BRITISH HEMIPTERA: ADDITIONS AND CORRECTIONS.
BY J. W. DOUGLAS AND JOHN SCOTT.

GEODROMICA.

Section 5.—LYGÆINA.

FAMILY I.—RHYPAROCHROMIDÆ.

STETHOTROPIS (Fieb.), n. g.

Short, broad, oval, stout.

Head transverse, short, pentagonal; crown (including the eyes) wider than the front of the pronotum, rather convex; face very short, sides slightly curved inwards, apex obtuse. Eyes rounded, projecting laterally. Antennæ slender, 1st joint stout, reaching beyond the end of the face, 2nd slender, slightly clavate, $2\frac{1}{2}$ times longer than the 1st; 3rd more slender and less clavate, about two-thirds the length of the 2nd; 4th thicker than the 2nd, about the same length as the 3rd, fusiform. Rostrum slender, reaching to the posterior coxae, 1st joint as long as the head, 2nd nearly twice as long, 3rd about as long as the 1st, 4th rather shorter.

Thorax: pronotum long-trapezoidal, moderately convex, anteriorly contracted to the width of the head but immediately widened and the anterior angles rounded off; anterior margin slightly concave; sides nearly straight, very slightly sinuate, the margin at first very narrowly reflexed, then gradually thickened and forming a small callus at the posterior angles which are thus obtuse; posterior margin, within the callosities, slightly emarginate. Scutellum long, triangular, slightly convex, sides depressed, apex acute. Elytra: —clavus long, narrow, sides parallel; corium wide, curved outwards, anterior margin not reflexed, the outer nerve incrassated and prominent on the basal half, its posterior course on the disc also considerably raised; membrane short, sub-quadrate, posterior angles subequally rounded, base depressed; of the four nerves the 1st is short and curved outwards, the 2nd, arising near the middle of the base, is nearly straight, slightly curved at the base; the 3rd, arising at the inner angle, curves
towards the 2nd and then slightly towards the inner margin; the 4th arises near the middle of the inner margin and curves parallel to the 3rd. Sternum, each segment with a triangular xyphus; meso- and metasternum with a central keel, the xyphus depressed. Legs moderate; thighs, 1st pair incrassated, simple, long-fusiform; tarsi, 1st pair short, 1st and 3rd joints sub-equal in length; 2nd very short; 3rd pair longest, 1st joint longer than the 2nd and 3rd together, 2nd very short.

Abdomen: connexivum wide, sharply reflexed.

Species 1.—Stethotropis incana (Doug. & Scott), n. sp.

Black. Head and pronotum clothed with dense ashy pubescence; elytra dark shaded brown, base and nerves of membrane yellowish-white.

Head appears ashy by reason of the dense decumbent pubescence, antennae black with fine projecting hairs, apex of 1st, 2nd, and 3rd joints piceous.

Thorax: pronotum covered like the head with dense, appressed, ashy pubescence, closely but distinctly deep-punctured, the callosities smooth. Scutellum less pubescent, with fine, less distinct punctures. Elytra dull, dark brown; clavus on the basal half with three rows of distinct punctures, posteriorly the punctures less distinct; corium in the inner margin, posteriorly, a longitudinal blackish streak, the raised course of the 1st nerve is also dark, the colour spreading posteriorly and outwardly into a blotch which extends narrowly on to the base of the membrane: membrane fuscous, the base (except as above stated) yellowish-white on the outer two-thirds, on the inner 3rd broadly clear, spotlike, with a blackish streak from the corium beyond the base of the 3rd nerve; nerves clear yellowish-white, and a streak of the same colour, sometimes interrupted, between the 1st and 2nd, and 2nd and 3rd. Legs: thighs pitchy-black, tibiae pale piceous, tarsi pale piceous, the last joint black.

Abdomen: beneath clothed with fine, decumbent ashy pile. Length 1½ line.

A single individual, ♀, was taken by Mr. T. V. Wollaston, last summer, at Teignmouth, and kindly presented to us. Dr. Fieber has founded on it a new genus and has sent a drawing of the characters, from which our figure is taken. Its place is near Stygnocoris.

Section 9.—Capsina.

Family II.—On cotylidæ.

Genus 7.—Conostethus, Feib.

Species 2.—Conostethus griseus, n. sp.

♀ Dark greyish-green.

Head yellow, somewhat darker on the sides and leaving an indistinct central line;
at the base of the head, and near to each eye, a small brown spot. Antennae black, 1st joint at the base greenish; 4th joint, apex brownish-green, Eyes purplish-brown. Rostrum greenish or yellowish, last joint black.

