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# NEW TASMANIAN SPIDERS OF THE FAMILIES ARCHAEIDAE, CYCLOCTENIDAE, AMAUROBIIDAE AND MICROPHOLCOMMATIDAE

by V. V. Hickman Hobart

(with 33 text-figures)

#### ABSTRACT

HICKMAN, V.V., 1981 (30 ix): New Tasmanian spiders of the families Archaeidae, Cycloctenidae, Amaurobiidae and Micropholcommatidae. Pap. Proc. R. Soc. Tasm., 115,47-68 (with 33 figures). https://doi.org/10.26749/rstpp.115.47 ISSN 0080-4703. New Town, Hobart, Tasmania, Australia.

Of the seven new species described one, Zearchaea globosa, belongs to the family Archaeidae and one, Otira affinis, to the family Amaurobiidae. Both are placed in genera hitherto recorded from New Zealand. Four are placed in the family Cycloctenidae not previously recorded from Tasmania. They belong to the genus Cycloctenus recorded from New Zealand, New South Wales and Lord Howe Island. A key to the genus is given. A new species in the family Micropholcommatidae is added to the four already known to occur in Tasmania.

# INTRODUCTION

The spiders described in the present paper include two species closely related to the New Zealand genera Zearchaea and Otira. They were collected in rain-forests of southwestern Tasmania. They are of some interest from the distributional point of view. The family Cycloctenidae, which is represented by four new species, has not been recorded previously from Tasmania.

# Family ARCHAEIDAE

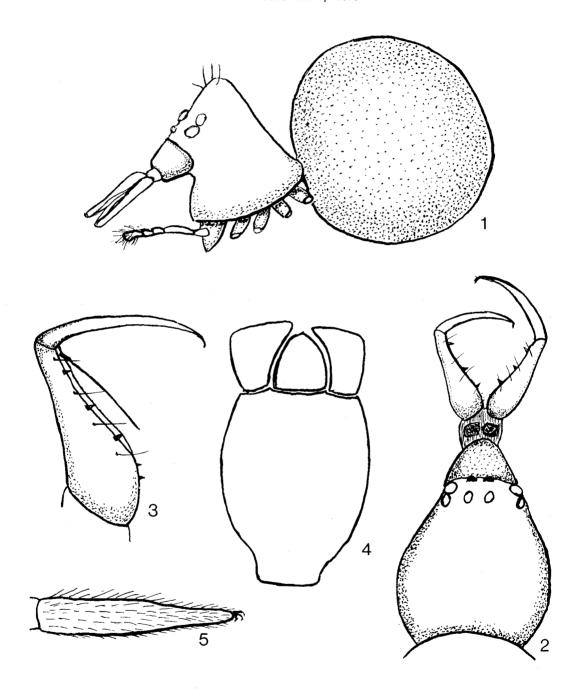
The family Archaeidae is one of the smaller groups of spiders. It was established on three fossil species from Baltic amber by Koch and Berendt (1854). After a lapse of nearly 100 years Petrunkevitch (1950) remarked that there were more fossil species recorded in the family than there were living species from regions where the Archaeidae were known to occur. At the present time about 30 species, including fossils, are recorded. They have a very wide distribution, being described from South Africa, Madagascar, Australia, New Zealand and Patagonia. Lehtinen (1967) considered that the genera Zearchaea, Pararchaea and Holarchaea, which occur mainly in New Zealand (Forster 1955) and Tasmania (Hickman 1969) have more affinity with the Patagonian genus Mecysmauchenius Simon (1884) and should form with it a separate family the Mecysmaucheniidae. The matter is one of difference of opinion (Legendre 1970).

Genus Zearchaea Wilton, 1946

Zearchaea globosa n. sp.

# Female

Measurements in mm:-	
Body length	1.40
Carapace length	0.63
Carapace width	0.46
Abdomen length	0.88
Abdomen width	0.84



FIGS 1-5.- Zearchaea globosa n. sp. Female: 1-body, 2-carapace and chelicerae, 3-chelicera, 4-maxillae, labium and sternum, 5-tarsus of a leg.

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Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
1	0.64	0.17	0.46	0.21	0.35	1.83
2	0.45	0.17	0.34	0.21	0.28	1.45
3	0.41	0.12	0.32	0.22	0.25	1.32
4	0.56	0.17	0.42	0.22	0.34	1.71
Palp	0.21	0.04	0.07		0.08	0.40

Colour of carapace, maxillae, labium, sternum and abdomen dark brown. Legs and chelicerae yellowish brown; palpi yellowish brown with dark tibia and tarsus.

Carapace (fig. 1) higher than long but not as high as abdomen, sloping steeply down in front and behind, without a constriction to form a "neck". Clypeus sloping to the front and forming a blunt point above the base of chelicerae. Eyes eight, in two recurved rows. Ratio of eyes AME:ALE:PME:PLE = 3:6:5:5. Median ocular quadrangle longer than wide in ratio 5:4 and wider behind than in front in ratio 5:3. Lateral eyes contiguous. AME separated by 2/3 their diameter. PME separated by 3/5 their diameter. Surface of carapace without tubercles but clothed with a few short hairs.

Chelicerae (figs 2 and 3) long and slender; widest in basal half. Articular membrane joining them to the cephalothorax has a pair of sclerites above and below. Each paturon is 0.28 mm long and 0.10 mm in greatest width. Fang 0.22 mm long with tip curved to form a hook. Margins of furrow minutely serrate. Promargin with three teeth; retromargin with two smaller teeth near base. A long slender spine arises near base of fang and projects for about three-quarters of the furrow's length (fig.3).

Maxillae (fig.4) converging in front of labium; anterior margin almost transverse and provided with a serrula, a few curved hairs and a weak scopula at inner angle.

Labium longer than wide and almost as long as the maxillae.

Sternum long shield-shaped; longer than wide in ratio 5:4; truncate behind; surface slightly convex and furnished with a few short hairs.

Palp about as long as femur of third leg. Tarsus short and thick, provided with many hairs. Claw absent.

Legs in order of length 1.4.2.3. Lightly clothed with short hairs; spines absent. Three trichobothria on first tibia, one on second, two on third and three on fourth; elsewhere none. Tarsi of first and second legs taper to a thin apex in distal third (fig.5). Claws three. They appear to have an onychium and no teeth.

Abdomen globose, without tubercles or sclerites, thickly covered with fine short hair. Epigynum indistinct. Six short spinnerets and a colulus present.

Locality:- Strathgordon, southwestern Tasmania; 1 Q (holotype). 25.4.1978. J.L. Hickman. Remarks:- The specimen of Zearchaea globosa was found among moss in dense rain-forest. It was the only specimen of the species in a collection of 7 300 spiders from southwestern Tasmania. Most of the collection was obtained from moss and leaf litter by the aid of Berlese funnels. The single specimen of Z. globosa was preserved intact and hence some features could not be ascertained. However, the form of the carapace, the unusual shape of the clypeus, the arrangement of the eyes, tibiae of the first legs much longer than metatarsi are all characters shared with the type of the genus Zearchaea, namely Z. elypeata Wilton, which occurs in New Zealand.

