SPIDERS FROM THE SUBANTARCTIC ISLANDS OF NEW ZEALAND

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Abstract

Material from the Auckland, Campbell, Bounty, and Antipodes Islands has been examined, including all of the type specimens of species previously recorded from these areas. Eight new species are described and two new genera are established bringing the total fauna to twenty-one. Two further species are recorded but not described owing to inadequate material. A close relationship is shown between the New Zealand fauna and that of the areas under consideration.

INTRODUCTION

The present paper is based in the main on the material collected by the members of the Cape Expedition from the Auckland and Campbell Islands between 1941 and 1945, but in order to make a more complete survey of the spider fauna of the Subantarctic Islands of New Zealand further collections made from the Auckland and Campbell Islands by Mr. J. H. Sorensen, from the Auckland Islands by Mr. R. K. Dell, and from the Bounties and Antipodes Islands by Mr. E. G. Turbott and Mr. R. K. Dell have been included.

Fortunately the type material for all of the species previously described from these areas has been available for re-examination and this has greatly facilitated the study of the present collections. The known spider fauna from the areas under consideration is now as follows:—

Auckland Islands

Family Dysderidae
**Subantarctia turbotti* n.gen.n.sp.
Family Amaurobiidae
Ixeuticus rubrioides (Hogg)
Family Agelenidae
Gohia falxiata (Hogg)
Family Hahniidae
**Hahnia* sp.
Family Clubionidae
Chiracanthium antarcticum (Berland)
**Chiracanthium sorenseni* n.sp.
**Chiracanthium wenhami* n.sp.
Family Amaurobioididae
Amaurobioides maritima Cambridge
Family Lycosidae
**Lycosa* sp.

Family Perissiblemmidae
Laestrygones minutissimum (Hogg)
Family Argiopidae
Araneus pustulosus Walck.
Family Theridiidae
**Theridion cruciferum* Urquhart
**Icona alba* n.gen.n.sp.
Family Linyphiidae
Mynoglenes marrineri Hogg
Mynoglenes insolens Simon
**Ostearius delli* n.sp.
Family Attidae
Clynotis barresis Hogg
Cosmophasis archeyi Berland
Family Textricellidae
**Textricella aucklandica* n.sp.

Campbell Island

Family Amaurobiidae
Ixeuticus rubrioides (Hogg)
Family Clubionidae
**Chiracanthium sorenseni* n.sp.
Family Amaurobioididae
Amaurobioides maritima Cambridge
Family Perissiblemmidae
Laestrygones minutissimum (Hogg)
Family Argiopidae
Araneus pustulosus Walck.
Family Linyphiidae
Mynoglenes marrineri Hogg
Mynoglenes insolens Simon
**Ostearius delli* n.sp.
Family Attidae
Clynotis barresis Hogg

Antipodes Island

Family Linyphiidae
**Mynoglenes marrineri* Hogg
**Ostearius delli* n.sp.
**Drapetsica australis* n.sp.
Family Erigonidae
**Erigone antipodiana* n.sp.
Family Attidae
**?Clynotis barresis* Hogg

Bounty Island

Family Clubionidae
Chiracanthium nummosum (Hogg)
Family Amaurobioididae
Pacificana cockayni Hogg

* New records.

Berland (1931) records *Rubrius rufus* from Campbell Island giving as the locality "Hillside, Bluff, Campbell Is". He also records *Mynoglenes marrineri* Hogg from the same locality. Dr. G. Archey who collected the material examined by Berland informed me that these records are erroneously attributed to Campbell Island and that the specimens were collected by him from the hillside at Bluff in the South Island of New Zealand before sailing to the subantarctic islands. The specimens were accidentally included in the collection forwarded to Berland for determination.

It would seem probable that the male specimen of *Cosmophasus archeyi* Berland was also collected from this locality as it has not been subsequently collected from the Auckland Islands. The female specimen attributed by Berland to this species is *Clynotis barresis* Hogg.

Relationships of the Fauna

The spiders of the Auckland and Campbell Islands show very close affinity with the New Zealand fauna. The New Zealand fauna itself is very poorly known. Probably only one-third or even less of the total fauna has been described, but in spite of this limiting factor, all of the genera recorded from these two areas, with the possible exception of *Subantarctia* n.gen. have been recorded, or are represented in collections, from New Zealand. Of the eighteen species listed, nine are endemic, one is known from the Snares, six are known from New Zealand or the Chathams and two are not specifically named. Future work on the New Zealand and Chatham Island fauna will, I am sure, reduce the endemic list still further.

The records of five species from the Antipodes Islands in the present paper are the first from this island. Of these five species, two are endemic while the remaining three are also found on the Auckland and Campbell Islands.

The fauna of Bounty Island is poor, as might be expected from the bare and exposed conditions encountered on this island. It is of interest, however, to note that the two species recorded are both endemic and one, *Pacificana cockayni* Hogg is placed in an endemic genus.

ACKNOWLEDGEMENTS

I am deeply indebted to the Cape Expedition Committee who have permitted me to report on the collections made during the course of the Cape Expedition and to Messrs. J. H. Sorensen, R. K. Dell, and E. G. Turbott, who have made special efforts to obtain further material from the various subantarctic islands they have visited since the termination of the Cape Expedition. I wish to express my thanks to Dr. H. D. Skinner, Director of the Otago Museum, for permitting me to obtain on loan the types of the spiders described by Hogg. I am also indebted to Mr. A. W. Parrott, who did many of the preliminary identifications of the Cape Expedition material.

LOCATION OF MATERIAL

The material examined is housed in the Canterbury Museum, Dominion Museum, and Auckland Museum, and the specimens in each institution are indicated by the prefixes C.M.A., D.M.Z/, and A.M. respectively.

SYSTEMATIC SECTION

Family *Dysderidae*

Genus *Subantarctia* n.gen.

Six eyes arranged in a relatively compact group, subequal, PME behind ALE. Carapace lacking fovea. Sternum with lateral extensions approaching similar extensions from carapace, fused posteriorly. Labium longer than wide, maxillae parallel. Margins of chelicerae toothed. Legs 2.1.4.3, lacking spines, trichobothria on tibiae and metatarsi of all legs. Two claws, homogeneous, pectinate on both pro- and retromargins, with prominent claw tuft. Pedipalp of female with well developed claw. Abdomen with two prominent pairs of spiracles near the epigynal groove. Colulus present.

Genotype *Subantarctia turbotti* n.sp.

This genus does not appear to have any close affinity with the previously known genera of this family but this is not surprising in view of our lack of knowledge of these spiders, which are abundantly represented in collections from both Australia and New Zealand. The presence of bipectinate claws separates the genus sharply from all other genera of the family. This character is of considerable interest, as it is one of the main characters normally used to separate this family from the Oonopidae.

Subantarctia turbotti n.sp.

Figs. 1–5

Cephalothorax: Length, 3·26; width, 2·23.
Abdomen: Length, 4·75; width, 2·78.

	Fem.	Pat.	Tib.	Met.	Tars.	Total
Leg 1	2·34	0·84	1·81	1·75	0·86	7·60
Leg 2	2·30	0·98	1·93	1·78	0·85	7·84
Leg 3	2·00	0·84	1·13	1·35	0·75	6·07
Leg 4	2·25	0·99	1·54	1·66	0·49	6·93
Pedipalp	0·75	0·38	0·45		0·81	2·09

Colour: The cephalothorax, sternum, and chelicerae are dark reddish-brown; legs and palp yellowish brown; abdomen uniform creamy white.

Carapace: Low, anterior margin slightly rounded, widening behind the eyes, widest between legs 2 and 3 where the width is equal to nine-thirteenths of the length. Fovea absent, carapace with a few fine, inconspicuous setae.

Eyes (Fig. 1): Six eyes arranged in a fairly compact group which takes up two-thirds of the width of the head. Ratio of eyes ALE : PME : PLE = 10:8:9. The PME are separated from the ALE by a distance slightly more than one-third of the diameter of one PME and from the PLE by a distance equal to their diameter. The PME are subcontiguous while the ALE and PLE are fully contiguous. The clypeus is small, sloping slightly, not as long as the diameter of a PME

FIGS. 1–5.—*Subantarctia turbotti* n.gen. n.sp. Fig. 1, Eye group of female; Fig. 2, Ventral surface of cephalothorax; Fig. 3, Prolateral view of chelicera; Fig. 4, Epigyne of female in transparent section; Fig. 5, Onychium and tarsal claws of leg 1 of female.

Chelicerae (Fig. 3): Stout, vertical, both pro- and retro-margin with two strong teeth. Along the prolateral margin are two rows of long setae, one row ciliated and the other smooth. There is a further row of five smooth setae on the distal retroventral surface.

Maxillae (Fig. 2): Parallel, more than twice as long as wide, palp inserted laterally at about half of its length.

Labium (Fig. 2): Separated from sternum. Longer than wide at base in ratio of 4:3. Outer margins converging, almost twice as wide at base, anterior margin strongly indented.

Sternum (Fig 2): Convex, granulate, longer than wide in ratio of 15:13. Anterior margin more or less straight, lateral margin with strong sharp projections which approach similar projections from the carapace but do not fuse. The posterior margin is truncate and fused with the carapace.

Legs 2.1.4.3.: Clothed with small pale setae, spines absent. All legs with a trichobothrium on the median surface of the tibia and the distal surface of the metatarsus. Two tarsal claws placed on a pronounced onychium, homogeneous, with a double row of pectinations, 10 outer and 12 inner (Fig. 5).

There is a pair of strong setae above the claws and a smaller pair one on each side of the onychium on the proximal ventro-lateral surfaces. The distal surface below the claws is provided with a thick scopula, which extends back along the ventral surface.

Pedipalps: Slightly longer than femur of leg 1. Two trichobothria on median surface of tibia. Tarsal claw well developed, curved, smooth

Abdomen: Cylindrical, slightly less than twice as long as wide clothed with short pale serrated setae. Spermathecae in transparent

section as shown in fig. 4. Two pairs of spiracles, conspicuous, posterior pair situated well behind the epigynal groove at slightly more than one-third of the length of the abdomen. The spinnerets are tubular and there is a small colulus.

Types: Holotype female, east shore of North Arm, Carnley Harbour, Auckland Is., 28 Oct. 1944, E. G. Turbott, under sticks (A.M.). Paratype ♀, same data in Canterbury Museum.

Family *Amaurobiidae*

Genus *Ixeuticus* Dalmas 1918

Ixeuticus rubrioides (Hogg)

Figs. 6–7

1909 *Amaurobius rubrioides* Hogg, Subantarct. Is. of N.Z., 1, p. 159
1909 *Badumna scylla* Hogg, Subantarct. Is. N.Z., 1, p. 160
1909 *Rubrius cruciferus* Hogg, Subantarct. Is. N.Z., 1, p. 169
1919 *Ixeuticus rubrioides* (Hogg), Dalmas, Ann. Soc. Ent. Fr., 86, p. 334
1931 *Ixeuticus rubrioides* (Hogg), Berland, Rec. Cant. Mus., 3 (6), p. 359
1931 *Rubrius cruciferus* (Hogg), Berland. Rec. Cant. Mus., 3 (6), p. 361

This is the most abundant species in both the Auckland and Campbell Islands and considerable variation in the development of the cribellum among specimens has resulted in individuals of this species being recorded in both cribellate and ecribellate families. I have re-examined the material studied by both Hogg and Berland and find that the specimens placed by them under *Rubrius cruciferus* are cribellate and identical with the specimens recorded by Berland as *I. rubrioides* and by Hogg as *A. rubrioides* from the Auckland and Campbell Islands. In some female specimens the cribellum is reduced in size and has the appearance of a broad colulus, but the calamistrum in all of these specimens is well developed. The Snares Is. species appears identical with specimens from the Auckland and Campbell Islands although as only immature specimens are available for examination there is still an element of doubt, which will only be settled after adult material from the Snares is examined. The type specimen of *Badumna scylla* however agrees with the Auckland and Campbell Islands species.

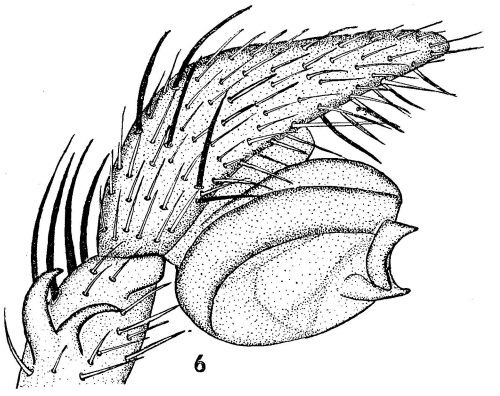
FEMALE

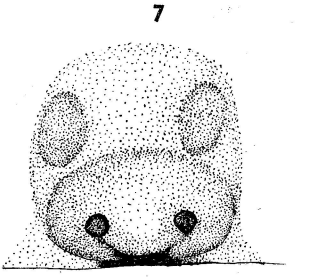
Eyes: Two rows occupying two-thirds of the head in the region of the eyes. The ratio of the eyes AME:ALE:PME:PLE = 3:4:5:4. The AME are separated from each other by a distance equal to 4/3 of the diameter of an AME and 8/3 from the ALE. The lateral eyes are contiguous. The PLE is separated from the PME by a distance equal to 13/3 of the diameter of an AME. The PLE are separated from each other by 7/3 and from the AME by 9/3 of the diameter of an AME. The median ocular quadrangle is wider behind than in front by a ratio of 17:10, length equal to the posterior width.

