

AUSTRALIAN MUSEUM SCIENTIFIC PUBLICATIONS

Rainbow, W. J., 1903. Studies in Australian Araneidae. No. 1. *Records of the Australian Museum* 5(1): 62–66. [14 April 1903].

doi:10.3853/j.0067-1975.5.1903.1032

ISSN 0067-1975

Published by the Australian Museum, Sydney

nature culture **discover**

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6 College Street, Sydney NSW 2010, Australia



STUDIES IN AUSTRALIAN ARANEIDÆ.

No. 1.

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(Figs. 5 and 6.).

ERIODON OCCATORIUM, *Walck.*

Mr. H. R. Hogg, M.A., in his monographic list of the "Spiders of the Sub-order Mygalomorphæ,"¹ when dealing with this species, reviews briefly the history of the type and other specimens in Europe,² from which it would appear that Walckenaer's specimen (type) came, in all probability from Port Jackson, N.S.W. Later, M. H. Lucas obtained a specimen from "les environs de Melbourne," and this was purchased by the Paris Museum in 1859.

In his paper, Mr. Hogg points out that Walckenaer "gives two drawings of the eyes, in one of which the front middle pair are quite small, about three diameters apart; in the other somewhat larger, one-and-a-half diameters apart. In the former, also, the rear side eyes are nearer together than the front side, and in the other drawing both distances are the same. The first is from above, the second from in front." Walckenaer described this species as *Missulena occatoria*.³

Lucas, in a paper dealing with the genus, says⁴ that the front middle eyes of *occatorium* are close together, and gives a figure in which they are delineated as small, and about a diameter apart; he was able to compare his specimen with the type, so, as Mr. Hogg remarks, "his identification should be correct." Lucas gave the measurements as 20 mm. long, but does not say whether the palces are included or not. According to the author of "Spiders of the Sub-order Mygalomorphæ"⁵ there are in the British Museum two female specimens from the Hunter River, N. S. W., and West Australia, labelled *E. occatorium*; these are old and dried, different from one another, and do not agree with Lucas's description. In order to assist the student, Hogg

¹ Hogg—Proc. Zool. Soc., 1901, p. 218 *et seq.*

² Hogg—*loc. cit.*, pp. 220-221.

³ Walckenaer—Tableau des Araneides, 1805, p. 8, pl. ii., figs. 11-14; *id.*, Ins. Apt., 1837, i, p. 252.

⁴ Lucas—Ann. Soc. Ent. Fr. (4), v., 1865, p. 309, pl. 8; also, Hogg—Proc. Zool. Soc., 1901, p. 221.

⁵ Hogg—*loc. cit.*, p. 221.

gives a brief description of these, together with measurements of the largest specimen,⁶ and adds:—"These two are more likely the female (unknown) of *E. rubrocapitatum*, Auss., and of *E. crassum*, Cambr., respectively."

Whatever these forms may be, I do not think that either of them is referable to *E. rubrocapitatum*, and this I will endeavour to demonstrate later on.

A short time ago, my colleague, Mr. E. R. Waite, presented to the Trustees of the Museum a specimen of *Eriodon* found by him at Mosman's Bay, and which, after careful examination, leaves no doubt in my mind as to its specific position—namely, *E. oceanarium*. This, for the benefit of students is herewith described.

FEMALE: *Cephalothorax* (from base to *clypeus*) 6·5 mm., or (including *falces*) 10·5 mm. long; breadth, 7·8 mm.; *abdomen* 12·2 mm. long, 10·3 mm. broad.

Cephalothorax.—Black-brown, glossy. *Pars cephalica* rising abruptly, high, strongly arched; a few long, stiff bristles form a fringe in front of anterior row of eyes, and at the sides; there are also a few long bristles scattered over the surface behind the median and rear eyes; from the median pair of eyes to junction of the cephalic and thoracic segments, there is a faintly discernible ridge; the junction of the cephalic and thoracic segments is deeply grooved. *Pars thoracica* moderately arched, depressed at centre; radial grooves faintly distinct. *Clypeus* of a pale, somewhat fleshy tint. *Marginal band* concolorous, broad, and fringed with fine, pale yellowish hairs.



FIG. 5.

Eyes.—Arranged in three series of 3, 2, 3 each; median pair separated from each other by a space equal to about once their individual diameter; lateral eyes protuberant, and of these each outer anterior eye is decidedly the largest of the group, and the inner one much the smallest (Fig. 5.)

⁶ Hogg—*loc. cit.*, p. 221.

Legs.—Short and strong, dark brown, glossy, spined, and clothed with long coarse hairs or bristles. Their measurements (in millimeters), are as follows:—

Leg.	Coxa.	Trochanter and femur.	Patella and tibia.	Metatarsus and tarsus.	Total.
1	3·0	5·8	4·5	4·0	17·3
2	3·0	5·8	4·3	3·5	16·6
3	3·5	5·8	4·5	4·0	17·8
4	3·5	7·5	5·5	4·5	21·0

Palpi.—Similar in colour, clothing, and armature to legs. measurements (in millimeters): Coxa, 2·1; trochanter and femur, 4·5; patella and tibia, 3·1; tarsus, 2·1; total, 11·8.

Falces.—Concolorous with cephalothorax, porrected, powerful, arched, apices and inner margins clothed with long, coarse bristles; falx sheath armed on the inner margin with a row of eleven small, strong teeth, and on the outer with nine; in addition to these there are two intermediate rows of about a dozen smaller teeth.

