

ASIATIC *TORTRICIDÆ*.

By the Rt. Hon. LORD WALSLINGHAM, M.A., LL.D., F.R.S.

[Continued from p. 386.]

TORTRIX, L.

715 (1). *Tortrix dumetana*, Tr.

Tortrix (*Pandemis*) *dumetana*, Stgr. & Wk. Cat. Lp. Eur. 236.
No. 702 (1871). *Tortrix dumetana*, Meyr. HB. Br. Lp. p. 538
(1895).

Hab. EUROPE. COREA—Gensan, VI. 1886 (*Leech*).
JAPAN—Yesso—Hakodate, VIII. 1886 (*Leech*). KASHMIR
—Scinde Valley, 7000 feet, VI. 1887 (*Leech*).

716. *Tortrix ochreana*, Hb.

Tortrix (*Lophoderus*) *ochreana*, Stgr. & Wk. Cat. Lp. Eur. 237.
No. 716 (1871).

Hab. EUROPE. ASIATIC TURKEY—*HALEB*—Shar Devesy,
21 V., 4 VII. 1890 (*Native Coll.*).

727 (1). *Tortrix ditinctana*, sp. n.

Antennæ pale cinereous, slightly annulated. *Palpi*, terminal joint somewhat concealed by the scales projecting beneath the median joint; pale cinereous. *Head* pale cinereous. *Thorax* mixed pale ochreous and rich reddish brown. *Fore wings* pale yellowish ochreous, almost entirely suffused with rich reddish ferruginous, and shaded with umber-brown on the apical third; four transverse fasciæ of brightly shining chalybeous scales, the first slightly curved outwards from the middle near the base; the second also curved outwards and partially interrupted with ferruginous before the middle; the third also curved outwards and slightly interrupted immediately after the middle; the fourth assuming the form of two outwardly curved chains of spots, the first of which from the costa at three-fourths from the base reaches downwards to about vein 6, the second commencing opposite to and beyond its apex curves outwards to the termen, and reverts along the margin towards the tornus; beyond these at the apex are two strong chalybeous spots; the only part of the wing on which the pale yellowish ochreous ground-colour is clear and unsuffused, and therefore noticeable, is on the upper half between the second and third fasciæ; cilia pale yellowish ochreous, touched with fuscous at the tornus. *Exp. al.* 16–17 mm. *Hind wings* dark brownish fuscous; cilia pale cinereous, shaded with greyish fuscous at the apex and flexus, and with a greyish fuscous shade along their base. *Abdomen* brownish fuscous. *Legs* brownish fuscous, hind tarsal joints with patches of pale cinereous.

Type, ♂ (70437) Mus. Wlsm.

Hab. JAPAN (*Pryer*, 1886). Two specimens.

This species is nearly allied to *Conwayana*, F., but is distinguished by the strong and less interrupted chalybeous fasciæ, by the absence of a pale dorsal patch, and the presence of a very conspicuous pale costal patch.

727 (2). *Tortrix tigricolor*, sp. n.

Antennæ cinereous, reddish ochreous at the base. *Palpi* short. with projecting scales above and below the median

joint, terminal joint short, exposed; brownish ochreous. *Head* and *thorax* brownish ochreous. *Fore wings* deep reddish ochreous, almost red-brown, with shining greyish chalybeous fasciæ; the first near the base, occupying the basal portion of the costa, is slightly angulated outwards on the fold; the second, at one-third, is slightly curved outwards and reaches the dorsum before the middle; the third, from beyond the middle of the costa, curving outwards is interrupted at the lower edge of the cell, but is continued from a point opposite to and before its lower extremity to the dorsum beyond the middle; the last, from the costa before the apex to the tornus, is sometimes interrupted and deflected at a point below the middle of the termen; a few shining greyish chalybeous scales at the apex; cilia brownish ochreous. *Exp. al.* 15 mm. *Hind wings* dark greyish fuscous; cilia pale greyish fuscous. *Abdomen* greyish fuscous. *Legs* cinereous.

Type, ♀ (70439); ♂ (70440) Mus. Wlsm.

Hab. JAPAN (*Pryer*, 1886). Three specimens.

In the male type the third fascia is continued to the tornus, a short half-fascia from behind the middle of the dorsum lying on its inner side; moreover the fourth fascia is not interrupted, but ends on the termen above the tornus. The species therefore seems to be somewhat variable.

727 (3). *Tortrix conchyloides*, sp. n.

Antennæ whitish ochreous, annulated with brown. *Palpi*, median joint thickly and somewhat loosely clothed above and below, terminal joint moderate, exposed; whitish ochreous. *Head* whitish ochreous. *Thorax* greyish brown. *Fore wings* whitish ochreous, much overspread with greyish brown, which occupies the whole of the base and is extended outwards above the fold reaching to below the middle of a central oblique greyish brown fascia from before the middle of the costa to the outer half of the dorsum; this fascia is more or less blended on its outer side with a third fasciaform shade from the costa before the apex to the tornus; on the dark shading are streaks and patches of shining leaden grey, with several tufts of raised black scales, two on the outer edge of the basal patch, one above the other below the fold, five or six along the inner edge of the central fascia, and a sinuous slender line of similar raised black scales within the outer brown shade; about the apex the pale wing-surface is slightly reticulated with brown; cilia pale whitish ochreous. *Exp. al.* 17 mm. *Hind wings* greyish fuscous cilia greyish

cinereous, with a dark shade along their basal half. *Abdomen* brownish fuscous. *Legs* whitish ochreous, slightly shaded with brownish fuscous.

