

FURTHER REMARKS ON THE GENUS *CHLORITIS*, WITH
DESCRIPTIONS OF ELEVEN NEW SPECIES.

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PLATE XIII.

SINCE writing my former article on the genus *Chloritis* (*ante*, pp. 40–50) new material of much interest has reached me from various sources. Colonel Beddome, Messrs. Sowerby & Fulton, Mr. E. A. Smith, and Mr. E. R. Sykes—to whom I am much indebted—have all contributed undescribed forms, and my own collection has further yielded three new species. Mr. Schepman, of Rhoon, Holland, has kindly sent to me for inspection a number of shells belonging to the Leyden Museum. Of these I refer three, from the Xulla Islands to *C. macrostoma*; they vary somewhat in elevation of the spire, and the peristome is somewhat more thickened than in the type; one of them, moreover, has the umbilicus narrower, and half covered by the columellar margin of the peristome, while the last whorl descends a little, but is not deflexed. Another of the Leyden Museum shells I refer to *C. biomphala*; it is from Taliabu Island, a new habitat for the species. I have appended a list of the species of *Chloritis*, brought up to date, adding all bibliographical references not included in Pilsbry's Manual of Conchology. I have omitted from the list the species named *bulbulus*, *zodiacus*, *Howesi*, and *Bonthainensis*, the brothers Sarasin having demonstrated that they pertain to the genus *Planispira*. On the other hand, I have included several species placed by Pilsbry in *Planispira*, e.g. *delibrata* and its allies, as these appear to me to fall more naturally into the genus under consideration.

I take this opportunity of recording my deep obligation to Mr. Smith for valuable assistance in compiling the list.

CHLORITIS BEDDOMEI, n.sp. Pl. XIII, Fig. 1.

Shell widely umbilicated, solid, depressed conoid, dark chestnut, shining under a velvety deciduous cuticle, finely and distantly plicatostriate, decussated with close microscopic spiral lines; spire convex, apex obtuse, suture somewhat deep. Whorls $5\frac{1}{2}$, increasing slowly and regularly, compressed above, rounded at the periphery, flattened below, obtusely angulated round the widely excavated umbilicus; last whorl scarcely descending in front, slightly dilated towards the mouth. Aperture elliptic, little oblique, margins convergent, united by a flexuous thread-like ridge. Peristome a little thickened, expanded, and reflexed; upper and outer margins arcuate, basal sinuous, projecting forward, columellar obliquely ascending into and impinging upon the umbilicus, then curved forward and towards the body-whorl and continued into the flexuous thread-like parietal ridge. Diam. maj. 28.5, min. 23.5 mm.; alt. 15.5 mm.

Hab.—New Guinea.

Type in Colonel Beddome's collection.

Compared with its only known ally, *C. selenitoides*, from Buru, the new species is larger, has $\frac{1}{2}$ whorl more, a relatively larger diameter, and shorter axis, the whorls are more flattened, the umbilicus is wider, and the columellar margin of the peristome ascends farther into the umbilicus, while the aperture is more dilated transversely, and the peristome is more expanded. Dedicated to Colonel Beddome, who received the shell from the Leyden Museum, and who has kindly placed this and two other species in my hands for description.

CHLORITIS HOLOSERICA, n.sp. Pl. XIII, Figs. 2, 2*a*.

Shell umbilicated, discoid, pale chestnut brown, finely striated, shining under a velvety deciduous cuticle; spire plane, suture shallow. Whorls 5, increasing slowly and regularly (the last rather suddenly), subangulated above, rounded at the side and below; last whorl a little dilated behind the peristome, descending nearly as far as the periphery, not deflected in front. Aperture oblique, roundly crescentic; margins distant, united by a slightly raised flexuous callus, upper margin ascending slightly at first, then arcuate; basal nearly straight; columellar dilated a little, ascending forward, slightly overhanging the narrow deep umbilicus, peristome white or roseate, thickened, expanded, and reflexed. Diam. maj. 24, min. 21.5 mm.; alt. 12.5 mm.

Hab.—North New Guinea (Mus. Cuming).

Type in the British Museum?