Legs: Calamistrum in single row on proximal half of metatarsus of fourth leg. Spines: First leg: Femur, dorsal 1.1.0.1, prolateral 1.0.2.0,

elsewhere 0; Patella 0; Tibia: ventral 0.2.2, elsewhere 0; Metatarsus: ventral 2.2.2, prolateral 0.0.1, elsewhere 0. Second leg: Femur, dorsal 2.1.1.1, elsewhere 0; Pat. 0; Tibia: dorsal 1.0.1.0.1, ventral 0.1.0.0.0, prolateral 0.0.0.1.0, retrolateral 0.0.0.1.0; Metatarsus: dorsal 0.0.2, ventral 2.1.1, prolateral 0.1.1, retrolateral 0.1.1. Third leg: Femur, dorsal 1.1.1.1.1, elsewhere 0; Patella 0; Tibia: dorsal 0, ventral 1.2.2, prolateral 0.1.1, retrolateral 0.1.1. Metatarsus, dorsal, 0.1.0.0., ventral 0.2.2.1, prolateral 1.0.1.2, retrolateral 1.0.1.2. Fourth leg: Femur, dorsal 1.1.1.1.1, elsewhere 0; Patella 0; Tibia: dorsal 0, ventral 1.1.1, prolateral 0.1.1, retrolateral 0.1.1. Metatarsus: dorsal 0.0.1.1, ventral 0.1.1.2, prolateral 1.0.1.1, retrolateral 0. Trichobothria distributed as follows: First leg: tibia 3 proximal, metatarsus and tarsus, 4 on distal half. Second and third legs: Patella 2 median, tibia 4 proximal, metatarsus 8, tarsus 7. Fourth legs: Patella 2 median, tibia 5, metatarsus 5 on dorsal surface beyond the calamistrum, tarsus, 2 short proximal, 2 long distal.

Abdomen: The cribellum is divided and in some specimens is short and somewhat raised giving it the general appearance of a colulus. The epigyne has the appearance in opaque view as shown in fig. 7.





FIGS. 6–7.—*Ixeuticus amaurobioides* (Hogg). Fig. 6, Genital bulb of male; Fig. 7, Epigynum of female.

MALE

Similar in appearance and general structure to female. Only the following features need mention.

Spines: First leg: Femur, dorsal 1.1.2; Patella 0; Tibia, dorsal 0.0.0.1, ventral 2.0.1.0, prolateral 0.1.0.1, retrolateral 1.1.0. Second leg: Femur, dorsal 1.1.1, elsewhere 0; Patella 0; Tibia: dorsal 1.0.0.1, ventral 2.0.1.2, prolateral 0.1.0.1, retrolateral 0.1.0.1; Metatarsus: dorsal 0.1.2, ventral 2.2.2, prolateral 1.1.1, retrolateral 1.1.1. Third leg: Femur, dorsal 1.1.1.1; elsewhere 0; Patella 0; Tibia: dorsal 0, ventral 2.2.2.0, prolateral 0.1.0.1, retrolateral 0.1.0.1; Metatarsus: dorsal 0, ventral 2.2.2, prolateral 1.1.2, retrolateral 1.1.2. Fourth leg: Femur, dorsal 1.1.1.1, elsewhere 0; Patella 0; Tibia: dorsal 0, ventral 2.2.2.0, prolateral 0.0.0.1, retrolateral 0.0.0.1; Metatarsus: dorsal 0.0.0.1, ventral 2.2.0.0, prolateral 0.0.1.2, retrolateral 0.0.1.2.

Trichobothria as in female.

The tibia of the pedipalp is provided with a strong spinous process

on the sub-distal retrolateral surface and a broad distal process. Th genital bulb is shown in fig. 6.

Types: Types of *Amaurobius rubrioides* Hogg from Snares Is *Badumna scylla* Hogg from Snares Is., *Rubrius cruciferus* Hogg fror Auckland and Campbell Islands in Otago Museum.

RECORDS

Auckland Islands

Port Ross, 1943 coll. ?, 1 ♂, 1 ♀ (C.M.A. 953); Ewing Is., 2 Jan., 1943, W. H. Dawbin, under skull of seal near beach, 1 ♀ (C.M.A. 960); Musgrave Peninsula, 3 Nov., 1943, S. Hancox, unde logs, 1 ♂, 2 ♀, 11 imm. (C.M.A. 962); Carnley Harbour, date ? Pollock, 2 ♂ (C.M.A. 963); Ewing Is., 15 Sept., 1943, coll ?, 1 ♂ 1 imm. ♀ (C.M.A. 964); Musgrave Peninsula, 28 April, 1943, S Hancox, on wood, 1 ♀ (C.M.A. 965); same locality, 19 April, 194 J. H. Sorensen (D.M. 2/944); Musgrave Peninsula, April, 1942, col ?, 3 ♂, 1 imm. ♀ (C.M.A. 966); Ewing Is., 26 Oct., 1943, coll. 1 ♀ (C.M.A. 967); among rocks below Mt. Dick, Adams Is., 1,300 ft 20 Feb., 1945, H. T. Wenham, 1 ♂, 1 ♀, 2 imm. (C.M.A. 969) Along Track to Lookout No. 2, 10 March, 1945, H. T. Wenham, 1 ♀ 2 imm. (C.M.A. 970); Ranui Cove, January, 1944, E. G. Turbott, 1 ♀ 1 imm. ♀ (C.M.A. 971); same locality, July, 1944, rocks above high water mark, E. G. Turbott, 1 ♀ (A.M.); in shed station No. 2 Tagua Bay, 29 May, 1944, coll. ?, 1 imm. ♀ (C.M.A. 972); Musgrav Inlet (sea level), April, 1944, A. Eden, 1 ♀ (C.M.A. 973); Ocean Is under fallen branches, late April, 1944, E. G. Turbott, 5 ♀, 2 imm. ♂ 2 imm. ♀ (A.M.); S.W. Trig, Adams Is., under rocks, 15 Sept 1944, E. G. Turbott, 1 ♀ with eggsac (A.M.); Pyramid Rock, unde stones on summit, 14 November, 1944, E. G. Turbott, 1 ♂, 2 ♀ (A.M.); Ocean Is., in sheep feeder, 9 July, 1944, E. G. Turbott, imm. ♂ (A.M.); Carnley Harbour, Sept., 1944, E. G. Turbott, 1 imm (A.M.); same locality, Aug., 1944, E. G. Turbott, 1 imm. ♂ (A.M.) Auckland Is., 18 Aug., 1944, E. G. Turbott, 1 imm. ♀ (A.M.) Summit Trig N.E. of Bristow Point, under rocks in snow, 12 Sept 1944, E. G. Turbott, 1 ♂, 1 ♀ (A.M.); Ranui Cove, March, 194 G. Easton, 1 imm. ♀ (A.M.); Ocean Is., late April, 1944, unde fallen branches, E. G. Turbott, 1 ♀, 9 imm. (A.M.); Musgrav Peninsula, 23 Aug., 1944, E. G. Turbott, 1 ♀ (A.M.); same locality 24 Aug., 1944, under rock, E. G. Turbott, 1 ♀ (A.M.); Summ Dome, Adams Is., 17 Nov., 1944, under rocks, E. G. Turbott, 1 ♀ (A.M.); same locality, 18 Nov., 1944, E. G. Turbott, 2 ♀, 7 imm. ♀ 1 imm. ♂ (A.M.); Ranui Cove, 30 June, 1944, A. Eden, 1 ♀ (A.M.) Summit, Mt. Ashley, 18 Aug., 1944, in lee of frozen rocks, E. G Turbott, 1 ♀ (A.M.), Chambres Inlet, late March, 1944, sea leve A. Eden, 2 ♀ (A.M.); Pyramid Rock, under stones on summit, 1 Nov., 1944, E. G. Turbott, 1 ♂, 2 ♀ (A.M.); Lake Shore, in fore South Coast, Adams Is., 19 Sept., 1944, M. G. Easton and E. G Turbott 1 ♀ (A.M.); Top of north ridge above landing, Disappoin ment Is., 1 Dec., 1944, M. G. Easton, 1 imm. (A.M.); Abov landing, Disappointment Is., near sea, 9 December, 1944, E. G Turbott, 1 imm. (A.M.); same locality, 9 Dec., 1944, in tussoc

E. G. Turbott, 1 ♀ ; M. G. Easton, 1 ♂ (A.M.) ; Stony Peak, 1923 ft., 16 April, 1945, M. G. Easton, 1 ♂ (A.M.) ; Auckland Is., April–May, 1944, E. G. Turbott, 2 ♂, 1 imm. (A.M.) ; Rose Is., Port Ross, 19 March, 1954, 2 ♀, 1 imm. ♂ (D.M. 2/977) ; Sandy Bay, Enderby Is., 18 March, 1954, R. K. Dell, 2 ♂, 4 ♀, 5 imm. ♀ (D.M. 2/981).

Campbell Island

Campbell Is., 1943, J. H. Sorensen, 4 ♂ (C.M.A. 955) ; same data 1 ♂ (C.M.A. 958) ; Tucker Cove, Valley, 12 Sept., 1947, under timber, J. H. Sorensen, 2 ♀ (D.M. 2/932) ; Tucker Cove, in old shed, 23 April, 1945, J. H. Sorensen, 1 ♂, 1 ♀ (D.M. 2/934) ; same locality, under logs, 29 April, 1945, J. H. Sorensen, 2 ♀ (D.M. 2/936) ; same locality, under old timber, 7 March, 1946, J. H. Sorensen, 2 ♀ (D.M. 2/937) ; same locality, ex lichen on trunks of *Dracophyllum scoparium*, 18 Aug., 1947, J. H. Sorensen, 4 imm. ♂ (D.M. 2/939) ; same locality, among old timber, 14 Nov., 1947, J. H. Sorensen, 2 ♂ (D.M. 2/940) ; 2 ♀, 2 imm. ♀, 1 imm. ♂ (D.M. 2/943) ; Courjolles, 8 Oct., 1945, J. H. Sorensen, 3 ♂, 6 ♀ (D.M. 2/931) ; Monument Harbour, under rocks above beach, 15 Nov., 1945, J. H. Sorensen, 3 ♀ (D.M. 2/933) ; Penguin Colony below Mt. Dumas, under stones, 17 Nov., 1945, J. H. Sorensen, 2 ♂, 4 ♀, 2 imm. (1 ♂, 1 ♀) (D.M. 2/935) ; Moubray Hill, ex leafmould, 10 Sept., 1947, J. H. Sorensen, 1 ♀ (D.M. 2/938).

Family *Agelenidae*

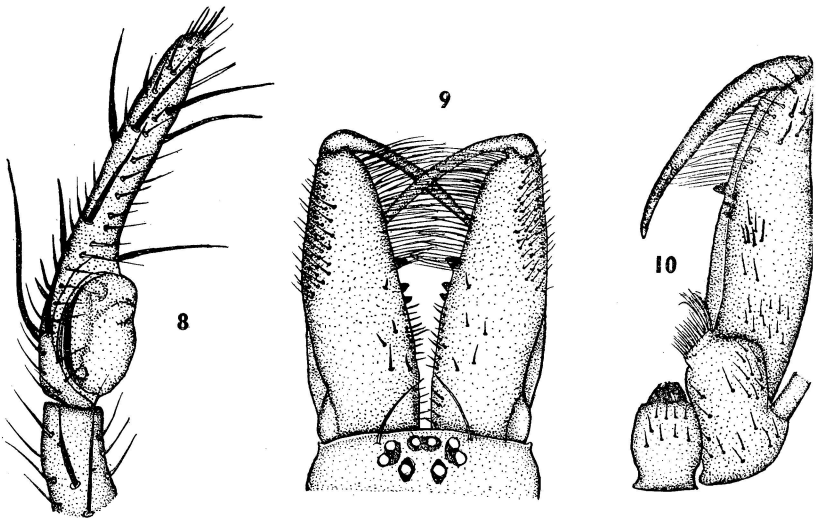
Genus *Gohia* Dalmas, 1918

Gohia falxiata (Hogg, 1909)

Figs. 8–10

1909 *Rubrius falxiatus* Hogg, Subantarct. Is. of N. Zeal., 1, p. 170
1918 *Gohia falcata* (Hogg), Dalmas, Ann. Soc. Ent. France, 86, p. 403

Hogg described this species from an adult male and an immature female. The immature female specimen is not present in the tube containing the male Type and is probably lost. Dalmas (1918) established a new genus for this species and suggested that the specific name should be altered to *falcata*. I have accepted Dalmas's generic placing but have used Hogg's original spelling for the specific name. It is unfortunate that the present collection contains only male specimens of this species because there is some doubt that this genus is correctly placed in the Agelenidae. There is a surprising similarity between this species and *Matachia ramulicola* Dalmas, which is a cribellate spider placed by Dalmas in a sub-family Matachiinae of the Psechridae. The adult male of this latter species is not known but Dalmas (1918) states that the shape of the apical segment of the pedipalp of an immature male suggests that the adult would have an elongate cymbium. There is no cribellum or calamistrum in the male specimens of *Gohia falxiata* but there is a broad area in front of the spinnerets which could indicate a non-functional cribellum as found in the adult males of other cribellate spiders. However, I have retained the genus in the family Agelenidae until such time as the adult male of *Matachia ramulicola* or the female of *Gohia falxiata* may be examined.



FIGS. 8–10.—*Gohia falxiata* (Hogg). Fig. 8, Genital bulb of male; Fig. 9, Dorsa view of anterior part of the cephalothorax and chelicera; Fig. 10, Ventra view of chelicera, maxilla and labium.

MALE

The eye group occupies slightly more than one-half of the widt of the head. From above the anterior row appears slightly recurve and the posterior row more strongly procurved; from in front th anterior row is straight and posterior row strongly procurved. Th ALE are placed on a small tubercle. Ratio of eyes AME:ALE:PME PLE = 5:9:8:9. The AME are separated from each other and als the ALE by a space equal to the diameter of the AME.

The ALE and PLE are separated from each other by a distanc equal to the width of the AME. The PME are separated from eac other and also the PLE and AME by a distance equal to twice th diameter of the AME. The median ocular quadrangle is wider behin than in front in the ratio of 26:15.

Chelicerae: These are directed forward and equal in length to three fifths of the length of the cephalothorax. The fang is long and curvec equal in length to two-thirds of the basal segment. The furrow i shallow with a strong single tooth on the promargin and three smalle teeth on the retromargin. There is a small lateral condyle beyond whic the retrolateral surface is flattened for about one-third of its length.

Sternum: The sternum is scutiform, longer than wide in the rati of 20:17, produced into a sharp point posteriorly between coxae whic are separated by a distance slightly less than their width.

Legs: Rather long and slender, clothed with fine setae. Superic claws homogeneous, with 9-10 strong pectinations; inferior claw wit six pectinations of which the anterior are long and curve down.