Type, ♂ (60256, Chang Yang) Mus. Wlsm.

Hab. CHINA—Chang Yang (*Pratt*). JAPAN—Yesso (*Pryer*, 1882). Two specimens

727 (4). *Tortrix Leechi*, sp. n. ♀

Antennæ pale canary-yellow, not annulated, but shaded with brownish beneath. *Palpi* projecting about the length of the head beyond it, median joint with projecting scales above and beneath (more closely packed than in *Christophana*), terminal joint very short, exposed; pale canary-yellow. *Head* and *thorax* pale canary-yellow. *Fore wings* pale canary-yellow, with a yellowish-brown shade at the base, often running through the middle of the wing above the fold and overspreading the apical half with the exception of the apex and termen; at the base, on the brown shade, is a shining rosy-grey metallic band; a rather broad, slightly oblique fascia of a similar metallic hue crosses from the costa, within the basal third, to before the middle of the dorsum, sometimes terminated on reaching the fold; another fascia of the same colour from beyond the middle of the costa nearly reaches the tornus, this is somewhat sinuate on its inner side; before the termen is a narrower band of the same colour, usually enclosing the outer edge of the dark shade, and reaching from the costa before the apex to the termen above the tornus; between this outer shining band and the shining fascia which precedes it is a series of about four minute black dots of raised scales on the outer half of the dark shade, two above and two below the middle of the wing; in some specimens there is also a spot of raised blackish scales at the outer third of the fold; cilia pale canary-yellow, touched with brownish at the tornus. *Exp. al.* 17–18 mm. *Hind wings* brownish fuscous; cilia on their outer half whitish cinereous. *Abdomen* greyish brown, anal tuft ochreous. *Legs* whitish ochreous.

Type, ♀ (60255, Yokohama); ♂ (70429, Yesso) Mus. Wlsm.

Hab. JAPAN—Yesso (*Pryer*, 1882). HONDO—Yokohama (*Manley*, 1888). COREA—Gensan, VI. 1886 (*Leech*). Five specimens.

A pale variety from Gensan (60031, ♀) is almost entirely without the brown shading, and is pale canary-yellow, with the metallic fasciæ of a more rosy pink, due to the absence of brown scales. The same variation of colouring occurs in the

allied *Loeflingiana*, L., but this species has the apex of the wing more pointed and the markings are quite different.

727 (5). *Tortrix Christophana*, sp. n. ✓

Antennæ pale yellowish, not annulate, but faintly dotted above with greyish. *Palpi*, median joint loosely clothed with long scales, projecting above and beneath, terminal joint rather long, naked; pale yellow. *Head* pale yellowish. *Thorax* bright yellow. *Fore wings* bright yellow at the base and narrowly along the costa and termen, the remainder of the wing rich red-brown, chestnut-brown, or pale chocolate-brown in different varieties; the darker colour has therefore the appearance of a large quadrate patch overflowing the wing from the dorsum, the whole of which it occupies from near the base to the tornus, its anterior margin tending obliquely outwards towards the costa and its upper and outer margins running parallel with the outline of the wing, one or two small streaks connecting it above with the costa; throughout this patch are a great number of shining metallic steel-grey spots, having in some varieties a rosy tinge; one or two spots are also visible on the pale basal portion of the wing and also along the termen; scattered between and among those on the dark patch are several tufts of raised scales of the same colour as the patch itself, of which one conspicuous series is arranged in an irregular oblique fascia tending outwards from the costa to the dorsum; cilia bright yellow, tinted at the tornus with the colour of the dark patch. *Exp. al.* 17 mm. *Hind wings* varying in colour according to the tint of the darker portion of the fore wings, which they closely resemble, and shading to pale cinereous at the base; cilia pale cinereous, with a slight ochreous tinge along their base. *Abdomen* and *legs* pale cinereous.

Type, ♀ (70433); ♂ (70434) Mus. Wlsm.

Hab. JAPAN (*Pryer*, 1886). *Honpo*—Yokohama (*Manley*, 1888); Tsuruga, VII. 1886 (*Leech*); Fushiki, VII. 1887 (*Leech*). Nine specimens.

727 (6). *Tortrix Joannisi*, sp. n.

Antennæ sulphur-yellow. *Palpi* projecting twice the length of the head beyond it; median joint clothed with rough scales projecting further beneath than above—these are pale yellow, brownish towards their tips; terminal joint protruding to the length of the lower tuft, smooth. *Head* and *thorax* pale yellow. *Fore wings* pale yellow, reticulated on the basal

half with brownish ochreous, clouded across the outer half with smoky brown and sprinkled throughout with small spots of steel-grey metallic scales; the broad smoky brown shade is broken by a pale yellow patch at the end of the cell and contains a few patches of raised brown scales in addition to the metallic sprinkling; it does not extend to the termen, a slender brownish ochreous line dividing the pale yellow marginal space; cilia pale yellow. *Exp. al.* 17 mm. *Hind wings* tawny brown; cilia whitish, slightly tinged with brown on their basal half. *Abdomen* (missing,—probably brown). *Legs* brownish white.

