

## BRITISH HEMIPTERA: ADDITIONS AND CORRECTIONS.

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*GEODROMICA.*

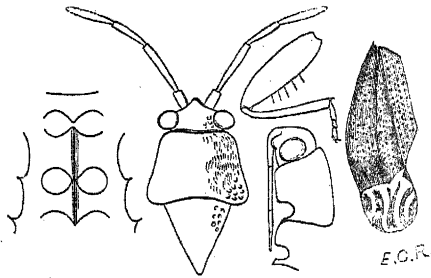
## Section 5.—LYGÆINA.

## 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

Details of *Stethotropis incana*, D. & S.

of the 2nd; 4th thicker than the 2nd, about the same length as the 3rd, fusiform. *Rostrum* slender, reaching to the posterior coxæ, 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, *antennæ* 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, *tibiæ* pale piceous, *tarsi* pale piceous, the last joint black.

*Abdomen*: beneath clothed with fine, decumbent ashy pile.

Length  $1\frac{1}{2}$  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.—ONCOTYLIDÆ.

#### Genus 7.—CONOSTETHUS, Fieb.

#### 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. *Antennæ* 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; *tibiæ* 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: antennæ* 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 I.—CORIXIDÆ.

##### Genus 1.—CORIXA, Geoffr.

##### CORIXA SOCIA, n. sp.

Brown-black, with very fine yellowish lines and markings. *Pro-notum*, *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. *Palæ*, ♂, 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 piceous, posterior margin black-brown with a very slightly angular medial prominence; on the crown, posteriorly, two very short, fine, punctate, longitudinal striæ, not extending quite to the base. *Face* pale yellow; facial depression in ♂, 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; *para-pleurae* pale yellow. *Legs* pale yellow,—1st pair, *coxae* outwardly black, apex yellowish; *thighs*, at the base, exteriorly with a blackish spot, extending upwards; *tibiae* arcuate, black above, apex yellowish; *palæ*, ♂, 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; *thighs*, apical third, especially on the upper-side, fuscous; *tibiae* pale fuscous; *tarsi* brown at the apex: 3rd pair, *coxae* black, apex yellowish; *thighs* 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 ♂, the basal segments black with the posterior margin and sides pale yellow; the last two or three segments dusky yellow; in the ♀ all the segments pale yellow. Length  $2\frac{1}{2}$ —3 lines.

In the form of the *palæ*, ♂, like *C. præusta*, 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 quadrate) 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, fuscous 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 fuscous. *Sternum* pale yellow. *Legs* pale yellow: 1st pair, *palæ*, ♀, cultrate, 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 *connerivum* 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. præusta*, 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 ♂, 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 furcate 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, *tibiae*, ♂, arcuate, the upper-side, except the apex, black; *palee*, ♂, 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: ♀, cultrate, narrow; slightly curved, apex acute: 2nd pair; *thighs*, on the basal half, pale, the apical half infuscated, darker on the upper edge; *tibiae* infuscated outwardly, *tarsi* yellowish with a black spot at the end: 3rd pair; *thighs* pale; *tibiae* 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 *palee*, ♂, 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, *palee*, ♂, 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*: *clavus* 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; *tibiæ* arcuate, in the ♂ brown above; *palæ*, ♂, on the upper-side, anteriorly, roundly dilated to the apex, with a brown line on the edge: 2nd pair; *tibiæ* 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  $2\frac{1}{2}$ —3 lines.

Distinguished from all other species by its yellowness. Comes next to *C. sodalis* in the character of the *palæ* 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*).

#### COBIXA SHARPI, *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 *C. 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. *Tibiæ* arcuate, narrow at the base, sub-clavate, longitudinally trigonate, the angles sharply defined. *Palæ* cultrate, broad, the base narrower than the end of the *tibiæ*, 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 Rogenhoferi*, 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 *clavus* delicately rastrate. *Pronotum* short, angular posteriorly, disc with a distinct longitudinal keel on the anterior half, and about eight indistinct, impressed, concolorous, transverse lines. *Clavus* and *corium* with very fine, scarcely perceptible yellowish lines. *Palæ* in both sexes narrow, very long-cultrate, 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.

*Thorax*: *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*: *clavus* 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: *membrane* 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* arcuate, on the upper side compressed into an angular, longitudinal ridge: *pala* 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 *pala* 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, *claws* 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, ♂,  $3\frac{1}{2}$ , ♀, 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.