Colias croesus Forc. (Lep., Pieridae) in Yorkshire.—I saw two clouded yellow butterflies on the Mewith Road near Bentham, Yorks, on the afternoon of June 24th, 1941. They were travelling west with a fairly strong west wind about a mile apart. By means of my cycle I could overtake and see them when settled; they appeared to be in a perfect and fresh condition.—Chris. A. Cheetham, Austwick, via Lancaster: June 26th, 1941.

Habits of Tabanus micans Mg. (Dipt.).—Oldroyd (in Edwards, F. W., Oldroyd, H., and Smart, J., 1939, British Blood-sucking Flies, Lond.: 90) refers to Tabanus micans Mg. as ‘undoubtedly one of the rarest representatives of its genus.’ I first took it in June, 1939, when two specimens were taken at Fairbourne, Merion. Both were flying within two inches of a road surface and not more than six inches from the grass verge. The flight was slower and quieter than any other species of the same genus that I have observed, and the locality was less than 20 ft. above sea-level. They were covered with dust and were so similar to blue bottles (Calliphora sp.) in general appearance that they would certainly not have been netted but for the fact that I was taking all the Diptera that came my way. These two specimens were shown to Mr. E. R. Goffe and, after he had confirmed my determination of the species, were presented to him.

On June 7th, 1941, I again visited Fairbourne with the fixed idea of obtaining some more specimens of Tabanidae, with micans as a special objective. With the exception of females of Chrysops caecutiens L., Tabanidae were rare, but two more dust covered specimens of micans, both males, were taken (June 9th and 17th) under identical conditions to those mentioned above, and once again the resemblance to Calliphora sp. was remarkable. On June 19th, Mr. James Hoste kindly offered to help in a search for specimens. Our attention was drawn to a nest of the wasp Vespula norvegica F.), and I observed that a sycomore branch which hung close to the nest had every leaf covered with honeydew. The shadows of insects feeding on this substance were clearly visible through the leaves upon which they were settled, and I observed many specimens that could only be either large fleshflies (Sarcophaga sp.) or Tabanidae. Most of these insects were from twelve to fifteen feet above the ground, and Mr. Hoste, who is six feet three inches in height, was able, with the assistance of my extending net stick, to capture one of these insects for examination. It was a male micans in perfect condition. Altogether, on three trees, we succeeded in netting seven micans and one T. distinguendus Verrall; many more were seen, but could not be reached. No effort was made by the females to attack us, although C. caecutiens did so in force. Both sexes of micans were taken at the honeydew at an altitude of about 70 ft. above sea-level. Hine is quoted by Oldroyd (p. 70) as noting a number of American species of the genera Chrysops and Tabanus feeding upon honeydew, but I know of no reference to this habit by British collectors. Finally, Verrall gave Merioneth as a locality for micans, but did not specify the district. There seems to be no reason why Fairbourne should be the only locality in that county.—G. S. Klock, Vanessa, 8 Knutsford Road, Wilm-slow, Cheshire: July 3rd, 1941.

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[I took two males and six females of T. micans as they came to drink at a small stream in Wytham Wood, Berks, May 31st, 1939. Mr. E. Taylor took two females which were circling round him in the same wood on July 9th, 1938.—B.M.H.]

[I took a male sitting on bare ground in a muddy lane near Carlisle, Cumberland, on July 2nd, 1941.—K.G.B.]

NEW SPECIES OF STAPHYLINIDAE (COL.) FROM BORNEO.

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

OXYTELINAE.

Oxytelus (Anotylus) bryanti sp.n.

Moderately shining; head brownish-red; thorax brown with the sides more or less brownish-yellow; elytra pitchy-black with the shoulders yellow; abdomen brownish-yellow. Antennae and legs reddish-yellow. Length 2.5 mm.

Near raffrayi Fauv. and arecace Cam., but with the head and thorax of darker colour, the former with different sculpture, the penultimate segments of the antennae less transverse than in raffrayi. ♂: head transverse, slightly broader than the thorax, the clypeal region shining, without sculpture, strongly depressed, its anterior border feebly emarginate in its whole extent and posteriorly separated by a fine gently curved impressed line from the rest of the surface; eyes rather small, the post-ocular region rounded and slightly dilated, vertex with a short median groove on each side of it with a few small punctures, neck limited on front by a curved impressed line; the fine supra-orbital ridge continued backwards and inwards to the neck, the temporal region coarsely and rugosely punctured, the rest of the surface closely and strongly obliquely striate. Antennae with the 4th segment distinctly longer than broad, 5th small, strongly transverse, 6th to 10th larger, slightly transverse. Thorax strongly transverse (4.5: 2.5), trapezoidal, the median sulcus narrow extending the whole length, the lateral broader, straight, abbreviated; the sides impressed, the whole surface coarsely and irregularly wrinkled. Elytra longer than the thorax (5.5: 2.5), rather coarsely striate, the rugae more or less interrupted. Abdomen extremely finely and very sparingly punctured and without ground sculpture. ♀: unknown. ♀: 7th sternite very slightly obtusely produced in the middle, arcuately emarginate on each side.