Spines: *First Leg.* Femur: dorsal 1.1; Patella 0; Tibia: ventral 2.2.(elsewhere 0; Metatarsus: dorsal 0, ventral 2.2.0, prolatera 0.0.1, retrolateral 0.0.1; Tarsus 0. *Second leg.* Tibia: ventral 2.2, elsc where 0; Metatarsus: dorsal 0, ventral 2.2.0, prolateral 0.0.1, retrolatera

0.0.1; Tarsus 0. *Third leg.* Tibia: dorsal 0.0.0.1.0, ventral 1.0.2.0.2, prolateral 0.1.0.1.0, retrolateral 0; Metatarsus: dorsal 1.0.1.0.1, ventral 0.1.0.2.1, prolateral 0.0.1.0.2, retrolateral 0.0.1.0.2; Tarsus 0. *Fourth leg.* Tibia: dorsal 1.0.1.0.0, ventral 1.0.1.0.2, prolateral 0.1.0.1.0, retrolateral 0.1.0.1.0; Metatarsus: dorsal 1.1.1, ventral 0.1.2, prolateral 0.1.2, retrolateral 0.1.2; Tarsus 0. There are also strong setae on the mid- and distodorsal and the distal prolateral surfaces of the femora and the disto-dorsal surface of the patella.

Trichobothria are distributed as follows: First leg, Tibia, 4 on proximal half of dorsal surface; Metatarsus, 2 small median, 1 long distal; Tarsus, 2 small median, 2 long distal. Second leg, as above, but 3 on Tarsus, situated on distal half. Third leg, as for second leg. Fourth leg, Tibia, single row of 8, fourth and eighth long; Metatarsus, 3 distal; Tarsus, 5 progressively longer distally.

Pedipalp: (Fig. 8). Long and slender, the tarsus is greatly elongated beyond the alveolus. There are two processes on the distal retrolateral surface of the tibia. Spines are arranged as follows: Femur: dorsal 0.1.1, ventral 0, prolateral 0.0.1, retrolateral 0; Tibia: dorsal 1.2, elsewhere 0; Tarsus: dorsal 2.1.1.0, ventral 0.1.1.1, prolateral 0.0.1.0, retrolateral 0.

The abdomen and spinnerets agree closely with the description given by Hogg.

Types: Type male in Otago Museum.

Records: Recorded only from the Auckland Is. South Tandy Inlet, Auckland Is., 50 feet, in sub-alpine meadow. February 8, 1945, H. T. Wenham, 1 ♂ (C.M.A. 987); Musgrave Peninsula, Auckland Is., April, 1942, R. A. Falla, 1 ♂ (C.M.A. 988); Musgrave Peninsula, Auckland Is., on wood at station, April 28, 1943, S. Hancox, 1 ♂ (C.M.A 989).

Family ***Hahniidae***

Genus ***Hahnia*** Koch, 1841

Hahnia sp.

A very immature specimen belonging to this genus was collected from the trunk of a Rata (*Metrosideros lucida*) at Musgrave Peninsula, Auckland Is., by Mr. J. H. Sorensen. This family has not been previously recorded from the subantarctic islands of New Zealand but Hickman (1931) records a species from Macquarie Is.

Family ***Clubionidae***

Genus ***Chiracanthium*** Koch, 1839

Chiracanthium antarcticum (Berland)

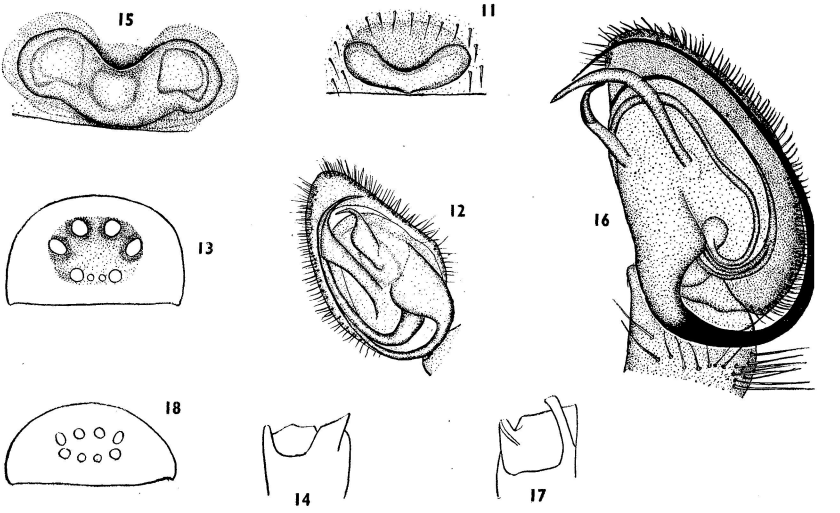
1931 *Gohia antarctica* Berland, Rec. Cant. Mus. 3 (6), p. 359

Figs. 11–14

Berland described this species from material collected by Dr. G. Archey, from the Auckland Islands in 1923. He considered it to be an Agelenid and placed it in the genus *Gohia* Dalmas 1919 of which the type species *G. falxiata* (Hogg) is found in the same area. However, it is undoubtedly related to *Chiracanthium furax* Koch from

Samoa and *Ch. stratioticum* Koch from New Zealand and I have transferred it with *Rubrius nummosus* Hogg, which is congeneric with *antarcticum*, to this genus in the family *Clubionidae*. In order that this species may be clearly separated from the closely related sympatric species, *Ch. sorenseni* n.sp., I have amplified Berland's description for certain characters and refigured the genital bulb and epigynum.

Eyes: (Fig. 13). These occupy slightly more than half of the width of the head and are surrounded with black pigment which encloses the entire eye group. The ratio of AME:ALE:PME:PLE = 1:3:4:6. The PLE are oval. The AME are separated from the ALE and each other by a distance equal to twice their diameter. The PLE are separated from the ALE by a distance equal to six times the diameter of the AME and from the PME by five times this distance. The PME are separated from each other by a distance equal to six and from the AME by eight times the diameter of the AME. The median



FIGS. 11–14.—*Chiracanthium antarcticum* (Berland). Fig. 11, Epigynum of female; Fig. 12, Genital bulb of male; Fig. 13, Eyes and clypeus from the front; Fig. 14, Retrolateral view of distal portion of tibia of male pedipalp showing processes.

FIGS. 15–18.—*Chiracanthium sorenseni* n.sp. Fig. 15, Epigynum of female; Fig. 16, Genital bulb of male; Fig. 17, Retrolateral view of distal portion of Tibia of male pedipalp showing processes; Fig. 18, Eyes and clypeus from the front.

ocular quadrangle is four times as wide behind as it is in front. When viewed from above the anterior row appears slightly procurved and the posterior row almost straight but when viewed from in front the anterior row appears straight and the posterior row strongly recurved. The height of the clypeus is equal to seven times the diameter of the AME.

Berland figures the male pedipalp but his drawing lacks detail. Its appearance is shown in fig. 12. There is a shallow concavity on the distal retro-lateral surface of the tibia bounded by two processes as shown in fig. 14.

The epigynal area of the female is oval with the posterior portion swollen and is shown in fig. 11.

Types: Syntypes (1 male, 2 females), Canterbury Museum.

RECORDS

Auckland Is.

Carnley Harbour, Coll. Knowles and Pollock, 1 ♀ with egg sac (C.M.A. 974); Musgrave Arm, Carnley Harbour, 5 May, 1943, R. A. Falla, 1 ♀ (C.M.A. 975); Musgrave Peninsula, 28 April, 1943, Coll. S. Hancox, on wood at No. 2 Station, 2 ♀, 2 imm. ♀, 1 imm. ♂ (C.M.A. 979); 15 Nov., 1943, Coll. S. Hancox, under logs, 5 ♀ (C.M.A. 981); Musgrave Pen., 15 Nov., 1943, under log, Coll. S. Hancox, 1 ♀ (C.M.A. 1003); Camp Cove, Carnley Harbour, 26 Oct., 1944, E. G. Turbott, in hollow in ground under log, with egg sac, 1 ♀ (A.M.).

Port Ross, 27 May, 1947, J. H. Sorensen, under timber, 1 ♂, 7 imm. (D.M. 2/951); Musgrave Inlet, sea level, end of April, 1944, A. Eden, 1 ♀ (A.M.); East Shore, North Arm, Carnley Harbour, 25 Oct., 1944, E. G. Turbott, in hole beside loose web above small pool, 1 ♀ (A.M.); 25 Oct., 1944, E. G. Turbott, on ground under sticks, 3 imm. (A.M.); Musgrave Pen., 31 Oct., 1944, E. G. Turbott, on ground under log, 1 ♀ (A.M.). Port Ross, 1942, 1 ♀ (C.M.A. 978); Shoe Is., Port Ross, 8 July, 1944, E. G. Turbott, found when digging out petrel burrows, 1 ♂ (A.M.).

Rose Is., Port Ross, 19 March, 1954, R. K. Dell, 2 ♀, 1 imm. ♀ (D.M. 2/976).

Ocean Is., 17 December, 1943, R. A. Falla, from burrow, 1 imm. ♂ (C.M.A. 976); late April, 1944, E. G. Turbott, under fallen branches, 1 ♀, 1 imm. ♀ (A.M.); 28 March, 1944, A. Paine, G. Pritchard, 2 ♀, 1 ♂ (A.M.); Top North Ridge above landing, 9 Dec., 1944, M. G. Easton, 1 imm. (A.M.).

Disappointment Is., 9 Dec., 1944, E. G. Turbott, M. G. Easton, 1 ♀ (C.M.A. 977); 6 Dec., 1944, M. G. Easton, E. G. Turbott, 1 ♀ with egg sac (A.M.); 9 Dec., 1944, E. G. Turbott, in tussock, 1 imm. ♀ (A.M.).

Adams Is., in tussock at approximately 100 ft. in valley at head of bay to west of Gratton Point, 16 Nov., 1944, M. G. Easton, E. G. Turbott, 1 ♀ (A.M.).

Adams Is., under rocks on or near Summit Dome, 18 Nov., 1944, E. G. Turbott, 7 imm. ♀ (A.M.).

Remarks: This species appears to be restricted to the Auckland Islands.

Chiracanthium sorenseni n.sp.

Figs. 15–18

FEMALE

Colour: Carapace, sternum and, appendages uniform pale-brown. Abdomen creamy white, without markings.

Carapace: Longer than it is wide in the ratio of 18:11. Head narrower than thorax, broadly truncate in front, almost straight; lateral margins parallel, with a number of small black hairs on each mid-lateral surface and along the median line. The lateral rows converge at the fovea which is surrounded with hairs. Head region higher than

thorax which slopes gently back from the fovea. Fovea longitudir narrow, lateral striae indistinct, faintly discernible near the fov Posterior margin of the carapace sharply truncate.

Eyes: (Fig. 18). The group occupies about half of the width of t head and is not surrounded by pigment as in *antarcticum*. The ratio AME:ALE:PME:PLE = 4:9:8:11. The AME are separated fr each other by 5/4 of their diameter and from the ALE by a distar equal to the diameter of the AME. The PLE are separated from t ALE by a distance equal to 3/4 and from the PME by 7/4 of t diameter of the AME. The PME are separated from each other a the AME by a distance equal to 10/4 of the diameter of the AME. T median ocular quadrangle is wider behind than in front in the ratio 26:13.

Chelicerae: Stout, vertical, swollen on the proximo-dorsal surfa Lateral boss present. Two teeth present on both pro-and retromarg as in *antarcticum* but smaller.

Labium: Free, as wide as high, lateral margins parallel, notcl proximally. Anterior margin entire.

Maxillae: Converging slightly over the labium. Outer margins gen rounded, inner margins straight, anterior margins oblique with a th scopula.

Sternum: Scutiform, anterior margin broad, almost straight. Sn lateral extensions between coxae 1 and 2, and 2 and 3. Sharply poin posteriorly between coxae 4, which are separated from each otl by a distance equal to one-third of their width.

Legs: Moderately stout.

Spines: *First leg.* Femur: dorsal 1.1.1, prolateral 0.0.2, elsewhere Tibia: ventral 2.2.2.1, elsewhere 0; Metatarsus: ventral 2.2.0, prolate 1.1.2, retrolateral 0.1.2, elsewhere 0. *Second leg.* Femur: dorsal 1.1 prolateral 0.0.1, elsewhere 0; Tibia: ventral 2.2.2, prolateral 1.1.0, el where 0; Metatarsus: dorsal 0.0.1, ventral 2.2.1, prolateral 1.2.2, ret lateral 0.1.2. *Third leg.* Femur: dorsal 1.1.1, prolateral 0.1.1, elsewh 0; Tibia: dorsal 0.1.0, ventral 1.1.1, prolateral 1.1.0, retrolateral 1.1 Metatarsus: dorsal 0.1.2, ventral 2.1.1, prolateral 1.1.2, retrolate 1.1.2. *Fourth leg.* Femur: dorsal 1.1.1, prolateral 0.0.1, elsewhere Tibia: dorsal 1.0.1.0, ventral 2.1.0.2, prolateral 1.0.1.0, retrolate 1.0.1.0; Metatarsus: dorsal 2.1.2, ventral 2.2.1, prolateral 1.1.1, ret lateral 1.1.1.

Trichobothria: *First leg*: Tibia, one on median surface; Metatars six; Tarsus six. *Second leg*: Tibia, two rows of four; Metatars seven; Tarsus five. *Third leg*: Tibia two rows of five; Metatar seven; Tarsus six. *Fourth leg*: Tibia 0; Metatarsus four; Tarsus sev There are three tarsal claws. Superior homogeneous with from 12 pectinations, inferior claw with a single somewhat slender tooth.

Abdomen: Ovate, clothed with humerous small short brown set The epigynum has the form shown in fig. 15, relatively larger than *antarcticum* and lacking an anterior plate.

The spinnerets are tubular, posterior pair more slender than anterior pair and longer. Colulus present.

MALE

Similar to female in general appearance and structure. The gen

bulb is shown in fig. 16. The embolus is much more strongly developed than in *antarcticum* and projects over the margin of the cymbium so that it can be seen from the ventral surface in contrast to *antarcticum* where it is contained within the limits of the cymbium. The tibial processes are somewhat similar to *antarcticum* as shown in fig. 17.

