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On some new and interesting Exotic Spiders collected by
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(Plate V.¹)

Order ARANEIDEA.

Fam. DRASSIDÆ.

Gen. PROTHESIMA L. Koch.

PROTHESIMA ALBOMACULATA, sp. n. (Plate V. figs. 2-2 c.)

Adult female, length $2\frac{1}{2}$ lines (4.5 mm.).

Cephalothorax flattish, oval, truncate at each end, fore end rather the narrowest, lateral marginal impressions at caput very slight, profile-line nearly level. Colour deep black-brown, softening to yellowish brown round the thoracic indentation; surface thinly covered with grey adpressed hairs.

Eyes in two transverse rows of very nearly equal length. Curve of posterior row slight and its convexity directed backwards. Anterior row almost straight, laterals of this row largest of the eight, the two centrals being placed on a slight prominence, and further from each other than from the laterals. The two centrals of the posterior row are much further from each other than from the laterals and are slightly the largest. The four centrals form a quadrangle as long as broad, the fore side being shortest.

Legs moderate in length and strength, 4, 1, 2, 3. Colour yellow to yellow-brown; the tibiæ, femora, and genuæ of the first pair black-brown, these joints of the second pair yellow-brown, and of the third and fourth pairs more or less deeply marked longitudinally and suffused with black and brown, furnished with coarse hairs and spines, the latter most numerous and strongest on the tibiæ and metatarsi of the third and fourth pairs.

Falces, maxillæ, and labium deep brown.

Sternum oval, pointed behind; colour reddish yellow-brown.

Abdomen oval, somewhat flattened, black, with four conspicuous white spots forming a quadrangle on the fore half of the upperside, the two hinder spots largest and nearly round, the anterior, near the fore margin, oval or subtriangular and forming a shorter transverse line than the hinder spots. On each side of the underside, about the middle, is a large somewhat irregular triangular-shaped white patch, whose inner angles are nearly contiguous a little way behind the middle. Spinners of the inferior pair much wider apart than the superiors. Genital aperture simple but characteristic in form.

Hab. Salisbury, Mashonaland, S. Africa, 5000 feet, Nov. 1898 to Jan. 1899 (*G. A. K. Marshall*).

¹ For an explanation of the Plate, see p. 16.

Gen. nov. TITUS.

Cephalothorax elongate-oval, rounded behind, broadly and a little roundly truncate before; lateral marginal impressions at the caput gradual but distinct; upper surface strongly convex; from the fore part of the caput to the hinder slope the rise is strong, a little curved and even, with a very slight dip at the thoracic junction. The sides of the cephalothorax project over the bases of the legs, making them appear to be articulated on the same plane as the sternum. The thoracic indentation is very minute, and the other normal ones obsolete; hinder slope steep; height of the clypeus, which projects, is half that of the facial space, its fore margin overhanging the base of the falces.

Eyes moderate and not greatly unequal in size; in two transverse curved rows; the hinder row considerably longest, its eyes are very nearly equally separated, and the convexity of its curve is directed forwards, while that of the anterior row is backwards. The hind-lateral eyes are larger than the hind-centrals and are placed outside a strong tubercle; those of the anterior row on a well-marked transverse prominence or ridge. The fore-centrals are very nearly if not quite of equal size, the interval between them being about double that which separates each from the fore-lateral eye on its side. The central quadrangle is slightly broader than long, and its anterior side shortest.

Legs short, rather slender, 4, 1, 2, 3; the femora strongly clavate or tumid at their posterior end, furnished with hairs and spines; two pairs of these are beneath the metatarsi and three pairs beneath tibiæ of the first pair. Tarsi end with 2 claws.

Palpi (♀). The digital joint is double the length of the radial, rather claviform, and ending with a very minute, slightly curved single claw.

Falces moderate in length, powerful, subconical.

Maxillæ rather short, strong, straight, but inclined to the labium; rounded at their outer extremity, and a little impressed and obliquely truncate at their inner extremity.

Labium short, broader than long, narrowest at the apex, the outer corners of which are rounded, and the middle a little impressed.

Sternum longer than broad, oval, slightly hollow-truncate in front, bluntish pointed behind, and its margins strongly indented by the basal joints of the legs. From the hinder end a chitinous plate runs between the coxæ of the fourth pair of legs and spreading out behind them joins in with the upperside of the cephalothorax.