# Family CYCLOCTENIDAE

The genus *Cycloctenus* L. Koch (1878) contains only seven described species. These have been recorded from three localities; two from Australia, four from New Zealand and one from Lord Howe Island. None has been recorded from Tasmania. The genus has been placed in several different families, namely, the Ctenidae by L. Koch (1878), Lycosidae by Simon (1898), Toxopidae by Forster (1964) and tentatively in a new family, Cycloctenidae, by Lehtinen (1967).

The four new species described herein have all the characters of the genus Cycloctenus as defined by L. Koch (1878) including the ventral rows of spines on the tibiae and metatarsi of the first pair of legs. However, Lehtinen (1967, p.371, Table 40) listing the characters of the family Cycloctenidae states that these spines are "absent" and that members of the family carry their egg-sacs. Cycloctenus cryptophilus n. sp. from Tasmania and Cycloctenus fugax Goyen (1890) from New Zealand make lenticular egg-sacs, which they do not carry, but attach to a stone or log and then camouflage with particles of debris. In spite of these differences the Tasmanian species of Cycloctenus have most of the characters which Lehtinen lists and are better placed in the family Cycloctenidae than in any of the previous families to which the genus was assigned.

The following key to the genus is given:-

# Key to the genus Cycloctenus

1	First and third legs equal in length	2
	First leg longer than third	3
$^{2}(1)$	Body length 6.5 mm	C. abyssinus Urquhart
	Body length 10.5 mm	C. pulcher Urquhart
3(1)	AME as large as PLE	C. vittatus Rainbow
	AME smaller than PLE	4
4(3)	Chelicera with 4 promarginal teeth	$\dots$ C. fugax Goyen
	Chelicera with less than 4 promarginal teeth	5
5(4)	Chelicera with 3 promarginal teeth	C. flaviceps Koch
	Chelicera with 2 promarginal teeth	6
6(5)	Chelicera with 5 retromarginal teeth	$\dots$ C. westlandicus Forster
	Chelicera with 2 retromarginal teeth	7
7(6)	PLE larger than PME	8
	PLE smaller than PME	9
8(7)	AME larger than ALE	$\dots$
	AME smaller than ALE	$\dots$ infrequens n. sp.
9(7)	Second leg longer than third	$\dots$ C. flavus n. sp.
	Second leg not longer than third	$\dots$ .C. montivagus n. sp.

# Genus Cycloctenus L. Koch (1878)

# Cycloctenus flavus n. sp.

# Male

Measurements in mm:-	
Body length	5.83
Carapace length	3.08
Carapace width	2.23
Abdomen length	2.85
Abdomen width	1.83

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
1	2.28	1.03	2.17	2.34	0.91	8.73
2	2.06	0.91	1.88	2.06	0.91	7.82
3	2.06	0.91	1.37	1.88	0.86	7.08
4	2.40	0.97	1.83	2.57	1.14	8.91
Palp	1.14	0.57	0.57	-	1.26	3.54

Colour of carapace yellow with two brown bands extending from posterior lateral eyes to hind margin. Side margins edged with brown. Chelicerae, maxillae, labium, sternum, palpi and legs yellow. Transverse brown bands below femora. Abdomen above cream with six pairs of dark dots forming a double median row on front half. On each side of the row of dots a broken dark brown band extends from front to hind end. Sides of abdomen mottled with brown. Ventral side cream with a median brown band.

Shape of carapace as in fig. 6. Highest part with a well marked longitudinal fovea. Eyes in three rows; first row formed by small AME, second by large PME and small ALE, third by large PLE. The length ratio of the three rows 21:58:72. Ratio of eyes AME:ALE: PME:PLE = 9:7:17:15. The AME are separated by once their diameter. The PME separated from each other by once their diameter and from ALE by 5/17 of their diameter. The PLE are separated from each other by four times their diameter and from PME by once their diameter. The trapezium formed by the posterior eyes is wider behind than it is long in the ratio 72:43. Height of clypeus about equal to diameter of AME. Surface of carapace clothed with fine, short, recumbent hairs. A few yellow setae are present in ocular area.

Chelicerae (fig.7) conical, geniculate and slightly inclined to maxillae. Lateral condyles well developed. Fang curved. Each margin of furrow with two teeth. A few minute denticles in furrow itself. On each side near base of fang is a long barbed hair.

Maxillae parallel, longer than wide in ratio 10:7, lightly clothed with erect hairs, serrula present and a scopula at inner apical angle.

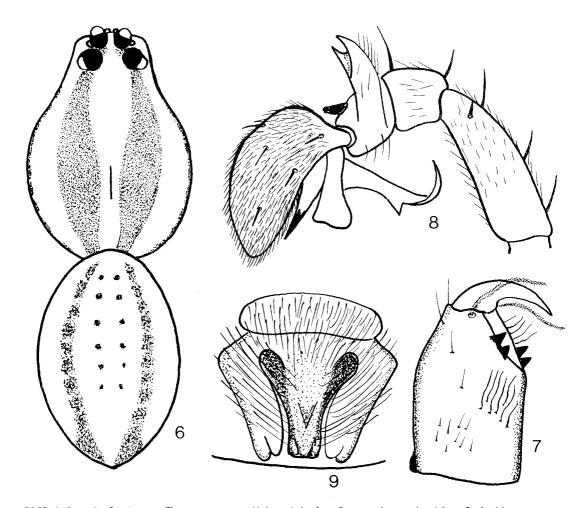
Labium wider than long in ratio 7:5, not extending beyond half length of maxillae, truncate in front and with lateral excavations at base.

Sternum shield-shape, as wide as long, slightly emarginate behind labium and lightly clothed with erect hairs.

Legs in length order 4.1.2.3. Trichobothria in a double row of about six on each tibia, a single row of four on each metatarsus and a single row of three to five on each tarsus. Trochanters not notched. Three tarsal claws; upper claws with nine teeth, lower claw with two. No claw tufts present.

Spines: First leg. Femur dorsal 1-1-1, prolateral 0-1-1, retrolateral 0-1-1, ventral 0. Patella dorsal 1-1, prolateral 1, retrolateral 1, ventral 0. Tibia dorsal 0-1-2, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2-2. Metatarsus dorsal 1-1-0, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2-2. Tarsus 0. Second leg. Femur dorsal 1-1-1, prolateral 0-1-1, retrolateral 0-1-1, ventral 0. Patella dorsal 1-1, prolateral 1, retrolateral 1, ventral 0. Tibia dorsal 1-1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2-2. Other segments as in first leg. Third leg. Femur dorsal 1-1-1, prolateral 0-1-1, retrolateral 0-1-1, ventral. Patella dorsal 1-1, prolateral 1, retrolateral 1, ventral 0. Tibia dorsal 1-1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2. Metatarsus dorsal 1-1-0, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-1. Tarsus 0. Fourth leg. Same as third leg.

Palpi (fig.8) slightly longer than carapace. Tibia with a large erect apophysis, which arises dorsolaterally on the prolateral side. Distal end of the apophysis is bifurcate forming two sharp points. On retrolateral side of tibia is a short black apical projection. On dorsal side of tarsus are several spines mingled with a dense clothing of hair. Genital bulb has a very large median apophysis, which is produced into a fine



FIGS 6-9.- Cycloetenus flavus n. sp. Male: 6-body, 7-retrolateral side of chelicera, 8-palp. Female: 9-epigynum.

curved tip and directed inwards on the prolateral side. Half way along the apophysis is a small pointed barb.