Maxillæ.—Dark brown, strong, broad, arched, tapering outwards to a point, surface hairy, inner and apical margins fringed with long reddish bristles.

Labium.—Similar to maxillæ in colour and clothing, longer than broad, arched, conical.

Sternum.—Rather longer than broad, glossy, narrowest in front, where it is deeply indented; surface depressed in places, and moderately hairy; margins fringed (not thickly) with long hairs.

Abdomen.—Obovate, projecting over base of cephalothorax, strongly arched, hairy, chocolate brown above, rather paler below.

Obs.—Since the above description was drawn up, the Trustees have received, through the courtesy of Mr. S. J. Johnston, B.A., of the Technological Museum, Sydney, and Mr. George Blake, of the Government Savings Bank, Sydney, two additional specimens (female) both of which were collected in the neighbourhood of Sydney. Unfortunately Mr. Johnston's specimen was dry when he obtained it, but that presented by Mr. Blake was in good condition. Both specimens are rather larger than the one described above, and their leg and palpi measurements are, therefore, relatively longer.

ERIODON RUBROCAPITATUM, *Auss.*

This is a widely distributed species, specimens having been collected in Northern and Southern Queensland, N. S. Wales, Victoria, S. Australia and W. Australia. The male

example is by far the best known, and is, as a rule, the only one found in collections. It differs somewhat in the intensity of its colouration, some examples having the head and falces a brilliant scarlet, whilst in others these parts are merely reddish-brown. The female has never been described.

Mr. Hogg, in addition to a brief description of a male in the Keyserling Collection (British Museum) gives the measurements of a specimen—which he regards as the female form of this species; this specimen is also in the British Museum Collection. The characters, however, with exception of the colour of the eyes, are not enumerated.⁷ *E. rubrocapitatum* is the form recorded by Simon under the specific name of *E. semicoccinneum*,⁸ and by myself as *Actinopus formosus*.⁹

A short time ago Mr. W. W. Froggatt, Government Entomologist of New South Wales, presented to the Trustees two specimens from Kalgoorlie, Western Australia, a male and female; the latter is described hereunder.

The fact that this specimen is the first female recorded having red head and falces, makes it particularly interesting. Hogg, in commenting upon the question of colour, says:—"No scarlet coloured females have been found; probably they are of the normal black-brown or chocolate colour and may not differ even so much as the males."¹⁰

FEMALE: *Cephalothorax* (from base to *clypeus*) 7.5 mm. or (including *falces*) 14.5 mm. long; breadth, 12 mm.; *abdomen*, (shrunken) 5.7 mm. long, 5 mm. broad.

Cephalothorax.—Broadest in front. *Pars cephalica* rising abruptly, high, strongly arched, smooth, shining red, darkest at base; immediately at rear of median eyes there are two distinct circular depressions or pits, from near which to the junction of the thoracic segment there is also a faintly discernable ridge. *Pars thoracica* smooth, shining, chocolate brown, broad, moderately convex, deeply depressed at centre, radial grooves distinct,

⁷ Hogg—*loc. cit.*, pp. 226-227.

⁸ Rainbow—*Proc. Lin. Soc., N. S. W.*, xxi., 1896, p. 328, pl. xx.
loc. cit., xxii., p. 253.

⁹ Simon in Semon—*Zool. Forsch. Austr. Malay. Archipel.*, 1896
Lief. 8, p. 343.

¹⁰ Hogg—*loc. cit.*, p. 223.

lateral and posterior angles reflexed. *Marginal band*, pale yellowish.



FIG. 6.

Eyes.—In three series of 3, 2, 3; median and outer lateral pairs moderately large and of equal size, but the inner lateral eyes are exceedingly minute; median eyes opalescent, surrounded by black rings, and separated from each other by a space equal to about once their individual diameter; outer lateral eyes protuberant, oval, colourless, and separated from each other by a space equal to three times their individual diameter; inner angles black; each inner lateral eye is seated midway between outer lateral and median eyes; they are also colourless (Fig. 6.)

Legs.—Short, robust, glossy, reddish brown above, and clothed with long coarse hairs and bristles; under surfaces of a somewhat lighter hue. Measurements (in millimeters):—

Leg.	Coxa.	Trochanter and Femur.	Patella and Tibia.	Metatarsus and Tarsus.	Total.
1	3.7	7.4	7.5	5.5	24.1
2	3.7	7.0	7.5	5.5	23.7
3	3.7	8.0	6.5	6.0	24.2
4	4.5	8.5	8.5	6.5	28.0

Palpi.—Similar in colour and clothing to legs. Measurements (in millimeters): Coxa, 2; trochanter and femur, 7; patella and tibia, 7; tarsus, 4; total, 20

Falces.—Smooth, red, powerful, porrected, arched, apices and inner margins clothed with long, coarse hairs or bristles; falx sheath armed on inner margin with nine small strong teeth, and on the outer with six; in addition to these there are two inner rows of about a dozen smaller teeth.

Maxilla.—Concolorous, strong, broad, clothed with long, coarse ferruginous and golden red hairs or bristles; inner apical angles thickly set with short coniform tubercles.

Labium.—Concolorous also, rather longer than broad, narrowest in front, the surface generally smooth, but depressed in places, and moderately hairy; outer angles fringed with long, reddish hairs.

Sternum.—Rather longer than broad, glossy, narrowest in front, where it is deeply depressed; there are also two deep depressions or pits near the posterior angle; surface smooth, red, and fringed with reddish hairs.

Abdomen.—Obovate, overhanging base of cephalothorax, hairy, black-brown, both above and below.