NEW SPECIES OF ORIENTAL STAPHYLINIDAE (COL.).

BY MALCOLM CAMERON, M.B., R.N., F.R.E.S.

Thoracocharus formosae sp.n.

Fore-parts moderately shining, the abdomen more so; head and thorax black, the former with the clypeus, antennal tubercles and narrow area between them, reddish-yellow; elytra brown, infuscate around the scutellum; abdomen black, the last segment reddish. Antennae and legs reddish-yellow. Length 4 mm.

Size of nympa Heller and with the antennae similarly constructed, but with narrower head, the eyes less prominent, the punctures fewer and much coarser, thorax more convex, the sculpture coarser, umbilicate-rugose, not verrucose, elytra a little shorter (2.5:2), not flattened, the asperate sculpture coarser and less close, abdomen less punctured, the punctures more or less biseriate on the anterior segments.

Formosa: Kankau (Koshun), vii.1909 (H. Sauter). This species has been distributed as variolosus Fauv. from which, however, it is quite distinct.

Trogophlebus (s.str.) formosae sp.n.

Rather dull, head, thorax and elytra dark ferruginous red, the latter more or less extensively infuscate; abdomen more shining, yellowish-red, the last three segments more or less infuscate. Antennae reddish, the first two or three segments lighter. Legs reddish-yellow. Length 2 mm.

Very near silvestris Cam., but less shining, of lighter colour, the antennae shorter and stouter, the penultimate segments as long as broad; head dull, the punctuation rugose, thorax less shining, broader, more transverse (3.5:2.5), wider in front, more deeply and broadly impressed at the sides; elytra and abdomen as in silvestris.

Formosa: Kankau (Sauter). This was recorded as silvestris by Bernhauer (1922, Arch. Naturgesch., 88:222), but it is quite distinct.

Trogophlebus (Troginus) formosanus sp.n.

Very near exiguis Er.; of the colour of the said species, but differing in the following respects; the eyes are larger, the thorax longer and more gradually narrowed behind, elytra a little longer than the thorax, slightly transverse. The sculpture as in exiguis.

Formosa: Takosaki, Mt. Ari, 12.ii.27 (Type, Yang). CHINA: Foochow (Yang).

Osorius siamensis sp.n.

Of the build of frontalis Fauv. but larger (7 mm.), more robust and with different sculpture.
Head between the eyes striate, in the middle with an oblong smooth area, the striae not continued on to the declivous part which is shining and conicous with a few granules at the sides, the frontal margin is slightly raised in the middle, scarcely emarginate but coarsely crenulate; the penultimate segments of the antennae are moniliform; the thorax is formed as in frontalis, with an impression at the rounded posterior angle, along the middle with a narrow impunctate area, elsewhere more finely and more closely punctured than in frontalis; elytra longer than the thorax (6:4:3), the punctuation as close but rather finer than in that species; the abdomen much more sparingly punctured than in frontalis.

**Indo-China**: Laos; Pou Mi, 27.xii.18 (de Salvaia). Type in my collection.

**Stenus (Hypostenus) coomani** sp.n.

Moderately shining, black. Antennae and palpi reddish-yellow. Legs black, the femora in the basal half and tibiae towards the apex, red, tarsi reddish-yellow. Length 6 mm.

Very near cincindeloides Schall., but a little larger and more robust; the punctuation of the fore-parts a little coarser, but that of the abdomen less coarse and especially on the non-constricted part of the segments much finer and more sparing. The antennae as in cincindeloides. This species would appear to be very near verticalis Ben., but the head is without a median smooth space.

♂ unknown.


**Oedichirus chapmani** sp.n.

Shining; head black; thorax red; elytra black with the posterior third red; abdomen with the first visible tergites red, the following black. Antennae yellow, the 4th to 8th segments infuscate. Legs yellow. Length 7 mm.

Sparingly differing in build and sculpture of the fore-parts from alatus Niet., the color pattern is also similar except that the 4th visible tergite is red whereas in alatus it is black, the antennae are distinctly shorter and stouter (and like the legs differently coloured), the penultimate segments only a little longer than broad; the thorax is a little shorter and broader and the punctuation of the abdomen distinctly coarser and closer throughout than in that species.

**Tonkin**: Hoa Binh. Unique. In my collection. I am indebted to my friend Mr. Chapman for this species.

**Astenus saigonensis** sp.n.

This species is similar to maculipennis Kr. var. maculatus Cam. except that the head is of a deep black colour and the elytral spot yet larger, extending nearly to the shoulder and the posterior margin, and also occupies the reflected margin except at the humeral and postero-external angle.

**Saigon**: Two ♀ examples. My collection.

**Charichirus chapmani** sp.n.

Coloration and lustre of princeps Fau., but at once distinguished by the shape and sculpture of the head.