Abdomen oval, clothed with fine hairs and a few bristles. Six spinnerets, short and conical, anterior pair larger than others. A colulus clothed with long hairs is present. Tracheal spiracle is close in front of colulus and leads into four tracheal tubes, which are confined to abdomen. Book lungs normal.

# Female

Measurments in mm:-	
Body length	6.63
Carapace length	2.87
Carapace width	2.24
Abdomen length	3.77
Abdomen width	2.80

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Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
1	2.00	1.09	2.00	1.88	0.80	7.77
2	2.06	1.03	1.66	1.77	0.80	7.32
3	1.88	1.03	1.20	1.66	0.74	6.51
4	2.28	1.03	1.66	2.34	0.97	8.28
Palp	0.97	0.46	0.57	-	1.14	3.14

Colour resembles that of male. The form of the carapace, eyes, chelicerae, maxillae, labium and sternum are also as in the male.

Legs in order of length 4.1.2.3, slightly shorter than those of male.

Spines: First leg. Same as in male except the metatarsus has 2-1-1-2 dorsal spines. Second leg. Same as in male except tibia has 0-1-2 dorsal spines and the metatarsus 2-2-1p-2 dorsal spines. Third leg. As in male except tibia has 0-1-1 and metatarsus 2-2-2 dorsal spines. Fourth leg. As in male except tibia has 0-1-1 dorsal, 2-1p-2 ventral and the metatarsus 2-2-2 dorsal spines.

Palpi slightly longer than carapace. Spines as follow:- Femur dorsal 1-1-1, prolateral 0-0-1, retrolateral 0, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1, retrolateral 0-1, ventral 0. Tarsus dorsal 1-1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-3. Five trichobothria on tibia and three on tarsus. Tarsal claw with five teeth.

Abdomen oval, clothed with fine hair and bristles as in male. Epigynum (fig.9) wider than long. The median septum V-shaped and truncate posteriorly. On each side a sclerotized plate with a curved inner margin close to the septum.

Locality:- Tarraleah, Tasmania. 1 & (holotype), 1 o (paratype), 7.10.1957. V.V. Hickman, southwestern Tasmania. 20 oo and 190 immature specimens Jan.-March 1976, 1977, 1978, C. Howard, C. Johnson and L. Hill.

Remarks: - Specimens were collected in moss, and leaf litter in rain-forest areas.

Cycloctenus montivagus n. sp.

# Female

Measurements in mm:-	
Body length	9.16
Carapace length	.4.05
Carapace width	2.97
Abdomen length	5.14
Abdomen width	3.77

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
1	3.08	1.43	2.68	2.46	1.26	10.91
2	2.91	1.37	2.28	2.51	1.20	10.27
3	2.86	1.43	2.06	2.80	1.26	10.41
4	3.54	1.43	2.86	4.00	1.60	13.43
Palp	1.26	0.69	0.86	-	1.26	4.07

Carapace light brown edged with dark brown round lateral margins. A thick dark median line extends from ocular region to fovea. An irregular dark brown band on each side runs back from posterior lateral eyes to hind margin. The band is crossed by darker radial marks (Fig.10). Chelicerae, maxillae and labium light brown, sternum darker. Legs and palpi light brown with transverse dark bands partly surrounding femora, patellae and tibiae. Abdomen above light brown with blotches and streaks of dark brown tending to form a pattern (fig.10). Ventral surface yellowish brown speckled with dark brown. Epigynum brown. Spinnerets yellowish.

FIGS 10-13.- Cycloctenus montivagus n. sp. Female: 10-body, 11-retrolateral side of chelicera, 12-ventral side of first tibia, 13-epigynum.

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Shape of carapace oval, narrowed in front, widest between second and third coxae, highest at each side of fovea, which is deep and longitudinal. Surface of carapace clothed with short recumbent hairs; a few bristles in ocular region. Eight eyes disposed in three rows. The first row formed by the AME, the second by ALE and PME and the third by PLE. The length of the rows are in ratio 5:16:20. The eyes are mounted on thick black rims. Ratio of eyes AME:ALE:PME:PLE = 7:9:30:20. The AME are separated from each other by 11/7 of their diameter. PME separated from each other by half their diameter and from ALE by 1/6 of their diameter. PLE are separated from each other by 18/5 of their diameter and from PME by 11/10 of their diameter. The quadrangle formed by the PME and PLE is about 3/5 as long as its posterior width.

Chelicerae conical with large lateral condyles; sparsely clothed with short hairs in front. Fang curved. Furrow with two teeth on each margin (fig.11).

Labium wider than long in ratio 9:7, extending to about half the length of maxillae; truncate in front with small lateral excavations at the base.

Maxillae parallel, longer than wide in ratio 7:5. Scopula present on inner apical angle and a few erect hairs on surface.

Sternum shield-shaped and longer than wide in ratio 29:25, ending in a point between hind coxae, slightly emarginate at base of labium, lightly furnished with erect hairs.

Legs in order of length 4.1.3.2. On the ventral side of the tibiae of the first and second legs are five pairs of long spines (fig. 12). Four trichobothria are present in a single row on each tarsus and metatarsus, and about six in a double row on each tibia. Three tarsal claws are present; upper claws with 10 teeth, lower claw with two. Claw tufts absent. Trochanters slightly emarginate.

Spines. First leg. Femur dorsal 1-1-1, prolateral 0-0-1-1, retrolateral 0-1-1, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 0, prolateral 1-1-0, retrolateral 1-1-0, ventral 2-2-2-2. Metatarsus dorsal 0, prolateral 0-0-1, retrolateral 0-0-1, ventral 2-2-2-2. Tarsus 0. Second leg. Femur dorsal 1-1-1, prolateral 0-1-1, retrolateral 0-1-1, ventral 0. Patella dorsal 1-1, elsewhere 0. Other segments as in first leg. Third leg. Femur dorsal 1-1-1, prolateral 0-1-1, retrolateral 0-1-1, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2. Metatarsus dorsal 1-1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-3. Tarsus 0. Fourth leg. Femur dorsal 1-1-1, prolateral 0-1-1, retrolateral 0-0-1, ventral 0. Other segments as in third leg.

Palpi slightly longer than carapace. Spines disposed as follows: Femur dorsal 1-1-2, elsewhere 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1, retrolateral 0, ventral 0. Tarsus dorsal 1-0-0, prolateral 1-1, retrolateral 1-1, ventral 2-2-1-3. Claw very slightly curved and with five teeth.

Abdomen oval, clothed with fine recumbent hairs mingled with coarse erect hairs or bristles. Epigynum (fig. 13) wider than long in ratio 19:12, with a broad septum, a median notch in the anterior margin and a rounded lobe on each side. Spinnerets short and conical, anterior larger than others with the second segment sunken in the apex of the first segment. A short colulus is present.

Locality:- Mount Wellington, Tasmania. 1 Q (holotype) 31.1.1940. V.V. Hickman.

