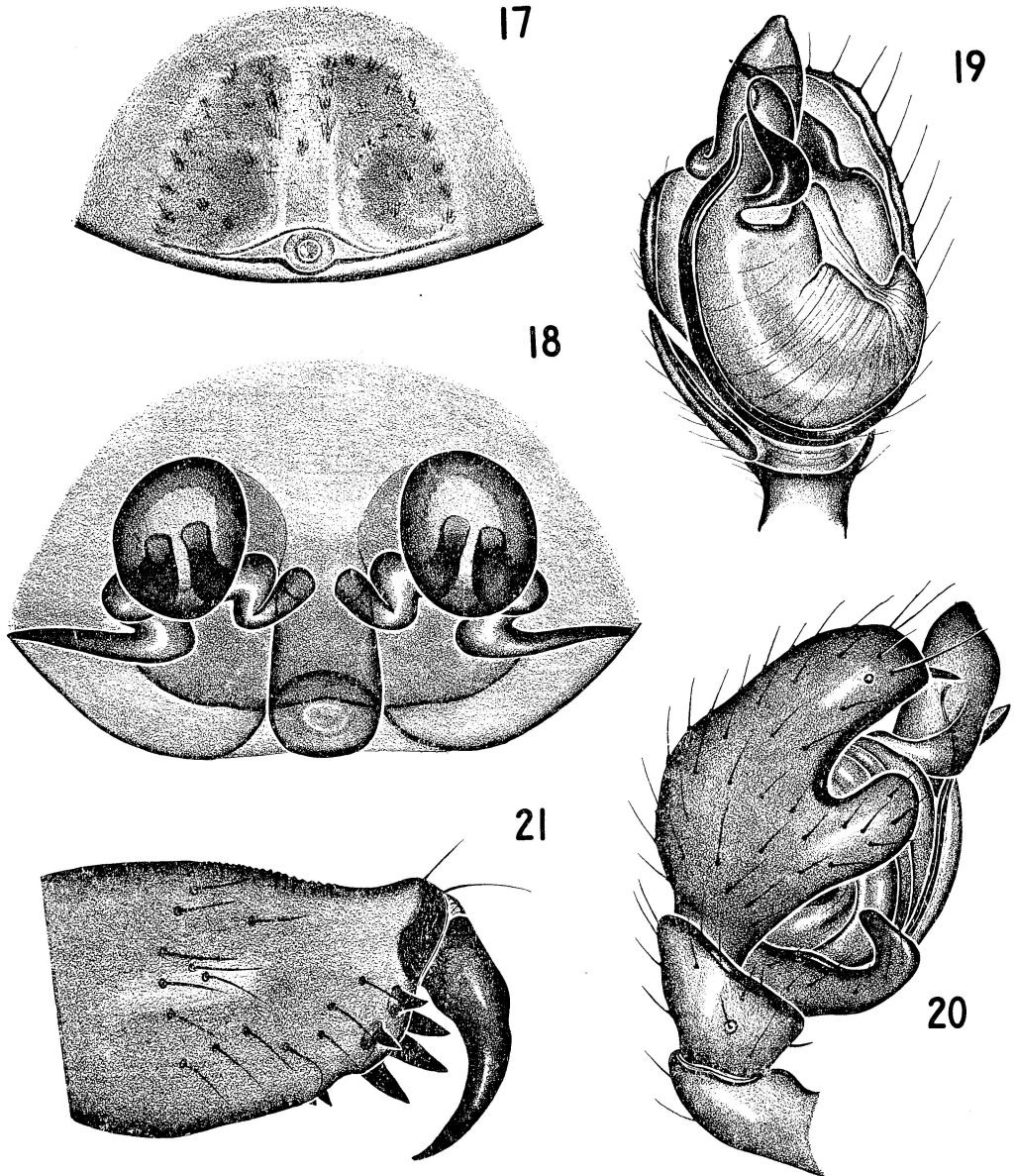


Fig. 17-21, *Micromaso flavus* Tambs-Lyche: 17, Epigynum; 18, internal genitalia from above; 19, ventral view, ♂ palp; 20, retrolateral view, ♂ palp; 21, ♀ chelicera.



