

data, medio depressiuscula et rimula subtili (sæpe subradiante) fissa, intus cinerascens; sporæ 8^{næ}, incolores (demum fuscescentes vel fuscæ), ellipsoideæ, simplices, longit. 0·018–0·025 millim., crassit. 0·011–0·016 millim.; paraphyses gracilescentes, irregulares et sæpe ramosæ; perithecium (peridium) etiam supra nigrum, infra (hypothecium) fusco-nigricans. Iodo gelatina hymenialis fulvo-rubens (præcedente cærulescentia levi).

Supra saxa granitosa in Gallia, Haute Vienne (Ripart, 1865), socia *Lecanora gibbosa*. Etiam supra saxa calcarea in Scotia, Braemar (Crombie).

Genus peculiare novum, *Mycoporo* quodam modo affine, sed apothecijs supra demum rimula subradiosa vel simpliciore dehiscentibus. Inter Pyrenocarpeos hic Lichen locum obtinere non potest, nam nullum habet ostiolum punctiforme. Ceteroquin *Mycoporum* et *Rimularia* apothecii typum offerunt proprium, qui nec apothecium discocarpum nec pyrenocarpum sistit; ab illo scilicet differt perithecio supra continuato totumque hymenium involvente; ab hoc (pyrenio) differt ostiolo non regulari contractoque nec anaphysisibus intus munito, sed rimula vel varie dehiscente. Adest hic *peridium*, fere sicut in Fungis variis. Distinguenda est duobus generibus allatis, tribus propria, quæ dicatur *Peridiei*.

XXXVI.—*Notes on the Dragonflies of the Seychelles.* By E.

PERCEVAL WRIGHT, M.D., F.L.S., Professor of Botany and Zoology in Trinity College, Dublin. *With a List of the Species and Descriptions of a new Genus and some new Species*; by the Baron E. DE SELYS-LONGCHAMPS.

DURING my six months' residence at the Seychelles I was very much struck by the apparent absence of insect-life. Ants and mosquitoes, indeed, abounded: the former were busy everywhere, and nothing that could be carried off was left very long alone by them; the latter were a constant source of discomfort. To all appearance they contrived to live happily while often rendering human life miserable. But there were no butterflies to be seen flying by day; and the cocoanut-oil lamps were let burn uninterruptedly by night, there being no big moths to flap over and extinguish them. This was especially the case during the months from June to September. Towards October insects began to appear, the Cicadæ were heard in the trees, and I have little doubt that if I had stayed at the islands for the whole of the rainy season I should have collected or seen a fair proportion of species. A large

number of my specimens collected at Praslin and Mahé were destroyed by ants, and in several instances I could not succeed in again capturing some of the more local forms. This was especially the case with my first collection of dragonflies; the store-box in which I had packed a lot of specimens was entered by the ants, and the whole series destroyed. As it was a very carefully made English store-box, without any apparent place of exit or entrance for the smallest insect, I was at a loss to account for this disaster. At last, determined to find out how the ants got in, I left the box tightly fastened as before, with half-a-dozen cockroaches pinned inside; and in a few hours I was able to trace the swarm of ants to the side of the box, and I then found that they got in along the side of one of the small screws which fastened on the hinge, and which unfortunately came through. These facts must be borne in mind when drawing any conclusion from the paucity of species met with by me: first, I was at Mahé at the wrong season of the year; and, secondly, I only saved a small portion of my collection.

On the eastern side of Praslin there is a large extent of flat land, nearly the whole of which is under cultivation as a cocoanut-tree plantation under the charge of Mr. Osughrue. Through this plain a little stream, coming down from the mountains, wanders; in some places it spreads out into large-sized ponds, but in very many places it is so small as to be easily stepped over. Where it flows into the sea there is, in the dry season, a large sand-bank which in the wet season is swept again into the sea by the force of the current of fresh water. The water is sweet, but becomes a little brackish where it approaches the sea-sands; and in this portion it abounds with many small fish, upon which *Ardeola lepida* (Manik) feed; now and then a Poule d'eau (*Gallinula chloropus*) is to be seen under the bamboo-caness; attached to the framework of a small bridge over this stream near the sea I collected several fine masses of *Spongilla alba* of Carter, hitherto known only as from the tanks of Bombay. All along this river, in the month of October, dragonflies abounded, and all the species collected by me were met with here. One species only of several which I collected at Mahé, *Libellula hemihyalina*, survived the ravages of the ants. Knowing that Mr. McLachlan was interested in the study of the Neuroptera, I took the opportunity of sending him a few common species collected in the spring of 1868 at Syracuse, to send also the remnants of my Seychelles collection. This he forwarded to Baron E. de Selys-Longchamps, who has most kindly not only named all the species, but in the following paper has described a new genus,