Two specimens from the Cuming Collection were labelled *C. Gruneri*, var. They are, however, distinct, measuring more than one-third less in diameter, and not being granulated like that species; the plane spire, wider umbilicus, and much less developed peristome and callus still further separate this species.

CHLORITIS TERES, n.sp. Pl. XIII, Figs. 3, 3*a*.

Shell moderately umbilicated, depressed conoid, fulvous corneous, irregularly striated, shining under a velvety deciduous cuticle (Fig. 3*a*), somewhat sparsely covered with stiff, short, dark bristles arranged in quincunx; when denuded, the surface is seen to be studded with small tubercles placed in shallow depressions. Whorls 4–4 $\frac{1}{2}$, increasing slowly, the last rather suddenly, and dilated towards the mouth, deeply deflected in front, tumid, scarcely angled round the umbilicus. Aperture subrotundate, oblique, margins convergent; peristome white or tinged with fuscous, thin, a little expanded, not reflexed; margins curved evenly, columellar obliquely ascending, triangularly dilated, and slightly overhanging the moderate umbilicus. Diam. maj. 19.5, min. 16 mm.; alt. 13 mm.

Hab.—New Ireland (Cox Collection).

Type in the British Museum.

A series of shells was received from Messrs. Sowerby & Fulton, accompanied by a note in Dr. Cox's writing—"I can't come to any conclusion about these specimens. From New Ireland." At first it was thought they pertained to *C. eustoma*, but upon careful comparison

with the type in the British Museum it was found that this form presented considerable differences which justified its being raised to specific rank. It is less depressed in the spire, the umbilicus is narrower, not obliquely excavated, and much less angulated, the whorls are more tubular, the last whorl is more dilated at its termination, the axis is higher in proportion to the diameter; the peristome is thinner, less expanded, not reflexed, and the hairs are more distant. The most salient feature, however, is the character of the raised tubercles placed in shallow depressions. The shells before me can be grouped into two series in about equal proportions; one typical, ranging in size from diam. 21.5, alt. 15 mm. to 19.5 and 13 mm.; the other a little more depressed in the spire, the axis a little shorter in relation to the diameter, and the umbilicus a little wider, ranging in size from diam. 21, alt. 14 mm. to 18.5 and 12.5 mm.

CHLORITIS SILENUS, Angas.

Chloritis conjuncta, Gude, *ante*, p. 47.

When considering this species I thought the material at my disposal justified me in separating a number of forms as a distinct species under the name *C. conjuncta*. Messrs. Sowerby & Fulton have kindly submitted a number of shells which demonstrate that the two extremes are linked by intermediate forms, and the name *conjuncta* must therefore be relegated to the synonymy of *C. silenus*.

CHLORITIS FRAUDULENTA, n.sp. Pl. XIII, Fig. 4.

C. Rehsei, Gude (not of Mart.): Proc. Malac. Soc., vol. vi (1904), p. 115.

Shell moderately umbilicated, depressed globose, blackish chestnut, shining; spire conoid, apex obtuse, suture shallow. Whorls 4, sub-compressed, subangulated above the periphery, dilated towards the mouth, then constricted, more so below, obtusely angulated round the obliquely excavated umbilicus; finely plicate-striate, the striae arcuate and pronounced at the suture; the first $2\frac{1}{2}$ whorls covered with minute, very crowded hair-points, arranged in quincunx, becoming sparser on the last half of the penultimate whorl, disappearing altogether on the last whorl, which descends shortly, but deeply, in front. Aperture semi-ovate, oblique; peristome thickened, expanded and reflexed, bluish, becoming blackish at the edge, margins a little convergent, evenly curved, columellar triangularly dilated and overhanging the umbilicus. Diam. maj. 39, min. 31 mm.; alt. 31 mm.

Hab.—Dinawa, British New Guinea (E. A. Pratt).

Type in my collection.