Types: Holotype male, Port Ross, Auckland Is. under timber, 27 May, 1947, J. H. Sorensen (D.M. 2/951), Allotype female, same data (D.M. 2/1012), Paratypes, same data, 5 immature (D.M. 2/1013), Depot Hill, Carnley Harbour, Auckland Is., 17 August, 1944, E. G. Turbott, 1 ♀ (A.M.) Musgrave Peninsula, Auckland Is., 15 November, 1943, under log, collected S. Hancox, 1 ♀ (C.M.A. 1003); Sandy Bay, Enderby Is., 18 March, 1954, R. K. Dell, 1 ♂, 1 imm. ♂ (D.M. 2/998); near Derry Castle Reef, Enderby Is., under stones and logs, 17 March, 1954, R. K. Dell, 1 ♀ (D.M. 2/992); Rose Is., Port Ross, Auckland Is., 19 March, 1954, R. K. Dell, 1 ♀ (D.M. 2/989); Campbell Is., 1943, J. H. Sorensen, 1 ♀ (C.M.A. 1004).

Remarks: This species is closely related to *Ch. antarcticum* (Berland), but is readily distinguished by the lack of pigment around the eyes, the relatively larger AME, the genital bulb of the male and epigynum of the female.

Chiracanthium wenhami n.sp.

Figs. 19–23

FEMALE

Measurements

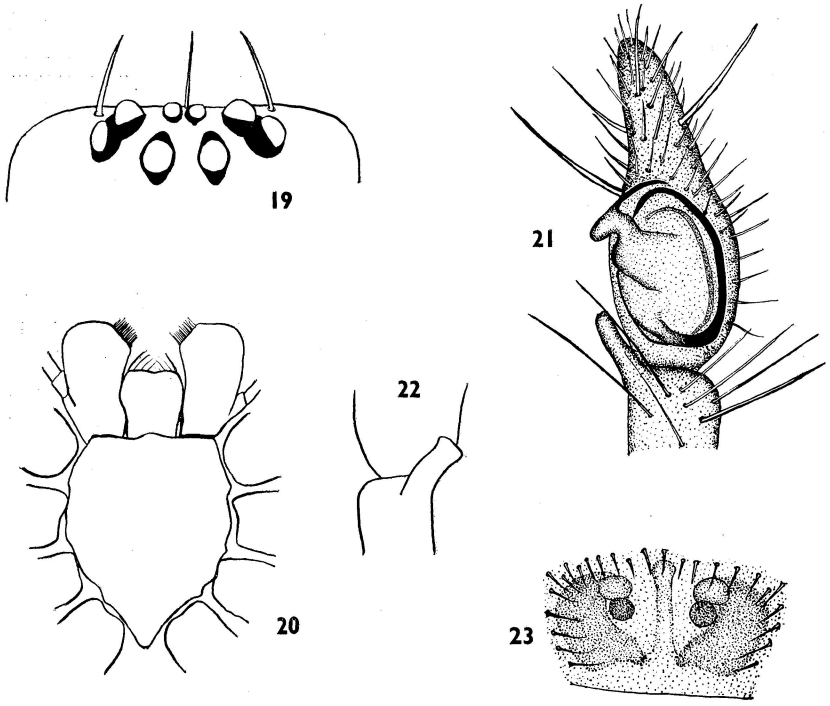
Cephalothorax: Length 4·50; width 3·11.
Abdomen: Length 6·91; width 5·00.

	Fem.	Pat.	Tib.	Met.	Tars.	Total
Leg 1	3·81	1·25	3·01	3·04	1·51	12·62
Leg 2	3·85	1·10	2·50	2·50	1·32	11·37
Leg 3	2·73	1·08	2·10	2·35	1·30	9·56
Leg 4	4·10	1·16	3·03	3·00	1·52	13·81
Pedipalp	1·83	0·55	1·08		1·46	4·92

Colour: Carapace pale brown, head darker; chelicerae, maxillae and labium dark brown. Sternum and legs yellowish, legs with few brown patches. Abdomen creamy white with a number of reddish brown patches on the dorsum which appear to form a series of rudimentary chevrons.

Carapace: Low, longer than wide in the ratio of 3:2, widest in the region of the posterior margin of the second pair of legs. Fovea long and shallow.

Eyes: (Fig. 19). The eyegroup occupies a little more than half of the width of the head region. Eyes in two rows seen from above. The anterior row is slightly recurved and posterior row slightly procurved. Ratio of eyes AME:ALE:PME:PLE = 5:7:7:6. The AME are separated from each other by a distance equal to their diameter and from the ALE by only 3/5 of this distance. The ALE are separated from the PLE by a distance equal to 2/5 of the diameetr of the AME. The PME are separated from each other and the PLE by a distance equal to 7/5 of the diameter and from the AME by 6/5 of the dia-



FIGS. 19–23.—*Chiracanthium wenhami*, n.sp. Fig. 19, Eyes of female from above Fig. 20, Sternum, maxillae and labium of male; Fig. 21, Genital bulb o male; Fig. 22, Retrolateral view of distal portion of Tibia of male pedi palp; Fig. 23, Epigynum of female.

meter of the AME. The ocular quadrangle is wider behind than i front in the ratio of 7:5. The clypeus slopes obliquely forward equa in height to the diameter of an AME. There is a strong setae situate in front of the lateral eyes and a number of smaller setae along th median line of the head region.

Chelicerae: Stout, vertical, proximo-dorsal surface distended. Latera bosses present, with a ridge extending distally. There is a pair o strong teeth on both pro- and retromargins.

Maxillae: (Fig. 20). Twice as long as wide at base, outer margin straight but inner margins curving in over the labium.

Labium: (Fig. 20). Free, notched proximally, anterior margi straight.

Sternum: (Fig. 20). Scutiform, longer than wide in ratio of 4:3 anterior margin straight, lateral margins with slight rounder projec tions, with a blunt posterior projection between the fourth pair c coxae which are separated by a distance equal to three-quarters c their width.

Legs: 4,1,2,3. Clothed with serrate setae. The spines are long, rela tively slender and serrate. Three tarsal claws, superior with 12 stron pectinations, inferior with 3–4 strong curved teeth. *Spines*: *First leg* Femur: dorsal 0, elsewhere 0; Patella 0; Tibia: dorsal 0, ventral 2.2. prolateral 1.0.0, retrolateral 0; Metatarsus: dorsal 0, ventral 2.2.0, pro lateral 0.0.1, retrolateral 0.0.1; Tarsus 0. *Second leg.* Femur: dorsal

median, elsewhere 0; Patella 0; Tibia: dorsal 0, ventral 1.2.0, prolateral 1.0.1, retrolateral 0; Metatarsus: dorsal 0, ventral 2.2.0, prolateral 1.0.1, retrolateral 0.0.1. *Third leg.* Femur: dorsal 1.2, elsewhere 0; Patella 0; Tibia: dorsal 0, ventral 2.2.2, prolateral 1.0.1, retrolateral 0.0.1; Metatarsus: dorsal 1.1.1, ventral 2.2.1, prolateral 1.0.2, retrolateral 1.0.2. *Fourth leg.* Femur: dorsal 1.1, elsewhere 0; Patella 0; Tibia: dorsal 0, ventral 2.2.2, prolateral 1.2, retrolateral 0.2; Tarsus 0.

Trichobothria are distributed as follows:—*First leg*: Metatarsus, 1 at one-third and one median; Tarsus 4 on distal half. *Second leg*: Tibia, 2.1 on proximal surface; Metatarsus, 2 median; Tarsus, 3 distal. *Third leg*: Tibia, 2.1 proximal; Metatarsus, 3; Tarsus, 3 median. *Fourth leg*: Tibia, 3 proximal; Metatarsus, 3; Tarsus, 3.

Pedipalp: Spines—Tibia: prolateral 1.2, elsewhere 0; Tarsus 1 proximal. Tarsal claw well developed, smooth.

Abdomen: Ovoid, longer than wide in ratio of 7:5 clothed with small setae. Epigyne in opaque view as shown in fig. 23. Spinnerets tubular, prominent, median spinnerets each with three long spigots. Colulus well developed.

MALE

Measurements

Cephalothorax: Length 3·50; width 2·45.

Abdomen: Length 3·52; width 2·41.

	Fem.	Pat.	Tib.	Met.	Tars.	Total
Leg 1	2·75	1·24	2·51	2·42	1·53	10·45
Leg 2	2·31	1·01	2·25	2·02	1·29	9·88
Leg 3	2·25	0·75	1·55	1·83	1·25	7·63
Leg 4	2·87	1·13	2·26	2·28	1·39	9·93
Pedipalp	1·75	0·75	1·00		1·24	4·74

Similar in structure to female. Legs 4,1,2,3. The tarsus of the pedipalp is produced anteriorly beyond the alveolus and the genital bulb appears as shown in fig. 21. Tibia with a strong single process on the distal retrolateral surface as shown in fig. 22.

Types: Holotype female, Auckland Is., H. T. Wenham (C.M.A. 1007). Allotype ♂, under stones and logs near Derry Castle Reef, Enderby Is., 17 March, 1954 (D.M. 2/1009); Paratypes, same data as allotype, 1 ♀ (D.M. 2/1010); Sandy Bay Enderby Is. ex-beating 18 March, 1954, R.K. Dell, 1 ♀ (D.M. 2/1000), 1 ♂, 1 ♀ (C.M.A. 1040); north-west corner, Enderby Is., under stones, 19 March, 1954, R. K. Dell, 1 imm. ♀ (D.M. 2/1011).

Chiracanthium nummosum (Hogg, 1909)

1909 *Rubrius nummosus* Hogg, Subantarct. Is. N.Zeal., p. 167.

This species was known only from Bounty Is. Two immature specimens were collected from Ringdove Bay, Antipodes Is. under stones in Penguin Colony, 5 Nov., 1950, by E. G. Turbott. I have re-examined the type material from the Otago Museum and the species appears to be more correctly placed in the Clubionidae rather than the Agelenidae and as it seems congeneric with *Chiracanthium sorenseni* I have placed it in this genus.

Family *Amaurobioididae*

Genus *Amaurobioides* Cambridge, 1883

Amaurobioides maritima Cambridge, 1883

This species is found in the littoral zone and is widely distributed being recorded from New Zealand, Tasmania, and South Africa. It is apparently abundant in both the Auckland and Campbell Islands. The absence of this species from the Bounty and Antipodes Islands is unusual in view of the apparent ease with which it is able to cross wide expanses of sea. It is possible that the steep coastlines of these two small islands do not provide a suitable habitat for the species to obtain a foothold.

RECORDS

Auckland Is.

Magnetic Survey Bay, Musgrave Harbour, on seashore, 3 Nov. 1944, E. G. Turbott, 3 ♀, 1 imm. (A.M.); Western shore of Musgrave Peninsula, in conspicuous nests in cracks in bare rock cliffs all within the spray zone, Nov., 1944, E. G. Turbott, 2 imm. (A.M.); Camp Cove, Carnley Harbour, 26 Oct., 1944, E. G. Turbott, intertidal, 4 imm. (A.M.); 6 April, 1944, Coll. ? 1 ♀ (C.M.A. 1000); Ranui Cove 4 July, 1944, E. G. Turbott, 3 imm. in nests under stones on the shore (A.M.); top of North Arm, Carnley Harbour, 6 Oct., 1943, E. M. and W. H. Dawbin, 5 ♀, 1 imm. under stones above high water mark (C.M.A. 997); Waterfall Inlet, 25 March, 1953, W. H. Dawbin, 1 ♀ (C.M.A. 993).

North shore, Adams Is., 25 Sept., 1944, E. G. Turbott, intertidal: 2 ♀, 1 imm. (A.M.). A field note mentions that a male was found in a nest with a female but as no male specimen is present in the tube it would appear that unless a male specimen has been lost the immature specimen recorded above was sharing the nest with an adult female. Adams Is., date ?, Coll. ?, 1 ♂ (C.M.A. 991).

Campbell Is.

Campbell Is., 1943, J. H. Sorensen, 9 imm. (C.M.A. 996, 1001).

Perseverance Harbour, under stones at highwater mark, 16 Nov. 1947, J. H. Sorensen, 16 ♀, 1 imm. ♂, 11 imm. ♀ (D.M. 2/946); Tucker Cove, 18 Dec., 1945, J. H. Sorensen, 2 ♀, 2 imm. ♀ (C.M.A. 1002).

Genus *Pacificana* Hogg, 1904

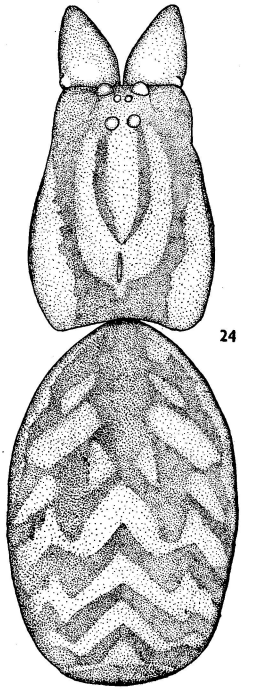
Pacificana cockayni Hogg, 1904

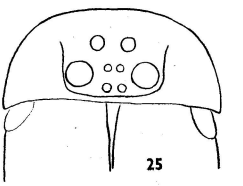
1904 *Pacificana cockayni* Hogg. Ann. mag. Nat. Hist. Ser. 7, 13 (73), p. 66.

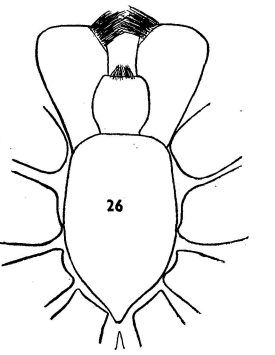
Figs. 24–28

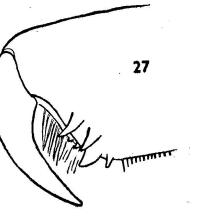
Hogg placed this genus in the family Agelenidae but I consider that it is related to *Amaurobioides* and have therefore transferred it to the Amaurobioididae.

In the present collection there is a large series collected from Bounty Island but unfortunately this includes only female and immature specimens. I have amplified Hogg's description and refigured the species.