W. SARAWAK: Mt. Matang, 1.i.14 (Bryant). Type in my collection.

Oxytelus (Anotylus) decipiens sp.n.

♂: extremely like hostilis Bernh., ♀.

Of the same colour and build but less shining, the eyes a little larger, the postocular region shorter, the structure otherwise similar, but with distinct coriaceous ground sculpture behind the clypeus and antennal tubercles, the basal area without ground sculpture but with three or four large punctures on either side; the antennae are differently constructed, the 2nd and 3rd segments longer, the 4th longer than broad, the 5th as long as broad, the 6th to 10th scarcely transverse; the thorax is similar in build, transverse (2:1.4) but less shining, the sculpture more wrinkled, less distinctly punctured and more rugose; the elytra and abdomen scarcely differ in the two species. Length 2.5 mm. ♀ unknown.


Mimogonus bryanti sp.n.

Moderately shining, dark ferruginous red, the base of the head
and the elytra blackish. Antennae and legs reddish-yellow. Length 2.4 mm.

Smaller and narrower than *fumator* Fauv., more brightly coloured, thorax shorter and so more transverse, the base more strongly constricted, the punctures deeper and ground sculpture absent, elytra much more strongly, closely and rugosely punctured, abdomen less finely, more roughly punctured. Head narrower than the thorax, the eyes prominent, closely covered with large punctures and with a fine coriaceous ground sculpture. Antennae with the 1st segment short and stout, 3rd as long as the 2nd, 4th to 10th transverse, the penultimate about twice as broad as long. Thorax transverse (2:1:5), the sides nearly straight but slightly retracted towards the anterior angles, before the sudden and strongly constricted with a deep impunctate fovea adjacent, the posterior angles rectangular, along the whole of the middle with a rather broad impunctate space, elsewhere covered with rather large umbilicate punctures, rather larger than on the head; ground sculpture absent. Elytra a little longer (2:1:5) than the thorax, a little broader than the long, closely and rugosely punctured; ground sculpture absent. Abdomen closely punctured, the punctures moderate in size, on the last tergite much more finely and sparingly, scarcely coriaceous. Pubescence throughout long and scanty. Anterior and middle tibiae with a few short spines externally, the posterior with some long yellow setae.


Thoracoprius niger sp.n.

Moderately shining, black. Antennae and legs yellowish-red. Length 3.5 mm.

Head narrower than the thorax, eyes prominent, impunctate on vertex and in front, at the sides with some large umbilicate punctures, distinctly coriaceous. Antennae with short and stout 1st segment, 3rd distinctly longer than the 2nd, 4th short oval, 5th to 10th gradually more transverse. Thorax transverse (3:5:2), the sides crenulate, very slightly rounded in front, straight and retracted before the posterior angles which are slightly impressed, along the middle with rather narrow impunctate area, elsewhere rather closely covered with large umbilicate punctures, larger than on the head, coriaceous. Elytra longer than the thorax (3:2), a little longer than broad, with similar but smaller punctures, coriaceous. Abdomen with superficial irregular puncturation, coriaceous. Pubescence throughout rather long, scanty. Anterior tibiae curved and subulate with five stout spines on the outer border; middle with seven or eight longer and more slender spines. This species should be near *vulneratus* Bernh., but differs in the colour, smaller size, impunctate vertex and impunctate median area of thorax and absence of deep fossa at the posterior angles.

W. SARAWAK: Mt. Matang, xii.1913 (Bryant). Type in my collection.

Thoracoprius longipennis sp.n.

Shining, dark ferruginous red, the elytra blackish. Antennae and legs reddish-yellow. Length 2 mm.

Smaller and narrower than *niger* Cam., differently coloured, the eyes larger, sides of thorax scarcely crenulate, punctuation throughout much less strong. Head narrower than the thorax with large prominent eyes, with small scattered umbilicate punctures few in number, distinctly coriaceous. Antennae with the 3rd segment as long as the 2nd, 4th to 10th slightly transverse, not increasing in width and more or less globular. Thorax slightly transverse (1:75:1:5), the sides scarcely perceptibly crenulate, feebly rounded in front, straight and gradually retracted behind with a deep fovea adjacent, along the middle with a narrow impunctate space which is elevated as a keel behind separating two rather large but superficial impressions, the punctures larger and much closer than on the head, coriaceous. Elytra much longer than the thorax (2:3:1:5), longer than broad, with much closer and more superficial punctures, coriaceous. Abdomen rather sparingly, roughly punctured, coriaceous. Pubescence coarse and scanty throughout.


Holotrechus bryanti sp.n.