The present shell was at first considered to be a form of *C. Rehsei*, but careful comparison has convinced me that we have here a distinct species. The axis is shorter in proportion to the diameter, the spire is more depressed, the aperture is more dilated transversely, the last whorl is more dilated towards the mouth, less tumid below, devoid of hair-scars and spiral furrows below, the narrower umbilicus is subangulated, the peristome less expanded and less reflexed, the surface more plicate, and the hair-scars on the earlier whorls more crowded. An immature specimen of $3\frac{1}{4}$ whorls in beautifully fresh condition

shows the hair-points as minute tubercles; these disappear somewhat suddenly near the termination of the third whorl.

CHLORITIS CHALLENGERI, n.sp. Pl. XIII, Figs. 5-5b.

Shell umbilicated, depressed conoid, fragile, dark reddish-chestnut, finely striated, shining under a velvety deciduous cuticle, decussated with close microscopic spirals; spire conoid, suture impressed, apex raised, the nepionic ($1\frac{1}{2}$) whorls finely granulated. Whorls $4\frac{1}{2}$, rounded above, subangulated above the periphery, slightly compressed below, subangulated round the moderate umbilicus, which has one or two spiral sulci inside, last whorl scarcely descending in front, a little constricted behind the peristome. Aperture oblique, roundly obovate; margins approaching, evenly rounded; peristome thin, rosy-purplish, slightly expanded; columellar margin triangularly dilated and slightly overhanging the umbilicus. Diam. maj. 16, min. 14 mm.; alt. 10 mm.

Hab.—Queensland ("Challenger" Expedition).

Type in the British Museum.

Six specimens, one of them immature, showing the finely granulated nepionic $1\frac{1}{2}$ whorls very distinctly. The present species is allied to *C. mansueta*, being similar in shape, but the latter is more solid and paler, and the whorls increase more slowly, while the granules, so conspicuous in that shell, are lacking in the new species. *C. Porteri*, another allied form, has a narrower umbilicus and a more contracted aperture; the short, stiff, dark bristles still further differentiate that species from both *C. mansueta* and *C. Challengeri*.

CHLORITIS ASTÆUS, n.sp. Pl. XIII, Figs. 6-6c.

Shell umbilicated, conoid, finely striated, whitish corneous, covered with soft, short, very crowded, pale hairs, arranged in quincunx (Fig. 6c); spire conoid, apex obtuse, suture impressed. Whorls 4, convex, obtusely angulated round the narrow umbilicus; last whorl slightly descending, then suddenly and shortly deflexed in front, slightly dilated, then strongly gibbous and narrowly constricted behind the peristome. Aperture subovate, oblique, margins convergent; peristome rosy-red, a little thickened, somewhat broadly expanded and flattened, not reflexed; upper and outer margins arcuate, basal nearly straight, forming a slight angle with the columellar margin, which ascends obliquely, is triangularly dilated, and slightly impinges upon the obliquely excavated umbilicus, which has a short furrow on the oblique portion. Diam. maj. 9.5, min. 8 mm.; alt. 5.5 mm.

Hab.—Cardwell, Queensland.

Type in Colonel Beddome's collection.

Allied to *C. brevipila*, but the last whorl is more gibbous and contracted behind the peristome, which is more expanded and flattened, but not reflexed; basal margin straight, and the hairs excessively minute and close.

CHLORITIS AGAMEMNON, n.sp. Pl. XIII, Figs. 7-7c.

Shell narrowly umbilicated, depressed conoid, reddish corneous, very finely striated, covered with excessively crowded and short

bristles (Fig. 7c); spire depressed, apex obtuse, suture deep, channelled. Whorls $4\frac{1}{2}$, increasing regularly, tumid, subangulated round the narrow but deep umbilicus; last whorl not descending. Aperture lunate, little oblique, margins convergent. Peristome fuscous, thin, little expanded; upper and outer margins arcuate; basal straightened, forming a slight angle with the columellar margin, which ascends obliquely, is reflexed, and triangularly dilated, impinging upon the umbilicus. Diam. maj. 10.5, min. 9 mm.; alt. 6 mm.

Hab.—Cardwell, Queensland.

Type in Colonel Beddome's collection.

A pretty little species, unlike any I have seen from that region, but evidently belonging to the group of *C. brevipila*. This and the preceding species were received with Brazier's MS. names, which I have adopted, as specimens may have been distributed to other collectors under those names.