Remarks:- Only the one specimen was found. It was taken on the summit of the mountain amongst leaf litter under Richea scoparia.

Cycloctenus cryptophilus n. sp.

Male

Measur	ements i	n mm:-					
	Body length			8	.50		
	Carapac	e length		4	.50		
	Carapace width			3	.10		
	Abdomen length Abdomen width			4			
				2.70			
	Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
	1	5.55	2.00	5.75	6.65	2.50	22.45
	2	5.55	2.10	5.70	6.50	3.00	22.85
	3	5.00	1.75	4.50	6.50	2.75	20.50
	4	5.55	1.90	5.50	7.50	3.25	23.70
	Palp	2.50	0.85	0.70	_	1.75	5.80

Carapace, chelicerae, legs and palps mainly light brown, the legs spotted and blotched with dark brown. Maxillae and labium brown. Sternum and coxae yellowish brown, the sternum speckled with dark brown towards margin. Abdomen above light brown with a median pattern of dark brown as in fig.14. Sides dark brown, ventral surface light brown speckled with dark brown. Spinnerets yellow.

Shape of carapace broadly oval, narrowed in front, depressed between head region and fovea, which is deep and longitudinal. Eyes eight disposed in three rows, first row formed by AME, second by ALE and PME and the third by PLE. Ratio of eyes AME:ALE:PME: PLE = 9:8:11:12. The median ocular quadrangle wider behind than in front in ratio 3:2 and its length equal to its width behind. Clypeus little higher than diameter AME and sloping slightly to front. All the eyes mounted on large black rims.

Chelicerae conical, condyles well developed, fang well curved, furrow oblique with two teeth on each margin. Each paturon geniculate and close below the "knee" has a conspicuous pair of spines, which cross the pair on the opposite paturon (fig.15).

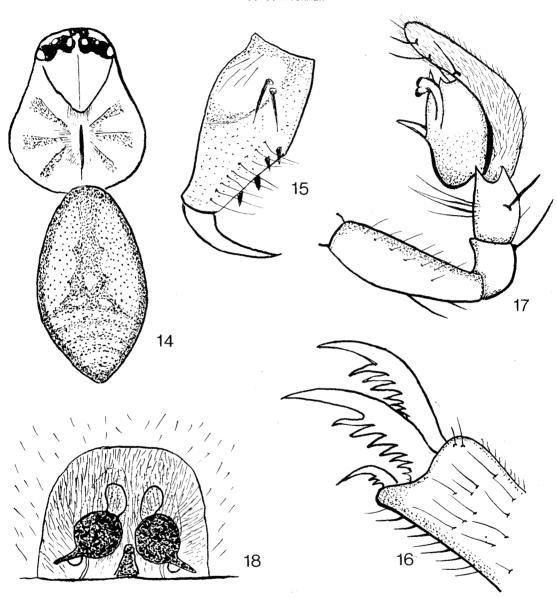
Maxillae almost parallel, longer than wide in ratio 15:8, provided with serrula and scopula.

Labium about half the length of maxillae, little longer than wide in ratio 15:14. Truncate and slightly excavated in front. Small lateral excavations on each side at base.

Sternum as wide as long, almost truncate in front, pointed between hind coxae. Slightly convex and sparsely clothed with erect hairs.

Legs in order of length 4.2.1.3; clothed with fine hair which is coarser below tarsi than elsewhere. Trichobothria are present in a double row on tibiae and metatarsi and a single row on tarsi; they have very small bases and are difficult to see; three tarsal claws are present, upper claws with about eight teeth, lower claw with two very small teeth. No claw tufts are present (fig.16).

Spines. First leg. Femur dorsal 1-1-1, prolateral 1-1-1-1, retrolateral 1-1-1-1, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1-1-1, retrolateral 1-1-1, ventral 2-2-2-2-2. Metatarsus dorsal 0, prolateral 1-1-1-1, retrolateral 1-1-1-1-1, ventral 2-2-2. Tarsus 0. Second leg. Femur dorsal 1-1-1, prolateral 1-1-1-1, retrolateral 1-1-1-1, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2-2. Metatarsus dorsal 0, prolateral 1-1-1-1, retrolateral 1-1-1, ventral 2-2-2. Tarsus 0. Third leg. Femur dorsal 1-1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 0. Patella 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2. Metatarsus dorsal 1, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-0-0. Tarsus 0.



FIGS 14-18.- Cycloctenus cryptophilus n. sp. Male: 14-body, 15-prolateral side of chelicera, 16-tarsal claws, 17-palp. Female: 18-epigynum.

Fourth leg. Femur dorsal 1-1-1, prolateral 1-1-1-1, retrolateral 0-1-1-1, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2. Metatarsus dorsal 0, prolateral 1-1-1-1, retrolateral 1-1-1-1, ventral 2-2-2-2. Tarsus 0.

Palp (fig.17) densely clothed with hair on dorsal side of tarsus, elsewhere sparsely clothed. Spines on dorsal side of femur 1-1, patella 1, tibia 1 and tarsus with three

or four on distal half. Tibia with two short apophyses on retrolateral side at apex. One trichobothrium on dorsal side. Genital bulb as in figure 17.

Abdomen long oval. Dorsal pattern variable and sometimes with a large yellowish area behind the dark central area. Six spinnerets, anterior pair largest. Colulus and tracheal spiracle present.

### Female

Measurement	s in mm:	-				
Body	length			14.25		
Cara	pace leng	gth		5.55		
Cara	pace wid	th		4.50		
Abdomen length				8.75		
Abdomen width				6.25		
Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
l	5.75	2.50	4.70	4.85	2.00	19.80
=						
2	5.10	2.50	5.00	5.00	2.00	19.60
3	4.80	2.00	3.90	5.05	2.20	17.95
4	5.75	2.00	4.50	6.25	2.75	21.25
Palp	2.00	1.00	1.35	-	2.75	7.10

Colour as in male except that a yellowish area is behind the median dark pattern on the abdomen. There is some variation in the colour pattern in both sexes.

Carapace and chelicerae as in male except the paired spines in front of the chelicerae are more strongly developed in female.

Maxillae, labium and sternum as in male. The legs are somewhat shorter.

Spines: First leg. Femur dorsal 1-1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2-2. Metatarsus dorsal 0, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2-2. Tarsus 0. Second leg. Femur dorsal 1-1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2-2. Metatarsus dorsal 0, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2-2. Tarsus 0. Third leg. Femur dorsal 1-1-1, prolateral 1-1-1-1, retrolateral 1-1-1, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2. Tarsus 0. Fourth leg. Femur dorsal 1-1-1, prolateral 1-1-1, retrolateral 1-1, ventral 2-2-2. Tarsus 0. Fourth leg. Femur dorsal 1-1-1, prolateral 1-1-1, retrolateral 1-1, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1-1, retrolateral 1-1, ventral 0. Metatarsus dorsal 0, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2. Tarsus 0.

Palpi about half the length of body. Spines disposed as follows:- Femur dorsal 1-1-1, elsewhere 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1, retrolateral 1, ventral 0. Tarsus dorsal 1-1, prolateral 1-1, retrolateral 1-1, ventral 2-2-2. Tarsal claw only slightly bent and with three teeth.