Type, ♀ (13329) Mus. Wlsm. *Paratype* (854, Wlsm. 1894) Mus. J. de Joannis.

Hab. CHINA—Zo-ci. Two specimens.

Named after M. l'abbé de Joannis, to whom I am indebted for the specimen.

727 (7). *Tortrix exuberans*, sp. n. 4

Antennæ pale yellow. *Palpi* pale yellow, the median joint roughly clothed above and beneath, the terminal joint erect, slender, naked. *Head* and *thorax* pale yellow, the tips of the tegulæ reddish ochreous. *Fore wings* bright yellow, profusely mottled with bright reddish ochreous, the mottling on the outer half tending to confluence transversely; each of the many bright reddish ochreous patches is centred with shining pinkish-lilac metallic scales, and there are a few raised tufts scattered about their surface in which are mixed a few very dark brown scales; cilia bright yellow. *Exp. al.* 16 mm. *Hind wings* rosy brownish. *Abdomen* rosy brownish. *Legs* pale brownish cinereous.

Type, ♂ (60033) Mus. Wlsm.

Hab. COREA—Gensan, VI. 1886 (*Leech*). Unique.

728 (1). *Tortrix striatulana*, sp. n.

Antennæ slightly ciliate in the male; pale ochreous. *Palpi* long, projecting twice the length of the head beyond it, median joint clothed with projecting hairs, which conceal the terminal joint; pale ochreous, touched with fuscous at the base and apex externally. *Head* pale ochreous. *Thorax* pale ochreous, banded with fuscous across the front. *Fore wings* with the costa very slightly arched, apex slightly rounded, termen very oblique; pale ochreous, speckled and striated minutely with fuscous and shaded with brownish ochreous and olive-brown; an outwardly curved line of

fuscous scales at about one-fourth indicates the outer edge of the basal patch; an oblique line of fuscous scaling from the middle of the costa to the tornus; a series of short fuscous costal streaks alternating on the outer half of the wing with oblique shining ochreous streaks longer than themselves; the apical portion of the wing is shaded with olive-brown and contains a curved steel-grey line from a little beyond the upper end of the transverse fascia to the middle of the termen, whence it is diffused downwards towards the tornus; a few steel-grey scales mixed with fuscous scales above the tornus; a slender black line along the termen; cilia whitish ochreous. *Exp. al.* ♂ 15, ♀ 17 mm. *Hind wings*, apex rounded, termen impressed below the apex; pale brownish grey; cilia whitish ochreous in the male, brownish cinereous in the female. *Abdomen* brownish grey. *Legs* whitish ochreous; hind tarsal joints touched with fuscous.

Type, ♂ (60026); ♀ (60368), Chang Yang, Mus. Wlsm.

Hab. CHINA—Chang Yang, 4000–6000 feet (*Pratt*). JAPAN (*Pryer*, 1886). Five specimens.

729. *Tortrix Loeplingiana*, L.

Tortrix (*Heterognomon*) *Loeplingiana*, Stgr. & Wk. Cat. Lp. Eur. 238^{*} No. 729 (1871).

Hab. EUROPE. ASIATIC TURKEY—HALEB—Shar Devesy, 1890 (*Native Coll.*).

730. *Tortrix viridana*, L.

Tortrix (*Heterognomon*) *viridana*, Stgr. & Wk. Cat. Lp. Eur. 238. No. 730 (1871).

Hab. EUROPE. ASIATIC TURKEY—HALEB—Shar Devesy, 23 VI. 1890 (*Native Coll.*).

731. *Tortrix pronubana*, Hb.

Tortrix (*Heterognomon*) *pronubana*, Stgr. & Wk. Cat. Lp. Eur. 238. No. 731 (1871).

Hab. EUROPE. ALGERIA—Constantine, 10 V. 1895; 10 X. 1894 (*Eaton*); Bône, 23 III.; 5 V. 1893 (*Eaton*). ASIATIC TURKEY—HALEB—Shar Devesy, 1893 (*Native Coll.*).

731 (1). *Tortrix soriana*, Kennel.

Tortrix (*Heterognomon*) *soriana*, Kennel, Ent. Zts. Iris, XII. 6–7. No. 4, Pl. I. 4 (1899)¹.

Hab. ASIATIC TURKEY—HALEB—Shar Devesy, 1893

(Native Coll.). SYRIA, Beyrout¹; III. 1886 (Pratt). PALESTINE (Tristram).

736. *Tortrix aurichalcana*, Brem.

Lazotenia aurichalcana, Brem. Mém. Ac. Imp. Sc. St. Pétersb. (7 s.)

VIII. (1) 89-90. No. 438, Pl. VII. 22 (1864)¹.

Tortrix (Heterognomon) aurichalcana, Stgr. & Wk. Cat. Lp. Eur. 238. No. 736 (1871)².

Hab. E. SIBERIA²—'von der Mündung des Noor bis oberhalb der Ema,' VI.-VII.¹ JAPAN—Yesso (Pryer, 1882); Hakodate, VIII. 1886 (Leech). HONDO—Tsuruga, VII. 1886 (Leech). CHINA—Chang Yang, 4000-6000 feet (Pratt).