*Micromaso flavus* Tambs-Lyche, 1954, *Sci. Res. Norw. Antarc. Exped.* **35**: 11.

♀. *Measurements*: Carapace, length 0.97; width 0.67. Abdomen, length 1.73; width 1.19.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Leg 1	0.73	0.21	0.67	0.53	0.41	2.54
Leg 2	0.66	0.23	0.51	0.51	0.40	2.31
Leg 3	0.59	0.23	0.47	0.49	0.36	2.14
Leg 4	0.79	0.21	0.69	0.69	0.41	2.79
Palp	0.28	0.11	0.16		0.29	0.84

*Color*: Except for black pigment around the eyes the cephalothorax and appendages are yellow. Abdomen cream, without markings. *Carapace*: Low, head region not strongly defined. Fovea lacking. *Eyes*: The whole eyegroup apart from a narrow strip between the PME is heavily shaded with black pigment. From above, posterior row is straight and anterior gently recurved. From in front the anterior row is straight and the posterior row gently procurved. Ratio of AME:ALE:PME:PLE = 3 : 5 : 5 : 4. AME separated from each other by 1/3 and from ALE by 2/3 diameter of an AME. Lateral eyes separated by 1/3 of diameter of an AME. PME separated from each other by 2/3 and from the PLE by 1/3 diameter of an AME. Median ocular quadrangle wider behind than in front in ratio of 12 : 7 and longer than wide behind in ratio of 14 : 12. Height of clypeus equal to 2 × diameter of an AME. *Sternum*: Longer than wide in ratio of 31 : 26. Anterior margin straight, lateral margins slightly indented at base of each coxa. Posterior margin obtusely rounded between coxae 4 which are separated by a distance equal to slightly more than diameter of a coxa. *Maxillae*: Slightly convergent. *Labium*: 2 × as wide as long. Anterior margin strongly rebordered. *Chelicerae*: Promargin with 1 small tooth at base of furrow and 3 strong teeth more distal. Retromargin with 2 small teeth. *Palp*: Bristles present on distodorsal surface of patella and 1 proximal and 2 distal on tibia. Tarsus with spines, d.l.o.p.l.l.v.l.l. Two trichobothria on tibia. Tarsal organ subdistal. Claw absent. *Legs*: The double row of bristles on legs of ♂ represented in ♀ by hairs which are barely discernible from normal hairs. Single bristle present on distodorsal surface of patella of 1st 3 pairs of legs but appears to be absent on patella 4. Tibia with 2 dorsal bristles, 1 proximal and the other subdistal. Tibia of leg 1 with 4 trichobothria arranged 1.2.1. but 3 trichobothria in a single row present on tibiae of remaining legs. Metatarsi 1-3 with a single trichobothrium. None on metatarsus 4. Superior claws with 6 teeth increasing in length distally. Inferior claw with 2 teeth. Two serrate bristles present at base of claws. *Abdomen*: Colulus triangular. Epigynum simple as shown in fig. 17. There is a median tubular process opening near epigynal groove and from base of this structure a pair of convoluted tubes pass to a pair of spherical receptacula.

♂. *Measurements*: Carapace, length 0.89; width 0.61. Abdomen, length 1.18; width 0.97.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Leg 1	0.73	0.21	0.52	0.41	0.36	2.23
Leg 2	0.69	0.21	0.51	0.43	0.34	2.18
Leg 3	0.61	0.19	0.44	0.39	0.32	1.95
Leg 4	0.75	0.19	0.69	0.55	0.37	2.55
Palp	0.30	0.11	0.19		0.31	0.91

Similar in general structure to ♀. Legs 1 and 2 are provided with a double row of short, stout bristles on ventral surface of all segments except the patella. These ventral bristles are weakly present on legs 3 and 4 where they are similar to ordinary hairs. The form of the palp is shown in fig. 19-20. Tibia without process, with 2 trichobothria. Paracymbium and retrolateral lobe well developed. (Fig. 2, 20.)

Holotype ♂ (Zool. Mus., Oslo), South Georgia, Grytviken, 25.XII.1909.