FIGS. 24–28.—*Pacificana cockayni* Hogg. Fig. 24, Dorsal view of body of female; Fig. 25, Eyes and clypeus of female from in front; Fig. 26, Sternum, maxillae and labium of female; Fig. 27, Prolateral view of female chelicera; Fig. 28, Epigynum of female.

Colour: The description given by Hogg is comprehensive but fig. 24 indicates the pattern on the carapace and the dorsum of the abdomen more clearly than the minute figure published by Hogg.

Eyes: (Fig. 25). These are most characteristic. They are placed in three rows which occupy slightly less than one-half of the width of the head in the eye region. Ratio of eyes AME:ALE:PME:PLE = 4:15:4:6. The AME are separated from each other and from the ALE by a distance equal to their diameter. The ALE are separated from the PLE by a distance equal to 12/4 of the diameter of an AME. The PLE are separated from each other and from the PME by a distance equal to 10/4 of the diameter of an AME. The PME are separated from each other by 3/4 of the diameter of an AME. The median ocular quadrangle is wider in front than behind in the ratio of 12:11 and the length is greater than the posterior width in the ratio of 17:11.

The maxillae are as shown in fig. 26, wider at the base than long in the ratio of 11:8. Labium constricted at the base, movable, and slightly recurved anteriorly. The sternum is elongate, longer than wide in the ratio of 3:2, lateral margins parallel, not produced between coxae, terminating posteriorly between coxae 4 to a sharp point. The fourth pair of coxae are separated by a distance equal to one-third of their width.

Legs: *Spines.—First leg.* Femur: dorsal 1.1.0, ventral 0, prolateral 0.0.2, retrolateral 0; Patella 0; Tibia: dorsal 0, ventral 3.3.2.2, pro-

lateral 1.1.1.1, retrolateral 0; Metatarsus: dorsal 0, ventral 1.1.2.1, prolateral 1.1.2.2, retrolateral 0.1.2.2. *Second leg.* Femur: dorsal 1.1.1, prolateral 0.0.1, elsewhere 0; Patella 0; Tibia: dorsal 0, ventral 1.2.1.1, prolateral 2.1.2.1, retrolateral 0; Metatarsus: dorsal 0, ventral 2.0.2.1, prolateral 2.1.1.2, retrolateral 0.0.0.2. *Third leg.* Femur: dorsal 1.2.2.1, elsewhere 0; Patella 0; Tibia: dorsal 0, ventral 1.1.2, prolateral 1.2.1, retrolateral 1.1.1; Metatarsus: dorsal 2.0.2.2, ventral 2.0.0.1, prolateral 1.1.1.1, retrolateral 1.0.1.1. *Fourth leg.* Femur: dorsal 1.1.1.1, retrolateral 0.0.0.1, elsewhere 0; Patella 0; Tibia: dorsal 0, ventral 3.1.1.2, prolateral 0, retrolateral 1.1.1.1; Metatarsus: dorsal 2.0.2.2, ventral 2.0.1.1, prolateral 1.1.1.2, retrolateral 0.

Trichobothria are distributed on the tibia, metatarsus, and tarsus as follows: First, second, and third legs, tibia 3, metatarsus 8, tarsus 7; fourth leg, tibia 2, metatarsus 2, tarsus 6. Three tarsal claws, superior with 4–5 small proximally situated teeth, inferior smooth.

Pedipalps: *Spines.* Femur: dorsal 1.1, elsewhere 0; Patella 0; Tibia: prolateral 1.2, elsewhere 0; Tarsus: dorsal 1.1.1, ventral 0, prolateral 2.2.2, retrolateral 0.1.1. Tibia with two median, Tarsus with 2 distal trichobothria.

Types: Bounty Is., in Otago Museum.

Records: Bounty Is., under loose rocks, in sea bird colony, 11 Nov., 1950, E. G. Turbott, 2 ♀, 14 imm. ♀ (A.M.); same data, coll. R. K. Dell, 1 ♀, 4 imm. ♀ (D.M. 2/947).

Family ***Lycosidae***

Genus ***Lycosa*** Latreille, 1804

Lycosa sp.

Two adult females were collected in the Auckland Is. by Mr. E. G. Turbott which probably represent an undescribed species. The specimens are in a poor condition and I have considered that it would be advisable to await further material before naming the species.

RECORDS

Ocean Is., under fallen branches, late April, 1944, E. G. Turbott, 1 ♀ (A.M.); Auckland Is., in a miscellaneous collection made during April and May, 1944, E. G. Turbott, 1 ♀ (A.M.).

Family ***Perissoblemmidae***

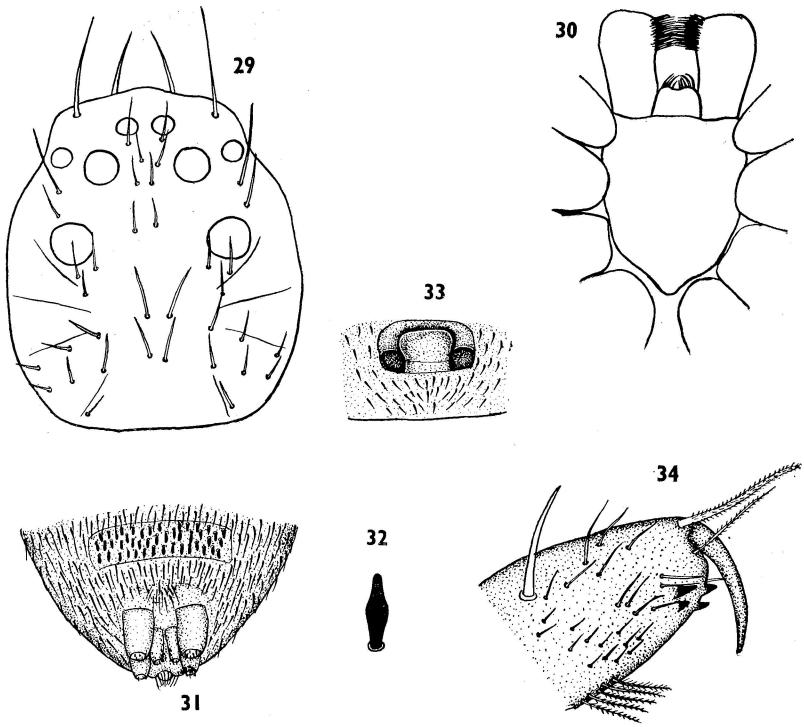
Genus ***Laestrygones*** Urquhart, 1893

Laestrygones minutissimum (Hogg)

1909 *Stiphidion minutissimum* Hogg, Subantarct. Is. N.Z. 1, p. 157
1919 *Stiphidiellum minutissimum* (Hogg), Dalmas, Ann. Soc. Ent. Fr. 86, p. 325

Figs. 29–34

Close examination of the two female specimens in the present collection has thrown some light on the affinities of this species. Hogg (1909) placed the single female specimen he had for examination in the family Psechridae and described it as a new species of *Stiphidion* Simon, considering it to be allied to the Tasmanian species *S. facetum*



FIGS. 29–34.—*Laestrygones minutissimum* (Hogg). Fig. 29, Carapace of female from above; Fig. 30, Sternum, maxillae and labium of female; Fig. 31, Postero-ventral view of abdomen of female; Fig. 32, Enlarged view of single process from plate in front of spinnerets; Fig. 33, Epigynum of female; Fig. 34, Retrolateral view of chelicera of female.

Simon. Dalmas (1919) pointed out that the Campbell Is. species could not be retained in this genus and established a new genus *Stiphidiellum* for its reception. However, examination of the well-preserved specimens in the present collection shows that this species is in fact ecribellate. The cribellum described by Hogg is a thickened area of the integument on the postero-ventral surface of the abdomen which is furnished with a number of small black lanceolate bristles and is situated well in front of the spinnerets. In the type specimen this plate is close to the spinnerets, due to contraction of the abdomen and could easily be mistaken for a cribellum. There can be no doubt that this species should be placed in *Laestrygones* Urquhart and it is possible that it is synonymous with *L. albiceres* Urquhart. I have re-examined Urquhart's type specimens but owing to the poor state of preservation of the type material it is not possible to decide this question with any certainty. In the meantime, I have retained Hogg's name and followed Bryant (1935) in placing this genus in the Perissoblemidae. The following details amplify the original description.

FEMALE

Carapace: Length 2·14; width 1·75.
Abdomen: Length 2·49; width 1·75.

	Fem.	Pat.	Tib.	Met.	Tars.	Total
Leg 1	1·62	0·55	1·35	1·11	0·75	5·38
Leg 2	1·61	0·62	1·29	1·16	0·63	5·31
Leg 3	1·62	0·63	1·20	1·08	0·69	5·22
Leg 4	1·84	0·68	1·35	1·31	0·67	5·85
Pedipalp	0·67	0·27	0·45		0·73	2·12

Eyes: (Fig. 29). Three rows 2.4.2, median row strongly procurved. Eye ratio AME:ALE:PME:PLE = 6:7:9:10. The AME are separated from each other by a distance equal to 4/6 of the diameter and from the PME by a distance equal to the diameter of the AME. The PME are separated from each other and from the PLE by a distance equal to 10/6 of the diameter of an AME and from the ALE by a distance equal to 5/6 of this diameter. The PME are separated from each other by a distance equal to six times the diameter of the AME and from the ALE by a distance of twice the diameter of the AME. The ocular quadrangle is wider behind than in front in the ratio of 9:4. Clypeus vertical equal to 10/6 of the diameter of the AME.

Carapace: The carapace is high, sloping down posteriorly. Fovea, absent but lateral grooves visible. There are a number of long setae on the carapace disposed as indicated in fig. 29.

The maxillae, labium and sternum, are as shown in fig. 30. Coxae 4 are separated by a distance equal to one-half of their width.

Legs: 4,1,2,3. *Spines—First leg.* Femur: dorsal 0.1.0.2.1, ventral 1.1.2.1.1, elsewhere 0; Patella: dorsal 1 proximal, 1 distal; Tibia: dorsal 1.1.1.1, ventral 2.0.2.0, prolateral 0.1.1.0, retrolateral 0.1.1.0; Metatarsus: dorsal 1.0.1, ventral 2.2.0, prolateral 1.0.1; retrolateral 1.0.1; Tarsus 0. *Second leg.* Femur: dorsal 0.1.2.1, ventral 2.2.0, elsewhere 0; Patella: dorsal 1.1; Tibia: dorsal 1.0.1, ventral 2.2.0, prolateral 1.1.0; retrolateral 1.1.0; Metatarsus: dorsal 0.1.0.1, ventral 2.0.2.0, prolateral 0.1.0.1, retrolateral 0.1.0.1; Tarsus 0. *Third leg.* Femur: dorsal 0.1.2.1, elsewhere 0; Patella 1.1; Tibia: dorsal 1.0.1.0, ventral 1.0.1.0, prolateral 0.1.1.0, retrolateral 0.1.1.0; Metatarsus: dorsal 1.0.1, ventral 2.2.1, prolateral 1.0.1, retrolateral 1.0.1; Tarsus 0. *Fourth leg.* Femur: dorsal 0.1.1.1, elsewhere 0; Patella 1.1; Tibia: dorsal 1.1.1.0, ventral 1.0.1.1, prolateral 0.1.1.0, retrolateral 0; Metatarsus: dorsal 0.1.0.1, ventral 1.0.1.1, prolateral 0.1.0.1, retrolateral 0.1.0.1. *Trichobothria. First leg*—Tibia 1 proximal; Metatarsus 1; Tarsus 2. *Second leg*—Tibia 1 proximal; Metatarsus 1; Tarsus 2. *Third leg*—Tibia 2 proximal; Metatarsus 2 distal; Tarsus 2 sub-distal. *Fourth leg*—Tibia 3 median; Metatarsus 1 median; Tarsus 2 sub-distal. Three claws, superior homogeneous with 6–7 pectinations, inferior smooth.

Pedipalp: Tarsal claw slender and smooth. *Spines*—Femur: dorsal 0.1.1.0, elsewhere 0; Patella: dorsal 1.1, elsewhere 0; Tibia: dorsal 1.1, ventral 0, prolateral 0.1, retrolateral 2.2; Tarsus: dorsal 1 proximal, ventral 0.0.1, prolateral 2.1.1, retrolateral 2.1.1.

Abdomen: Ovate, heavily clothed with short serrate setae. Spinnerets tubular, colulus present but ill-defined. There is a group of short black setae on a small plate in front of the spinnerets (fig. 31). The setae are somewhat flattened, distended laterally near the middle and ter-

minated bluntly (fig. 32). The epigynum has the form shown in fig. 33.

Types: Holotype female, Campbell Is. in Otago Museum.

Records: Mount Beeman, Campbell Is., 17 August, 1947, J. H. Sorensen, 1 ♀ (D.M. 2/927); Sandy Bay, Enderby Is., 18 March, 1954, R. K. Dell, 1 ♀ (D.M. 2/980).

Family *Argiopidae*

Genus *Araneus* Clerck, 1757

Araneus pustulosus Walck.

This common New Zealand species has been previously recorded from both the Auckland and Campbell Islands by Hogg (1909) and Berland (1931). The present collection includes specimens from Auckland Is.

RECORDS

Auckland Is.: Station buildings, Ranui Cove, May 1944, E. Hoskins, E. G. Turbott, 2 ♂ (A.M.); Ranui Cove, 1944, E. G. Turbott, 1 ♂ (A.M.); Carnley Harbour, coll. Knowles and Pollock, 1 ♀ (C.M.A. 1006); Carnley Harbour, in bush near sea level, 3 Nov., 1944, E. G. Turbott, 2 ♀ (A.M.); Port Ross, under timber, 27 May, 1947, J. H. Sorensen, 4 ♀ (D.M. 2/945); 9 Feb., 1945, A. P. and J. H. Sorensen, 1 ♀ (C.M.A. 985); Kekeno Bay, 7 July, 1944, E. G. Turbott, 1 ♀ (A.M.); Erebus Cove, 22 Aug., 1943, R. W. Balham, 1 ♀ (C.M.A. 983); Chambres Inlet, 9 Feb., 1945, A. P. and J. H. Sorensen, 1 ♀ (C.M.A. 986); Adams Is., in forest near lake shore, on south coast, 19 Sept., 1944 (A.M.).