CHLORITIS MANSONENSIS, n.sp. Pl. XIII, Figs. 9-9b.

Shell moderately umbilicated, thin, translucent, shining, corneous, rather evenly and distantly ribbed above and at the side, slightly striated below, the striæ decussated by distant shallow spiral sulci. Spire strongly depressed, apex obtuse, suture rather deep. Whorls $4\frac{3}{4}$, a little flattened above and below, rounded at the periphery; obtusely angulated round the moderate, deep umbilicus; last whorl descending a little, and slightly deflexed in front, a little dilated towards the mouth. Aperture rotundate-lunate, oblique; margins convergent; peristome thin, not thickened, slightly expanded, columellar margin slightly dilated above and impinging upon the umbilicus. Diam. maj. 16, min. 13.5 mm.; alt. 8 mm.

Hab.—Tonkin.

Type in my collection.

From Mr. Fruhstorfer I received this shell with the MS. name "*Mansonensis*, Mlldff.," but as it does not appear to have been published I venture to describe and figure it. The species is allied to *C. insularis*, but that shell possesses $5\frac{1}{2}$ whorls, and measures 18 mm. It is also more depressed in the spire, while it lacks the riblets of the new species.

CHLORITIS RUFOFASCIATA, n.sp. Pl. XIII, Figs. 8-8c.

Shell umbilicated, discoid, fragile, translucent, pale corneous, with a narrow, red, supra-peripheral band, finely and regularly striated, very minutely and densely granulated, the granules arranged in quincunx (Fig. 8c); spire plane, suture impressed. Whorls 4, convex above, obtusely angulated above the periphery, obliquely sloping and convex below, distinctly angulated round the funnel-shaped umbilicus; last whorl slightly descending in front, not deflexed. Aperture securiform, scarcely oblique; margins a little convergent, united by a thin callus. Peristome thin, acute, white, a little expanded; upper margin nearly straight, outer strongly curved, basal nearly straight, forming an angle with the columellar margin, which is reflexed, triangularly dilated, and impinges slightly upon the umbilicus. Diam. maj. 15, min. 12 mm.; alt. 7 mm.

Hab.—West Sumatra.

Type in Mr. Sykes' collection.

Allied to *C. Smithi*, but not tubercled like that species. It is smaller, the last whorl is not deflexed, not concave above the periphery, and the peristome is thinner and not reflexed.

CHLORITIS SYKESI, n.sp. Pl. XIII, Figs. 10–10*c*.

Shell umbilicated, depressed conoid, pale corneous, fragile, translucent, shining under a velvety cuticle (Fig. 10*c*), finely striated, covered with very short, crowded, pale bristles arranged in quincunx. Spire subplane, apex sunk, suture impressed. Whorls $4\frac{1}{2}$, convex above, rounded at the side, slightly compressed below, obtusely angulated round the moderate pervious umbilicus; last whorl scarcely descending, not deflexed in front, slightly dilated towards the mouth. Aperture crescentic, little oblique, margins convergent; peristome thin, fuscous, shortly reflexed; upper and outer margins arcuate, basal forming an obtuse angle with the columellar margin, which is nearly vertical, slightly dilated above, shortly ascending forward, and slightly impinging upon the umbilicus. Diam. maj. 16.5, min. 14.5 mm.; alt. 10 mm.

Hab.—West Sumatra.

Type in Mr. Sykes' collection.

The present species resembles *C. Fruhstorferi* in contour, but is a little more depressed, the hairs are much crowded, not tubercled; the peristome is thinner, and the columellar margin less dilated. Compared with *C. Everetti*, the whorls are less tumid, and the umbilicus is wider. Another ally is *C. tabularis*, but that species is larger, less depressed, darker in colour, the columellar margin is less oblique, the umbilicus narrower, less obliquely excavated, and less angulated, while the hairs are slightly less crowded. This and the preceding species were kindly placed in my hands for description by Mr. Sykes.

CHLORITIS EURYCHASMA, n.sp. Pl. XIII, Figs. 11–11*c*.