Thorax: pronotum—sides and a central line yellow; callosities brownish-yellow minutely spotted with brown, their posterior margin brown. Scutellum dark greyish-green, anterior portion and a central line yellow, the former darker than the latter, transverse channel brown, interrupted by the central line. Elytra dark greyish-green; clavus—inner margin narrowly black; corium—anterior margin as far as the 1st nerve yellow, the colour softened down and blended with the prevailing colour as they approach each other; cuneus yellow; membrane blackish, slightly iridescent, lesser cell white; cell nerves yellow, outer nerve of the large cell darker, between the apex of the cuneus and lesser cell nerve and the apex of the anterior margin is enclosed a pale triangular patch, margined with black at its lower extremity. Sternum greenish; mesosternum with a broad dark greyish-green streak on each side of the centre. Legs greenish; thighs next the apex with a short row of minute brown spots on the upper and under-sides, those on the 3rd pair placed diagonally towards the base; tibia brownish-green or yellow with erect, somewhat spinose, black hairs; tarsi brown, 3rd joint, except the base, and claws, black.

Abdomen: upper-side black or brown-black; under-side green; connexivum yellow.

♀ slightly paler than the ♂.

Head: antennae yellowish or brownish-yellow; 2nd joint brown; 3rd and 4th black, basal half of the 3rd dark brown, apex of the 4th brownish-green. Elytra scarcely so long as the abdomen. Membrane abbreviated; cell nerves yellow. All the other characters as in the ♂. Length 2 lines.

In the appendix to the “Europäischen Hemiptera,” p. 394, Fieber describes an insect as a variety of Conostethus roseus, Fall., to which the present bears a great resemblance in many respects, but its stature (nearly one-third larger), rounder head, and different colour of the elytra (the two former characters not referred to by Fieber) render it very conspicuous when placed alongside C. roseus.

Taken in some numbers by Dr. Power below Gravesend on and underneath Arenaria maritima, in June last.

AQUATILIA.

Section 5.—CORIXINA.

Family 1.—CORIXIDÆ.

Genus 1.—CORIXA, Geoffr.

CORIXA socia, n. sp.

Brown-black, with very fine yellowish lines and markings. Pronotum, clavus and corium delicately rastrate. Pronotum with 7—9
lines, mostly entire; clavus with the first five or six lines straight and parallel; corium with short irregular, delicate lines. Pala, arranty, twisted, roundly dilated on the upper side anteriorly; 1st joint of the posterior tarsi with a large, sub-trapezoidal, posterior, black spot.

Head: above pale picose, posterior margin black-brown with a very slightly angular medial prominence; on the crown, posteriorly, two very short, fine, punctate, longitudinal striae, not extending quite to the base. Face pale yellow; facial depression in arranty, deep, oval, extending forwards nearly to the middle of the eyes.

Thorax: pronotum rounded behind, anteriorly without a carinate elevation, with 7—9 fine, close, indistinct, slightly undulating, dark yellowish, transverse lines, mostly entire, but sometimes shortened and confluent. Elytra: clavus with fine, dark yellowish, transverse lines, the first six or seven straight, parallel, then two shortened inwardly, and the remainder less regular, shorter, and often turned down at the inner end; corium with very fine, irregular, short, faintly jagged, transverse yellowish lines, the posterior inner angle nearly clear of markings; membrane-suture broad, clear yellowish, the colour extending round the apex, as a line, on to the marginal channel which is dark livid, in certain lights pale inwardly; membrane with fine, irregular, sub-angularly twisted yellowish markings, sparse in the middle, the entire margin black. Sternum black; scapulae pale yellow; pleurae black on the base, the posterior half, and a line on the margin of the basal half, pale yellow; parapleurae pale yellow. Legs pale yellow,—1st pair, coxae outwardly black, apex yellowish; tibiae, at the base, exteriorly with a blackish spot, extending upwards; tibiae, acute, black above, apex yellowish; pala, arranty, the lower margin nearly straight, the upper-side at first much constricted and flattened, then dilated and rounded, turned broadly inwards, and abruptly rounded to the apex, so that the upper surface exhibits a broad screw-form; the colour at first brown deepens to black on the dilated portion and is continued as a line almost to the apex: 2nd pair, coxae black, apex yellowish; tibiae, apical third, especially on the upper-side, fuscous; tibiae pale fuscous; tarsi brown at the apex: 3rd pair, coxae black, apex yellowish; tibiae broadly black exteriorly, less so interiorly; tarsi with long, black cilia, 1st joint at the end with a large black spot extending quite across, sub-trapezoidal, the inner side being longer than the outer, and the upper margin sloping outwards; 2nd joint clear yellow with a very fine black line on the margins.

