Stone, some of which had their heads embedded in the wasp-larvæ in the act of sucking the juice.

Mr. Parroo exhibited numerous new species of Heteromerosous Coleoptera from Australia. One species of Scolus was remarkable, inasmuch as it was always covered, even when living, with a floccose substance, which had been declared to be the immature state of a fungus (Sphaeria).

Mr. Briggs exhibited Diopria pulchella, captured recently by him at Polkstone.

Mr. Davis exhibited numerous preserved larvæ, including a case illustrating the life history of Cocapus fimbriatus.

Mr. Müller stated that Cimips lycides emitted, when handled, a strong and disagreeable odour, and he thought that this might partially account for its rapid spread in this country, the odour possibly rendering it distasteful to birds, &c.

Mr. Dunnion made some observations respecting a swarm of Syrphus he had noticed at Walton-on-Naze, in Essex, last autumn. Mr. Verrall had examined some of the specimens, and said there were six species.

A discussion then took place respecting the enormous number of Syrphus and Coreinella noticed last season, especially with reference to the supposed migratory powers of these latter. The general opinion of the Meeting was, that there was no necessity to suppose immigration to have taken place, as the larvæ were most extremely abundant a short time before the appearance of the swarms of the perfect insects.

Mr. Bates read a paper on "New genera and species of Coleoptera, from Chontales, Nicaragua."

Mr. Baly communicated new genera and species of Hymenoptera.

Mr. Salvin read a "Synopsis of the Rhopalocerous genus Chloridae."

6th December, 1869. H. W. Bates, Esq., President, in the Chair.

M. M. d'Emerich, De Marsoul, and Oberthür were elected Foreign Members; Capt. A. M. Lang, of Brockham, near Reigate, W. A. Lewis, Esq., of The Temple, J. C. Melville, Esq., of Manchester, and Howard Vaughan, Esq., of Chancery Lane, were elected Members.

Professor Westwood exhibited drawings of several very large species of Callididae, and of new genera and species of Psalophidae.

Mr. F. Smith exhibited a larva-case which he supposed to belong to a species of Oikeistus, found by Mr. J. K. Lord, in the plains of Sinai, on the sand, where the only vegetation consisted of low plants; also a mass of earth-cells, formed by a species of Halitgus, near Cairo; these penetrated the sand to the distance of a foot.

Mr. Jenner Weir exhibited Heliothia armigena, bred from larvæ feeding in the fruit of the Tomato, in Spain or Portugal.

Mr. Muller exhibited a photograph of an example of Stereostichus Prostomii, from Switzerland, with two supernumerary hind-legs.

Mr. MacLachlan communicated "Notes on Boreus hyemalis, Linne, and B. Westwoodi, Hag."

NEW SPECIES, &c., OF HEMEROBINAE—SECOND SERIES (OSMYLUS).

By R. MacLachlan, F.L.S.

The insects noticed in this series all pertain to Osmus, with one exception, for which I have thought it necessary to institute a new genus. One rather important fact has struck me, when examining these insects, viz., that in most of the species (perhaps all, excepting the European O. fulvicephalus) the claws are toothed internally, or bifid.

The following is a concise tabular arrangement of the more closely allied genera:—

A. — Ocelli dentati. ................................................. POLYSTICHOTHE, Birm.
A. A. — Ocelli aduncti.

a. — Area costalis sericarumum unicul.
b. — Tarsoroma plantulae simplicis. Area sub-costalis

vena transversa basalis ........................................... OSMYLUS, Latr.

b. b. — Tarsoroma plantulae bidacti vel lunuliforme.
c. — Area sub-costalis vena transversa-basalis. STENOMUS, McL.

c. c. — Area sub-costalis vena transversa-basalis

plurimi .............................................................. PORISIMUS, McL.

a. a. — Area costalis sericarumum plurimi (ad basin 5)

areolatum .......................................................... HYFORMUS, McL.

The genus Myiactylus, Brunn, is placed in the family Nymphidae on account of its filiform antennæ.

The now described species of the above-named genera are as follows:—

POLYSTICHOTHE.— punctatus, F. (N. America); villatus, Say (N. America).