Shell perforate, compressed conoid, pale corneous, rather thin, translucent, finely striated, covered with very short, crowded hairs arranged in quincunx (Fig. 11*c*). Spire conoid, apex prominent, suture impressed. Whorls 4 (the first two minutely granulated), convex above, obtusely angulated at the periphery, becoming rounded towards the mouth, tumid below; last whorl descending shortly, abruptly deflexed in front below the periphery, gibbous and then narrowly constricted behind the peristome. Aperture obovate, margins distant, united by a somewhat solid callus on the parietal wall. Peristome fuscous, a little thickened, shortly reflexed; upper, outer, and basal margins arcuate, columellar broadly dilated, more than half covering the narrow perforation of the umbilicus. Diam. maj. 15, min. 13.5 mm.; alt. 11 mm.

Hab.—Sjerah Island (? Sera), north of Tenimber.

Type in my collection.

I have adopted the MS. name *C. eurychasma*, Boettger, under which the shell was received by the writer from the late Bruno Strubell.

The name occurs in Mr. Fulton's list in Proc. Malac. Soc., vol. iii (1899), p. 213, but, as far as I am aware, no description was ever published. In the shape of the aperture and the broadly dilated columellar margin of the peristome, the new species resembles *C. Romaensis*, but that shell is more globose, more elevated in the spire, the umbilicus is completely covered, and the cuticle is devoid of hairs or scars.

Genus CHLORITIS, Beck.

Section CHLORITIS, s.s.

- C. unguilina*, Linn.; var. *minor*, Fér. Ceram.
C. Eduardi, Gude.¹ Moluccas.
C. unguiculina, Mart.; var. *fusca*, Gude.² Buru.
C. biomphala, Pfr. Ceram, Celebes, Taliabu.
C. omphalospira, Mlldff.³ China.
C. diplomphala, Mlldff. China.
C. biconcava, Hde. China. = *Outangensis*, Crosse.
C. molina, Hde. China.
C. Minahassæ, Sar.⁴ Celebes.
C. Martensi, Pfr. Ceram.
C. cheratomorpha, Tap. New Guinea.
C. Talabensis, Kob.⁵ Celebes.
C. heteromphala, Pils.⁶ Moluccas.
C. mima, Fult.⁷ Buru.
C. circumdata, Fér. Aru, Mysol, Waigiou, New Guinea.
C. molliseta, Pfr. Mysol.
C. pervicina, Smith.⁸
C. Lansbergiana, Dohrn. ? New Guinea.
C. Maforensis, Tap.; New Guinea. Var. *micromphalus*, Pils.; Aru.
C. unguiculastra, Mart.; var. *Buruensis*, Mart.; var. *Amboinensis*, Mart.; var. *pilosa*, Mart. Buru, Amboina.
C. flexuosa, Pfr. = *Ceramensis*, Pfr. Ceram.
C. unguicula, Fér. = *Yoldii*, Mörch. Ceram, Amboina.
C. Ponsonbyi, Gude.⁹ Moluccas.

Section PTYCHOCHLORITIS, Mlldff.¹⁰

- C. Gruneri*, Pfr. Buru.
C. mirabilis, Mlldff.¹¹ Buru.
C. holoserica, n.sp.¹² New Guinea.

¹ Ante, p. 41.

² Ante, p. 41.

³ Nachr. Blatt Deutsch. Malak. Ges., 1897, p. 29.

⁴ Die Land-Mollusken von Celebes, 1899, p. 199, pl. xxv, fig. 250.

⁵ Abh. Zool. Mus. Dresden, vol. vi (1896-7), No. 5, p. 3.

⁶ Man. Conch., vol. vi (1891), pl. li, figs. 60-62. (No description.) Gude, ante, p. 43.

⁷ Proc. Malac. Soc., vol. iii (1899), p. 214, pl. xi, fig. 7.

⁸ Ann. & Mag. Nat. Hist., ser. vi, vol. xx (1897), p. 411, pl. ix, figs. 8-10.

⁹ Ante, p. 42.