Abdomen long oval, furnished with short hair. Epigynum wider than long in ratio 10:9, well covered with hair; its form as fig.18. Spermathecae as seen in transparent preparations round. Six spinnerets, colulus and tracheal spiracle present.

Localities:- Tasmania Fern Tree 1  $\sigma$  (holotype) 24.1.1960, 3  $\rho$   $\rho$  (paratypes) 4.11.1959. National Park 1  $\rho$  29.8.1951, J.L. Hickman. Lenah Valley 1  $\sigma$  , 4  $\rho$   $\rho$  1.6.1948, V.V. Hickman.

Remarks:- Cycloctenus cryptophilus is usually found under decaying logs in rain-forests. Males occur from Jan. to June. Females lay their eggs in early Spring. The egg-sac is lenticular and made of white silk. The female covers it with particles of rotten wood and other debris. It is attached to the underside of logs in damp sites.

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# Cycloctenus infrequens n. sp.

Male

Measuremen	nts in mm:-	<b>-</b>				
Вос	ly length		5	.55		
Can	apace leng	th	2	. 70		
Car	apace widt	h	2	.05		
Abo	lomen lengt	:h	2	.70		
Abo	lomen width	ı	1.50			
Leg	g Femur	Patella	Tibia	Metatarsus	Tarsus	Total
1	3.25	1.10	3.25	3.50	1.60	12.70
2	3.15	1.00	3.00	3.25	1.50	12.70
3	2.65	0.95	2.50	3.25	1.70	11.05
4	3.50	1.00	3.00	3.95	2.00	13.45
Pa]	p 1.90	0.55	0.85	-	1.10	4.40

Colour of carapace yellowish brown with radial dark markings. Palpi and legs yellowish with dark brown spots and blotches. Maxillae and labium brown. Sternum yellowish brown with darker margin. Abdomen dark brown above with an elongate yellow median area on front half with five pairs of dark spots (fig.19). Ventral surface light brown; spinnerets yellow.

Carapace oval, narrowed in front to about half its maximum width; depressed between head region and fovea. Cervical groove well marked. Fovea longitudinal and deep. Eight eyes in three rows, the first row being formed by AME, the second by ALE and PME, and the third by the large PLE. The length ratio of the three rows 3:10:12. Ratio of eyes AME: ALE:PME:PLE = 6:8:16:25. Median ocular quadrangle longer than its posterior width in ratio 35:26 and wider behind than in front in ratio 13:8. Height of clypeus about three times diameter of AME.

Chelicerae conical with lateral condyles; furrow oblique with two teeth on each margin; fang well curved; four spines on front of each paturon (fig.20).

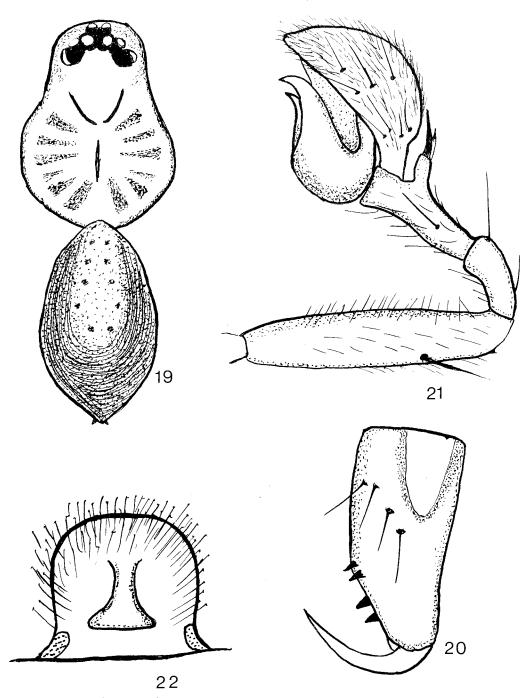
Maxillae longer than wide in ratio 3:2; lightly clothed with hair and furnished with scopula and serrula.

Labium as wide as long; about half length of maxillae; slightly emarginate in front and fringed with long hairs.

Sternum little longer than wide in ratio 14:13, truncate in front and ending in a point between hind coxae, clothed with a few hairs.

Legs in length order 4.1.2.3, the first and second legs being equal in length. Trichobothria on tibiae, metatarsi and tarsi. Three tarsal claws; upper claws with three teeth, lower claw with one. Claw tufts absent. Trochanters not notched.

Spines:- First leg. Femur dorsal 0-1-1, prolateral 1-1, retrolateral 1, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1, retrolateral 1, ventral 2-2-2-2-2. Metatarsus dorsal 0, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2-2-2. Tarsus 0. Second leg. Femur dorsal 1-1-1, prolateral 0-1-1, retrolateral 1-1, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 0-1-1, retrolateral 1-1-1, ventral 2-2-2-2-2. Metatarsus dorsal 0, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2-2-2. Tarsus 0. Third leg. Femur dorsal 1-1, prolateral 1-1, retrolateral 1-1, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 1-2 apical. Metatarsus dorsal 0, prolateral 1-1-1-1, retrolateral 1-1-1-1, ventral 2-2-2-2. Tarsus 0. Fourth leg. Femur dorsal 1-1-1, prolateral 1-1, retrolateral 1-1-1, retrolateral 1-1, retrolateral 1-1, retrola



FIGS 19-22.- Cycloctenus infrequens n. sp. Male: 19-body, 20-chelicera, prolateral side, 21-palp. Female: 22-epigynum.

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Palp (fig.21). Spines as follows:- Femur dorsal 1-1, elsewhere 0. Patella the same. Tibia dorsal 1, prolateral 1, elsewhere 0. Tarsus with a few coarse bristles on dorsal side in basıl half and apex. Tibia much longer than patella than usual and with a broad apophysis at the apex of dorsal side. The apophysis is concave below and has two prongs. The prolateral prong is long with a sharp curved point, the retrolateral prong is flat, pointed, short and with a rugose edge. Tarsus spoon-shape; the genital bulb as in figure.

Abdomea oval, about as long as carapace. Spinnerets six, front pair largest. Integument clothed with fine hairs and erect bristles. Small colulus present.

#### Female

Me	asurements	in mm:-					
	Body :	length		6	.55		
	Carapa	ace lengt	th	3	.00		
	Carapa	ace width	ı	2	. 30		
	Abdome	en lengtl	1	3	.50		
	Abdome	en width		2.50			
	Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
	1	2.75	1.00	2.50	2.15	1.25	9.65
	2	2.50	1.00	2.25	2.20	1.25	9.20
	3	2.50	0.75	2.00	2.50	1.50	9.25
	4	3.00	0.85	2.25	3.25	1.75	11.10
	Palp	1.50	0.65	0.75	-	1.00	3.90

The female resembles the male but has a larger body and shorter legs. Its colouration is similar but the yellow area on the dorsal side of the abdomen is smaller and on the ventral side of the abdomen the female has a pair of longitudinal yellow stripes.