OSMYLUS.— fulvicephalus, Scop. (Europe); multiguttatus, McL. (Asia Minor); conspersus, Walk. (India); lineatocollis, McL. (India); Langii, McL. (India); pubicosta, Walk. (India); tuberculatus, Walk. (India); interius, McL. (India?); and inquinatus, McL. (Ceram).

STENOSMYLUS.— tenus, Walk. (Tasmania); stenopterus, McL. (Australia); incius, McL. (N. Zealand); pallidus, McL. (Australia); and (?) longipennis, Walk. (Australia).

PORISIMUS.— striatus, Birm. (Australia).

HYFORMUS.— punctipennis, Walk. (India).

OSMYLUS MULTIGUTTATUS, n. sp.

O. niger, nitidus. Pedes flavi; tarsorum articulis 1—4 ad apicem,

In sua. auctoris, necnon Dom. De Selva.

The whole body, including the antennae, eyes and ocelli, intensely black, the head much polished, the other parts drier; abdomen clothed with moderately long cincereous hairs, especially at its apex. Head with the crown very convex, not elevated in front, the ocelli prominent; palpi piccis, the terminal joint tipped with black. Legs yellow, moderately pubescent; the coxae, four first tarsal joints at the apex, and the last joint entirely black; claws blackish piccis, stout, finely serrated internally; plantula simple.

Wings broad, the apical margin rounded; whitish-hyaline, thickly covered with large and intensely black spots. In the anterior wings there are about 25—30 more or less rounded spots, some of those on the costa being confluent, and thus forming transversely elongate, cuneiform dashes; the margins are regularly spotted, the disc with two irregular longitudinal rows, those placed on the two rows of gradate veins often united into interrupted transverse streaks; in the posterior wings the discal spots are less numerous. The margins (especially the costa) and all the veins are strongly ciliated with black. The longitudinal and most of the transverse veins and veinslets in the basal half of the wings are whitish yellow, except where they traverse the spots, when they become black; most of the gradate veins and of the longitudinal apical veins are black (but the first five gradate veins in the outer series are white in the middle, even although they be placed in the black spots); the sector about 10-branched in the anterior wings; the pterostigmata region in all the wings is slightly tinged with yellowish.

This beautiful and striking species was collected in 1869, at Trebizond, by M. Th. Dayrolo. In structure it is much like O. fuleicophilus (chrysops, Auct.), but has shorter and broader wings, with the apical margin slightly rounded, instead of slightly excised; hence the apex is less produced. The net-work of the wings is rather more open, and the series of gradate veins more parallel.

Osmylus Lineatocollis, n. sp.


In Mus. Brit. et auctoris.

Pitchy-black, the head somewhat shining. Palpi piceous. Antennae yellow, the two basal joints pitchy-black. Eyes very large, black and shining. Ocelli small. Prothorax rather short, the sides parallel; abore, with three transverse raised lines, one in the middle, and one at each end (forming raised margins), clothed with sparse blackish hairs. Abdomen blackish above, somewhat ochreous beneath. Legs yellow, with minute blackish points and short yellow pubescence; claws serrated internally.

Wings long, narrow, acute, the apical margin very slightly excised, giving the wings a slightly falate appearance; anterior wings washed with yellow, shining; with fuscos marks, viz., three large, somewhat quadrate, spots on the costa.
several beyond these near the apex, and a large irregular band extending from near the apex and along the dorsal margin, emitting three broad streaks, one of which enters the apex, and the two others reach the dorsal margin; beyond this band, nearer the base, is a less distinct and somewhat quadrate spot on the dorsal margin, and there are also two small and distinct discal blackish spots, one near the base, the other in the middle; the whole wing is rather thickly sprinkled with pearly drops, being in reality portions of the membrane which have not acquired the yellow ground tint; in the fuscous band these dots are more distinct, and several of them are there much larger, forming large spots; neurition moderately open, the veins and veinedlets yellow, with minute black points, from each of which springs a short blackish hair; posterior wings hyaline, all the basal veins and veinedlets, and also the gradate veinedlets, black and suffused with blackish; the longitudinal veins between, and on each side of, the gradate series, whitish, with blackish points.

There is a specimen of this beautiful species in the British Museum, and I have a long series before me, which I owe to the liberality of Captain Lang, by whom they were collected at Masuri, in June.

**Osmius pubiconsta, Walker.**


Long. corp. 4—4½”; exp. alar. 17½”. Hab. India septentrionalis.