This species appears to be extremely variable; in a long series some forms are so much darkened as to almost entirely lose the yellow tint and become brown or greyish brown. In one variety the markings are entirely lost, except that the waved metallic lines can be traced across the unicolorous shining ochreous brown wings; other varieties are almost entirely pale yellow, with a sprinkling of pale grey-brown scales.

736 (1). *Tortrix sinapina*, Btl. ✓

Pandemis sinapina, Btl. Ill. Typ. Lp. Het. B. M. III. 78, Pl. LX. 3 (1879)¹.

Hab. JAPAN. HONDO—Yokohama¹; (Manley, 1888).

736 (2). *Tortrix pulchra*, Btl.

Ariola pulchra, Btl. Ill. Typ. Lp. Het. B. M. III. 19, Pl. XLV. 6 (1879)¹.

Antennæ fuscous, basal joint chestnut-brown mixed with pale ochreous. *Palpi* chestnut-brown. *Head* pale greyish ochreous. *Thorax* chestnut-brown, tegulæ with a bluish tinge. *Fore wings* chestnut-brown, narrowly pale ochreous along the extreme costa and dorsum, with four shining metallic chalybeous streaks running longitudinally; the first immediately below the costa tapers outwards from the base to two-thirds the length of the wing; the second from the middle of the base along the lower margin of the cell is deflected at the end of the cell to the tornus; the third from the base below the fold to the outer extremity of the fold near the tornus; the fourth commencing narrowly at about one-fourth from the base, between the costal and middle streaks, is widened outwards attaining the apex, and is thence deflected along the termen, where it is bordered on each side

by three or four purplish fuscous spots; cilia bright ochreous. *Exp. al.* 21–24 mm. *Hind wings* brownish fuscous; cilia pale cinereous. *Abdomen* brownish fuscous. *Legs* pale cinereous; hind tibiæ thickly clothed above.

Hab. JAPAN (Pryer, 1886). HONDO—Yokohama¹.

739 (1). *Tortrix nigricaudana*, sp. n.

Antennæ pale brownish. *Palpi* brownish cinereous. *Head* and *thorax* pale brownish grey. *Fore wings* brownish testaceous, with a slight tawny gloss, a pale chestnut-brown central fascia and central reticulations; the fascia commences narrowly on the costa before the middle, and slants obliquely to the dorsum before the tornus; its inner margin is clearly defined and angulated inward a little above the fold, its outer side is widened and diffused, extending to the end of the cell and to the tornus; there is a narrow costal blotch of the same colour before the apex, the space before and behind the fascia being reticulated with narrow sinuous lines crossing the veins; cilia shining pale brownish grey. *Exp. al.* 26 mm. *Hind wings* greyish brown, cilia shining pale grey. *Abdomen* brownish grey, anal tuft dense and black. *Legs* pale brownish ochraceous.

Type, ♂ (60060) Mus. Wlsm.

Hab. COREA—Gensan, VI. 1886 (Leech) ♂♂. [? JAPAN (Pryer, 1886) ♀.]

A single female from Japan (70397) perhaps belongs to this species; but as males only were taken at Gensan, it would be at present unsafe to determine it.

745. *Tortrix imperfectana*, Ld.

Tortrix imperfectana, Ld. Wien. Ent. Mts. II. 150–1, Pl. IV. 8 (1858)¹.

Tortrix (Heterognomon) imperfectana, Stgr. & Wk. Cat. Lp. Eur. 239, No. 745 (1871)².

Hab. SYRIA—Libanon¹; Galilee, IV. 1886 (Pratt); Palestine (Tristram).

[*CNEPHASIA*, Crt., = *SCIAPHILA*, Tr.]

767 (1). *Tortrix vetulana*, Chr.

Sciaphila vetulana, Chr. Bull. Soc. Imp. Nat. Mosc. LVI. 72–3. No. 105 (1881)¹: sep. 160–1 (1882)¹.

Hab. E. SIBERIA—Wladiwostok, VI.¹ COREA—Gensan, VI. 1886 (Leech). JAPAN (Pryer, 1886).

770. *Tortrix argentana*, Cl.

Sciaphila (*Ablabia*) *argentana*, Stgr. & Wk. Cat. Lp. Eur. 240. No. 770 (1871)¹. *Sciaphila argentana*, Fern. Tr. Am. Ent. Soc. X. 16-17. No. 67 (1882)².

Hab. EUROPE¹. KASHMIR—Scinde Valley, 7000 feet, VII. 1887 (*Leech*); Deosai Plains, 13,000 feet, VIII. 1887 (*Leech*). JAPAN—*Yesso* (*Pryer*, 1882). UNITED STATES—California², Nevada², Colorado (Loveland, 5000-10,000 feet, VII. 1891, *W. G. Smith*).

771 (1). *Tortrix virginana*, Kennel.

Sciaphila virginana, Kennel, Ent. Zts. Iris, XII. 12-13. No. 10, Pl. I. 10 (1889)¹.

Hab. ASIATIC TURKEY—*HALEB*—Shar Devesy (*Native Coll.* 1892). *DIARBEKE*—Mardin¹.

776 (1). *Tortrix sedana*, Cnst.