The ratio of the eyes AME:ALE:PME:PLE = 7:9:15:20 and the median ocular quadrangle is shorter than its posterior width in ratio 32:45 and longer behind than in front in ratio 45.23

Palp has spines as follows: - Femur dorsal 0-1-1, elsewhere 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1, retrolateral 1-1, ventral 0. Tarsus dorsal 1, prolateral 1-1-1, retrolateral 1-1-1, ventral 2-2-2. Claw very slightly curved and with three teeth. Basal prolateral spine on tibia as long as the segment.

Epigynum wider than long in ratio 6:5, clothed with hairs. Septum is in the form of an inverted T (fig. 22).

Locality:- Tasmania, Tarraleah 1 d'(holotype) 7.10.1957; 1 o (paratype) May 1952, V.V. Hickman.

# Family AMAUROBIIDAE

This family was established by Thorell (1870) and for many years has included only cribellate forms. Since Lehtinen (1967) published his comprehensive study of the classification of cribellate spiders the cribellate condition can no longer be regarded as diagnostic of the family and many non-cribellate spiders must be included in it. Forster and Wilton (1973) considered that the family should be limited to those genera, which have a simple tracheal system and a sclerotized plate-like median apophysis. In New Zealand most members of this group are ecribellate and include seven genera, among which is the genus Otira. This genus contains forms having the sensory organ known as a tarsal rod. The finding of a Tasmanian species with such an organ appears worth recording.

# Genus Otira Forster and Wilton, 1973

Otira affinis n. sp.

#### Male

Measureme	ents in mm:-				
Вс	dy length		2	.50	
Le	ength of car	apace	1		
Wi	dth of cara	pace	0	.97	
Le	ength of abd	omen	1.12		
Wi	Width of abdomen			0.77	
Le	eg Femur	Patella	Tibia	Metatarsus	Tarsus
1	0.96	0.41	0.97	0.70	0.55

Deg	1 Cmar	rucciia	13.044	MO CUCCULO (CO	I tt I J (I.)	1004
1	0.96	0.41	0.97	0.70	0.55	3.59
2	0.86	0.41	0.71		0.48	2.98
3	0.75	0.30	0.58	0.79	0.47	2.89
4	1.27	0.41	1.10	1.23	0.69	4.70
Palp	0.48	0.21	0.08	-	0.49	1.26

Total

Carapace light brown with dark lateral margins. Black radial markings on thorax and a dark medial line from AME to thoracic fovea. Chelicerae, maxillae, labium, sternum and legs light brown. Brown bands on tibiae and metatarsi. Abdomen greyish brown with a dorsal median row of five pairs of cream spots, the hind pair being joined together. Sides and ventral surface of abdomen pale brown.

Shape of carapace oval, widest between second coxae, narrowed in front to about half maximum width. Fovea longitudinal. Ocular area longer than wide in ratio 6:5. Eight eyes in two strongly procurved rows, the hind row longer than front row in ratio 25:13. Ratio of eyes AME:ALE:PME:PLE = 1:4:6:6. The procurvature of hind row is so great that PLE are almost in front of PME. Pigmentation of rims surrounding eyes is so extensive that the ocular area is mainly black (fig.23)

Chelicerae slightly geniculate, with lateral condyles. Clothed in front with a few long setae. Furrow oblique, promargin with six teeth, the distal four shorter than the others, retromargin with two teeth. Promarginal scopula of ten barbed setae. Fang well curved (fig.24).

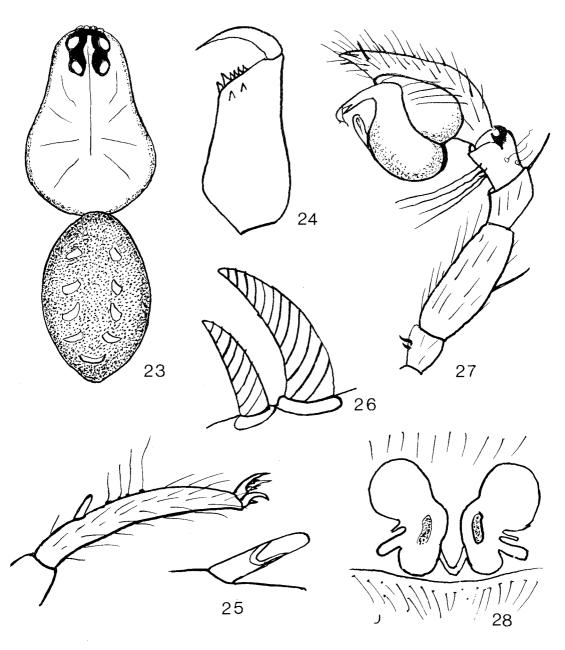
Maxillae slightly converging with a dense scopula on inner side of apical half. Apex with a serrula of about 24 teeth. Outer margin slightly curved.

Labium less than half the length of maxillae; wider than long in ratio 4:3. Front margin slightly excavated, almost straight.

Sternum shield-shape, straight in front, bluntly pointed between hind coxae. Lightly clothed with barbed hairs that slope inwards.

Legs in order of length 4.1.2.3; lightly clothed with barbed hairs. Trochanters not notched. Four trichobothria on tibia, metatarsus and tarsus. Sensory rod on all tarsi basal to trichobothria (fig.25). Upper tarsal claws of first and second legs with 7 teeth, those of third and fourth legs with 4 teeth; lower claw of all legs with one tooth.

Spines are as follows but show some variation in the specimens and also on left and right sides of the one specimen. First leg. Femur dorsal 1-1-1, prolateral 0, retrolateral 0, ventral 0. Patella dorsal 1 apical, elsewhere 0. Tibia dorsal 1 basal, prolateral 1-1, retrolateral 0, ventral 2-2. Metatarsus dorsal 0, prolateral 1 apical, retrolateral 0, ventral 2-2-2. Second leg. Femur dorsal 1-1-1, prolateral 0, retrolateral 1, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 0, prolateral 1-1, retrolateral 1-1, ventral 2-2. Metatarsus dorsal 0, prolateral 1-2, retrolateral 0, ventral 2-2-2. Tarsus 0. Third leg. Femur dorsal 1-1-1, prolateral 1 apical,



FIGS 23-28.- Otira affinis n. sp. Male: 23-body, 24-retrolateral side of chelicera, 25-tarsus of leg and sensory rod, 26-paired spines on trochanter of palp, 27-palp. Female: 28-epigynum.

retro lateral 1 apical, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 0-1, prolateral 1-1, retrolateral 1-1, ventral 0-1. Metatarsus dorsal 1-0, prolateral 1-1, retro lateral 1-1-1, ventral 2-2-2. Tarsus 0. Fourth leg. Femur dorsal 1-1-1, prolateral 1 apical, retrolateral 1 apical, ventral 0. Patella dorsal 0-1, elsewhere 0. Tibia dorsal 1-1, prolateral 1-1, retrolateral 1-1, ventral 2-2-2. Metatarsus dorsal 2-2-2, prolateral 1-1, retrolateral 1-1-1, ventral 2-2-2. Tarsus 0.

