

XXX. ON SOME NEW OR LITTLE-KNOWN
MYGALOMORPH SPIDERS FROM THE
ORIENTAL REGION AND AUS-
TRALASIA

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The following note contains the descriptions of a new genus and six new species of mygalomorph spiders, and also notes on some incompletely known species. The forms dealt with are nearly all from the Oriental region and are preserved in the collections of the British Museum (Nat. Hist.) or of the Indian Museum (Calcutta). The new genus differs from all other Oriental mygalomorph spiders in having a sound-producing organ between the mandibles.

Damarchus assamensis, sp. nov.

Colour a more yellowish brown than *D. oatesii*, Thorell.

Carapace considerably shorter than patella and tibia of first or fourth legs or than metatarsus of fourth. Anterior row of eyes more strongly procurved than in *D. oatesii*.

Palp. Spine of palpal organ longer, as compared with the bulb, than is the case in *D. oatesii* (plate xxiv, fig. 8).

Legs. Patella and tibia of first leg a little shorter than those of the fourth; metatarsus of first armed below towards the posterior side with 1.1 spines and with a pair of apical spines; its anterior surface unarmed. Metatarsus of the second leg armed in the same way as that of the first, but an additional anterior spine is present below and an antero-dorsal spine also. Tibia of first leg with its armature resembling that of the metatarsus of the second but with 1.1 upper anterior spines; the large inner apical spine with its curvature less pronounced than that of *D. oatesii* (fig. 7).

Tibia of second leg lacking the inner ventral spine. Tibiæ and metatarsi of posterior legs armed below with a number of spines. Patella of third leg with two or three anterior spines. Tarsi of all four pairs of legs scopulate, the metatarsi of the anterior legs also scopulate apically.

Measurements in mm. Total length 14, length of carapace 7.25, of first leg 24, of second leg 22.5, of third leg 21, of fourth leg 28.

Material. A single adult male from Sibsagar, Assam, collected by Mr. Peal. (Indian Museum collection.) A number of females

were found in the same bottle, but they do not differ in structure from the female of *D. oatesii*.

Genus SELENOCOSMIA.

In 1897 Mr. R. I. Pocock¹ instituted a new genus *Phlogiellus* for a Selenocosmid spider in which the claws of the fourth leg are three in number. This third claw is present, however,² in the great majority of the species of *Selenocosmia* and *Chilobrachys* (including the type species of these two genera) and it will be necessary therefore to abandon the genus *Phlogiellus* and to regard it as a synonym of *Selenocosmia*. The division of the tarsal scopulæ of the legs of all four pairs is mentioned by Mr. Pocock in his description of *Phlogiellus*, and this character seems peculiar to the species for which the genus was founded. It must be remembered, however, that the structure of the tarsal scopulæ varies considerably both in *Selenocosmia* and *Chilobrachys* and can not be regarded as a satisfactory generic character. In most of the species belonging to these two genera the tarsi of the fourth legs alone are divided, but in *S. stirlingi*, Hogg, the fourth tarsus is entire or very indistinctly divided. Whilst in *S. insulana*, sp. nov., *S. sarawakensis*, *C. sericeus*, Thorell, and *C. subarmatus*, Thorell, the tarsal scopulæ of both the posterior pairs are divided.

Selenocosmia honesta, sp. nov.

♂. *Colour*. Cephalothorax buff-coloured, appendages russet, the abdomen ochraceous.

Carapace shorter than patella and tibia of first or fourth legs and almost equalling metatarsus of fourth in length. Anterior row of eyes procurved; anterior medians a little closer to one another than to the anterior laterals.

Mandible. furnished with long and fine bristles on its outer surface.

Palp. Numerous long, fine hairs, which are not set so close together as in a typical *Chilobrachys* are present above the stridulatory bacilli. Spine of palpal organ long, curved and rather thick, the point blunt and slightly enlarged (fig. 4).

Legs 4, 1, 2, 3. Patella and tibia of first leg a little shorter than the metatarsus and tarsus of fourth and much longer than its patella and tibia. Metatarsi of the three anterior legs scopulate for almost their entire length. Scopula of metatarsus of fourth leg occupying

¹ *Abhandl. d. Senckenb. naturf. Ges.*, xxiii, pp. 595—597, pl. xxv (1897).