Sciaphila sedana, Cnst. Ann. Soc. Ent. Fr. (6 s.) IV. 211-2, Pl. IX. 8 (1884)¹.

Hab. FRANCE, VII.-VIII.¹ ASIATIC TURKEY—*HALEB*—Shar Devesy (*Native Coll.* 1893).

777 (1). *Tortrix Tristrami*, sp. n.

Antennæ dirty white. *Palpi* and *head* dull white. *Thorax* white. *Fore wings* white, at about one-fourth from the base an outwardly curved nut-brown fascia, sometimes angulated above the fold at its outer edge, passes from costa to dorsum (or in some specimens is separated from the dorsum by a short space), this fascia is less wide than the space intervening between it and the base; about the middle of the costa a rather wider fascia of the same colour reaches the dorsum before the tornus, its inner margin slightly concave, its outer margin sometimes angulated outward about the middle; a costal patch before the apex is slightly broken on the costa, its lower margin not connected with a narrow sub-terminal shade beneath it; all these markings are clearly defined and are speckled with black along their edges, the intermediate pale spaces being also sometimes very slightly speckled with brown on the costa and dorsum; cilia white. *Exp. al.* 16-18 mm. *Hind wings* pale brownish grey; cilia rather paler, with a shade-line running through them near their base. *Abdomen* and *legs* pale brownish grey.

Type, ♂ (13507); ♀ (13508) Mus. Wlsm.

Hab. PALESTINE (*Tristram*). Four specimens.

Allied to *octomaculana*, Dbld., some varieties of which it greatly resembles in pattern and colour; but it is a much smaller insect, and, so far as one can judge from the possession of only four specimens, is more consistent in its markings.

I name this species after the Rev. Canon Tristram, who nearly thirty years ago greatly encouraged my early studies of the Microlepidoptera by giving me numerous specimens from Palestine, including the species described by the late H. T. Stainton.

779. *Tortrix chrysanthemana*, Dp. (†H.-S.).

Sciophilat† chrysanthemana, Stgr. & Wk. Cat. Lp. Eur. 240. No. 779 (1871).

Hab. EUROPE. JAPAN (*Pryer*, 1886).

780 (2). *Tortrix barbarana*, sp. n.

Antennæ, palpi, and *head* pale brownish cinereous. *Thorax* brownish fuscous. *Fore wings* pale brownish cinereous, with a brownish fuscous basal patch extending to one-third, angulated outward a little above the fold and inward on the fold itself, this patch is slightly mottled with the paler ground-colour, a few darker fuscous scales being scattered along its margin; across the middle of the wing a slightly oblique brownish fuscous fascia reaches the dorsum before the tornus, its outer edge is also slightly angulated outward about the middle, but it is not connected with a somewhat triangular costal patch of the same colour before the apex, the intermediate space between these dark markings being very thinly bestrewn or reticulated with brownish fuscous scales, becoming somewhat confluent only a little before the middle of the termen; cilia brownish grey, a rather darker line along their base. *Exp. al.* 14-16 mm. *Hind wings* brownish grey; cilia the same, with a darker shade-line running through them near their base, which is rather paler than their outer half. *Abdomen* and *legs* brownish cinereous.

Type, ♂ (61564); ♀ (61565) Mus. Wlsm.

Hab. ASIATIC TURKEY—HALEB—Shar Devesy (*Native Coll.* 1893). Eleven specimens.

This species greatly resembles in appearance dark specimens of *Isotrias hybridana*, Hb., and especially the variety (?) known as *castiliana*, Rag.; but from this it can at once be separated by the neurulation of the hind wings, in which veins

6 and 7 are not remote at origin as in *Isotrias*. In *castiliana* the costal mark before the apex is produced downward and usually reaches the termen above the tornus, whereas in *barbarana* it does not extend downward even so far as the middle of the wing-width, and is separated from the slight ante-marginal shade which sometimes occurs below it. It closely approaches *Tortrix minusculana*, Z. + *incertana*, Tr., in size and markings, but the absence throughout my series of the marked projection on the outer edge of the basal patch which occurs in every one of the very numerous specimens in the Zeller collection serves to distinguish it; it has, moreover, shorter and more obtuse fore wings.

DOLOPLOCA, Hb.

789 (2). *Doloploca lineata*, sp. n.

Antennæ brownish cinereous. *Pulpi* and *head* pale brownish cinereous. *Thorax* brownish cinereous. *Fore wings* with the apex rounded, the termen much more oblique than is usual in the *Cnephasia* group of *Tortrix*; brownish cinereous, with scattered dusting of slightly raised blackish scale-spots, especially on the outer half; a faintly indicated reddish-brown band arises from the dorsum before the tornus, and reaches to the upper angle of the cell, but does not attain to the costa; this is preceded and followed in some specimens by detached patches of faint mottling of the same colour; the veins throughout the wing are indicated by slightly paler lines, the cilia corresponding in colour with these, but having a clear slender reduplicated line running through them around the apex and termen. *Exp. al.* 20 mm. *Hind wings* brownish grey; cilia rather paler, with a reduplicated brownish grey shade-line running through them; the lines are much wider than those in the cilia of the fore wings. *Abdomen* brownish cinereous. *Legs* pale cinereous.

Type, ♂ (13511) Mus. Wlsm.