Abdomen short, broad, its upper surface covered with a strong kind of granulose coriaceous shield furnished with plumose and other hairs; sides, especially backwards, protuberant and tumid, these parts connected behind by transverse rugæ or folds, in the midst of which the spinners are placed and almost hidden in a circular cavity.

[2]

TITUS LUGENS, sp. n. (Plate V. figs. 3-3 e.)

Adult female, length $2\frac{1}{2}$ lines.

Cephalothorax bright red-brown, suffused with a darker hue on the sides and on the caput, the fore part of which is nearly black; the surface is thickly covered with small round shining tubercles or granulosities, and it is thinly clothed with hairs, of which some on the sides and hinder part are white and of a plumose nature.

Legs yellow tinged with brown; the femora much strongest, granulose, as also are the uppersides of coxæ. Colour of the femora of 1st pair black-brown, of the second pair not so dark, of the third and fourth pairs paler and indistinctly banded with darker. The tarsi are enlarged slightly and gradually to the ends, which are furnished with two claws and a compact claw-tuft.

Falces deep reddish black-brown, paler at the fore extremity, furnished in front with bristly hairs.

Maxillæ and *labium* yellow-brown.

Sternum yellow-red, covered thickly with small granulosities like the cephalothorax.

Abdomen coriaceous, covering of the upperside black with a central triangular patch of white plumose hairs, two patches of the same on the lateral margins, and one at the hinder extremity, sides and underside of a paler browner hue. The fore extremity on the underside is covered with a coriaceous granulose integument (the granulosities much strongest and becoming tubercular at the fore end), which forms a short sheath, covering most of the connecting pedicle as well as the spiracular openings and the genital aperture. For the peculiar form of the abdomen, see generic characters above; but whether this is only specific or whether generic, it is hard to say in the absence of allied species.

Hab. Salisbury, Mashonaland, S. Africa, 5000 feet, Nov. 1898 to Jan. 1899 (*G. A. K. Marshall*).

Fam. EPEIRIDÆ.

Genus NEPHILENGYS L. Koch.

NEPHILENGYS MALABARENSIS Walck.

An adult female of this common and widely dispersed Epeirid from Karkloof, Natal (*G. A. K. Marshall*).

Fam. GASTERACANTHIDÆ.

Subfam. EURYCOMINÆ.

Gen. CYRTARACHNE Thor.

CYRTARACHNE CONICA, sp. n. (Plate V. figs. 1-1 c.)

Adult female, length rather over $3\frac{1}{2}$ lines, or 8 mm.; length of abdomen $2\frac{1}{2}$ lines, width $3\frac{1}{3}$ lines.

Cephalothorax short, slightly longer than broad, broadest and [3]

rounded behind, truncate before; the profile-line forms a continuous curve; the lateral marginal impressions at the caput are very slight. Colour yellowish brown.

Eyes small, in the ordinary Epeirid position; the four centrals form as nearly as possible a square, its posterior eyes slightly largest. The lateral pairs are close to the anterior corners of the caput, minute; those of each pair are contiguous to each other and form nearly a straight line with the anterior pair of the central quadrangle.

Legs short, not very strong, 1, 2, 4, 3, devoid of spines, furnished with fine hairs only; colour brownish yellow, tinged with orange.

Falces short, strong, subconical; colour like that of the cephalothorax. Maxillæ and labium normal in form, and similar in colour to the cephalothorax, perhaps rather paler.

Sternum similar in colour to the legs.

Abdomen coriaceous, large, subtriangular, broader than long, rounded in front, the fore corners rounded, though scarcely to be described as forming distinct prominences; upper surface considerably elevated in a subconical form; colour yellowish white, that of the cone tinged with yellow-brown. Near the middle of the anterior margin, quite visible but not very distinct, are three sigilliform markings with two others behind, halfway to the summit of the conical abdomen; behind these last, and one on either side of the base of the cone, are two others similar, in a transverse line, and forming a line equal in length to that formed by the three anterior sigillæ; the upper part of the cone is encircled by some indistinct fine darker concentric lines. The underside is dark dull yellow-brown, and from the outer margins of it sundry fine dark lines issue upwards in groups of two or three, converging until they meet about one-third of the way towards the top of the cone. Genital process broad and very characteristic in form.

Hab. Singapore (*R. Shelford*).

Fam. THOMISIDÆ.

Subfam. AMYCIINÆ.