Family *Theridiidae*

Genus *Theridion* Walck., 1805

Theridion cruciferum Urquhart, 1885

This common New Zealand species is represented in the collection by a single female collected in the station building, Ranui Cove, Auckland Is., 10 July, 1944. It seems probable that the specimen was introduced from New Zealand.

Genus *Icona* new genus

AME smallest, remaining eyes subequal. Lateral eyes contiguous. Median ocular quadrangle wider behind than in front. Sternum as wide as long, pointed posteriorly and extending behind the coxae which are widely separated. Labium short, free, maxillae converging over labium. Legs long and slender, without spines, first leg longest, third smallest, second and fourth subequal, a tarsal comb of ten serrate bristles on the fourth tarsus. Trichobothria present on metatarsus of leg 2, tibia and metatarsus of leg 3, tibia of leg 4 and pedipalp tibia. Tarsal drum on all tarsi. Pedipalp claw strongly pectinate.

Genotype *Icona alba* n.sp.

The affinities of this genus are uncertain but should be clarified when the New Zealand fauna is more fully known.

Icona alba n.sp.

Figs. 35–39

MALE

Measurements

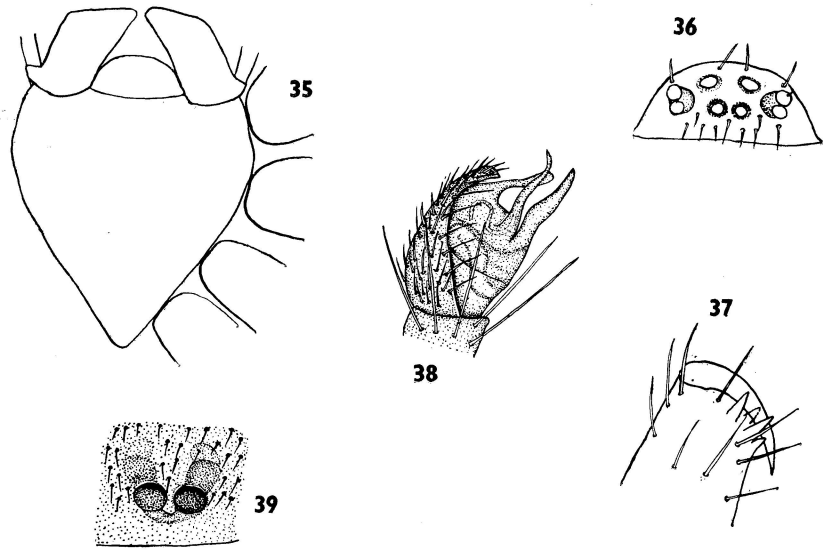
Cephalothorax: Length 2·00; width 1·64
Abdomen: Length 3·01; width 1·98

	Fem.	Pat.	Tib.	Met.	Tars.	Total
Leg 1	4·14	0·84	4·21	3·63	1·48	14·30
Leg 2	2·74	0·62	2·34	2·19	1·06	8·95
Leg 3	2·03	0·50	1·27	1·58	1·83	7·21
Leg 4	2·87	0·72	2·00	2·22	1·02	8·83
Pedipalp	1·01	0·27	0·62		0·65	2·55

Colour: General colour of body and appendages pale creamy white, with a broad blackish area behind the eyes which narrows posteriorly and extends to the posterior margin. Abdomen with a small black patch on the antero-dorsal surface and 3–4 pairs of black patches on the postero-median surface.

Carapace: Head region indistinctly separated from thoracic region, smooth, with few small black setae behind the eyes. Widening evenly antero-posteriorly, widest between legs two and three. Fovea longitudinal, shallow, bounded laterally by a pair of slight swellings. Striae absent.

Eyes: (Fig. 36). From above the anterior row appears slightly recurved and the posterior row slightly procurved but from in front the anterior row appears straight and the posterior row more strongly procurved. Ratio of eyes AME:ALE:PME:PLE = 7:10:10:11. The



FIGS. 35–39.—*Icona alba* n.gen. n.sp. Fig. 35, Sternum, maxillae and labium of male; Fig. 36, Eyes and clypeus of male from in front; Fig. 37, Retrolatera view of male chelicera; Fig. 38, Retrolateral view of genital bulb of male; Fig. 39, Epigynum of female.

AME are separated from each other by a distance equal to 5/7 of their diameter and from the ALE by 8/7. The lateral eyes are contiguous and placed on a tubercle. The PME are separated from each other and from the AME by 8/7 of the diameter of the AME and 10/7 from the PLE. The median ocular quadrangle is wider behind than in front in the ratio of 28:19.

Chelicerae: (Fig. 37). Vertical, parallel, fangs small, slender, extending over distal end, promargin with three teeth, proximal small, retromargin with single strong tooth. Setae sparse and simple.

Maxillae: (Fig. 35). Converging over labium, outer margins parallel, anterior margin obtuse.

Labium: (Fig. 35). Twice as wide as long, anterior margin evenly rounded, separated by a suture from the sternum.

Sternum: (Fig. 35). Margins lacking lateral extensions. Widest between coxae 1 and 2 where the width is equal to the length, narrowing evenly posteriorly to form a sharp posterior projection behind coxae 4. The fourth coxae are separated by a distance equal to their diameter.

Legs: 1,2,4,3. Long and slender, clothed with simple setae. Spines absent but strong bristles arranged as follows:

Patellae of all legs with one proximo-dorsal and one disto-dorsal; tibiae of legs 1 and 2 with a single bristle at two-thirds, tibia of leg 4 with one mid-dorsal. Trichobothria distributed as follows:—Absent from leg 1, one mid-dorsal surface of metatarsus of leg 2, 4 on tibia, one at one-third of metatarsus of leg 3, and three on proximal half of tibia of leg 4. There is a tarsal organ situated on the dorsal surface of each tarsus immediately before the mid-surface. The comb on the ventral surface of the tarsus of leg 4 is well developed, consisting of ten strong serrate bristles. There are three tarsal claws, inferior with a single tooth, superior homogeneous, with 6–7 teeth.

Pedipalps: The genital bulb has the form shown in fig. 38. With a single trichobothrium on the mid-dorsal surface of the tibia.

Abdomen: Ovate, clothed with short simple setae. Six spinnerets, short and conical. Colulus absent.

FEMALE

Measurements

Cephalothorax: Length 1·75; width 1·50
Abdomen: Length 2·51; width 2·14

	Fem.	Pat.	Tib.	Met.	Tars.	Total
Leg 1	3·25	0·88	3·01	2·87	1·25	11·26
Leg 2	2·63	0·75	1·74	1·86	1·11	8·09
Leg 3	2·11	0·55	1·13	1·36	0·79	5·94
Leg 4	2·75	0·73	1·87	1·85	1·04	8·24
Pedipalp	0·88	0·29	0·49		0·75	2·41

Colour: The black area on the cephalothorax is more pronounced than in the male. The dorsal surface of the abdomen is brown mottled with white and with a narrow black line running down the median surface. Structure similar to male. Epigynum as shown in fig. 39. Pedipalp with two trichobothria on the dorsal surface of the tibia and a tarsal drum at two-thirds of the length of the tarsus. Tarsal claw strong, pectinate.

Legs: 1, 4, 2, 3, with bristles and trichobothria as in male.

Types: Holotype male, Sandy Bay, Enderby Is. ex beating 17 March 1954, R. K. Dell (D.M. 2/1001). Allotype ♀ same data (D.M. 2/1002). Paratypes, 2 ♂, 1 ♀, 2 imm. ♂ same data (C.M.A. 1038, D.M. 2/1003, 1004).

Family *Linyphiidae*

Genus *Mynoglenes* Simon, 1905

Mynoglenes insolens Simon, 1905

1905 *Mynoglenes insolens* Simon, Zool. Jahrb. Syst. 21, p. 419

Originally described from the Chatham Islands, this species was subsequently recorded by Berland (1931) from the Auckland Islands. The present collection includes a large number of specimens from the Auckland Islands and a few from Campbell Island where *M. marrineri* Hogg appears to be the more common species. Hickman (1939) records this species from Macquarie Is.

RECORDS

Aucklands Is.

Port Ross, under timber, 27 May, 1947, J. H. Sorensen, 7 ♀, 1 imm. (D.M. 2/967); Aug., 1944, E. G. Turbott, 1 ♀ (A.M.); Ranui Cove, rocks above high-water mark, July, 1944, E. G. Turbott, 1 ♀ (A.M.); in hut, 9 July, 1944, 1 ♀ (A.M.); Jan., 1944, E. G. Turbott, 1 ♀ (A.M.); Feb., 1944, E. G. Turbott, 1 imm. (A.M.); 14 June, 1944, E. G. Turbott, 1 imm. (A.M.); under log, 4 July, 1944, E. G. Turbott, 1 ♀ (A.M.); East shore, North Arm, Carnley Harbour, under sticks, 25 Oct., 1944, E. G. Turbott, 1 imm. (A.M.); Shore, Western Carnley Harbour, under bark of decaying branch, 14 Sept., 1944, E. G. Turbott, 1 ♀ (A.M.); Carnley Harbour, Dec., 1944, E. G. Turbott, 1 imm. (A.M.); Tagua Beach, on shingle, 24 Oct., 1944, E. G. Turbott, 1 ♀ (A.M.); Tandy Inlet, under loose rocks 5 yards above high-water mark, 28 Jan., 1945, H. T. Wenham, 1 imm. (C.M.A. 1027).

Ocean Is., under fallen branches, late April, 1944, E. G. Turbott, 1 imm. ♂ (A.M.).

Disappointment Is., slope above landing, 9 Dec., 1944, E. G. Turbott, 1 ♀ (A.M.); in tussock, 9 Dec., 1944, E. G. Turbott, 1 ♀ (A.M.); 9 Dec., 1944, M. G. Easton, 1 ♀ (A.M.); top of north ridge above landing, 9 Dec., 1944, M. G. Easton, 1 imm. (A.M.).

Ewing Is., 20 Dec., 1942, R. A. Falla, 1 ♀ (C.M.A. 1031).

Campbell Is.

Campbell Is., J. H. Sorensen, 1 ♀ (C.M.A. 1026); Courejolles, under stones, 8 Oct., 1945, J. H. Sorensen, 1 ♂, 2 ♀, 1 imm. (C.M.A. 1028).

Mynoglenes marrineri Hogg, 1909

1909 *Mynoglenes marrineri* Hogg, Subantarctic Islands of New Zealand, 1, p. 165

1939 *Mynoglenes marrineri* Hogg, Hickman Rep. B.A.N.Z. Antarctic Res. Exp. 1929–1931, Ser. B.4 (5), p. 174

This species was originally recorded from Campbell Island but has subsequently been recorded from Auckland Islands and Macquarie

Island. The present series of records extends its range to the Antipodes Islands.

Types: Campbell Is. in Otago Museum.

RECORDS

Campbell Is.

Campbell Is., in scrub, 17 April, 1945, J. H. Sorensen, 3 imm. (C.M.A. 1012); on dead bird, 5 June, 1945, J. H. Sorensen, 2 ♀ (C.M.A. 1013); 30 April, 1945, J. H. Sorensen, 1 imm. ♂ (C.M.A. 1014); No. 3 station, 10 July, 1944, 1 ♂ (C.M.A. 1015); 20 July, 1945, J. H. Sorensen, 1 ♀ (C.M.A. 1018); 13 April, 1946, J. H. Sorensen, 1 ♂, 2 imm. (C.M.A. 1020); 1943, J. H. Sorensen, 3 ♂, 16 ♀, 3 imm. (C.M.A. 1022); 29 May, 1945, J. H. Sorensen, under old timber, 5 ♀ (C.M.A. 1025); under old timber, 4 July, 1947, J. H. Sorensen, 1 ♂, 5 ♀ (D.M. 2/961); 9 Dec., 1946, J. H. Sorensen, 1 ♀ (D.M. 2/962); Tucker Cove, 10 March, 1946, J. H. Sorensen, 1 ♂ (C.M.A. 1016); under old timber near camp, 12 Sept., 1947 (D.M. 2/960); 21 Nov., 1947, J. H. Sorensen, 2 ♂, 3 ♀, 3 imm. (D.M. 2/964); in tussock, 1 Feb., 1947, J. H. Sorensen, 2 ♀, 4 imm. (D.M. 2/965); Courejolles, 15 April, 1944, 1 ♂ (C.M.A. 1023); 8 Jan., 1947, J. H. Sorensen, under stones in mollymawk colony, 1 ♀ (D.M. 2/963); below Mt. Dumas, 17 Nov., 1945, J. H. Sorensen, 1 ♂ (C.M.A. 1010); Perseverance Harbour, under stones at high-water mark, 16 Nov., 1947, J. H. Sorensen, 1 ♀ (D.M. 2/957); 14 July, 1947, J. H. Sorensen, 3 ♀ (D.M. 2/966); Penguin Harbour, under old timber, 9 Oct., 1947, J. H. Sorensen, 3 ♀, 7 imm. (D.M. 2/959).

Auckland Is.

Auckland Is., R. A. Falla, 1 ♀ (C.M.A. 1008), Musgrave Pen., 15 Nov., 1943, coll. S. Hancox, under logs, 1 ♀ (C.M.A. 1021); Sandy Bay, Enderby Is., 18 March, 1954, R. K. Dell, 1 ♂, 1 imm. ♂, 2 ♀ (D.M. 2/982).

Antipodes Is.

Ringdove Bay, under stones in Penguin Colony, 5 Nov., 1950, R. K. Dell, 1 ♂, 8 ♀, 11 imm.

Genus ***Drapetisca*** Menge, 1886

Drapetisca australis n.sp.