Head as long as broad, a little broader than the thorax, the eyes moderate, temples straight and parallel, the posterior angles almost rectangular, on the middle of the disc with a small almost impunctate area, elsewhere with very close small granules and with the temporal region transversely rugulose. Antennae a little shorter than in princeps, the 9th and 10th segments about as long as broad. Thorax slightly broader than long (3:75:3:5), trapezoidal, along the middle with a fine raised shining line, elsewhere closely covered with rather larger granules than on the head. Elytra longer than the thorax (4:5:3:5), the suture very narrowly reddish, the postero-external region from the apex of the suture to the lateral border a little behind the middle, yellow, with as close but rather finer granular sculpture. Abdomen extremely finely, rather closely punctured and pubescent. Length 6 mm.

♂ unknown.

**Tonkin**: Hoa Binh. Type in my collection. I am indebted to Mr. Chapman for this species.

**Scimbialium (Schatzmayria) irakensis** sp.n.

Very similar to nifostaceum Cam. Of the same build and colour, but with larger eyes and shorter antennae, the penultimate segments only slightly larger than broad, the ground sculpture of the head much less distinct, thorax a little shorter, the punctuation not quite so fine, the elytra as finely but rather more closely punctured, the abdomen as finely but more densely punctured and pubescent. Length 5:5 mm.

From nifostaceum Bernh. it differs in the much shorter antennae, narrower less closely punctured head, much less closely punctured thorax, more finely punctured elytra and more closely punctured abdomen.

**Irak**: Baghdad. Unique. My collection.

**Scimbialium (s.str.) persimilis** sp.n.

In colour, build, lustre and antennal structure similar to anale Nordan., but differing in the following respects; the punctuation of the head is finer and closer, that of the thorax and elytra as close but distinctly finer, the abdomen much more finely and more closely punctured. Length 10 mm.

**Mesopotamia**: Tanooma. Type in my collection.

**Leptacinus chinensis** sp.n.

Shining; head black, thorax reddish-brown, elytra yellow infuscate at the base, abdomen yellowish-brown. Antennae and legs reddish-yellow. Length 4 mm.

Very near paramunipustula Gyll., of similar build but smaller and narrower, the antennae thinner, the punctures on the head smaller, the thorax with
punctures as in _paramunctatus_, but those of the elytra much smaller and more superficial; in other respects similar.

**S. China:** Sheung Shui. Unique. My collection.

**Hesperus chinensis** sp. n.

Shining; head and thorax dark ferruginous red with very feeble metallic reflex; elytra pitchy black, the shoulders, suture and posterior margin both very narrowly reddish-yellow; abdomen with the first three visible tergites reddish-yellow, the following pitchy, the posterior margin of the 5th reddish-yellow. Antennae yellowish-red with the 1st segment yellow. Legs yellow, the apices of the femora and tibiae slightly infuscate. Length 6.75 mm.

In the colour of the body very similar to _inaequalis_ Fauv., but smaller, much narrower and the elytra without depressions. Head subquadrate, slightly transverse, much broader than the thorax, the post-ocular region gently retracted to the broadly rounded posterior angles, the eyes moderate, much shorter than the post-ocular region, with four inter-ocular punctures, the median pair distant from one another, the post-ocular region with seven or eight large punctures, otherwise impunctate, the ground sculpture extremely fine, striate and more or less longitudinal. Antennae rather short, reaching the base of the thorax, the 3rd segment longer than the 2nd, 4th to 8th all slightly longer than broad, decreasing in length, the 9th and 10th as long as broad, the 11th very slightly longer than the 10th. Thorax narrow, longer than broad (4.5:3), widest at the anterior angles, on each side of the middle with a row of six large punctures, towards the sides with a puncture a little external to the most anterior of the dorsal row and a group of four external to 3, 4 and 5 of this row, otherwise impunctate except for the usual marginal punctures; ground sculpture absent. Elytra as long as, but a good deal broader than the thorax, transverse, coarsely, moderately closely punctured, more closely at the base and with rather long sparing hairs. Abdomen very finely and very sparingly punctured and with a few fine hairs. 

♂ unknown.

**China** (without further indication). Unique. British Museum.

**Atheta (Aloconota) persica** sp. n.

Moderately shining, head and abdomen black, thorax dark reddish-brown, elytra yellow, the base and sometimes the reflexed sides more or less infuscate. Antennae black, the first four segments and legs reddish-yellow. Length 3 mm.

Except for the broader head, larger eyes, more brightly coloured elytra and much longer antennae, resembling _sulciicornis_ Steph. Head subquadrate, a little narrower than the thorax, the eyes as long as the post-ocular region, the disc in the 3rd broadly, superficially impressed, coriaceous and with a few small, obsolete punctures. Antennae long and slender, the 3rd segment slightly longer than the 2nd, 4th to 10th all longer than broad, decreasing in length, the 9th and 10th distinctly longer than broad, the 11th cylindrical, fully as long as the two preceding together. Thorax slightly transverse, formed as in _sulciicornis_, impressed before the scutellum and with a short median impressed line, the sculpture as on the head. Elytra as long as the thorax, very slightly broader than long, very finely coriaceous and rather closely, very finely and obsolescently punctured. Abdomen very finely and very sparingly punctured, more strongly coriaceous than the fore-parts. ♂ 7th tergite with a large pointed tubercle in the middle; 8th nearly truncate and very obsolescently crenulate, in the middle with two little teeth.

