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XLVIII.—On a new type of stridulating-organ in Mygalomorph spiders, with the description of a new genus and species belonging to the suborder

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(10) *Sciurus bocourti lylei*, subsp. n.

Size largest among the forms of *bocourti*.

General colour above smoke-grey, individual hairs mouse-grey basally, then white, a large proportion with black tips. Face and head faintly washed with orange-rufous. Tail basally (50 mm.) coloured like the back, then (50 mm.) white, and finally bright cinnamon-rufous. Hands and feet finely grizzled black and white. Under surface a pale bright orange-rufous.

Dimensions of type (taken in the flesh):—

Head and body 213 mm.; tail 200; hind foot 49; ear 20.

Skull: greatest length 51 (54)*; basilar length 40 (43); zygomatic breadth 30 (32); brain-case breadth 23·5 (24); interorbital breadth 18 (20); nasals, length 14 (16·5), breadth proximally 4, breadth distally 7; diastema 11·1 (12·6); upper molar series 10·3.

Hab. Chiengmai on the Me Ping.

Type. Adult female. B.M. no. 7. 11. 13. 11. Original number 242. Taken by Mr. T. H. Lyle on 12th August, 1907, and presented by him to the Museum.

Three specimens examined, all very like one another. The complete absence of either red or brown in the coat (above), the bright orange-rufous belly, the obsolescence of the red colouring on the head, and the paler hands and feet make this a very striking form among the subspecies of *bocourti*.

XLVIII.—On a new Type of Stridulating-organ in *Mygalomorph Spiders*, with the Description of a new Genus and Species belonging to the Suborder. By A. S. HIRST.

SEVERAL types of stridulating-organs are known to occur in the spiders of the suborder Mygalomorphae. These organs consist of arrangements of spines and bacillæ, the structure and disposition of which differ much in the groups and genera in which they are present. In some of the groups of the subfamily Aviculariinae (Thrigmopocæe &c.) the apparatus lies between the posterior surface of the mandible and the anterior surface of the maxillipalp, and this is also the case in some of the genera of the Dipluridæ. In other groups of

* The figures in brackets are those of a rather older individual.

the Aviculariinae (Phoneyuseae &c.) the stridulatory organ (when present) is placed between the posterior surface of the maxillipalp and the anterior surface of the coxa or trochanter of the first leg. In a few genera in which this latter type of apparatus occurs the part which is borne by the first leg is present on both coxa and trochanter.

In some of the genera of the Ischnocoleae there is present a type of stridulating-organ which has hitherto escaped notice and which differs in several important respects from those referred to above. In this form of apparatus the structures are situated between the inner (anterior) surfaces of the mandibles themselves. It differs, moreover, from all the forms of stridulating-organs hitherto described as occurring in Mygalomorph spiders in that the opposed surfaces of the appendages do not bear dissimilar series of bacillae and spines, the structures of the two halves of the organ being precisely similar in form and arrangement. In the spiders of the genus *Selenogyrus* a well-marked apparatus of this type is present. It consists of a number of rows of bacillae arranged in a somewhat crescentic manner, the bacillae of the outer rows being the largest. Three or four of the posterior bacillae are of large size and form a separate group (fig. 1). In a new genus of Ischnocoleae from the Cameroons, here described, a different modification of this form of stridulating-organ is present. The inner surface of the mandible is furnished with numerous spines which are grouped in a somewhat irregular fashion. A few of these spines are enlarged and are of peculiar form (fig. 2). In an Indian Ischnocolid from Travancore, which belongs to an undescribed genus and species, the stridulating-apparatus presents itself in a much reduced form. An oblique row of five strong spines is present towards the base of the inner surface of the mandible. A few weak spines are placed behind this row of strong spines, and some of the setae of the inner surface of the mandible have their ends slightly enlarged (fig. 3). In *Metriopelma auronitens*, Keyserling*, there occurs a peculiar structure which differs much from the stridulating-organs described above. The inner surface of each mandible is provided with a raised area which partly encircles and encloses a dense brush of long and slender bristles. These bristles are curved, their free ends being directed towards the ventral edge of the mandible. It remains to be seen if this structure is a stridulating-organ. I have only been able to

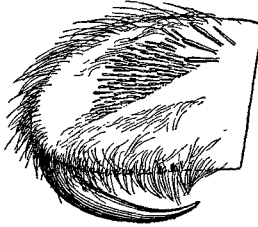
* E. Keyserling, 'Die Spinnen Amerikas: Brasilianische Spinnen,' 1891, p. 16.

examine a single specimen (the typical male) of *M. auro-nitens*, Keyserling. There is no trace of this structure in the typical specimen (a female) of *M. pantherina*, Keyserling*, which is supposed by Pocock to be the female of *M. auro-nitens*. It is possible, however, that this organ is confined to the one sex.