RECORDS. SOUTH GEORGIA. Unknown sources, I-III, 1961, N.V. Jones. Brown Mountain, 14.XI.1963, under rocks in scree. Grytviken Peninsula, Gull Lake, under moss and rocks, sealevel to 150 m, Royal Bay, Moltke Harbor, Lower Valley, 11.III.1964, from tussock, sealevel to 150 m, sg-228e.

#### Genus *Neomaso* Forster, new genus

Eye region of ♂ not modified. From above, anterior row of eyes gently recurved, posterior row straight.

AME smallest. Height of clypeus equal to  $5 \times$  diameter of an AME. Ventral bristles on legs only weakly developed. Male palp with a short and stout rodlike embolus originating mesially.

Type-species: *Neomaso claggi* n. sp.

This genus differs strongly from the other 3 genera described from South Georgia with the much wider clypeus and different form of the bulb of the ♂ palp. In the other 3 genera the embolus is spiniform and originates from the base of the bulb.

**Neomaso claggi** Forster, new species. Fig. 1, 22–26

♂. *Measurements*: Carapace, length 0.89; width 0.64. Abdomen, length 0.87; width 0.59.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Leg 1	0.51	0.19	0.41	0.40	0.36	1.87
Leg 2	0.49	0.17	0.38	0.38	0.36	1.78
Leg 3	0.42	0.16	0.33	0.35	0.26	1.52
Leg 4	0.55	0.23	0.47	0.42	0.36	2.03
Palp	0.33	0.11	0.15		0.31	0.90

*Color*: Cephalothorax and appendages pale yellow to yellow brown. Abdomen gray with 4 faint pale bands across dorsal surface behind midline. *Carapace*: Smooth and shiny with a row of 5 hairs down median surface of head. Clypeus rises vertically to eyes and surface behind eyes slopes gently down to posterior margin. Cervical groove and fovea indistinct. *Eyes*: Eyegroup occupies 9/10 of width of head. From above, anterior row gently recurved and posterior row straight. From in front, anterior row recurved and posterior row less strongly procurved. Ratio of AME:ALE:PME:PLE = 4 : 8 : 6 : 6. AME separated from each other by a distance equal to 1/4 and from ALE by 4/4 diameter of an AME. Lateral eyes contiguous. PME separated from each other, and from PLE, by 5/4 of the diameter of an AME. Median ocular quadrangle wider behind than in front in ratio of 17:10 and longer than wide behind in ratio of 20. 17. Height of clypeus equal to  $5 \times$  diameter of an AME. *Sternum*: Wider than long in ratio of 25:23. Anterior margin straight, lateral margins evenly curved. Terminated behind obtusely between coxae 4 which are separated by a distance equal to width of a coxa. *Maxillae*:  $2 \times$  as wide as long. Slightly convergent. Serrula and scopula well developed. *Labium*: Wider than long in ratio of 8:5. Anterior margin strongly rebordered. *Chelicerae*: Both margins with 4 teeth but those on promargin strong and widely spaced while on retromargin teeth are smaller and are grouped distally. *Palp*: Distal retrolateral surface of tibia directed forward to form a short lobe. Paracymbium strongly developed as shown in fig. 1, 22. Lobe on retrolateral margin of cymbium well developed and there is a further lobe on dorsal surface. Form of bulb shown in fig. 22, 23. Tibia with 3 trichobothria. *Legs*: 4123. There is a double row of bristles on ventral surface of femur, tibia, metatarsus and tarsus of all legs but they are not strongly developed. There is a bristle on proximodorsal surface of the patella and tibia of all legs. Trichobothria: Leg 1, Tibia, 1.2.1. Metatarsus, 1. Leg 2, Tibia, 2.2.1. Metatarsus, 1. Leg 3, Tibia, 1.2.1. Metatarsus, 1. Leg 4, Tibia, 1.1.1.2.1. Metatarsus, 0. Superior claws with 2 teeth. Inferior claw with a single tooth. Two serrate bristles at base of claws. Tarsal organ situated between 1/3 and 1/2 of length of tarsus. *Abdomen*: Colulus well developed, subtriangular, with a median transverse row of 3 hairs.