**In Mus. Brit. et auctoribus.**

Whitish, with a pale yellow tinge. Crown of head much inflated, with irregular blackish markings; front with blackish dots, and blackish lines at base of antennal sockets: palpi annulati with picco; antennae yellowish white, the two basal joints (and sometimes also the third) pitchy black. Prothorax rather short, slightly broader posteriorly; above, with interrupted longitudinal blackish lines, and clothed with sparse but long yellowish hairs: mesothorax large, much inflated. Legs pale whitish yellow, and clothed with long concorsorous hairs; the apex of the tarsi testaceae, claws testaceae, curved, internally at about the middle with two or three small and indistinct teeth.

Wings broad, sub-acute at the apex, whitish-hyaline with whitish veins and veinedlets; the costal margin and neurition longy ciliated: anterior wings with the costal area very broad at the base, rather abruptly dilated (almost as in *Anapsalgus* and *Megalonus*); markings few and blackish, consisting of a spot on each side of the somewhat yellowish pterostigmatical region, the inner of which is the larger, a short transverse streak placed on the inner series of gradate veins, and many scattered dots at the base of the wing and on the dorsal margin; veins and veinedlets whitish, with small and distinct black points, from each of which springs a blackish hair; most of the veinedlets of the inner gradate series, some in the outer, and several at the base of the costal area, black; costal margin with pale ciliation, which is very long near the base; reticulation very open (transverse veinlets few): posterior wings with a black spot upon each side of the pterostigmatical region; neurition without black points; some of the gradate veins in both series blackish.

I have re-described this insect, partly because it was erroneously placed by Mr. Walker in *Chrysopea*, and also because I have before me three fine examples taken by Capt. Lang at Masuri in June and July, it having hitherto been unique. It is an anomalous *Osmius*, and I am not very clear as to the existence of ocelli, which I believe are present, though certainly obscure. The species is best placed in this genus provisionally.

**Osmius interlineatus, n. sp.**

O. griseo-brunneus, pilis flavis nigriisque vestitus. Antenna flave. Pedes pallide flavi, tibiae antecis intermediisque casta nigro-tripunctata. Alae mediocir elongata, acute, griseo-hyalinae; pterostigmatici utrinque fusco-notato, punctisque nonnullis fuscos; venis venulosis nigros, albo-varius; sub-costis, radiisque albis, nigro-lineatis; anticae areae sub-costatae nigro-lineatae, margine dorsali puncto tuberculato fusco notato.

Long. corp. 5”; exp. alar. 17½”. Hab. Natalia? (India orientali?).

**In Mus. Brit.**

Livid greyish-brown with yellow and blackish hairs intermingled. Antennae yellow. Eyes grey. Prothorax stout, rather longer than broad. Legs pale yellow; anterior and intermediate tibiae with three black spots externally, of which one is in the middle, one near the base, and one near the apex. Wings rather long, the apex acute, the apical margin straight; greyish-hyaline; pterostigmatic region with a blackish spot on each side, a smaller blackish spot placed across two of the nerves of the outer gradate series, and two or three more in the disc on the cubital region; on the inner margin of the anterior wings at about one-third of its length from the base, is a rounded raised (convex) fuscous spot with black veins; neurition for the most part black, but white here and there; sub-costis and radius in the anterior wings whitish, with six pairs of long black spaces, and with black lines in the membrane in the sub-costal area, one line being placed between each pair on the veins; in the posterior wings there are five pairs of black spaces on these veins, and no lines in the sub-costal area: the net-work of the basal portion of the wings is moderately dense; the gradate series not parallel but converging on the inner margin.

There is one example (not in good condition) in the British Museum, indicated as from Port Natal; but, without being able to affirm
that it is so, I am rather inclined to believe that this locality is erroneous, and that the insect is, in reality, Indian. It is allied to *tuberculatus* and *inquinatus* (the next described species), differing from the former in its larger size, broader aspect, and in the lineated sub-costal area; its differences from *inquinatus* are noted in the following comparative diagnosis.

**Osmius inquinatus, s. sp.**

O. interlineato similis; sed alis sine punctis discalisibus, antecorarum areâ sub-costali, arcoque inter sub-costae et radium, fasciae duabus brevi-bus, transversalis, puncto inter fascias, striisque duabus apicum versus, sordide aureis, max distinguitur.