Palp has a pair of short spines on ventral side of trochanter, one 60  $\mu m$  long and 18  $\mu m$  in maximum width, the other 45  $\mu m$  long and 12  $\mu m$  in greatest width. Each is marked with oblique curved ridges (fig.26). The femur has 1-1 dorsal spines and patella 0-1. Tibia has a group of long bristles on ventral side, and four trichobothria and apophyses on dorsal side (fig.27). The tarsus is spoon-shape, clothed with hairs, and with a few short spines at apex. Genital bulb has a slender terminal apophysis and a narrow elongate conductor, which ends in a small hood-like cover for the short embolus (fig.27).

Abdomen oval, integument thin and with barbed hairs. Spinnerets small; anterior pair largest; middle pair fused into one structure with three setae at apex and two spigots on each side; hind pair minute with one spigot. Colulus present and furnished with a few hairs.

#### Female

Measurements in mm:-	
Body length	2.51
Carapace length	1.31
Carapace width	0.97
Abdomen length	1.25
Abdomen width	0.80

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
1	1.03	0.45	0.89	0.68	0.48	3.53
2	0.90	0.42	0.68	0.68	0.48	3.16
3	0.82	0.40	0.55	0.78	0.48	3.03
4	1.16	0.41	0.92	1.13	0.66	4.28
Palp	0.46	0.25	0.25	-	0.48	1.44

Female resembles male in colour and markings and in most features.

Spines show some differences in number and distribution. First leg. Femur dorsal 1-1, prolateral 0-1. Patella dorsal 1-1. Tibia dorsal 0, prolateral 0, retrolateral 0, ventral 2-1p-2-2. Metatarsus dorsal 0, prolateral 1-1, retrolateral 0, ventral 2-2-2. Tarsus 0. Second leg. Femur dorsal 1-1, prolateral 0-1, retrolateral 0, ventral 0. Tarsus 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 0, prolateral 1-1-1, retrolateral 0, ventral 2-2-2. Tarsus 0. Third leg. Femur dorsal 0-1, prolateral 1-1, retrolateral 0, ventral 2-2-2. Tarsus 0. Third leg. Femur dorsal 0-1, prolateral 0-1, retrolateral 0, ventral 0. Patella dorsal 1-1, elsewhere 0. Tibia dorsal 0-1, prolateral 1-1, retrolateral 1-1, ventral 1p-1p-2. Metatarsus dorsal 0-1-0. prolateral 1-1-1, retrolateral 1-1, ventral 2-2-1. Tarsus 0. Fourth leg. Femur dorsal 0-1, prolateral 0-1, retrolateral 1-1, retrolateral 1-1, ventral 1-1, ventral 1p-1p-2. Metatarsus dorsal 2-2-2, prolateral 1-1, retrolateral 1-1, ventral 12-2-1. Tarsus 0.

Palp nearly as long as carapace; clothed with barbed hairs. Spines as follows:-Femur dorsal 0-1-1, elsewhere 0. Patella dorsal 1-1. Tibia dorsal 1-1, prolateral 1, elsewhere 0. Tarsus dorsal 1-1, prolateral 1-1-1, retrolateral 1-1-1, ventral 1-1. Four trichobothria on tibia and three on tarsus. Claw with three teeth.

Form of epigynum as seen in transparent preparations is shown in fig.28. Spinnerets small; anterior pair two-segmented and with about six spigots. Middle pair 60  $\mu$ m long, fused together to form a single domeshape structure with three setae at the apex and two

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spigots at each side. Hind spinnerets about 57  $\mu m$  long, conical, with one spigot and a long seta. Colulus and a small tracheal spiracle present.

Type locality:- Strathgordon 1  $\sigma'$  (holotype), 1  $\varphi$  (paratype), 2  $\varphi$   $\varphi$  (paratypes) 16.5.1978 (J.L. Hickman). Other localities in southwestern Tasmania 26  $\varphi$   $\varphi$  and 142 immature specimens, Jan-March 1976 and 1977 (C. Howard, 1. Hill).

Habits:- The spider occurs in moss and litter in rain-forest areas. Specimens kept in captivity spun no webs and made no egg-sacs during four weeks in April and May. Males appear in late Autumn.

Remarks:-  $\ell tira$  affinis resembles other members of the genus in having a tarsal rod instead of the usual pedal organ or drum, a similar arrangement of the eyes, the same general form of the epigynum and the peculiar paired spines on the trochanter of the male palp. It differs in having the tarsal rod basal instead of distal to the tarsal trichobothria, and also in the form of the embolus of the genital bulb.

# Family MICROPHOLCOMMATIDAE

This is a family of very small spiders about 1.0 mm in body length. They occur in moss and leaf litter of rain-forests. The family was established on the characters of two species in Lorne, Victoria and two in Tasmania (Hickman 1944). Forster (1959) transferred the species to the family Symphytognathidae, but later in revising the latter family, Forster and Platnick (1977) left the species in the Micropholcommatidae where they had been placed. The distribution of the family has now been extended to New South Wales and Western Australia (Main 1974). The recorded species number five.

Genus Micropholcomma Crosby and Bishop, 1927

Micropholeomma turbans n. sp.

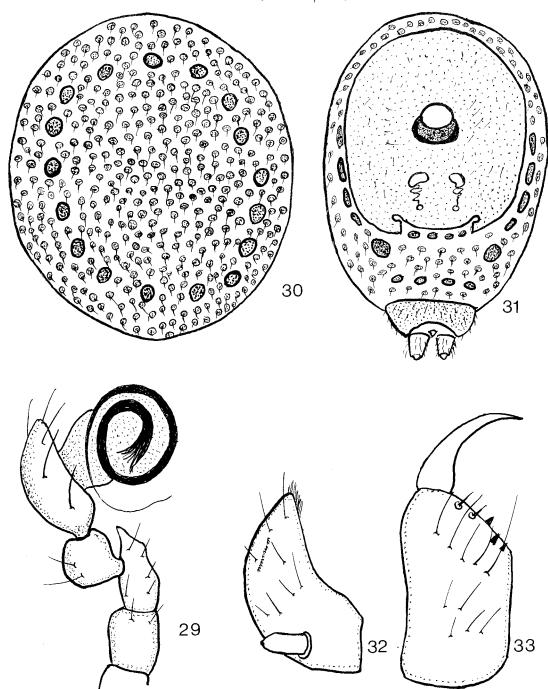
Male

Measurements in mm:-	
Body length	0.76
Carapace length	0.36
Carapace width	0.31
Abdomen length	0.59
Abdomen width	0.43

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
1	0.30	0.11	0.23	0.12	0.22	0.98
2	0.27	0.11	0.20	0.11	0.23	0.92
3	0.25	0.09	0.18	0.11	0.20	0.83
4	0.30	0.11	0.26	0.12	0.22	1.01
Palp	0.05	0.07	0.05	-	0.09	0.26

Carapace brown with dark markings on each side; chelicerae, palpi and legs light brown; sternum with a dark spot opposite base of each coxa. Abdominal scute and sclerites brown, soft parts greyish.

Shape of carapace pyriform, head region high sloping slightly downward to the front from the thorax, which slopes steeply to hind margin. Surface smooth and polished; a few hairs scattered on the surface. Eight eyes in two rows, which occupy the width of the front of the head region. Seen from above front row slightly procurved and hind row almost straight. Eye ratio AME:ALE:PME:PLE = 10:18:15:17. AME dark, other eyes pearly white. All eyes surrounded with dark rims. Lateral eyes contiguous. ALE almost touching AME. Hind row longer than front row, and the eyes evenly spaced. Clypeus high and provided with a few hairs.