Hab. PALESTINE (*Tristram*). Four specimens.

I can find nothing described which corresponds to the unusual shape and colouring of this species. It is much smaller than the two known species of *Doloploca*, but in form and structure it agrees better with this genus than with the *Cnephasia* group of *Tortrix*.

109 (1). CRYPTASPASMA, gen. nov.

(κρυπτός = hidden; ἄσπασμα = the thing embraced.)

Type *Penthina*? *lugubris*, F. & R.

Antennæ (♂) less than half the length of the fore wings,

very shortly pubescent. *Palpi* short, appressed to the face; median joint short and densely clothed, terminal joint short, almost entirely concealed. *Head* slightly rough above. *Thorax* not tufted. *Fore wings* elongate, narrow at the base, widened outwardly; costal margin straight, male with a narrow elongate costal fold; apex rounded, termen oblique, tornus rounded, dorsum straight, limbus not abruptly defined. *Neuration*, 12 veins, all separate; 2 from middle third of cell; 3 and 4 approximate at origin; 6 and 7 separate, but closely approximate at upper angle of cell, 7 to termen. *Hind wings* broader than the fore wings, with the termen and dorsum rounded. *Neuration*, 8 veins; 3 and 4 connate, 5 slightly bent over towards origin of 4; 6 and 7 stalked or almost coincident towards their base. *Abdomen* (♂) slender, genital segments concealed within a circular shield or pouch, having an aperture of scarcely more than half its size posteriorly; uncus present within the pouch.

794 (1). *Cryptaspasma lugubre*, F. & R.

Penthina? *lugubris*, F. & R. Reise Nov. Lp. V. Pl. CXXXVIII. 32 (1875)¹.

Antennæ fuscous. *Palpi* dark fuscous. *Head* dark brownish fuscous. *Thorax* grey, sprinkled with fuscous. *Fore wings* dark grey, streaked, mottled, and sprinkled with fuscous and brownish fuscous; costa dark fuscous on the basal half along the fold, spotted with large and small fuscous spots beyond; an irregular dark fuscous streak runs along the lower margin of the cell from the base, extending upwards from the end of the cell, where it contains a small yellow-ochreous spot, and dilated downwards across the fold towards the dorsum about its middle; the outer extremity of this streak is depressed and unites with a sinuous dark brownish fuscous band which crosses the wing from the costa to the dorsum; this is bowed outwards on its upper half and inwards on its lower half, and lies at about one-fifth from the termen; beyond it the grey colouring of the wing is reticulated with brownish fuscous, the extreme margin being narrowly brownish fuscous; cilia brownish cinereous, darker on their basal half. *Exp. al.* ♂ 17-25, ♀ 20-25 mm. *Hind wings* brownish grey, slightly iridescent; cilia pale cinereous, slightly darker along their base. *Abdomen* brownish grey, with a strong and thick cinereous anal tuft concealing the upper edge of the genital pouch. *Legs* cinereous; hind tarsal joints faintly spotted.

Hab. N. BENGAL — Darjiling, 26 VII. 1886 (*Elwes*).

SIKKIM (Möller, 1887). ASSAM—Mao (N. Manipur), 5000–7000 feet, VIII. 1889 (Doherty). PERAK—Gunong Hijan, 4000–4900 feet (Doherty, 1891). BATIAN—Mt. Sibela, 3000–5000 feet (Doherty, 1892).

Felder and Rogenhofer record their type of *Penthina? lugubris* from “fl. Amazonas (Bates).” The specimen is labelled “276” and “B. in cop.” It is on a long iron pin, whereas Bates used short English pins, and the evidence is very strong that this is another of the very numerous mistakes in locality-labels which pervade the collection ostensibly made by the ‘Novara’ expedition, but which was obviously put together by purchase and otherwise from many widely scattered sources. The specimens labelled Bates Coll. could have been obtained in no other manner, as Mr. Bates did certainly not accompany the expedition.

109 (2). *BRACHYGONIA*, gen. nov.

(βραχύς=short; γωνία=an angle.)

Type (♂) *Brachygonia angulicostana*, Wlsm.

Antennæ less than half the length of the fore wings; ♂ stout, scarcely pubescent; basal joint somewhat enlarged. *Palpi* short, appressed to the face; median joint moderately clothed with appressed scales; terminal joint slightly exposed. *Head* slightly rough above. *Thorax* smooth. *Fore wings* elongate, slightly widened outwards; costa shortly angulated at the extreme base, straight beyond, male without a fold, apex rounded; termen oblique, slightly convex, tornus rounded. *Neuration*, 12 veins, all separate; 2 from middle third of cell; 3 slightly recurved and closely approximate to 4 at its origin; 7 to termen. *Hind wings* rather triangular, apex rounded, termen slightly rounded. *Neuration*, 8 veins; 3 and 4 connate; 5 bent over towards origin of 4; 6 and 7 almost coincident towards their base. *Abdomen* somewhat stout; genital segments (♂) concealed in a circular chitinous pouch; uncus present. *Legs* smooth.

This genus, which agrees in neuration with *Tortrix*, L., differs in the short abrupt angle at the base of the fore wings and in the almost even width of the wings. The very short antennæ and the unusual form of the anal appendages seem to justify the creation of a new genus for its reception.