Abdomen black; connexivum pale yellow: beneath, in arranty, the basal segments black with the posterior margin and sides pale yellow; the last two or three segments dusky yellow; in the female all the segments pale yellow. Length 2½—3 lines.

In the form of the pala, arranty, like O. praestus, but differs from that species in being blacker, in the more delicate and shorter character of the lines on the corium, in the darker colour of the middle and posterior thighs, and in the sub-trapezoidal (not quadrat) shape of the black spot on the posterior tarsi.

A few specimens were taken last summer in the district of Strathglass, Inverness-shire, by Dr. F. Buchanan White.
CORIXA BOLDI, n. sp.

♀. Black-brown with pale yellow markings. Pronotum with 7 – 8 very fine interrupted black lines. Clavus with long zig-zag, longitudinal lines in the middle, and short transverse lines on the sides. Corium with short, twisted, transverse lines. Posterior tarsi: the 1st joint with a large, apical, black spot, semi-oval on its upper end.

Head brownish-yellow, fuscos at the base, with a short, punctate, longitudinal stria on each side of the slightly raised middle.

Thorax: pronotum, clavus and corium finely rastrate. Pronotum posteriorly rounded, anteriorly without a keel, transversely with 7 – 8 very fine, slightly impressed black lines, the intermediate yellow lines rather wider. Elytra: clavus with long, zig-zag, sharply angulated, longitudinal, yellow lines on the middle, broad at the base, the margins each with a series of short hieroglyphic marks, sometimes connected; on the posterior 4th these marks form irregular transverse lines: corium with short, twisted, angulated, somewhat oblique transverse lines, interrupted on the posterior inner angle by a longitudinal black streak, the angle itself, at the end of the clavus, with a black spot; marginal channel pale yellowish; membrane-suture narrow, dusky yellowish: membrane filled with hieroglyphic yellowish markings, interrupted near, and parallel to, the inner margin by a pale streak, exterior margin black, posterior margin fuscos. Sternum pale yellow. Legs pale yellow: 1st pair, pale,♀; ciliate, narrow, acute: 2nd pair, tarsi with a brown spot at the apex: 3rd pair, 1st joint with a large, apical, black spot reaching quite across the joint, the upper end of the spot semi-oval; 2nd joint with a delicate black margin; cilia black.

Abdomen above, black; sides and conneixivum pale yellow; the last segment, within the posterior margin, with a brown line; under-side pale yellow.

Length 3 lines.

This species is at once distinguished by the longitudinal direction of the peculiar markings on the clavus. By the spot on the posterior tarsi it is related to C. praevata, but the form of the spot differs, being sub-oval, instead of quadrate.

Described from a single ♀, taken by Mr. T. J. Bold in August, at Gosforth, “in a lake into which a burn runs.”

CORIXA SODALIS, n. sp.

Brown-black, with fine pale yellow markings. Pronotum with 8 – 9 very fine black lines. Clavus: the lines on the basal half straight or furcate; corium with irregular, interrupted, twisted lines. Palæ, ♂; anteriorly, on the upper-side, roundly dilated to the broad apex, outwardly, like the tibiae, black: tarsi: 3rd pair, the 1st joint with a small triangular, apical, black spot.
Head piceous; facial depression in \( \mathcal{O} \), deep, extending forwards to the middle of the eyes.

**Thorax:** pronotum, clavus and corium delicately rastrate. Pronotum rounded behind; disc with 8—9 very narrow, impressed black lines, the intermediate yellow lines rather broader, the first three or four straight, the rest more or less curved downwards, frequently shortened in the middle and confluent. Elytra: clavus with fine, pale yellow, transverse lines; on the basal half six or seven parallel, mostly entire, but sometimes infuscated at the ends, the first three or four slightly broader than the others; on the 2nd half irregular, broken, or angularly twisted: corium with delicate, irregular, much broken and angularly twisted, pale yellow, transverse lines, sparser on the posterior inner angle, leaving there a short, longitudinal black streak; membrane-suture narrow, clear pale yellow, marginal channel narrow, pale livid: membrane with minute hieroglyphic markings, the middle more or less free, the margins black. Sternum and side plates pale yellow. Legs yellowish: 1st pair, tibia, \( \mathcal{O} \), arcuate, the upper-side, except the apex, black; pala, \( \mathcal{O} \), viewed from the side cultrate, the upper-side anteriorly, broadly arcuate, apex broad, flattened and curved inwards, outside black, but the colour not extended to the apex: \( \mathcal{Q} \), cultrate, narrow; slightly curved, apex acute: 2nd pair; thighs, on the basal half, pale, the apical half infuscated, darker on the upper edge; tibia infuscated outwardly, tarsi yellowish with a black spot at the end: 3rd pair; thighs pale; tibia broadly black on the sides; tarsi yellow with black cilia, 1st joint with a short, triangular, apical, black spot on the inner side, its outer angle generally not extending quite to the black outer margin, but sometimes touching it; 2nd joint clear yellow with a delicate black margin.