² In searching for this minute unpaired claw it is necessary to remove the unguis on one side and sometimes the pad supporting it also; great care must be used in doing this as the claw itself is easily destroyed. A third claw is present in the following species—*Selenocosmia fuliginea*, Thorell, *S. himalayana*, Poc., *S. inermis*, Auss., *S. javanensis*, Walck., *S. lanipes*, Auss., and in the new species described above; *Chilobrachys brevipes*, Thorell, *C. fumosus*, Poc., *C. cervinus*, Thorell, *C. fimbriatus*, Poc., *C. hardwicki*, Poc., *C. nitelinus*, Karsch, *C. sericeus*, Thorell, *C. stridulans*, Wood-Mason, *C. thorelli*, Poc., and *C. (Neochilobrachys) subarmatus*, Thorell.

more than two-thirds of the length of the segment and extending laterally almost to its base. Tarsal scopulæ of the first three legs undivided, that of the fourth divided by a line of setæ.

Measurements in mm. Total length 41, length of carapace 20, of first leg 71.5, of second 65, of third 55.5, of fourth 74, of patella and tibia of first leg 27.5, of patella and tibia of fourth 25, of metatarsus of fourth 20.5.

Material. A single male from Fak Fak, Dutch New Guinea. (Brit. Mus. coll.)

Selenocosmia insulana, sp. nov.

♂ *Colour.* Carapace covered with short yellowish hair, the chitin below very dark; appendages fawn; abdomen with long cinnamon-coloured hairs.

Carapace shorter than patella and tibia of first or fourth legs, equal to patella and tibia of second or to metatarsus and tarsus of first and slightly exceeding patella, tibia and tarsus of palp in length. Anterior median eyes further apart from one another than from the anterior laterals. Fovea small in extent.

Mandible with the outer surface furnished with very long stridulatory setæ.

Palp. Bacilli of coxa of palp very slender. Spine of palpal organ fairly long, curved and keeled, the terminal part slender (fig. 5).

Legs 1, 4, 2, 3. First and fourth legs almost equal in length. Patella and tibia of first leg equalling tibia, metatarsus and tarsus of third in length and considerably exceeding patella and tibia of fourth. Metatarsus of fourth a little longer than its tibia and equal in length to the tibia of the first. First and second pairs of legs with the tarsal scopulæ undivided and with their metatarsi scopulate except at the base. Tibia of first leg also with a scopula which is especially thickened apically. Tarsal scopulæ of the legs of the two posterior pairs divided by a line of setæ. Metatarsus of fourth with a scopula (in which long hairs are intermingled) occupying almost two-thirds of the length of the segment.

Claws of fourth leg three in number.

Measurements in mm. Total length 18; length of carapace 9, of first leg 28.5, of second leg 24, of third leg 20, of fourth leg 27.5, of patella and tibia of first leg 11.75, of patella and tibia of fourth 9.75, of metatarsus of fourth 7.

Material. A single adult male from Djampea Island (South of Salayer Island), collected by Mr. A. Everett. (Brit. Mus. coll.)

Selenocosmia obscura, sp. nov.

♂ *Colour.* Carapace pale brown, upper side of legs walnut-brown with narrow yellowish apical bands, paler below; abdomen brown, the long hairs yellowish.

Carapace much shorter than patella and tibia of first or fourth legs, slightly shorter than metatarsus of fourth and slightly longer

than patella, tibia and tarsus of palp. Front row of eyes slightly procurved, the medians a little further apart from one another than from the laterals.

Mandible. Stridulatory setæ of mandible very long and fine.

Palp. Bacilli of anterior surface of coxa of palp numerous and arranged in a number of rows. They are mostly rather fine and become finer until they shade in to the hairs above. Spine of palpal organ long, strongly curved and twisted, its basal part very wide and furnished with a strong keel which ends at the base of the spine in a projecting lobule. Basal part of spine very wide, the distal part very slender and the point not distinctly enlarged (fig. 6).

Legs 4, 1, 2, 3. Patella and tibia of first leg a little longer than the corresponding segments of the fourth and a little shorter than the metatarsus and tarsus of the fourth. Metatarsus of fourth shorter than patella and tibia of second but exceeding patella and tibia of third in length. Tarsal scopulæ of first and second legs entire, that of the third divided by a very fine line of setæ and the fourth by a distinct line of setæ. Metatarsi of first and second legs scopulate for their entire length, metatarsus of fourth distally scopulate. Fourth leg with three claws.

Measurements in mm. Total length 26·5; length of carapace 12·75, of first leg 44·75, of second leg 38·5, of third leg 33·5, of fourth leg 47·5, of patella and tibia of first leg 17·5, of patella and tibia of fourth 16, of metatarsus of fourth 13·25.

Material. A single adult male (the type) and several young females from Sarawak, collected by Mr. C. Hose. (Brit. Mus. coll.)

Remarks. This species is closely allied to *S. inermis*, Auss., chiefly differing from that species in its much larger size and in the greater length of the limbs as compared with the carapace.

Chilobrachys fumosus, Pocock.