794 (2). *Brachygonia angulicostana*, sp. n.

Antennæ, *palpi*, and *head* dark brownish fuscous. *Thorax* dark brownish fuscous, sprinkled with brownish cinereous

posteriorly. *Fore wings* dark brownish fuscous at the base, thence somewhat sprinkled with brownish cinereous, giving them a paler appearance outwardly; with a small pale ochreous spot at the end of the cell, a dark brownish fuscous patch on the fold below the middle of the wing, and a fascia-form band of dark brownish fuscous running parallel with the outer margin to within the tornus; this is sometimes broken up into two or more patches; the termen and costa are indistinctly blotched with dark brownish fuscous; cilia brownish cinereous, darker along their base. *Exp. al.* 19 mm. *Hind wings* dull brown, dark brownish fuscous inclining to purplish fuscous at the base; cilia pale cinereous, with a brownish cinereous shade running through them near their base. *Abdomen* cinereous, clouded with purplish fuscous above on the middle. *Legs* pale cinereous.

Type, ♂ (70553); ♀ (70573) Mus. Wlsm.

Hab. JAPAN (Pryer, 1886). Three specimens.

✓ 109 (3). MICROCORSES, gen. nov.

(μικρός=little; κόρσης=one who wears his hair short.)

Type (♂) *Microcorses marginifasciatus*, Wlsm.

Antennæ less than half the length of the fore wings; (♂) stout, slightly pubescent. *Palpi* short, porrect, projecting but little beyond the head; median joint closely clothed; terminal joint not very distinct. *Head* moderately smooth. *Thorax* stout, not tufted. *Fore wings* elongate, narrow at the base, widened outwardly; costa straight, ♂ without a fold, apex rounded; termen oblique, straight; dorsum moderately straight, slightly convex towards the base. *Neuration*, 12 veins, all separate; 7 to termen. *Hind wings* broader than the fore wings, termen slightly excavate below the apex, thence evenly rounded; ♂ with a small but distinct thickening or brush of scales above the base of vein 1, covered by a small fold or flap. *Neuration*, 8 veins; 3 and 4 connate; 5 bent over towards origin of 4; 6 and 7 separate, but closely approximate at the extreme base. *Abdomen* stout. *Legs*, posterior tibiæ slightly hairy above.

The type has somewhat the appearance of a *Cnephasia*; it is, however, coarsely and roughly clothed. The antennæ are much shorter and stouter, and it is apparently allied to *Brachygonia*, Wlsm., which differs in the angle at the base of the fore wings and in the absence of the tuft and flap of the hind wings.

794 (3). *Microcorses marginifasciatus*, sp. n.

Antennæ and *palpi* tawny brown. *Head* and *thorax* dark tawny brown, the latter brownish cinereous posteriorly. *Fore wings* brownish cinereous, shaded and speckled with tawny brown throughout; with some brownish fuscous mottlings along the costa and termen, a faintly indicated short brownish fuscous basal patch, an irregular reddish brown blotch or group of spots at the middle of the wing, at the outer edge of which is a small yellowish ochreous spot at the upper angle of the cell and a darkly mottled narrow reddish brown fasciaform band running parallel with the termen from near the apex to behind the tornus; cilia brownish cinereous. *Exp. al.* 19 mm. *Hind wings* pale greyish brown, with a small tuft of brown scales covered by a pale shining cinereous flap above the base of vein 1; cilia pale cinereous. *Abdomen* pale greyish brown. *Legs* pale cinereous; hind tarsal joints banded with pale fuscous.

Type, ♂ (70592) Mus. Wlsm.

Hab. JAPAN (*Pryer*, 1886). Three specimens.

CENECTRA, Gn.

752. *Cenectra pilleriana*, Schiff.

Cenectra pilleriana, Stgr. & Wk. Cat. Lp. Eur. 239. No. 752 (1871)¹
Fern. Tr. Am. Ent. Soc. X. 19. No. 88 (1882)².

Hab. EUROPE¹. CHINA—Chang Yang, 4000–6000 feet (*Pratt*, 1886). JAPAN—HONDO—Oiwake (*Pryer*, 1885). UNITED STATES—California², Texas².

LEONTOCHROMA, gen. nov.

(λέων=a lion; χρώμα=colour.)

Type *Leontochroma aurantiacum*, Wlsm.

Antennæ (♂) strongly ciliated (not notched). *Palpi* short, projecting less than the length of the head beyond it, closely clothed, terminal joint exposed, rather short. *Head* moderately rough. *Thorax* smooth, or slightly tufted posteriorly. *Fore wings* elongate, narrow at the base, widened outwards; costa gently arched towards the base; ♂ with a short and very narrow costal fold at the base (easily overlooked); apex slightly produced; termen slightly excavate below the apex, scarcely oblique; tornus rounded; dorsum straight. *Neuration*, 12 veins; 3 and 4 stalked; 7 and 8 stalked, 7 to the termen. *Hind wings* rather triangular, slightly excavate

below the rounded apex, thence convex. *Neuration*, 8 veins; 3 and 4 from a short stalk; 5 approximate at base to 3+4; 6 and 7 separate, but very closely approximate and parallel towards their base. *Abdomen* moderate, anal tuft well-developed. *Legs* smooth, without projecting scales.