Allolestes, and several new species. While it is a matter of regret that the material placed in the Baron's hands was not sufficiently large to give him a fair idea of the number of species to be met with in the Seychelle Islands, still it is a source of some satisfaction to me to think that it has been the means of obtaining so interesting a communication as the following from so very excellent an authority on the Odonata; and my especial thanks are due to Mr. M'Lachlan for his valuable assistance in obtaining it, and in looking over and correcting my translation of it. The types of the species I have given to Mr. M'Lachlan.

List of Species and Description of a new Genus and five new Species of Dragonflies (Odonata) from the Seychelles. By the Baron E. DE SELYS-LONGCHAMPS.

Professor E. Perceval Wright, of Dublin, forwarded to me through Mr. M'Lachlan the Odonata which he had collected during the summer and autumn of 1867, in the little-known islands of the Seychelles.

The specimens, but fifteen in number, are very interesting; they belong to nine species, of which five are new. I give below the characters of the undescribed species.

With regard to the geographical distribution of these species there are several points of interest. Four of them are plainly of an African type, viz. *Libellula hemihyalina*, Desj.; *L. Wrightii*, sp. n.; *Agrion senegalense*, Ramb.; *Brachybasis glabra*, Burm. The other five species represent forms which inhabit India and Malasia. These are, *Libellula trivialis*, Ramb.; *Allolestes M'Lachlani*, gen. et sp. nov.; *Trichocnemis cyanops*, sp. n.; *T. bivittata*, sp. n.; *Zygonyx(?) luctifera*, sp. n. This latter species approaches the genus *Cordulia*. *Libellula hemihyalina* comes from Mahé; all the species, including it, come from Praslin, one of the most easterly of the islands.

1. *Libellula hemihyalina*, T. Desjardins.

L. disparata, Ramb.

Two males, quite like those from the Mauritius, from Natal, and from Senegal. It will be necessary to refer to this species *L. separata*, De Selys, from Algeria, which appears to be nothing more than a well-marked variety.

2. *Libellula Wrightii*, sp. n.

This species belongs to the African group, to which pertain also *L. brachialis*, Beauvois, *L. contracta*, Ramb., and *L. Marchali*, Ramb.

Length of abdomen 24–25 millim., hind wing 27, pterostigma $2\frac{1}{2}$.

♂ adult characterized by the coloration of the front, of which the excavated upper portion is greenish blue, not metallic, surrounded with blackish. The upper lip is yellowish, encircled with blackish, and with a median blackish line; the lower lip yellowish, with the median lobe entirely blackish and, with the inner borders of the lateral lobes, forming a median space of that colour. Abdomen strongly powdered with bluish; third segment greatly constricted.

In the ♂ non-adult, and in the ♀ (which was taken by the late M. Julien Desjardins in the island of Mauritius), the thorax is not powdered with bluish; it is blackish, with an antehumeral band, two lateral ones on each side, and several spots beneath orange-coloured. In the ♀ the abdomen (which is not pulverulent) has a double median orange-coloured spot on the first to the seventh segments; the eighth much dilated at the sides.

3. *Libellula trivialis*, Ramb.

One female, which does not differ from Rambur's types indicated from Bombay and Macao. *A priori* I was induced to unite with it the allied species *L. flavistyla* of Africa, or *L. tetra* of the Mauritius; but the number of the "posttrigonal" cells and of the cells in the interior triangle of the superior wings are opposed to this, as well as the form of the abdomen and of the vulvar scale, which are quite like those of *L. trivialis*.

4. *Zygonyx* (?) *luctifera*, n. sp.

♂. Abdomen 32 millim., inferior wing 35, pterostigma $1\frac{1}{2}$.

Wings hyaline, scarcely tinted; membranule long, pale brown; discoidal triangles free, that of the upper wing narrow, acute at the lower angle, followed by two rows of posttrigonal cellules; the internal triangle of the superior wings of two cellules, but scarcely to be distinguished from those adjoining; a single transverse basal nervule in the space between the submedian nervure and the postcosta in all the wings; the nodus nearer to the apex than the base of the wings; ten antecubital nervules in the superior wings, the last isolated; seven to eight in the inferior. Almost entirely coal-black (with steel-blue reflections on the front and fore part of the thorax). Some dull yellowish markings, indistinctly indicated, as follows:—a transverse band on the face, comprising the nasus and the rhinarium; five or six spots on each side of the thorax, and a vestige on the sides of the second abdominal segment. Femora dull brown externally.