**Abdomen** above, infuscated in the middle lengthwise, the sides and connexivum pale yellow; beneath infuscated in the middle, the sides and posterior margin of the segments yellowish. Length 3 lines.

By the form of the pala, \( \mathcal{O} \), closely allied to *C. Wollastoni*, but differs in colour, being brown-black, not brown; in the greater sharpness, distinctness, and paleness of the lines on the elytra; and especially in the short form of the black spot on the posterior tarsi, which in *C. Wollastoni* reaches far up the inner side of the joint.

Several examples taken by Mr. Bold in September, at Gosforth, "in a lake into which a burn runs."

**Corixa cognata, n. sp.**

Yolk-yellow with black markings. Pronotum with seven very fine, impressed black lines, nearly all of them shortened and joined to others. Clavus with the first five or six lines mostly straight, the rest irregular. Corium with short, thick, irregular lines, posteriorly and inwardly interrupted by a longitudinal streak. Legs yellow, pala, \( \mathcal{O} \), roundly dilated on the upper-side anteriorly; tarsi; 3rd pair, on the apex of the 1st joint a small, black, triangular spot.
Head yellow-brown; facial depression, in ♂, oval, deep, extending forwards to the middle of the eyes.

Thorax: pronotum with a faint anterior keel and seven very fine, impressed, black, transverse lines, all, or nearly all, shortened and joined to others, the yellow intervals wider. Elytra: clava with the first five or six black lines mostly straight with wider intervals, the rest irregular, angularly undulating: corium with short, thick, irregular, jagged and twisted transverse black lines mostly connected just before the outer ends, (the yellow intervals broader and more irregular in the ♀ than in the ♂), on the posterior inner angle a short, longitudinal, black streak; marginal channel entirely yellow; membrane-suture yellow, narrow, distinct: membrane with twisted, hieroglyphic markings, sub-parallel round the margin; margin narrowly black. Sternum entirely yellow.

Legs yellow: 1st pair; tibiae arcuate, in the ♂ brown above; pala, ♀, on the upper-side, anteriorly, roundly dilated to the apex, with a brown line on the edge: 2nd pair; tibiae embrowned, tarsi with a brown spot at the apex: 3rd pair; 1st joint at the apex, on the inner side, with a small, black, triangular spot, of which the outer angle just touches the exterior margin of the joint, 2nd joint clear, the margins with a fine black line; cilia black posteriorly, yellowish on the basal half of the 1st joint.

Abdomen pale yellow, the base of the segments, especially in the ♂, infuscated.

Length 24—8 lines.

Distinguished from all other species by its yellowness. Comes next to O sodalis in the character of the pala and in the form of the spot on the posterior tarsi, but differs widely in colour and in the bolder character of the markings on the elytra.

One ♂, Loch Grienan, Rothesay, September, 1866 (Douglas).

One ♂ and two ♀, Loch Leven, August, 1868 (Power).

Corixa Sharpf, Doug. & Scott.

Of this species, described last year from a single ♀ (Ent. Mo. Mag., v, 295), Dr. F. Buchanan White was fortunate enough last July to take two or three specimens in the same loch where he found O. alpestris, and we are thus enabled to give the distinctive characters of the male.

♂. Facial depression broad, deep, extending beyond the eyes on the frontal prominence. Tibiae arcuate, narrow at the base, sub-clavate, longitudinally trigonate, the angles sharply defined. Pala cultrate, broad, the base narrower than the end of the tibiae, the upper margin gradually rounded to the obtuse apex, and anteriorly inclined inwards, the lower margin gradually widened from the base and then slightly sinuate to the apex; seen from the inside, the upper margin, from the base for nearly half its length, is depressed and turned down sharply.
inwards; outside slightly convex; seen from above, the whole pala has a flattened and twisted appearance, resembling one of the blades of a steam-ship's screw-propeller.

The following species, in the form and width of the head, in the eyes not reaching the posterior margin, in the presence of the facial depression in both sexes. and in the form of the pronotum, recedes from the type of Corixa, and approaches Cymatia, and it may hereafter be deemed desirable to establish for it a new genus, which may probably also include Corixa Bogenhoferi, Fieb.