¹⁰ Nachr. Blatt Deutsch. Malak. Ges., 1902, p. 199.

¹¹ Loc. cit., p. 199.

¹² Ante, p. 106.

- C. exacta*, Pfr. New Guinea.
C. Buruana, Mlldff.¹ Buru.
C. macrostoma, Gude.² Bangaya, Xulla.
C. latecostata, Kob.³ Borneo.
C. Balantensis, Kob.⁴
C. Beddomei, n.sp.⁵ New Guinea.
C. selenitoides, Fult.⁶ Buru.

Section EUSTOMOPSIS, n. Type, *C. eustoma*.

- C. eustoma*, Pfr.; New Georgia, Solomon Islands. Var. *erinaceus*, Pfr.; New Georgia, New Ireland.
C. Moellendorffi, Anc.⁷ Tuom Island, New Georgia.
C. Simbangensis, Kob.⁸ New Guinea.
C. subtilis, Gude.⁹ New Guinea.
C. Durandi, Bav. & Dautz.¹⁰ Tonkin.
C. Leei, Cox; Louisiade Archipelago. Var. *Sudestensis*, Hedl.¹¹; Sudest Island. Var. *Woodlarkensis*, Hedl.¹²; Woodlark Island. Var. *Papuensis*, Hedl.¹³; New Guinea.
C. multisetosa, Fult.¹⁴
C. teres, n.sp.¹⁵ New Ireland.
C. tenebrica, Fult.;¹⁶ var. *pallida*, Gude; ¹⁷ var. *tumida*, Gude.¹⁸ New Ireland.
C. subcorpulenta, Smith. Louisiade Archipelago.
C. discordialis, Fér. New Ireland.
C. fausta, Gude.¹⁹ New Ireland.
C. Dentrecasteauxi, Smith. Admiralty Islands.
C. murina, Pfr. Admiralty Islands.
C. ursina, Pfr. Admiralty Islands.
C. delphax, Dohrn.²⁰ New Guinea.
C. dinodeomorpha, Tap.²¹ New Guinea.

¹ Loc. cit., p. 199.

² Ante, p. 42.

³ Conch. Cab., *Helix*, Abth. iv (1894), p. 700, pl. cc, figs. 3, 4.

⁴ Abh. Zool. Mus. Dresden, vol. vi (1896-7), No. 5, p. 2.

⁵ Ante, p. 105.

⁶ Proc. Malac. Soc., vol. iii (1899), p. 215, pl. xi, fig. 9.

⁷ Proc. Linn. Soc. N.S. Wales, 1897, ser. ii, vol. x, p. 773, pl. xxxvi, fig. 7; Gude, ante, p. 44.

⁸ Nachr. Blatt Deutsch. Malak. Ges., 1898, p. 93.

⁹ Ante, p. 44.

¹⁰ Journ. de Conchyl., 1900, pp. 111, 441, pl. xi, figs. 1-3.

¹¹ Proc. Linn. Soc. N.S. Wales, 1891, ser. ii, vol. vi, p. 83.

¹² Loc. cit., p. 83.

¹³ Loc. cit., p. 83.

¹⁴ Ann. & Mag. Nat. Hist., ser. vii, vol. ix (1902), p. 315.

¹⁵ Ante, p. 106.

¹⁶ Ann. & Mag. Nat. Hist., ser. vii, vol. ix (1902), p. 316.

¹⁷ Ante, p. 45.

¹⁸ Ante, p. 45.

¹⁹ Ante, p. 45.

²⁰ Conch. Cab., *Helix*, Abth. iv (1893), p. 648, pl. clxxxvi, figs. 5-7.

²¹ Loc. cit., p. 648, pl. clxxxvi, figs. 8, 9.

- C. Lintera*, Gude.¹
C. fuscopurpurea, Smith.² Woodlark Island.
C. ephamilla, Smith.³ New Guinea.
C. perambigua, Smith.⁴ New Guinea.
C. nephele, Strub.⁵ New Guinea.
C. silenus, Ang.=*conjuncta*, Gude.⁶ New Ireland.
C. Gaimardi, Desh.=*adustus*, Hinds. New Ireland.
C. exigua, Gude.⁷ New Ireland.
C. fraterna, Gude.⁸ New Ireland.