*Long. corp. 4"; exp. alar. 19".*

*Hab. Ceram.*

In Mus. Brit.

This species, collected in Ceram, by Mr. Wallace, has the form of *interlineatus*, but is apparently abundantly distinct in consequence of the dull golden markings of the anterior wings.

O. *tuberculatus*, *interlineatus*, and *inquinatus*, are no doubt closely allied; yet I cannot consider them as only forms of one species, and doubt not that more extensive materials will prove their specific value. Possibly also the raised spot of the wings, and somewhat different general appearance, may eventually cause them to be generically separated from the other species of *Osmius*. The claws in *O. tuberculatus* are distinctly bifid at the apex, and the same character doubtless obtains in the two others; but the single specimens of each of these are not in a condition for minute examination.

**Hyposmus, nov. gen.**

*Caput parnum; antennae breves; ocelli supra et inter antennarum bases positi; tubum paulo emarginatum; palporum maxillarum articuli duo basilae breves, ceteri longiores, inter se angulares, ultima acute, Prothorax latitudine paulo longior. Pedes pilosi, spinulis crassis, valde curvatis, plantulis simplicibus. Alae amplae; antecorarum areâ costali lata; venulæ costales fuscatae, venulis obliquis plurimos, serie areolarum plurimas formantibus, connecta; sub-costâ et radio ad apicum confluentibus; area sub-costalis venulis undâ ad basin sulcâ instructa; sectore et radio parallelis; areolis discalisis per-numerosis; venulis marginalibus fuscatis; areâ post-costali multi-areolatae; posticen fere ut in antice, sed area costalis angustata, serie areolarum unica.*

This genus is formed for the reception of *Osmius punctipennis*, Walker, and differs especially from *Osmius* (as here restricted) in the costal veinlets being united so as to form several irregular rows of small cells.

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1870.

**Hyposmus punctipennis**, Walker.

*Osmius punctipennis*, Walk., Tr. Ent. Soc. Lond., n.s., vol. v, p. 188.


*Long. corp. 6"; exp. alar. 24—28".*

*Hab. India septentrionali.*


Head testacea; crown much inflated, but with an abrupt declivity above the antennae which is occupied by a yellow transverse space, in which are situated the ocelli, which are very small, and placed closely together in a triangle; the posterior portion of the head, partly below the eyes, shows two large oval tuberoles, one on each side. Antennae and palpi pale brownish.

Eyes somewhat plumaceous. Thorax above more sparse, but long, testaceous hairs. Abdomen fuscous (colours probably altered), clothed with testaceous hairs; the last segment entirely testaceous and provided with two large oblique approximating valves (?). Legs yellowish, with yellow hairs; the tarsi somewhat darker; the claws shining brown.

Wings long and broad, acute at the apex; hyaline with a testaceous tinge, and with beautiful blue, purple, and golden reflections; the pterostigmatical region yellowish with indications of fuscous dots; sub-costae and radius yellow; most of the other veins whitish, but many of the transverse veinlets fuscous; the margins and veins longly ciliated with yellowish hairs: in the anterior wings are several fuscous dots on the outer series of grade veinlets, and a smoky cornicose dot in one of the discal cells near the middle; the cells in the costal area irregular; the discal cells very numerous, but leaving a very broad marginal space.

Of this large insect I have seen but two examples—Walker’s type, and the one given to me by Captain Lang, by whom it was captured at Kunawur.

20, Lime Grove North, Lowham, S.E.,

December, 1869.

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**Hints on Preserving Larvae.**

By H. Pyee.

Some two years ago, seeing some preserved larvae in the possession of Mr. Bond, I became desirous to know the method by which they were prepared; and, after a good many experiments, I attained success. Believing that there are many others who would like to be informed of the *modus operandi*, I have pleasure in giving them the result of my experience, as follows.

Having procured a larva, immerse it in a solution of alum or pyro-
Call #: QL461 .E98
Location: evans
Not Wanted Date: 07/14/2004

Status: Faculty
Phone: 979-862-3507
E-mail: j-oswald@tamu.edu

Name: John Oswald

Pickup at WCL

MS 2475
College Station, TX 77843