**Corixa alpestris, n. sp.**

*Corixa alpestris*, Buchanan White, in litt.

Black, shining. **Head** considerably wider than the pronotum, prominent in front; facial depression in both sexes. **Pronotum** and **claus** delicately rastrate. **Pronotum** short, angular posteriorly, disc with a distinct longitudinal keel on the anterior half, and about eight indistinct, impressed, concolorous, transverse lines. **Claus** and **corium** with very fine, scarcely perceptible yellowish lines. **Pala** in both sexes narrow, very long-culturate, in the ♂, seen from the side, at the base, on the upper-side, roundly widened, the dilatation, seen from above, forming a long, cordate depression.

**Head**, including the eyes, much wider than the pronotum, anteriorly convex, in front prominent beyond the eyes, posteriorly, on each side piceous, depressed, the middle rather elevated, on each side of which, and along the margin of the eyes, is a row of punctures, other scattered punctures are also on the crown; posterior margin sharply raised, extending behind the eyes. **Face** covered with very long, projecting, yellowish hairs; facial depression in ♂ oval, concave, extending on the frontal prominence beyond the eyes, in ♀ piceous, flat, extending only to the middle of the eyes; **labrum** yellowish-brown.

**Thorsus**: **pronotum** short, pentagonal; sides short, nearly straight, hinder sides nearly straight, apex obtusely pointed; disc slightly convex, with about eight transverse, scarcely perceptible, slightly impressed concolorous lines (in some examples, in certain lights, the intervals are indistinctly yellowish at the ends); on the anterior half of the disc a distinct longitudinal keel. **Elytra**: **claus** with delicate, undulating, interrupted, transverse lines rarely reaching the inner margin, more distinct at the base; claval suture raised, **distinct**: **corium**, clothed with very fine, short, decumbent, yellowish hairs and with delicate, undulating, much interrupted, yellowish, transverse lines, the posterior inner angle almost devoid of marking; membrane-suture obsolete, and the markings continued over it; marginal channel livid black: **membrana** with markings like those of the corium, short and parallel on the inner side, the margin all round black, unpotted. **Sternum**: **prosternum** side lobes pale.
yellow; scapulae pale yellow outwardly; pleurae obscure yellowish posteriorly, parapleurae obscure yellowish (in the ♀ the light colour on all these sternal lobes is more obscure than in the ♂). Legs: 1st pair black above, dingy whitish beneath; ♂, thighs beneath, on the lower margin, with a pale, rounded, foliaceous enlargement, which is suddenly contracted at the apex (in the ♀ this enlargement is less); tibiae arculate, on the upper side compressed into an angular, longitudinal ridge: palæ very long, cultrate, curved above to a long point, the inner margins with very long, strong, projecting brown hairs; seen from the side the base seems widened on the upper-side in a semi-oval form, seen from above this enlargement has the form of a long-cordate hollow with raised edges, projecting at its base roundly on the outer side, and extending nearly half the length of the pala (looking as if a small open shell had been affixed); in the ♀ the palæ are narrower, sub-aculeate, and without the basal enlargement: 2nd pair, thighs fuscous, pale on the basal third and beneath, tibiae and tarsi fuscous, posteriorly black, claus fuscous, posteriorly yellowish; 3rd pair, thighs and tibiae obscure yellowish, broadly black on the margins; tarsi yellow with black margins, overlaid with very long, black cilia.

Abdomen above, black; connexivum yellow with black margin; under-side, in the ♂, the straight segments black with the posterior margin distinctly dingy white, the border broadest in the last of these segments, the contorted segments dingy white with fuscous shades; in the ♀ all the segments, dingy whitish with narrow paler margins.

Length, ♂, 3½, ♀, 4 lines.

For this fine and remarkable addition we are indebted to the enterprise of Dr. F. Buchanan White, by whom several examples of it were found last July “in a small loch at an elevation of about 2,000 feet on Ben Hearag, Strathglass, Inverness-shire, in company with Dytiscus lapponicus.”

In the “British Hemiptera,” the following corrections are required:

Page 57.—Sehirus albomarginatus: the lateral margins of the pronotum and elytra are stated to be yellowish-white, whereas this colour exists on the latter only. Mr. Rye pointed this out to us just after he made the captures noted ante p. 183.

Page 225.—Nysius: “the 3rd, 4th, and 5th nerves connected beyond the base by a cross-nerve forming two cells,” should be “the 4th and 5th nerves connected beyond the base by a cross-nerve forming one large cell.”

Page 299.—Miridus: “longish-oval; viewed from the side almost a parallelogram,”—insert “head” before “viewed.”

Lee: February, 1870.