♀. *Measurements*: Carapace, length 0.78; width 0.59. Abdomen, length 1.19; width 0.92.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Leg 1	0.51	0.21	0.41	0.39	0.35	1.87
Leg 2	0.49	0.17	0.39	0.33	0.31	1.69
Leg 3	0.41	0.17	0.35	0.33	0.28	1.54
Leg 4	0.56	0.18	0.47	0.41	0.33	2.05
Palp	0.28	0.08	0.16		0.26	0.78

Similar in general color and structure to male. Patella and tibia of palp with a single distodorsal bristle. Tibia with 4 trichobothria arranged 2.2. Tarsal organ at 2/3 of length of segment. Tarsal claw absent. Epigynum distinctive and in form of a sclerotized lobe with the form shown in fig. 24. There is a single pair of reniform receptacula at base of lobe, from which 2 broad ducts lead down to paired openings at distal extremity (Fig. 25)

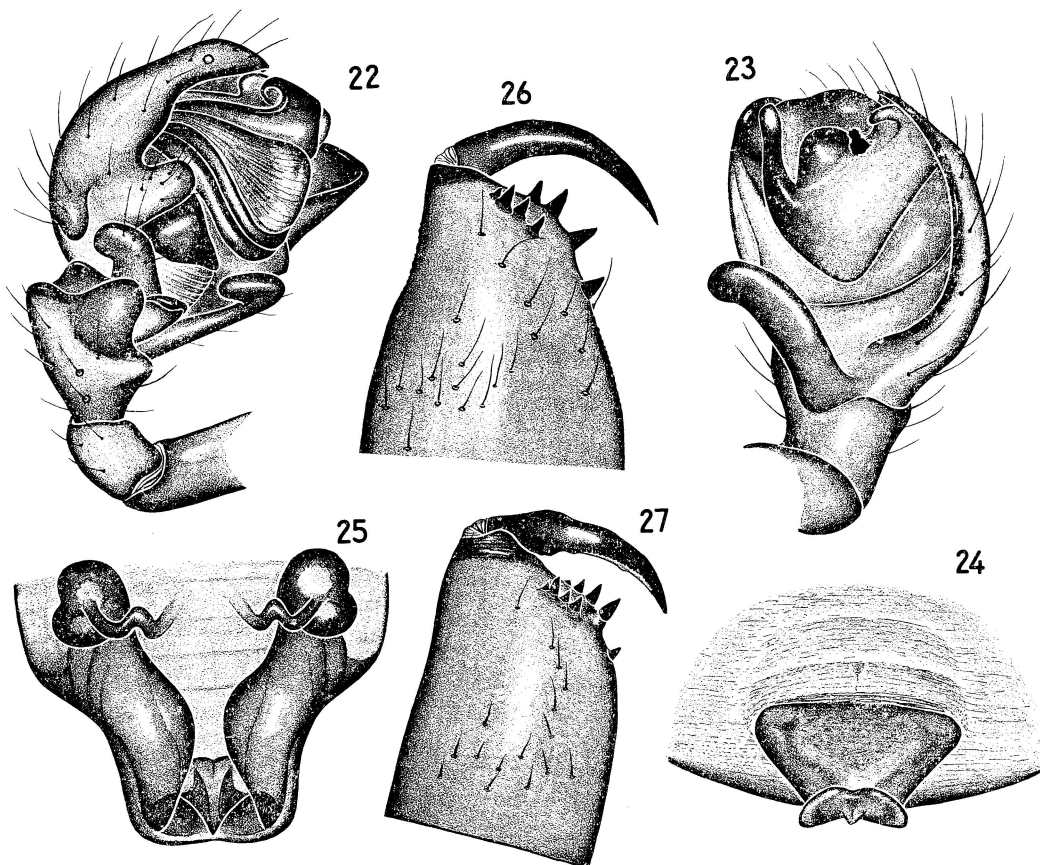


Fig. 22-26. *Neomaso claggi* n. gen. n. sp.: 22, retrolateral view, ♂ palp; 23, ventral view, ♂ palp; 24, epigynum; 25, internal genitalia from above; 26, ♀ chelicera. 27, Chelicera of specimen from Terra Nova Bay, Antarctica.

Holotype ♂ (BISHOP 8827), South Georgia, Bay of Isles, Pauls Beach, 22.I.1961, N.V. Jones; allotype ♀, Royal Bay, Moltke Harbor, Lower Valley, under rocks, sealevel to 150 m, H. B. Clagg.