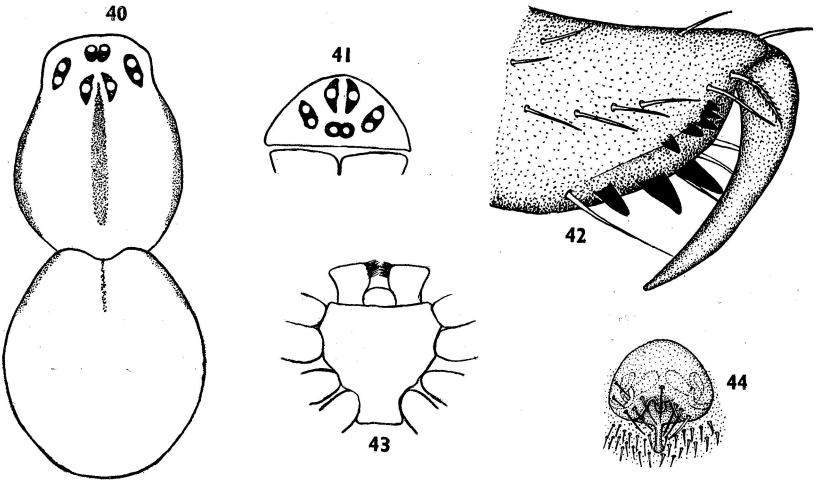
Figs. 40–44

FEMALE

Cephalothorax: Length 1·29; width 1·16
Abdomen: Length 1·53; width 1·52

	Fem.	Pat.	Tib.	Met.	Tars.	Total
Leg 1	1·44	0·29	1·43	1·25	1·00	5·41
Leg 2	1·37	0·35	1·13	1·16	0·92	4·93
Leg 3	1·10	0·27	0·78	0·75	0·82	3·72
Leg 4	1·45	0·30	1·14	1·21	0·80	4·90
Pedipalp	0·45	0·16	0·27	0·53	0·53	1·94

Colour: Carapace pale yellow with blackish band down median surface and lateral margins. Appendages and sternum pale yellow.



FIGS. 40–44.—*Drapetisca australis* n.sp. Fig. 40, Body from above; Fig. 41, Eye and clypeus from in front; Fig. 42, Retrolateral view of chelicera; Fig. 4. Sternum, maxillae, and labium; Fig. 44, Epigynum of female.

Abdomen creamy white with a thin black line down the antero-media surface and two black patches on the mid-ventral surface.

Carapace: Low, head region not clearly separated from thoraci region, but slightly higher, lateral margins evenly rounded behind th region of the eyes where the widest portion is equal to 9/10 of th length of the carapace. There are only a few small and inconspicuou hairs, situated mainly on the median surface. Fovea absent.

Eyes: (Figs. 40–41). The eye group occupies 5/9 of the head i the region of the eyes. Two rows. From in front the anterior ro appears strongly recurved and the posterior row almost straight. Fro above the anterior row is strongly recurved and the posterior ro strongly procurved. Ratio of eyes AME: ALE:PME:PLE = 2:3:4:3 The AME are separated from each other by a distance equal to thei diameter and from the ALE by 3/2 and the PME by 5/2 of thei diameter. The lateral eyes are sub-contiguous separated from th AME by 5/2, from the PLE by 4/2, and from each other by 3/2 o the diameter of the AME. The median ocular quadrangle is wide behind than in front in the ratio of 11:6 and the length is equal to th posterior width. Clypeus short, equal to twice the diameter of an AME

Chelicerae: (Fig. 42). Vertical, lacking lateral condyles, promargi with three strong teeth, retromargin with five smaller teeth, four dista closely spaced. There is a row of four smooth setae on the retrolatera surface. In addition to a few irregularly placed smooth setae there is a ciliate seta on the retrolateral surface near the base of the fang.

Maxillae: (Fig. 43). Converging slightly over the labium.

Labium: (Fig. 43). Immovable, longer than wide, anterior margi practically straight.

Sternum: (Fig. 43). Wider than long in ratio of 6:5, anterior margi straight, lateral margins, widest anteriorly, with small rounded pro jections between the coxae of the legs. Posterior margin wide pos

teriorly behind coxae 4 and truncate. Fourth pair of coxae separated from each other by a distance equal to 4/3 of their diameter.

Legs: 1, 2, 4, 3. *Spines*: *First leg*—Tibia: dorsal 1 median, elsewhere 0; Patella: dorsal 1 proximal, elsewhere 0; Tibia: dorsal 1.1, prolateral 0.1, elsewhere 0; Metatarsus and Tarsus 0. *Second leg*—Patella 1 disto-dorsal; Tibia 1 dorsal, elsewhere 0; Metatarsus and Tarsus 0. *Third leg*—Patella 1 disto-dorsal; Tibia: dorsal 1.1, elsewhere 0; Metatarsus and Tarsus 0. *Fourth leg*—Patella 1 disto-dorsal; Tibia 1 dorsal. Trichobothria are distributed as follows:—First and second legs with 2 on mid-dorsal surface of the Tibia and one on the proximal third of the Metatarsus. Third leg with two on the Tibia but none on Metatarsus. Fourth leg with four (2.1.1.) on the mid-dorsal surface of the tibia. Three tarsal claws, superior homogeneous, with 13–15 small teeth, inferior long and slender with short, single, ventral tooth.

Pedipalp: Short, equal in length to the femur of the first leg, with numerous strong bristles on the tarsus. Trichobothria absent. Tarsal claw apparently lacking.

Abdomen: Slightly ovoid, as long as wide, with median indentations on the antero-dorsal surface. Clothed with fine hair. Six spinnerets, epigynum as in fig. 44, with a long transparent rod extending back from the posterior margin, which is swollen and rounded apically.

Type: Holotype female, top of slope above Ringdove Bay, Antipodes Is., ex mould under *Poa literosa* with *Polystichum vestitum*, 10 Nov., 1950, E. G. Turbott (A.M.).

REMARKS

It is with some doubt that this species is placed in *Drapetisca* but re-assignment may be made when more adequate material is available. Hickman (1941) records a species of *Drapetisca* from Macquarie Is.

Sub-family Gonatiinae Hull, 1810

Genus ***Ostearius***

Ostearius delli n.sp.

Figs. 45–51

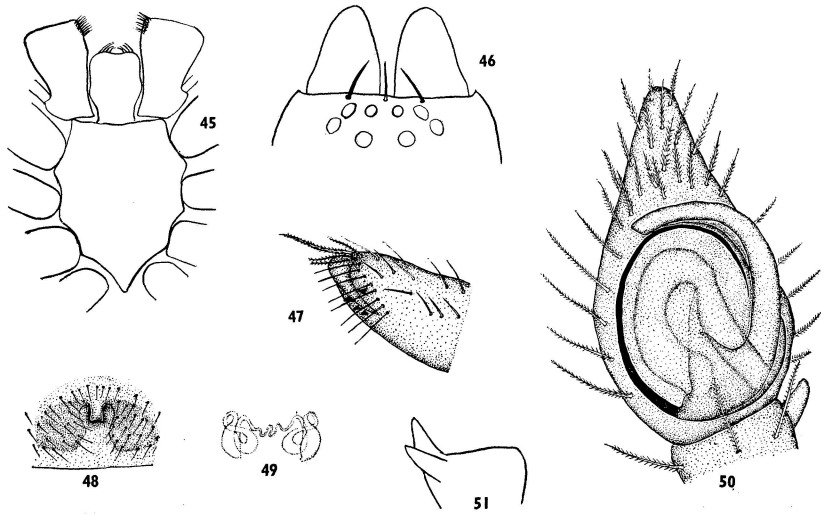
FEMALE

Carapace: Length 1·66; width 1·13
Abdomen: Length 2·63; width 1·84

	Fem.	Pat.	Tib.	Met.	Tars.	Total
Leg 1	1·21	0·45	0·83	0·82	0·47	3·78
Leg 2	1·00	0·41	0·55	0·68	0·50	3·14
Leg 3	1·03	0·49	0·78	0·78	0·55	3·63
Leg 4	1·12	0·45	0·81	0·79	0·59	3·76
Pedipalp	0·63	0·25	0·30		0·54	1·72

Colour: Carapace, chelicerae, and sternum pale brown, legs yellowish brown. Abdomen creamy white with black patch on median surface of dorsum and postero-lateral surfaces.

Carapace: Smooth and shiny, low, head part not separated from thoracic part, lateral margins almost parallel, recurved posteriorly,



FIGS. 45–51.—*Ostearius delli* n.sp. Fig. 45, Sternum, maxillae and labium of male; Fig. 46, Eyes and chelicerae of male from above; Fig. 47, Prolateral view of female chelicera; Fig. 48, Surface view of female epigynum; Fig. 49, Transparent view of female epigynum; Fig. 50, Ventral view of genital bulb of male; Fig. 51, Retrolateral view of distal portion of Tibia of male, pedipalp showing processes.

longer than wide in ratio of 13:9. Fovea absent. There are three strong black setae in front of the eyes and with three rows of erect black hairs on the median surface between the eyes and fovea, carapace otherwise smooth.

Eyes: (Fig. 46). The ocular group occupies more than two-thirds of the width of the head. From in front the anterior row is strongly recurved and the posterior row strongly procurved, from above the degree of curvature appears less. The ratio of eyes AME:ALE:PME: PLE = 3:4:4:4. The AME are separated from each other and from the PME by a distance equal to 2/3 of the distance of one of the AME and from the ALE by 4/3. The lateral eyes are sub-contiguous, PLE separated from PME by a distance equal to the diameter of an AME and from each other by 4/3. The median ocular quadrangle is wider behind than in front in the ratio of 3:2. The clypeus is short, equal to the diameter of an AME. There are three conspicuous setae on the clypeus, one in front of each ALE and one median. Three irregular rows of hairs extend back down the median surface of the head part behind the eyes.

Chelicerae: (Fig. 47). Vertical, parallel, lacking condyles. There is a group of four setose hairs on the distal surface of the basal segment of which one is long. Furrow shallow, with a single tooth on the mid promargin and three similar teeth on the retromargin. A row of smooth setae extends down the lower prolateral surface from the base of the fang to the proximal extension of the cheliceral furrow.

Maxillae: (Fig. 45). Slightly divergent, inner margins curving in, longer than wide at base in ratio of 5:2.

Labium: (Fig. 45). Free, longer than wide in ratio of 4:3, lateral margins gently curved, anterior margin straight.

Sternum: (Fig. 45). Scutiform, longer than wide in ratio 7:5, anterior margin straight, lateral margins evenly curved, not drawn out laterally, posterior produced to a broad point between coxae 4 which are separated by a distance slightly less than the width of one of them.

Legs: 1, 4, 3, 2. Clothed with ciliate setae. *Spines. First leg*—Femur: dorsal 1.1, prolateral 1.1, elsewhere 0; Patella 1 disto-dorsal; Tibia: dorsal 1.1, prolateral 1.0, elsewhere 0; Tarsus 0. *Second leg*—Femur: dorsal 1.1.1, elsewhere 0; Patella 1 disto-dorsal; Tibia: dorsal 1.1, prolateral 1.1, elsewhere 0; Metatarsus and Tarsus 0. *Third leg*—Femur: dorsal 1.1.1, elsewhere 0; Patella: dorsal 1.1, elsewhere 0; Tibia: dorsal 1.1, ventral 1.1, prolateral 1.1, retrolateral 0; Metatarsus: dorsal 1.1.2, ventral 0, prolateral 1.0.1, retrolateral 0.0.1. Tarsus 0. *Fourth leg*—Femur: dorsal 1.2, elsewhere 0; Patella: dorsal 1.1, elsewhere 0; Tibia: dorsal 1.1.0, ventral 0.1.2, prolateral 0.1.1, retrolateral 0.1.1; Metatarsus: dorsal 1.1, ventral 0.1, prolateral 1.1, retrolateral 0.1. *Trichobothria*: *First leg*—Tibia 2.1.2; Metatarsus 1.1 at two-thirds of the length of the segment; Tarsus 2 median. *Second leg*—Tibia 1.2.1; Metatarsus 1.1 at two-thirds; Tarsus 1.1. *Third leg*—Tibia 1.2.1; Metatarsus 1.1; Tarsus 1.1. *Fourth leg*—Tibia 1.1.1; Metatarsus 1.1; Tarsus 1.1.

Pedipalps: Length equal to approximately one and a half times that of the femur of the first leg. Spines distributed as follows:—Femur: dorsal 1.1, ventral 1.1, prolateral 0, retrolateral 1.1; Patella 1 disto-dorsal; Tibia 1 mid-dorsal; Tarsus 0. There are two trichobothria present on the proximo-dorsal surface of the Tibia. The tarsal claw is small and smooth.

Abdomen: Ovoid, longer than wide in the ratio of 6:5, evenly clothed with fine pale setae, but with a number of more prominent longer, black hairs on the dorsal surface, more numerous anteriorly. Spinnerets tubular, anterior pair separated from each other by one-half of their diameter at the base. Colulus absent. Epigynum appearing in opaque view as in fig. 48, and in transparent view as shown in fig. 49.

MALE

Measurements

Carapace: Length 2·28; width 1·53
Abdomen: Length 2·59; width 1·96

	Fem.	Pat.	Tib.	Met.	Tars.	Total
Leg 1	1·01	0·39	0·86	0·89	0·60	3·75
Leg 2	0·98	0·44	0·63	0·81	0·60	3·46
Leg 3	1·06	0·41	0·69	0·81	0·59	3·56
Leg 4	1·09	0·45	0·75	0·78	0·62	3·67
Pedipalp	0·62	0·20	0·24		0·63	1·79

Similar in general structure to female. The genital bulb is shown in fig. 38.

Types: Holotype ♂, Sandy Bay, Enderby Is., ex beating, 17 March, 1954, R. K. Dell (D.M. 2/1005); Allotype ♀ same data (D.M. 2/1006); Paratypes same data, 3 ♂, 4 imm. (D.M. 2/1007), 1 ♂, 1 ♀ (C.M.A. 1039).

Records: "Tops", Ringdove Bay, Antipodes Is., 7 November, 195C R. K. Dell, 1 ♀, 1 imm. (D.M. 2/952, 2/953). Slopes above Ringdov Bay, Antipodes Is., under *Poa literosa* and *Polystichum vestitum,* 1(November, 1950, E. G. Turbott, 1 ♀ (A.M.); Moubray Hill, Camp bell Is., ex leafmould, 10 October, 1947, J. H. Sorensen, 1 ♀ (D.M 2/954); Mount St. Col. Campbell Is., ex leafmould, 24 February 1947, J. H. Sorensen, 1 ♀ (D.M. 2/974).