Genus AMYCLÆA Sim. (*Amycle* Cambr.).

AMYCLÆA LINEATIPES, sp. n. (Plate V. figs. 4-4 d.)

Adult female, length $2\frac{1}{2}$ lines.

This Spider is nearly allied to *A. forticeps* Cambr. (P. Z. S. Lond. 1873, p. 122) from Ceylon, and bears a close general resemblance to it; but it may be distinguished by the shorter legs, by the area of the four larger outer eyes, of which the anterior is of the same length as the posterior side, and the four anterior eyes forming a straight transverse line. The markings on the legs, palpi, and abdomen, and the form also of the abdomen, differ from those of *A. forticeps*, though it is possible that this last character may only be sexual.

The *palpi* have a longitudinal black streak on their inner sides.

[4]

The *legs* have a longitudinal red-brown streak on the outer side of the femora of the first pair, and a blackish one on the inner side of those of the fourth pair, a white line also runs along the side of the tibiæ and metatarsi; the tarsi of the first and second pairs are white; the general colour of the legs is dull orange-yellow.

The *abdomen* is joined to the thorax by a distinct jointed pedicle; it is of an oval form, broadest behind and pointed in front, and without any lateral transverse constriction. It is of a dull yellowish hue tinged with reddish; on either side towards the hinder extremity is a large black spot; along the middle of the upperside on the hinder half are two converging rows of small white spots, with some other white ones towards the fore extremity; on each side also of the fore half are two broadish, but not very strongly defined, oblique brownish stripes, the hinder ones meeting at an angle in the middle and continued in the median line to the fore end. The genital aperture is well marked and of a very characteristic form.

Hab. Singapore. Sent to Mr. Shelford by Mr. H. N. Ridley, Director of the Botanic Gardens, Singapore.

The type of the genus, *A. forticeps* Cambr. (Ceylon), has two similar spots on the abdomen.

This Spider was found in company with the ant *Æcophylla smaragdina*, the habits of which have been described by Mr. Ridley (Journ. Asiat. Soc., Straits Branch, 1890, No. 42, p. 345).

Fam. SALTICIDÆ.

Genus SALTICUS Latr. (sensu restricto).

SALTICUS ATTENUATUS, sp. n. (Plate V. figs. 6-6c.)

Female (immature), length (including falces) $3\frac{1}{2}$ lines = 7 mm.

Cephalothorax oblong, narrowing gradually to the posterior end, which is truncate. Caput flat, rather longer than the thorax and rather longer than broad, divided from the thorax by a deep indentation or constriction. Colour deep black-brown on the thorax; caput black; in the constriction are three short lines or patches of white hairs, one on each side and one in the middle.

Eyes normal, ocular area longer than broad.

Legs rather short, furnished with short hairs, and a few fine spines in pairs beneath the tibiæ of the first and second pairs; these are of a pale yellow colour; the outer side of the tibiæ, metatarsi, and tarsi of the first pair, and of the tibiæ and metatarsi of the second, marked with a longitudinal black stripe; the coxæ, femora, tibiæ, and base of the metatarsi of the third pair black, the rest pale yellow; the fourth pair have the coxæ pale yellow, with an exterior longitudinal black line on the outer side, and the femora and tibiæ black, the metatarsi and tarsi being yellow.

Palpi yellowish; radial joint blackish; digital joint large, oval, flattish and tumid.

Falces rather shorter than the caput, strong, prominent, of a dull yellow-brown colour.

Maxille dull blackish, extremities pale yellowish.

Labium dull black, apex pale.

Sternum elongate, narrow; the basal joints of the legs are articulated around it on the same plane, the first two pairs with their coxæ almost contiguous on their inner sides.