Section SULCOBASIS, Tap.

- C. sulcosa*, Pfr. Aru Islands.
C. rubra, Alb. Mysol; Aru Islands.
C. concisa, Fér. Aru Islands; New Guinea.
C. Cumingi, Gude.⁹ New Guinea.
C. Beatricis, Tap. New Guinea.
C. leptocochlea, Anc.¹⁰ German New Guinea.
C. Rohdei, Dohrn.¹¹ New Guinea.
C. Djammensis, Kob.¹² Djamma Island, New Guinea.
C. lepidophora, Dohrn.¹³ New Guinea.
C. anceps, Strub.¹⁴ Ferguson Island, New Guinea.
C. Minnegerodei, Strub.¹⁵ Normanby Island, New Guinea.
C. Rehsei, Mart.=*Gerrardi*, Smith; var. *obtecta*, Reinh. New Guinea.
C. fraudulenta, n.sp.¹⁶ New Guinea.
C. Prestoni, Gude.¹⁷ New Guinea.
C. globosa, Preston; var. *major*, Smith.¹⁹ New Guinea.
C. stirophora, Smith; var. *Collingwoodensis*, Preston.²¹

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- ¹ Journ. Malac., vol. xii (1905), p. 13, pl. iii, fig. 5.
² Proc. Malac. Soc., vol. ii (1897), p. 288, pl. xvii, figs. 12-14.
³ Ann. & Mag. Nat. Hist., ser. vi, vol. xv (1895), p. 232; vol. xvi, p. 363, pl. xx, fig. 10. Conch. Cab., *Helix*, Abth. iv (1895), p. 823, pl. cccxiii, figs. 7, 8.
⁴ Loc. cit., vol. xv, p. 233; vol. xvi, p. 363, pl. xx, fig. 11.
⁵ Nachr. Blatt Deutsch. Malak. Ges., 1895, p. 151; Conch. Cab., *Helix*, Abth. iv (1895), p. 822, pl. cccxiii, figs. 5, 6.
⁶ Ante, p. 47.
⁷ Ante, p. 48.
⁸ Ante, p. 47.
⁹ Ante, p. 48.
¹⁰ Proc. Linn. Soc. N.S. Wales, 1897, ser. II, vol. x, p. 772, pl. xxxvi, fig. 1.
¹¹ Conch. Cab., *Helix*, Abth. iv (1893), p. 644, pl. clxxxv, figs. 3, 4.
¹² Loc. cit., p. 699, pl. cc, figs. 1, 2.
¹³ Loc. cit., p. 644, pl. clxxxv, figs. 5-8.
¹⁴ Loc. cit., p. 821, pl. cccxiii, figs. 1, 2.
¹⁵ Loc. cit., p. 822, pl. cccxiii, figs. 3, 4.
¹⁶ Ante, p. 107.
¹⁷ Journ. Malac., vol. ix (1904), p. 114, figs. 1-4.
¹⁸ Proc. Malac. Soc., vol. v (1902), p. 17, fig. 1.
¹⁹ Ann. & Mag. Nat. Hist., ser. VII, vol. xvi (1905), p. 194.
²⁰ Op. cit., ser. vi, vol. xv (1895), p. 231; vol. xvi, p. 363, pl. xx, fig. 9. Journ. Malac., vol. v (1896), p. 17; Moss & Webb, ib., p. 33, pl. iii, figs. 1, 2; shell, figs. 3-7, anatomy.
²¹ Proc. Malac. Soc., vol. v (1902), p. 17, fig. 5.

- C. Bougainvillei*, Pfr. = *Angasiana*, Newc. Solomon Islands.
C. majuscula. New Hanover; New Ireland; Admiralty Islands.
C. Isis, Pfr. Admiralty Islands.
C. quercina, Pfr.; Solomon Islands. Var. *Hombroni*, Pfr. = *Janellii*, Hombr. & Jacq.; Solomon Islands; Admiralty Island.

Section AUSTRORHODITIS, Pils.