Eyes prominent, somewhat contiguous. Prothorax with the

posterior lobe subtriangular, rounded. Abdomen slender, cylindrical, not constricted, becoming narrower from the base to the extremity. Legs slender, ciliated. Anal appendices simple, thrice the length of the tenth segment.

♀ unknown.

This species appears to me to belong to the genus *Zygonyx*, of which the type (*Z. Ida*, Selys) comes from Java, and has the base of the second to the eighth segments encircled with yellow. The analogy between the two species is very great, and I think that affinity equally exists; however, there are three characters which cause me to hesitate as to its definite position: *Z. luctifera* has a smaller head, it possesses only one nervule in the median basal space, and the lower division of the tarsal claws, although well marked, is shorter than the upper; the equality of the two divisions of the claws is the character on which I founded the genus *Zygonyx*.

Z. Iris, Selys, from the Malayan archipelago, forms another section, in which the discoidal triangles are traversed by a nervule, and the divisions of the claws are equal. This constitutes the type of the genus, such as it has been adopted by Herr Brauer.

Genus ALLOLESTES, De Selys, gen. nov.

Pterostigma thick, oblong, surmounting two to three cellules. Reticulation rather dense; the sectors curved near the base, from the short sector (*secteur bref*) to the ultranodal with two supplementary sectors interposed between each. Wings strongly petiolated (as far as the apex of the quadrilateral), the postcostal basal nervule placed under the first antecubital; quadrilateral very long (the upper side one-fourth shorter than the lower), occupying all the space between the second antecubital and the nodus; a single cellule between the quadrilateral and the vein which descends from the nodus; postcostal space with a single row of cellules.

Lower lip oblong, roundly emarginated in its final third, the extremities distant. Antennæ with the first joint very short, the second one-half longer, the third slender, equalling the two first united.

Abdomen moderate, slightly longer than the inferior wings.

Legs rather long, with long ciliations; tarsal claws bifid.

♂ unknown; ♀ with the tenth segment very short, the ninth shorter than the eighth.

This genus, which resembles *Argiolestes* by the pterostigma, the lower lip, the claws, and the strongly petiolated wings, differs from it by the postcostal space formed of a single row of cellules, and by one supplementary sector less from the short sector to the ultranodal.

Allolestes differs from *Podolestes* by the less emarginated lower lip, by the bifid claws, by the more strongly petiolated wings, and by one more supplementary sector between the short sector and the ultranodal.

It differs from both neighbouring genera by the very long quadrilateral extending from the second antecubital as far as the nodus; in this character it has analogy only with *Paraphlebia* (from Mexico), which belongs (as does *Allolestes*) to the legion of *Podagrion*.

5. *Allolestes M'Lachlani*, n. sp.

♀. Abdomen 23 millim., inferior wing 20.

Wings hyaline. Pterostigma brown, darker in the centre, encircled by a thick black nervure. Nineteen to twenty-one postcubital nervules in the superior wings, seventeen to eighteen in the inferior.

Yellowish brown, blackish behind the eyes. Prothorax obscure laterally, the posterior lobe slightly sinuated. Thorax with the dorsal keel blackish, as well as three lateral bands; a yellow band anteriorly.

Segments one to seven terminated by a blackish ring, three to seven communicating by a yellow ring, eight to ten brown.

Legs yellowish, the femora with a basal, median, and terminal blackish ring.

Appendices brown, broad, triangular, short; vulvar valvules yellowish, ciliated, reaching beyond the apex of the abdomen.

Resembling *Podolestes orientalis* by the coloration, but differing by the size being one-half less, by the reticulation, &c.

6. *Trichocnemis cyanops*, n. sp.

♂. Abdomen 37 millim., inferior wings 25.

Pterostigma blackish brown, elongate lozenge-shaped, covering almost two cellules. Fifteen to sixteen postcubital nervules in the inferior wings.

Head black; rhinarium, internal border of the eyes, cheeks, and upper lip blue, the latter bordered with black. Prothorax blackish, with a blue lateral spot; the posterior lobe rounded, spotless. Front of the thorax blackish brown up to the first lateral suture, with a pale posthumeral line; the sides and the underside pale, with a brownish-black band, which is dilated at the second suture.