Musagetes fumosus, Poc., *Ann. Mag. Nat. Hist.* (6), xv, p. 174, pl. x, fig. 7 (1895); *Chilobrachys fumosus*, id., *Fauna Brit. India*, p. 196 (1900).

♂ *Cephalothorax* much shorter than patella and tibia of first or fourth legs and equalling metatarsus of fourth or patella and tibia of palp in length.

Mandible with the spines on the outer side rather fine and a little longer than is usually the case in the genus *Chilobrachys*.

Palp. Bacilli of coxa of palp with a well-marked band of hairs dorsally. Palpal organ with the spine long, slender and twisted. The bulb is traversed by a keel which runs along the spine forming the inner limit of a conspicuous groove. Terminal part of spine with the edges turned down so as to enclose a groove and with the edge of the outer side forming a projecting lateral lobe just before the point; the point itself being slightly enlarged (fig. 3).

Legs 4, 1, 2, 3. Patella and tibia of first and fourth legs almost equal in length. Metatarsi of anterior legs scopulate throughout their length, metatarsus of the fourth leg scopulate for more than a

third of its length, the scopula being divided by a line of bristles. Tarsi of legs of fourth pair alone divided and ending in three claws.

Measurements in mm. Length of cephalothorax 14.25, its width 12; length of first leg 47, of second 42, of third 39, of fourth 52, of patella and tibia of first 18, of patella and tibia of fourth 17.5.

Material. A male from Kurseong, Eastern Himalayas (Dr. N. Annandale). A male and four females from Sureil, Darjiling (Col. A. Alcock). A female specimen from Burroi, at the foot of the Daffa Hills.

Remarks. The type is a female specimen labelled "North India." The specimens which I have identified as belonging to this species differ from the typical specimen in having the spines on the outer surface of the mandible more numerous and not so clearly arranged in rows.

Chilobrachys assamensis, sp. nov.

♂ *Colour.* Carapace yellowish; body and legs russet-brown, lower surface of body a little paler.

Carapace much shorter than patella and tibia of first or fourth leg, longer than patella and tibia of palp and equal to metatarsus of fourth. Eyes of anterior row slightly procurved and subequal in size, the anterior medians further apart from one another than the anterior laterals. Fovea wide and only slightly procurved.

Mandible. Outer surface of mandible furnished with slender setæ which are not very long and are either arranged in definite rows or irregular in disposition.

Palp. A narrow fringe of setose hairs with a metallic sheen, overhangs the bacilli. Spine of palpal organ short and with a spiral twist; the basal part broad, the narrowed apical portion short and blunt. A sharp keel traverses the bulb and runs along the spine, forming the outer limit of a deep groove, which is limited on the inner side by a second keel. A second slight groove makes its appearance towards the apex of the spine running parallel with the main groove, on its outer side (fig. 1).

Legs 4, 1, 2, 3. Patella and tibia of first leg equal in length to or slightly longer than the patella and tibia of the fourth. Patella and tibia of third leg and palp equal in length. Metatarsi of first and second legs scopulate for almost their entire length; the scopula of the fourth metatarsus occupying about a third of the length of the segment, and divided by a line of setæ. Tarsal scopulæ of the three anterior pairs of legs undivided, that of the fourth being divided by a fine line of setæ. Claws of the fourth leg three in number.

Measurements in mm. Total length 25, length of carapace 10.5, of first leg 33.5, of second leg 29.5, of third 27, of fourth 36.75, of patella and tibia of palp 9, of patella and tibia of first leg 12.5.

♀ *Carapace* equal to or slightly less than patella and tibia of first or fourth leg and much less than metatarsus and tarsus of fourth; width of anterior edge of carapace much less than the length of the metatarsus of the fourth leg.

Measurements in mm. Total length 25.5, length of carapace 9.5, of first leg 25, of second leg 22, of third leg 20, of fourth leg 27.5, of patella and tibia of fourth 9.5, of metatarsus of fourth 7.25.

Material. A large number of males and females collected by Mr. S. E. Peal, at Sibsagar, Assam. (Ind. Mus. coll. and Brit. Mus. coll.)

Chilobrachys stridulans, Wood-Mason.

Mygale stridulans, Wood-Mason; *Proc. As. Soc. Bengal*, p. 197 (1875); id., *Tr. Ent. Soc.*, p. 281, pl. vii (1877).

Chilobrachys stridulans, Poc., *Fauna Brit. India* (Arachnida), p. 198 (1900).

Musagetes masoni, Poc., *Ann. Mag. Nat. Hist.* (6), xv, p. 174, pl. x, fig. 6 (1895).