REMARKS

The Antipodes Is. specimens are smaller than those from the Auck land and Campbell Is. but are identical in structural details.

Family ***Erigonidae***

Genus ***Erigone*** Audouin, 1826

Erigone antipodiana n.sp.

Figs. 52–55

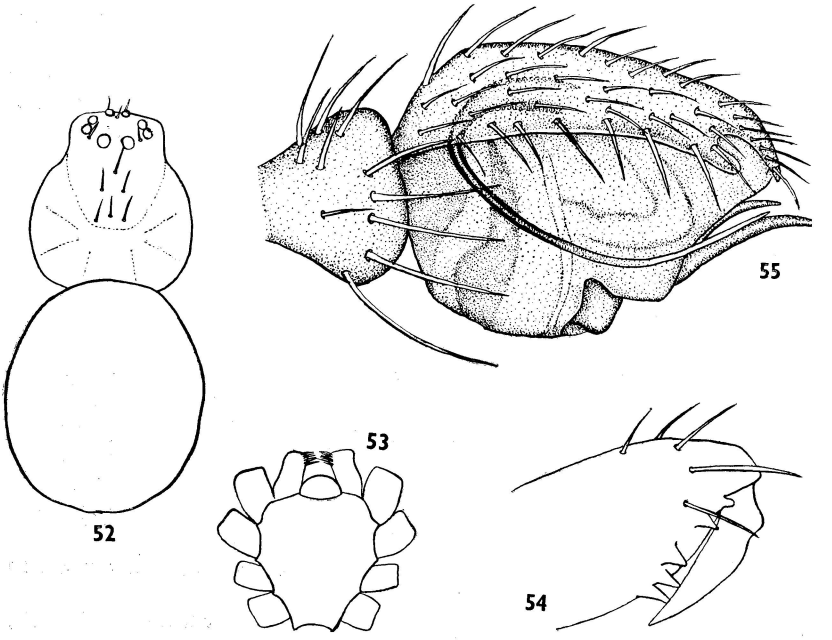
MALE

Measurements

Carapace: Length 1·12; width 1·06; height 0·63

Abdomen: Length 1·49; width 1·03

	Fem.	Pat.	Tib.	Met.	Tars.	Total
Leg 1	1·21	0·29	0·83	0·61	0·59	3·53
Leg 2	1·00	0·27	0·69	0·55	0·55	3·06
Leg 3	0·75	0·25	0·52	0·39	0·37	2·28
Leg 4	0·92	0·25	0·72	0·50	0·45	2·84
Pedipalp	0·53	0·16	0·12		0·42	1·23



FIGS. 52–55.—*Erigone antipodiana* n.sp. Fig. 52, Dorsal view of body; Fig. 5 Sternum, maxillae and labium; Fig. 54, Retrolateral view of chelicera; Fi 55, Retrolateral view of genital bulb.

Colour: Carapace and sternum dark blackish brown, appendages slightly paler brown. Abdomen uniform greyish black.

Carapace: Finely granulate, head portion high, equal in height to almost half of the length of the carapace, widening considerably behind the eye region. Fovea absent but faint lateral striae visible.

Eyes: Two rows occupy most of the width of the head. From in front the anterior row appears recurved and the posterior row procurved; from above the anterior row is strongly recurved while the posterior row is almost straight. Ratio of AME:ALE:PME:PLE = 7:8:9:8. The AME are separated from each other by a distance equal to width and from the ALE by a distance equal to slightly more than the diameter of an AME. The lateral eyes are sub-contiguous. PLE separated from PME and each other by a distance equal to 10/7 of the diameter of AME. The median ocular quadrangle is wider behind than in front in the ratio of 7:5. The clypeus is vertical, equal in height to three times the width of an AME. The AME project slightly over the clypeus.

Chelicerae: Stout, vertical, lateral boss absent. There are two strong teeth on the retromargin, one distal, the other at about mid-way along the furrow, promargin with similar teeth closely spaced near the proximal region of the furrow. The fang is strong distended on the proximo-dorsal surface.

Maxillae: (Fig. 53). Lateral margins nearly parallel but converging over labium.

Labium: (Fig. 53). Separated from sternum by a procurved suture but probably immovable. Anterior margin evenly rounded.

Sternum: (Fig. 53). Convex, strongly granulate, width at widest region equal to length. There are sharp lateral projections between the coxae. Posterior margin broad, strongly recurved, separating coxae 4 by a distance equal to slightly more than twice their diameter.

Legs: 1, 2, 4, 3. Legs relatively short clothed with fine ciliate setae. All tarsi with a tarsal organ situated about one-third of the length of the segment and provided with a ventral row of strong serrate hairs.

There is a spine present on the disto-dorsal surface of the patella of the second legs and the proximo-dorsal surface of the tibia of the fourth leg.

Trichobothria: *First leg*—Tibia 1.2.2. *Second leg*—Tibia 2.1; Metatarsus 1 proximal. *Third leg*—Tibia 1.2. *Fourth leg*—Tibia 2.1.1.

Three claws, superior homogeneous with 5–6 serrations, inferior smooth.

Pedipalps: (Fig. 55). About equal in length to the femur of the first leg. Without spines or trichobothria.

Cymbium deeply notched on the distal retromargin. Embolus long and slender, curving from the base across the retrolateral surface.

Abdomen: Globose, sparsely covered with short, dark, apparently smooth hairs. Sclerotic patch present in the position of the lung books. Spinnerets small, well developed colulus present.

Type: Holotype male, "Tops" Ringdove Bay, Antipodes Is., 7/11/50, R. K. Dell (D.M. 2/955).

REMARKS

The generic placing of this species is tentative and will need revision when further material is available. It will probably prove to be congeneric with some of the numerous New Zealand forms at present awaiting study.

Family ***Attidae***

Genus ***Clynotis*** Simon, 1901

Clynotis barresis Hogg, 1909

1909 *Clynotis barresis* Hogg, Subantarctic Islands of New Zealand 1, p. 176.

This spider appears to be quite common on both the Auckland and Campbell Is. I have re-examined the types of *Cosmophasis archeyi* Berland and consider that while the male specimen is definitely distinct from *Clynotis barresis* Hogg, his female specimen is identical with this species. The absence of *C. archeyi* from the present collection would suggest that the male specimen is a New Zealand species which had a similar history to *Rubrius rufus* which was actually collected at Bluff although attributed by Berland to Campbell Island. An immature attid in the collection from Antipodes also appears to be of this species.

RECORDS

Auckland Is.

Western Bay, Carnley Harbour, in forest near sea level, 15 Sept., 1944, E. G. Turbott, 1 ♂ (A.M.); 14 Sept., 1944, E. G. Turbott, 1 ♀ with egg sac, from nest in deep rock crevice upper intertidal (A.M.); Lookout at No. 1 Station, 1 July, 1943, R. A. Falla, 1 ♂ (C.M.A. 1031); Musgrave Peninsula, 15 Nov., 1943, S.H. under logs, 1 ♀ (C.M.A. 1035).

Ranui Cove, among rocks above high-water mark, July, 1944, E. G. Turbott, 1 ♂ (A.M.); under rata bark, 27 June, 1944, E. G. Turbott, 1 imm. (A.M.); Rose Is., Port Ross, 19 March, 1954, R. K. Dell, 1 ♀ (D.M. 2/978); Sandy Bay, Enderby Is., 18 March, 1954, R. K. Dell, 1 ♀ (D.M. 2/983).

Campbell Is.

Campbell Is., J. H. Sorensen, 3 ♂ (C.M.A. 1033, 1036); 12 Sept., 1945, J. H. Sorensen, 1 imm. ♂ (C.M.A. 1034); 1943, J. H. Sorensen, 4 ♂, 2 ♀, 3 imm. (C.M.A. 1037).

Antipodes Is.

Shore cliffs, Ringdove Bay, 5 Nov., 1950, E. G. Turbott, 1 imm. (A.M.).

Family ***Textricellidae***

Genus ***Textricella*** Hickman, 1945

Textricella aucklandica n.sp.

Figs. 56–60

Carapace:	Length 0·75; width 0·57; height 0·43
Abdomen:	Length 0·82; width 0·63

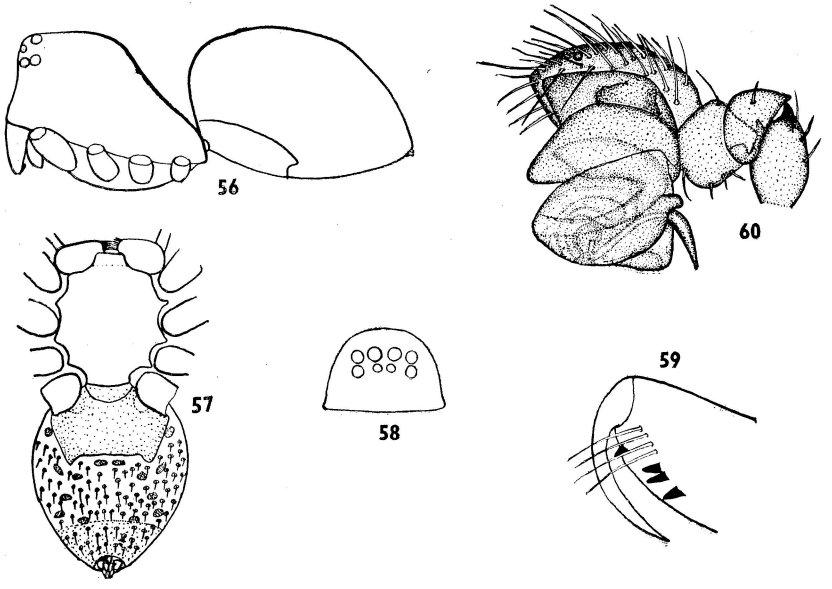
	Fem.	Pat.	Tib.	Met.	Tars.	Total
Leg 1	0·45	0·15	0·41	0·21	0·36	1·57
Leg 2	0·49	0·21	0·37	0·22	0·35	1·63
Leg 3	0·42	0·15	0·32	0·20	0·35	1·44
Leg 4	0·57	0·16	0·45	0·23	0·39	1·80
Pedipalp	0·27	0·03	0·59		0·25	1·14

Colour: Carapace, sternum, and appendages dark reddish-brown. Abdomen bluish-grey.

Carapace: (Fig. 56). Smooth, rounded in front and laterally, clypeus vertical height equal to four and a half times the diameter of an AME. The head region is flattened but rises posteriorly to about midway, beyond which the surface of the carapace slopes steeply back to the posterior margin. There are a few setae down the median surface of the head part behind the eyes.

Eyes: (Fig. 58). Two rows, occupying two-thirds of the diameter of the head in that region. Viewed from in front both rows appear procurved. Viewed from above the anterior row appears slightly recurved and the posterior row straight. Ratio of eyes AME:ALE:PME:PLE = 12:21:20:25. The median ocular quadrangle is wider behind than in front in the ratio of 11:5 and its length is greater than its posterior width in the ratio of 13:11. AME are separated from each other by 4/12 of their diameter and from the ALE by 10/12. Lateral eyes contiguous. PME separated from each other by 15/12 and from the PLE by 10/12 of the diameter of the AME.

Chelicerae: (Fig. 59). Vertical, not diverging, lateral condyles absent, apparently without stridulating ridges. Promargin with two teeth,



FIGS. 56–60.—*Textricella aucklandica* n.sp. Fig. 56, Lateral view of body; Fig. 57, Ventral view of body; Fig. 58, Eyes and clypeus from in front; Fig. 59, Retrolateral view of chelicera; Fig. 60, Retrolateral view of distal segments of male pedipalp, showing patella and tibial process and genital bulb.

retromargin with three teeth. The teeth on the retromargin are more proximal in position, the pair nearest the base of the fang are closely placed. There are a number of smooth, irregularly placed setae on both pro- and retro-lateral surfaces and a row of four similar setae on the sub-distal prolateral surface.

Maxillae: (Fig. 57). Converging in front of the labium, with a thick distal scopula and a serrula on the retrolateral margin.

Labium: (Fig. 57). Fused to sternum, twice as wide as long, straight in front and provided with 6–7 setae.

Sternum: (Fig. 57). Strongly convex and granulate, sparsely clothed with small hairs, longer than wide in ratio of 11:9, rebordered laterally, produced laterally into sharp projections between the coxae. Truncate posteriorly between coxae 4 which are separated by a distance about one and a half times their diameter.

Legs: Lacking spines. Legs 1–3 with three trichobothria (2:1) on the mid-dorsal surface and one on the metatarsus. Leg 4 with 3 (1.2.1) on the tibia but none on the metatarsus. Three tarsal claws, superior with 4–5 small teeth, inferior with a single tooth.

Pedipalps: (Fig. 60). Genital bulb large with a short apical embolus. Patella with a curved and pointed flattened apical process, Tibia with a raised plate, thin and dishlike, produced into a sharp process posteriorly where it rests against the patella process. Tarsus spoon-shaped with a prominent tarsal organ on the prolateral margin at about two-thirds of its length. Spines and trichobothria absent.

Abdomen: (Figs. 56, 57). Ovoid, longer than wide in ratio of 11:8. Dorsal scute lacking but the anterior surface of the venter is covered by an epigastric scute which projects slightly at each postero-lateral corner and extends anteriorly to enclose the petiolus. There is a broad lightly sclerotized area on the venter in front of the spinnerets which extends to the dorsal surface as a narrow ring and encloses the spinnerets. The surface of the abdomen is clothed with short setae, each arising from a small sclerotic base, and with a number of larger sclerotic areas which do not bear setae. Six spinnerets and a prominent colulus.

Female unknown.

Types: Holotype male, Musgrave Peninsula, Auckland Island, on boles of rata (*Metrosideros lucida*) April 19, 1947, J. H. Sorenser (D.M. 2/928). Paratype male, same data (C.M.A. 261).

REMARKS

The family *Textricellidae* was established by Hickman for three species of apneumone Tasmanian spiders. The occurrence of the present species might well have been taken as an indication of close Australian affinity were it not for the fact that many as yet undescribed species of this family have been collected in New Zealand, some of which are closely related to the Auckland Is. species.

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