749 (1). *Leontochroma aurantiacum*, sp. n.

Antennæ (broken) tawny reddish at the base. *Palpi* pale tawny reddish. *Head* and *thorax* tawny reddish. *Fore wings* tawny reddish, the lines of the veins and a few transverse reticulations delicately marked with tawny fuscous; a basal patch, curved on its outer side, an oblique central fascia before the middle reaches the dorsum scarcely beyond the middle, and a subapical band, all tawny reddish brown more or less outlined with tawny fuscous; cilia tawny fuscous, with a slender pale line along their base. *Exp. al.* ♂ 21, ♀ 22 mm. *Hind wings* pale greyish cinereous, blending to bright orange-ochreous beyond the middle, with one or two transverse reticulations from the costa near the apex; cilia greyish cinereous. *Abdomen* greyish cinereous, anal tuft ochreous. *Legs* reddish ochreous.

Type, ♂ (9129) Mus. Wlsm.

Hab. SIKKIM, X. 1889 (*Elwes*). Two specimens.

749 (2). *Leontochroma suppurpuratum*, sp. n.

Antennæ, *palpi*, and *head* reddish fuscous. *Thorax* pale reddish fuscous with a strong lilac sheen, a dark reddish brown tuft posteriorly. *Fore wings* shining pale lilac, suffused with reddish brown from near the base of the dorsum to the tornus, this shade extends obliquely from the base to the upper edge of the cell and is so far clearly defined, blending into the delicate lilac ground-colour above and beyond the middle of the wing; the apical half of the wing and some part of the middle is thickly speckled with reddish brown dots; a slight reddish brown shade about the middle of the costa, and a stronger ferruginous shade along the outer third of the costa reaching nearly to the apex; the termen is narrowly shining rosy steel-grey; cilia pale ferruginous, with a narrow reddish brown line along their base, their extreme apex touched with fuscous. Underside cinereous, with a strong reddish ferruginous tinge along the costa and termen, the extreme apex purplish fuscous and there is some greenish shading beneath the costa. *Exp. al.* ♂ 22, ♀ 27 mm. *Hind wings* rufo-cinereous at the base, shading outwards to

pale reddish ferruginous; cilia pale ferruginous, greyish fuscous at their apex. Underside cinereous, with a strong reddish ferruginous tinge along the costa and termen, the extreme apex purplish fuscous and there is some greenish shading along the costa. *Abdomen* greyish fuscous, anal tuft ferruginous. *Legs* reddish ferruginous.

Type, ♂ (9131); ♀ (9132) Mus. Wlsm.

Hab. SIKKIM—Tonglo, 10,000 feet, VII. 1886 (*Elwes*). Four specimens.

749 (3). *Leontochroma viridochraceum*, sp. n.

Antennæ, *palpi*, and *head* reddish brown. *Thorax* pale reddish brown. *Fore wings* shining greenish yellow, suffused on the outer third with reddish brown, and with a large ill-defined reddish brown dorsal patch reaching from near the base of the dorsum to the tornus; this dorsal patch is of a somewhat triangular shape with its apex somewhat curved outwards towards the middle of the wing, its outer edge is more clearly defined than its inner edge, except on the dorsum; the overclouding of the apical third of the wing is less intense in colour than the dorsal patch, except in the case of two patches lying about the end of the cell and an elongate costal shade attaining the apex; between these markings is a shining paler space, but of a rather rosy tint, in which the greenish yellow ground-colour does not enter; cilia reddish ochreous. Underside shining pale yellowish ochreous, costa and termen reddish ochreous. *Exp. al.* 31 mm. *Hind wings* pale shining greyish cinereous, blending to æneous on their outer half; cilia pale shining cinereous with an æneous tinge. Underside shining pale yellowish ochreous, costal and apical margins reddish ochreous, apex strongly reticulated with deep rich reddish ochreous (almost reddish brown). *Abdomen* ochreous. *Legs* very pale ochreous, touched on their undersides with reddish ochreous.

Type, ♀ (9135) Mus. Wlsm.

Hab. SIKKIM—Tonglo, 10,000 feet, VII. 1886 (*Elwes*). Unique.

If this is only a form of *suppurpuratum*, Wlsm., it is widely distinct not only in the ground-colour of the wing but also in the position of the markings, and deserves at least a varietal name.

749 (4). *Leontochroma lebetanum*, sp. n.

Antennæ ochreous. *Palpi* tawny brown. *Head* and *thorax* tawny reddish brown. *Fore wings* pale tawny, with a

transverse oblique median band of dark tawny reddish brown from the middle of the costa to the dorsum before the tornus, this is met by a diffused shade of a scarcely paler tint coming from the base and overflowing the dorsal half of the wing, there is also a costal shade on the outer third reaching to the apex; cilia tawny. *Exp. al.* 20 mm. *Hind wings* greyish, with a tawny suffusion on their outer half above the middle; cilia greyish. Underside of both wings with the costal and terminal portions overspread with tawny reddish ochreous, somewhat reticulated, the remainder being grey. *Abdomen* brownish grey. *Legs* greyish ochreous.

Type, ♂ (61145) Mus. Wlsm.

Hab. E. CHINA—Omei Shan, VI.-VII. Unique.

[To be continued.]