FIGS 29-33.- *Micropholeomma turbans* n. sp. Male: 29-palp. Female: 30-dorsal side of abdomen, 31-ventral side of abdomen, 32-maxilla and palp, 33-prolateral side of chelicera.

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Chelicerae 0.16 mm long, sloping slightly towards maxillae, lateral condyles and stridulating ridges absent, furrow oblique, promargin with two teeth and a spine, retromargin with one small tooth. Maxillae strongly converging, with small apical scopula and serrula. Labium wider than long in ratio 27:8, rounded in front. Sternum convex, shield-shape, rebordered, excavated round base of each coxa, truncate posteriorly and widely separating hind coxae; surface with a few hairs.

Legs in order of length 4.1.2.3. Lightly clothed with hair. One trichobothrium on the tibia of the first, second and third legs and two on the fourth. Tarsi straight with a sensory drum on dorsal side near base. Three claws, upper pair with two teeth, lower claw with none.

Palp (fig.29) with distal extension of patella to form a blunt point beyond junction with tibia. Embolus makes a coil of two turns on genital bulb. Tarsus spoon-shape clothed with hairs and a few bristles on dorsal side.

Abdomen almost covered by a dorsal scute. Sides with two folds. Ventral surface with a large epigastric scute, which is extended round the petiolus. Soft part of integument with numerous small sclerites, each carrying a hair. Spinnerets six, front pair largest. A small colulus present, which together with the spinnerets is surrounded by a sclerotized ring.

### Female

Measurements in mm:-	
Body length	0.84
Carapace length	0.39
Carapace width	0.32
Abdomen length	0.66
Abdomen width	0.48

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
1	0.27	0.11	0.20	0.12	0.23	0.93
2	0.26	0.11	0.19	0.11	0.23	0.90
3	0.22	0.10	0.16	0.11	0.21	0.80
4	0.30	0.10	0.25	0.12	0.23	1.00

The female has the same colour as the male and resembles the male in most characteristics, but is slightly larger and differs in the following features:-

Chelicerae (fig.33) have a slightly different dentition.

The palp is rudimentary consisting of a small stump projecting from the front of the maxilla at the base and showing no indication of segmentation.

The abdomen has no dorsal scute but the integument of the dorsal surface is provided with numerous small sclerites each with a short seta and the margin has a ring of larger sclerites (fig.30). The ventral surface has a large epigastric scute as in the male and the spinnerets and colulus are also surrounded by a similar sclerotized ring. On the hind margin of the epigastric scute are two small notches, one on each side, in which open the tracheal spiracles. The afferent ducts leading to the spermathecae open on the epigastric scute and may be seen in transparent preparations (fig.31).

Locality:- Southwestern Tasmania, Gordon River valley,  $145^{\circ}56'E$ ,  $42^{\circ}37'S$ , 10' (holotype), 10' (paratype) from moss 5.1.1978 (L. Hill et al.);  $145^{\circ}54'E$ ,  $42^{\circ}38'S$ , 20', 200', 200' (paratypes) from leaf litter 5.1.1978 (L. Hill et al.). Other localities in the Gordon River valley from moss and litter 180' and 2300' during Jan., Feb. and March 1976/1978 (C. Howard and L. Hill).

Remarks: - M. turbans resembles M. caeligenum Crosby and Bishop, M. parmatum Hickman and M. mirum Hickman in having females with vestigial palps. It differs from them in the form of the male palp. It also differs from M. caeligenum and M. parmatum but resembles M. mirum in the dorsal covering of the abdomen of the female. Unlike M. mirum it lacks the peculiar spines around the spinnerets. The females of M. bryophilum (Butler) and M. longissimum (Butler) have palps in which tibia and tarsus are fused into one segment.

### LODGEMENT OF TYPES

Holotypes mentioned herein will be lodged in The Australian Museum, Sydney. Paratypes, if available, will also be lodged in The Australian Museum and in The Tasmanian Museum and Art Gallery.

### ACKNOWLEDGEMENTS

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#### REFERENCES

- Forster, R.R., 1955: Spiders of the family Archaeidae from Australia and New Zealand. Trans. R. Soc. N.Z., 83: 391-403, figs 1-24.
- 1959: The spiders of the family Symphytognathidae. Trans. R. Soc. N.Z., 86: 269-329, figs 1-158.
- , 1964: The spider family Toxopidae (Araneae). Ann. Natal Mus., 16: 113-151, figs 1-75.
- and Platnick, N.I., 1977: A review of the spider family Symphytognathidae. Amer. Mus. Novitates, 2619: 1-29, figs 1-74.
- and Wilton, C.L., 1973: The spiders of New Zealand, Part 4. Otago Mus. Bull., 4: 15-309, figs 1-1088.
- Goyen, P., 1890: Descriptions of new species of New Zealand Aranaae, with notes on their habits. Trans. Proc. N.Z. Inst. 1889, 22: 267-273.
- Hickman, V.V., 1944: On some new Australian Apneumonomorphae with notes on their respiratory systems. Pap. Proc. R. Soc. Tasm. 1943: 179-195, figs 1-35.
- , 1969: New species of Toxopidae and Archaeidae (Araneida). Pap. Proc. R. Soc. Tasm., 103: 1-11, figs 1-30.
- Koch, C.L. and Berendt, G.C., 1854: DIE IN BERNSTEIN BEFINDLICHEN CRUSTACEEN, MYRIOPODEN, ARACHNIDEN UND APTEREN DER VORWELT. 1-124, pls 1-17. Berlin.
- Koch, L., 1878: DIE ARACHNIDEN AUSTRALIENS. Nurnberg, 969-1044, pls 84-92.
- Legendre, R., 1970: Arachnides-Araignees-Archaeidae. Faune de Madagascar, 32: 1-49, figs 1-18, pls 1-4.
- Lehtinen, P.T., 1967: Classification of the cribellate spiders and some allied families with notes on the evolution of the sub-order Araneomorpha. *Ann. Zool. Fenn.*, 4: 199-468, figs 14-524.
- Main, B.Y., 1974: Occurrence of the lungless spider Micropholcomma Crosby and Bishop in South-West Western Australia (Araneae: Symphytognathidae). J. Aust. ent. Soc., 13. 79.
- Petrunkevitch, A., 1950: Baltic Amber spiders in the Museum of Comparative Zoology.
- Bull. Mus. Comp. Zool., 103: 259-337, pls 1-27.
  Simon, E., 1884: Note complémentaire sur la famille des Archaeidae. Ann. Mus. civ. stor. nat. Genova, 20: 373-380. , 1898: HISTOIRE NATURELLE DES ARAIGNEES. Tome II. Paris: 193-380. Thorell, T., 1870: On European spidore " ' '
- Thorell, T., 1870: On European spiders. N. Act. reg. Soc. sci. Uppsala, 7: 109-242. Wilton, C.L., 1946: A new spider of the family Archaeidae from New Zealand.
- - Dom. Mus. Rec. Ent., 1: 19-26, figs 1-5.