Chilobrachys masoni, Poc., *Fauna Brit. India* (Arachnida), p. 197 (1900).

Material. Two adult males and many females from Sibsagar, Assam (Peal coll.). Three males from Aideo (Peal coll.) and a female from Goalpara, Assam. A male and two females from Punkabaree, Sikkim.

Var. *masoni*, Poc.

Material. A male and a female from Silcuri, Cachar. Five females (the types) from Sylhet, Assam.

Remarks. Both the male and female of *Chilobrachys masoni*, Poc., are very closely allied to *C. stridulans*, Wood-Mason, and only seem to differ in the broader and more conspicuous bands of white at the apices of the tibiæ, patellæ, etc., of the limbs. Whilst these bands of white are clearly visible in the females of *stridulans* from Sibsagar, they are less conspicuous in the males accompanying them. I think that it would be best to regard *C. masoni* as a colour variety of *C. stridulans*.

Chilobrachys (Neochilobrachys) subarmatus, Thorell.

Ischnocolus subarmatus, Thorell, *Kongl. Sv. Vet. Akad. Handl.*, xxiv, No. 2, p. 13 (1891).

I. inermis (Auss.), Thorell, *Ann. Mus. Civ. Genova*, xxxvii, p. 172 (1897).

Phlogiellus subarmatus, Pocock, *Fauna Brit. India* (Arachnida), p. 202 (1900).

Mandible. Outer surface of mandible furnished with short spinules.

Palp. Anterior surface of coxa of palp with a single row of spiniform bacilli, which vary in number from two to six and have no band of hair above them (fig. 2). In young specimens the bacilli may be absent.

Legs. Tarsal scopulæ of first and second legs entire; tarsi of third and fourth legs with their scopulæ divided by a line of setæ, which is much wider in the case of the fourth leg. Fourth leg with three claws.

Material. A single adult male and numerous females from the Nicobars. (Ind. Mus. coll. and Brit. Mus. coll.)

Remarks. This interesting species is chiefly characterised by the structure of its stridulatory apparatus, the half which is situated on the coxa of the palp being exceptionally simple and elementary in character. I think that it would be best to institute a subgenus of *Chilobrachys* for it, and I propose the name *Neochilobrachys* for this new subgenus.

ANNANDALIELLA, gen. nov.

Carapace. Thoracic fovea straight, transverse. Eyes of anterior row strongly procurved.

Labium broader than long and spinulose apically.

Sternum. Posterior sigilla of small size, widely separated from one another and separated from the margin by about one-and-a-half times their diameter.

Mandibles with their inner surfaces furnished with a stridulatory organ consisting of an oblique row of spines, few in number; the two halves of the organ being exactly similar in structure.

Legs slender. Tibiæ and metatarsi of anterior pairs armed with apical spines alone, below; tibiæ and metatarsi of posterior legs armed with a number of spines.

Spinnerets. Upper spinnerets four-jointed, the apical segment being longer than the penultimate segment.

¹ *Annandaliella travancorica*, sp. nov.

♀ *Colour* (specimen rubbed) pale yellowish brown.

Carapace equal in length to patella and tibia of first or fourth legs, considerably longer than patella and tibia of second and a little shorter than patella, tibia and tarsus of palp. Anterior median eyes further apart from one another than from the elongate anterior laterals, and of smaller size.

Legs. Metatarsus of fourth leg equal in length to patella and tibia of second and almost equal to metatarsus and tarsus of third. Patella and tibia of third leg about equal to patella and tibia of palp.

Metatarsus of first leg scopulate for almost its entire length; metatarsus of fourth only scopulate at the apex. Tarsal scopula of first leg undivided, that of the second faintly divided, and the scopulæ of the tarsi of the third and fourth distinctly divided by a line of setæ.

Tibia of first leg, and metatarsi of first and second, armed below with a single apical spine; tibia of second with three apical spines. Tibia of fourth furnished ventrally with two strong spines and also with a number of apical spines; its anterior side with two spines, and the posterior with four. Metatarsus of fourth leg with 1.1 antero-dorsal spines and with postero-dorsal spines corresponding

¹ The stridulatory organ of this spider is described and figured in *Ann. Mag. Nat. Hist.* (8), ii, p. 402, text-fig. 3 (1908).

to them in position ; its ventral surface armed with two spines and with apical spines besides. Tibia and metatarsus of third leg also spined.

Measurements in mm. Total length 28·5, length of carapace 12·5, of first leg 30·75, of second 26·75, of third 26, of fourth 36·5, of patella, tibia and tarsus of palp 13·25, of patella and tibia of first leg 12·5, of metatarsus of fourth leg 10.

Material. A single adult female from Travancore. (Ind. Mus. coll.)