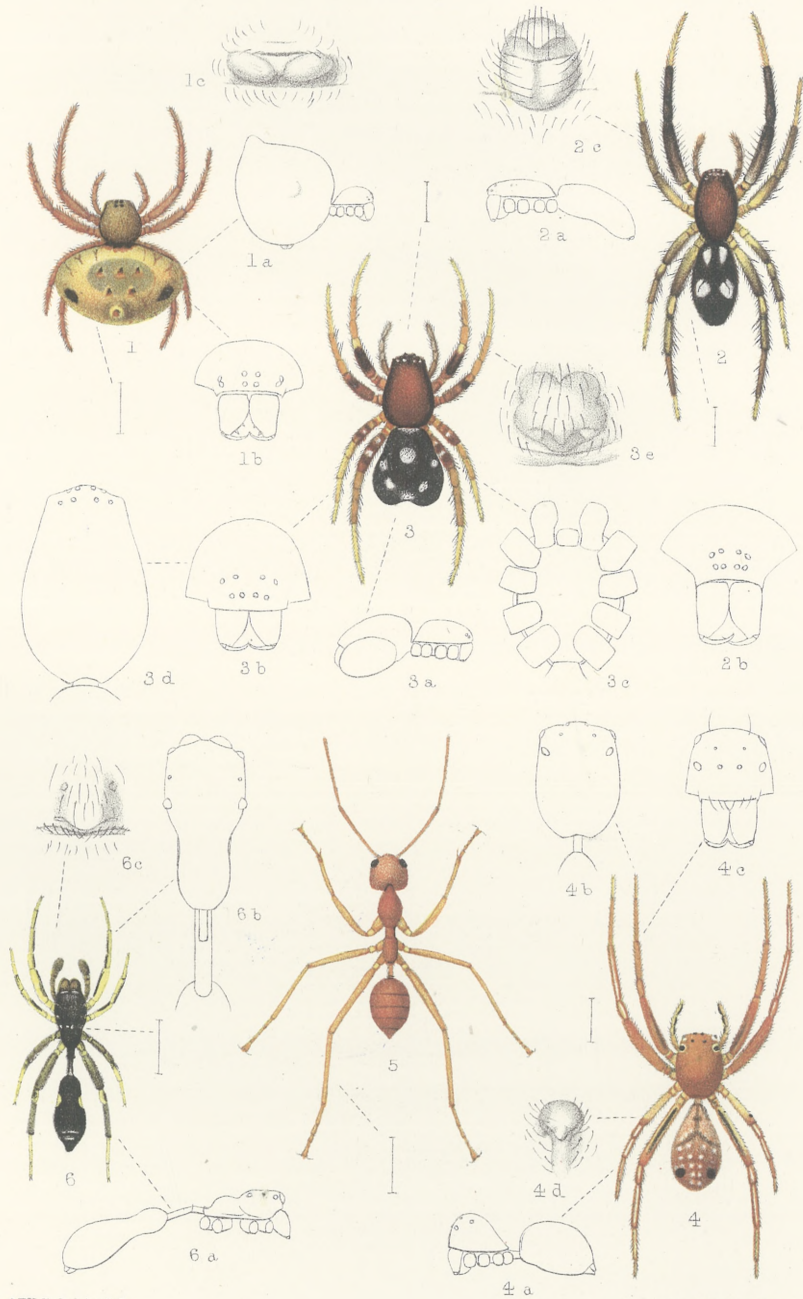
Abdomen narrow, elongate-oval, strongly and broadly constricted towards the fore extremity; pedicle as long as the caput, two-jointed, the posterior joint longest and set in a circular cavity or socket at the extremity of the abdomen. Colour black, a little paler at the constricted part, just below the sides of the constriction white.

Hab. Singapore. Sent by Mr. H. N. Ridley to Mr. R. Shelford.

EXPLANATION OF PLATE V.

- Fig. 1. *Cyrtarachne conica*, ♀ (p. 13). 1 *a*, profile; 1 *b*, eyes and falces from in front; 1 *c*, genital aperture.
2. *Prosthesima albomaculata*, ♀ (p. 11). 2 *a*, profile; 2 *b*, eyes and falces from in front; 2 *c*, genital aperture.
3. *Titus lugens*, ♀ (p. 13). 3 *a*, profile; 3 *b*, eyes and falces from in front; 3 *c*, maxillæ, labium, and sternum; 3 *d*, cephalothorax and eyes from above and behind; 3 *e*, genital aperture.
4. *Amyciaea lineatipes*, ♀ (p. 14). 4 *a*, profile; 4 *b*, eyes and falces from in front; 4 *c*, eyes and cephalothorax from above and behind; 4 *d*, genital aperture.
5. *Ecophylla smaragdina* (p. 15). (Ant with which *Amyciaea lineatipes* lives.)
6. *Salticus attenuatus*, ♀ (p. 15). 6 *a*, profile; 6 *b*, cephalothorax and connecting pedicle from above; 6 *c*, genital aperture. (It is doubtful whether this example is quite adult.)





ATHolick delet lith.

West, Newman. chromo.