EUPHRICTUS, gen. nov.

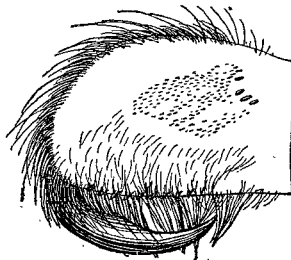
Anterior row of eyes slightly procurved, the posterior row almost straight. Cephalothoracic fovea minute and procurved. Labium armed with many spinules (the spinules are more numerous than is represented in fig. 4), the maxillæ

Fig. 1.



Mandible of *Selenogyrus aureus*, Pocock, from the inner side.

Fig. 2.



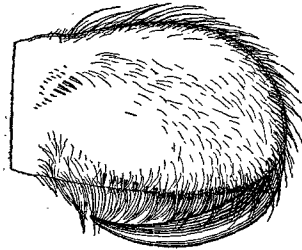
Mandible of *Euphrictus spinosus*, sp. n., from the inner side.

also spinulose. Posterior sigillæ of sternum of small size, widely separated from one another and separated by about twice their length from the margin of the sternum. Inner surfaces of the mandibles furnished with a stridulating-organ

* *T. c.* p. 18.

of the type detailed above. Spine of the palpal organ long and with the terminal part slender and pointed (fig. 5). Tibia of first leg with no trace of spurs, but furnished with apical, ventral, and lateral spines. Tarsi of the anterior legs with the scopulæ divided by a line of setæ; tarsi of the fourth pair of legs with the scopulæ divided by a fairly broad band of setæ.

Fig. 3.



Mandible of an undescribed genus and species of *Ischnocolea* from the inner side.

Fig. 4.



Fig. 5.

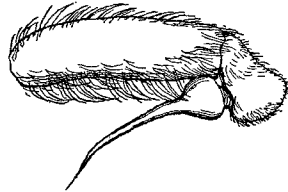


Fig. 4.—Labium of *Euphrictus spinosus*, sp. n., from above.

Fig. 5.—Outer view of palp-organ of *Euphrictus spinosus*, sp. n.

Euphrictus spinosus, sp. n.

Colour (worn specimen).—Carapace yellowish, abdomen with the inner scale-like hairs of the dorsal surface brown, the long hairs light yellowish; ventral surface of the abdomen much lighter in colour.

Carapace equal in length to the patella, tibia, and tarsus of the maxillipalp, and very nearly equal to the length of the metatarsus of the fourth leg.

Anterior median eyes a little further from one another than from the anterior laterals; posterior median eyes almost touching the posterior laterals. Eyes of anterior row considerably larger than the eyes of the posterior row.

Abdomen.—Terminal segment of spinnerets by far the longest.

Legs.—Patellæ and tibiæ of first and fourth legs almost equal in length. Patella and tibia of second leg equal to the metatarsus of the fourth leg. Metatarsi of anterior legs scopulate for more than half their length; metatarsus of first leg armed below with a large spine and also with a small apical spine. Tibia of first leg armed ventrally and laterally with 7–9 spines, three of which are apical. Metatarsi of third and fourth apically scopulate. Tibiæ and metatarsi of third and fourth legs armed ventrally and laterally with a number of spines. Tarsi of palp and legs furnished dorsally with a number of clavate hairs.

Palp.—Spine of palpal organ long and twisted (fig. 5).

Mandible with stridulatory organ as described above (fig. 2).

Measurements in mm.—Total length of body 15·5; length of carapace 7·75, of first leg (from base of femur) 26, of fourth leg 29, of patella and tibia of first leg 9·5, of patella and tibia of fourth leg 9; of patella, tibia, and tarsus of palp 7·75.

Locality.—A single adult male from the River Ja, in the Cameroons, collected by Mr. G. L. Bates.

Remarks.—A mutilated and immature specimen from the same locality, which seems to belong to an allied species, possesses a well-marked rastellum. The teeth are twelve in number and form a border to the inner edge of the mandible. In the type of *Euphrictus spinosus* they are represented by a number of spiniform setæ.

XLIX.—*Descriptions of new Species of New-Zealand Coleoptera.* By Major T. BROWN, F.E.S.

[Continued from p. 352.]

Group *Feronidæ*.

Trichosternus cælocephalus, sp. n.

Robust, suboblong, moderately convex, nitid, blackish green, margins metallic green; legs rufo-piceous; the labrum, antennæ, and palpi pitchy red, these last more rufescent, with their tips still paler.

Head moderately large, not as broad as thorax, its sides and occiput appearing quite convex, owing to the whole