RECORDS. SOUTH GEORGIA: Grytviken Peninsula, King Edward Cove, 14.XI.1963, from rock crevices near beach, sg-12e. Brown Mountain, 14.XI.1963, under moss and rocks, sealevel to 150 m, sg-76c, sg-30b. Brown Mountain, 14.XI.1963, under rocks in scree, sealevel to 150 m, sg-34c. Cumberland East Bay, 24.II.64, from nest material of Light Mantled Sooty Albatross (*Phoebastria palpebrata*) sg-206d, sg-195b. Grytviken, 7.III.1961, random sample at whaling station, N.V. Jones, sg-65d. Doris Bay, 7.II.1964, under rocks, on scree sealevel to 150 m, sg-194c. Bay of Isles, Paul Beach, 22.I.1961, from moss among tussock grass, N.V. Jones, sg-30d. Ocean Harbor, Hound Bay, 14.I.1961, from moss drier, sg-12f. Stromness Peninsula, Husvik Valley, 21.XII.1963 under rocks, sealevel to 150 m, sg-95b. Husvik, 9.I.1964, from moss, sealevel to 150 m, sg-116. Husvik Valley, 21.XII.1963, from moss, sealevel to 150 m, sg-109b. Leith Harbor Valley, 26.XII.1963, under rocks sealevel to 150 m, sg-127b. Busen Peninsula, Carlita Bay, 31.XII.1963, under rocks near beach, sg-132d.

I have pleasure in naming this species for Mr Harry B. Clagg who was responsible for obtaining the extensive collections on which this paper is based.

#### APPENDIX

##### *Record from Antarctica*—Family Micryphantidae

A portion of the cephalothorax of a small spider was collected by Mr U. Kinet from Terra Nova Bay in 1965. The data with the specimen are:

Location 28. Flotation. 90 m elevation, Northern Foothills, Terra Nova Bay, Antarctica, 5 November 1965, U. Kinet.

The specimen consists of a portion of the carapace and sternum, 2 chelicerae and the coxae of the legs, but the appendages are missing. There is no trace of internal structure and the specimen may be portion of a cast skin. Because the palp is missing it is not possible to determine whether the specimen is ♂ or ♀ or in fact if it is mature.

It would appear to be a Micryphantidae and may be related to the spiders recorded from South Georgia. While the occurrence of this single specimen does not in itself demonstrate the presence of spiders in Antarctica as the specimen could be the remains of a windborne spider or exuviae, it is described below to permit comparison with any future records made in Antarctica or the subantarctic islands. The remains do not fit the descriptions of any species recorded from the subantarctic region to date.

Head region and part of the thoracic region of the carapace is present. Length of carapace approximately 0.75 mm. Eye region appears to be slightly raised. From above, anterior row gently recurved while posterior row equally procurved. Ratio of AME:ALE:PME:PLE = 6 : 6 : 6 : 5. AME are separated from each other and from ALE by a distance equal to 1/2 of diameter of an AME. Lateral eyes contiguous. PME are separated from each other by a distance equal to 5/6 and from the PLE by 6/6 of diameter of an AME. Median ocular quadrangle wider behind than in front in ratio of 17 : 15 and longer than wide behind in ratio of 18 : 17. Height of clypeus appears to be between 2 and 3 × diameter of an AME. Sternum distorted but appears to be as long as wide, with posterior portion truncate. Little can be seen of the maxilla except for the remains of a thick scopula. Labium not present. Chelicerae provided with 5 teeth on promargin of which median 3 are strongest and the distal smallest. The basal tooth is widely separated from the remaining 4 which are grouped together. Retromargin with 4 smaller teeth, contiguous at base and placed on distal surface near base of fang. Distal tooth smallest. 'stridulating ridges' clearly visible. (Fig. 27).

There is little point in speculating too widely on the possible presence of spiders in Antarctica on the basis of the present specimen other than noting that if such populations do exist it is expected that they would be micryphantids similar to the specimen described above. Extensive searching in a number of areas in Antarctica has failed to produce any supporting evidence such as silken structures which might confirm the presence of the group in this area.

#### REFERENCES

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