Shining, black, the posterior margin of the tergitae rufescent. Antennae and legs reddish yellow. Length 4 mm.

In size and build scarcely differing from *crassicollis* Er. But the head and thorax without trace of ground sculpture, the former a little more finely and less closely punctured, the latter, however, scarcely differing in punctuation, the elytra much more sparingly and indistinctly punctured, abdomen much more punctured, only coriaceous at the bases and sides of the segments. Head finely, moderately closely punctured, without ground sculpture. Antennae short, the 4th segment scarcely longer than broad, 5th and 6th moniliform, 7th transverse, 8th to 10th much more strongly, forming a club. Thorax slightly transverse (3:75:3), sides feebly rounded in front, straight and a little retracted before the base, less finely and more closely punctured than the head. Elytra longer than the thorax (3:4:3), broader than long, the humeral angle forming a small prominent tubercle and with an impression internal to it, finely, sparingly and obsoleuto punctured with a fine wrinkled ground sculpture. Abdomen with a few fine scattered punctures, more numerous on the 6th and 7th tergitae, finely coriaceous at the bases and sides of the tergitae, practically without ground sculpture along the middle.

W. SARAWAK: Mt. Matang, 26.i.14 (Bryant). Type in my collection.

Osorius strigicollis sp.n.

In build, colour and antennal structure scarcely differing from *collaris* Bernh.

The head and thorax less shining and with different sculpture. The rugae between the eyes are closer and sharper, the striae narrower; they are continued to the truncate anterior border without interruption along the middle and at the sides, the anterior border without trace of median tubercle. The thorax is formed as in *collaris*, the anterior and posterior angles rounded, the latter with a small impression adjacent, along the middle with smooth shining space, elsewhere with close longitudinal striae and rugae, these scarcely interrupted. Elytra a little longer than the thorax (4:75:4), slightly broader than long, with moderately large, rather close but superficial punctures. Abdomen moderately closely, asperately punctured as in *collaris*, finely coriaceous. Length 6 mm.

W. SARAWAK: Quop, 24.iii.14 (Bryant). Type in my collection.
Osorius luzonicus Bernh. subsp. n. sarawakensis.

Only differs from the type in larger size and the punctuations of the thorax and abdomen being a little finer and not so close. Length 4.75 mm.

W. SARAWAK: Mt. Matang, 18.i.14 (Bryant). In my collection.

Osorius bryanti sp.n.

Build of sparsus Cam. (except that the anterior angles of the frontal margin of the head are not prominent), but with different sculpture and the antennae with shorter intermediate segments.

The interocular striae and rugae are fine and interrupted; on the declivous front only a few fine more or less elongate granules are present, the vertex smooth and shining. Thorax slightly transverse (4:1:3:5), the sides straight and even retracted from the prominent anterior to the rounded posterior angles, which are superficially impressed, impunctate along the middle, elsewhere with rather close, small, oval, superficial, umbilicate punctures. Elytra a little longer than the thorax (4:3:5), the punctures small, obsolete and irregular. Abdomen sparingly, finely and asperately punctured, only the bases of the segments coriaceous. Length 5.5 mm.

W. SARAWAK: Mt. Matang, 22.i.14 (Bryant). My collection.

(To be concluded.)

Stenodema trispinosum Reut. (Hem., C. T. D. pseud.) in Norfolk.—The following observations on this insect have been made chiefly at Wheatfen Broad, Surlingham, Norfolk, where it is common among the sedges of closed reed-swamp; others at Upton Broad and Hoveton in the Bure Valley, during the years 1937-41.

Stenodema trispinosum Reut. is essentially a fen insect; it is double-brooded, and the colour-change from brown to green takes place in the imagines of both generations. Nymphs from eggs laid by hibernated females are found in June and July; those from July—August imagines occur from August to early October. Imagines of the summer brood appear first at the beginning of July; they are brown on emergence and develop a green colour in both sexes within a week or two and die off at the end of August. Imagines of the second brood attain maturity between the end of August and mid-October; they are brown on emergence and remain so throughout hibernation which ensues. Early in April they repair to the sedge Carex hudsonii Ar. Benn, then beginning to flower and the females rapidly attain green coloration while the males remain brown. During April the males number rather less than 20 per cent. of the whole, dying off altogether by mid-May. As spring advances the females visit other sedges coming into flower, including Carex acutiformis Ehrh., C. paniculata L., C. goodenovii Gay and C. divisa Huds. and to a slight extent Eriophorum angustifolium Roth. and Luzula campestris Br., but never far from C. hudsonii Ar. Benn., which seems essential to them. Oviposition takes place from May onward and young nymphs have been found on sedges in the first week of June. Some of the hibernated females persist until mid-July and have by then attained a deep green coloration; it will be seen that they coexist for a short time with imagines of the next generation.

Parallel observations on the related species, S. calcareum Fall. and S. laevigatum L., have shown that these remain in hibernation later than S.