**Persia:** Kerman, 24.X.32 (H. E. J. Biggs). Type in British Museum (Nat. Hist.), co-type in my collection.

**Zoological Museum,**

Tring, Herts.

**September 11th, 1940.**

An observation on _Melitta leporina_ (Pauz.) (Hym., Apidae).—Walking across Hampstead Heath late one dull afternoon in July, I happened to see a male of _M. leporina_ on a clump of _Achillea_. Stooping to pick it up, I observed the abdomens of several others projecting above the flower-heads, and I counted fourteen of them, head downwards, forming a compact mass; it was not until I started moving them that they showed any signs of life, when they dropped down into the grass and lethargically crawled out of sight, not one attempting to fly away. Other clumps of _Achillea_ were examined and several were found to contain smaller groups of males, always head downwards, thirty-five specimens in all being counted. A single female was found on a thistle head some yards away. On a previous hot day, both sexes had been found in considerable numbers visiting the white clover amongst which the _Achillea_ grows, the females entering burrows in sandy ground nearby. This bee is particularly numerous in the district this year, and has been found wherever the clover grows at all extensively. I do not doubt that the males passed the night in these groups, but _Achillea_ or some plant which would allow them to form compact masses is not at a rule present near the colonies, and it would be interesting to know where the males then go, since a clover head could not support more than two or three of them. Little is known about the nocturnal habits of male bees, but several individuals of _Panurgus calcaratus_ (Scop.) have been found curled up together in composite flowers and F. Smith has recorded (1891, _Cat. Brit. Hym.,_ 2nd ed., pt. 1:165) males of _Cheilostoma_ spp. curled up together in flower heads and also attached to blades of grass and twigs by the mandibles, the abdomen held horizontal and the legs stretched out in a line with the body. Perkins observes (Trans. ent. Soc. Lond., 1919:232, 235) that _Nomada_ sometimes sleep clinging by the mandibles to the heads of flowering grasses, dead twigs and leaves, the legs all drawn close to the body and the antennae porect, so as to resemble a little stalk, while on wet days he has found _Melitta, Epeolus_ and _Nomada_ hanging on to herbs and shrubs, soiled with rain and torpid with cold. On one occasion I found some small male _Halictus_ torpid within the flowers of a _Cantiana_, and I have often found males of _Bombus_ and _Psithyrus_ early in the morning, motionless and wet with dew, on lavender heads. Some male bees may pass the night in the entrance to the burrows, this being most probable in species which form colonies and where the males are to be found in the daytime close to the burrows (for example, _Halictus minutus_ (Schrank), _Andrena armata_ (Gmelin), etc.). Mr. G. E. J. Nixon tells me that many of the smaller wasps roost in holes in posts and that they will do so in holes drilled for this purpose, from which they may be removed during the night. The difficulties of locating insects during the night are obvious, but, except for a few species, all bees and wasps have disappeared.
ever, Mr. A. M. Critchley-Low has taken a female *apiformis* which he describes (in press) as having light lemon-yellow bands, a statement which he has very kindly confirmed in a letter, while two males and two females bred in March this year by Mr. A. A. Allen were undersized and had the 'usually tawny pubescence yellow.' This difference may have been due to immaturity, but Donisthorpe's bred specimens have the pubescence tawny and no doubt mature individuals are variable as regards the colour of the light bands.

I suggest, therefore, that *personatus* Harris is a yellow-banded form of the species usually known as *apiformis* Schrank, who described it as having 'fascia in basi thoracis, & alia per medium abdominis flavae.' Indeed, most of the details given by Harris seem to fit such a hypothesis, e.g. black head, thoracic hair thicker than abdominal hair through which the glossy abdomen may be seen, white anal parts [some specimens have these tawny], long black legs [knees and tarsi are obscurely reddish], sector-edge of wings tinged with amber and a brown cloud proceeding from this edge irregularly half-way across the wing. Moreover, Harris states that when at rest the wings of *personatus* lie on the back, neatly covering each other, a fact which has been noticed in *apiformis* by Edwards (1926, Entomologist, 59:267). This resemblance in the manner in which the wings are carried was first pointed out to me by Mr. Coe; it is, as Mr. Collin reminds me, 'by no means peculiar to *Pocota*, but one commonly adopted by many Syrphidae and other families of Diptera.' It should also be noted that the specimen of *personatus* was unique and that it was found in a window. This has its parallel in the rarity of *apiformis* and in the capture of two specimens in windows, another under a glass coping, a fourth dead in a lamp-shade and a fifth in a spider's web; i.e. a considerable proportion of the 24 adults known to have been taken in England were secured in or around buildings of various kinds. *P. apiformis* breeds in decaying wood and is no doubt accustomed to enter holes in trees where the intensity of light is less than in the open. This habit would be sufficient to account for the entry of the insect into houses, etc., and in the light of this consideration Harris' discovery of *personatus* on the inside of a window becomes specially significant.

Finally, it may be added that additional points of resemblance may be seen in the figure, e.g. the small head (narrower than thorax), wing venation (cubital vein without Eristaline dip) and hairy femora. The illustration of the head indicates some of the