Abdomen very long and slender, blackish above; first segment short, bluish, with a black dorsal band; fourth to sixth encircled with livid at the base (the circle interrupted at the dorsal crest); sides of the eighth, ninth, and tenth bluish, the latter very short.

Legs pale red, with long ciliations; exterior of the femora blackish.

Anal appendices—superior dull bluish, longer than the tenth segment, thick at the base, distant, afterwards compressed, slightly curved inwards and downwards near the apex, ciliated; inferior darker, one-half shorter, thick at the base, contiguous, drawn out at the apex into two little elevated points.

♀ unknown.

This species is remarkable for its long pterostigma, blue face, the pale humeral line not reaching beyond the hind part of the thorax, and terminating before the base, finally by the absence of pale spots at the base of the thorax. The inferior anal appendices have not the lower internal tooth, as in *T. silenata* from the Malayan archipelago.

7. *Trichocnemis bilineata*, n. sp.

♂. Abdomen 36 millim. (♀, 34), inferior wing 22.

Pterostigma blackish brown, lozenge-shaped, elongated, covering one and a half (♂) or two (♀) cellules. Thirteen to fourteen postcubital nervules in the inferior wings.

Head blackish above, the back of the eyes pruinose; an elongated livid mark on each side parting from the antennæ and directed towards the occiput.

Prothorax blackish, the base and a lateral border at the median lobe yellow; posterior portion without spots.

Front of the thorax bronzy black as far as the lateral sutures, having in front, against the prothorax on each side of the dorsal keel, a yellow cuneiform spot; a blue humeral line not descending beneath; sides bluish, with an undulated black band at the second lateral suture. Underside livid.

Abdomen long and slender; sides of the first segment broadly bluish; a vestige of a pale interrupted basal ring at the dorsum on the third to the sixth segments.

Legs livid, with long brown ciliations; exterior of femora and interior of tibiæ blackish.

♂. Posterior lobe of the prothorax rounded; rhinarium, internal margin of the eyes, cheeks, and upper lip blue, the latter finely bordered with black: sides of the eighth to the tenth segments bluish, the latter very short.

Anal appendices—superior brown, longer than the tenth segment, slightly thickened at the base, distant, afterwards compressed and somewhat curved inwards and downwards towards the apex, ciliated; inferior dull, thickened and contiguous at the base, afterwards drawn out at the extremity into two points suddenly straightened, somewhat distant at first,

afterwards approaching each other, and at last slightly divergent.

♀. Posterior lobe of the prothorax deeply divided by an oval excision; rhinarium and upper lip blackish; inner border of the eyes and the cheeks yellowish. (The last three segments of the abdomen are missing.)

This species is allied to *T. Dictynna*, but very distinct by the two pale spots of the front of the thorax being very much smaller, the lateral bands more dilated, and the pterostigma longer. The ♀ is remarkable for the oval excision which divides the posterior lobe of the prothorax. The appendices of the ♂ are formed like those of *T. cyanops*; only the superior are rather more excavated internally, and the inferior rather less contiguous before the apex.

Until the present time the genus *Trichocnemis* was known only from South Asia and the Malayan archipelago.

8. *Agrion senegalense*, Rambur.

Two males similar to those of the African continent and islands.

9. *Brachybasis glabra*, Burm. (*Agrion*).

Agrion ferrugineum, Rambur.

Two males, similar to those of the African continent, Madagascar, and Mauritius.

Liège, 9th Feb., 1869.

XXXVII.—*Descriptions of new Genera and Species of Tenebrionidæ from Australia and Tasmania.* By FRANCIS P. PASCOE, F.L.S. &c.

[Continued from p. 153.]

[Plate XII.]

THE three following appear to be degraded Tasmanian forms of *Cestrinus*, Er.*, and are closely allied; they are narrower and more feebly constructed, and the prothorax wants the expanded margin. *Opatrum piceitarse*, Hope, belongs to this genus; with this species his *Isopteron opatroides* exactly agrees, only the latter has clear ferruginous antennæ. The same author's *Platynotus insularis* is, I believe, another member of the genus. The descriptions of these insects and some others, in the 'Transactions of the Entomological Society' (ser. 1. vol. iv.), were very concise; and they were left un-

* Wieg. Arch. 1842, i. p. 172.