- C. Spinei*, Cox = *hystrix*, Cox. Queensland.
C. Porteri, Cox. Queensland.
C. mansueta, Pfr. Queensland; New South Wales.
C. Challengeri, n.sp.¹ Queensland.
C. Blackalli, Braz. Queensland.
C. Buxtoni, Braz. Thursday Island.
C. brevipila, Pfr. Victoria; South Australia; New South Wales; Queensland; islands in Torres Straits.
C. astæus, n.sp.² Queensland.
C. Novocambrica, Gude.³ New South Wales.
C. disjuncta, Gude.⁴ New South Wales.
C. Layardi, Gude.⁵ Islands in Torres Straits.
C. Agamemnon, n.sp.⁶ Queensland.
C. mendax, Mart. Timor.
C. rhodochila, Mlldff.⁷ Timorlaut (Tenimber).
C. aridorum, Cox. Queensland.
C. pelodes, Pfr. = *prunum*, auct. (*non* Fér.) = *pseudoprunum*, Pils. North-West Australia.
C. Coxeni, Cox. Queensland.
C. Bennetti, Braz. Queensland.
C. Blackmani, Cox. Queensland.
C. Coxenæ, Braz. Queensland.
C. mucida, Pfr. Percy Isles, north-east coast of Australia.
C. occulta, Pfr. Aru Islands.
C. chloritoides, Pils. New Guinea.
C. Micholitzii, Mlldff. Tenimber.
C. gonistoma, Mlldff.; var. *major*, Mlldff. Tenimber.
C. telitecta, Mlldff. Tenimber.
C. tenuitesta, Mlldff. Tenimber.
C. rectilabrum, Smith.⁸ North-West Australia.
C. millepunctata, Smith.⁹; Baudin Island. Var. *Cassiniensis*, Smith.¹⁰; Cassini Island.

¹ Ante, p. 108.² Ante, p. 108.³ Ante, p. 49.⁴ Ante, p. 49.⁵ Ante, p. 49.⁶ Ante, p. 108.⁷ Nachr. Blatt Deutsch. Mal. Ges., 1892, p. 95.⁸ Proc. Malac. Soc., vol. i (1894), p. 88, pl. vii, fig. 14.⁹ Loc. cit., p. 88, pl. vii, fig. 11.¹⁰ Loc. cit., p. 88, pl. vii, fig. 12.

- C. Maforinsulæ*, Preston.¹ Mafor Island, New Guinea.
C. argillacea, Fér.=*cyclostomopsis*, Lea. Timor, Flores, Solor, Sumba.
 Adonare, Rawak, Alor, Boneratu, Oinanisa.
C. Romaensis, Mlldff.² Roma.
C. eurychasma,³ n.sp. Sjerah I., Moluccas.
C. subplicifera, Smith.⁴ New Guinea.

Section TRICHOCHLORITIS, Pils.

- C. Hungerfordiana*, Nev. China; Formosa.
C. Tanqueryi, Cr. & F. Cochin China.
C. Condoriana, Cr. & F. Pulu Condor.
C. Norodomiana, Morl. Cambodia.
C. Fouresi, Morl. Cambodia; Siam.
C. propinqua, Pfr. India.
C. delibrata, Bens.; Bengal; =*procumbens*, Gould; Assam, Burma.
 Var. *fasciata*, G.-A.; Assam. Var. *Khasiensis*, G.-A.; Assam.
C. gabata, Gould; Burma. Var. *Merguiensis*, Phil.; Mergui.
C. pilisparsa, Mart.⁵ Celebes.
C. Smithi, Bock. Sumatra.
C. rufofasciata, n.sp.⁶ Sumatra.
C. caseus, Pfr. Siam; Laos; Cambodia.
C. Lambineti, Bav. & Dautz.⁷ Tonkin.
C. Siamensis, Mlldff.⁸ Siam.
C. platytropis, Mlldff.⁹ Malay Peninsula.
C. Mansonensis, n.sp.¹⁰ Tonkin.
C. athrix, Mlldff.¹¹ Tonkin.
C. insularis, Mlldff.¹² Tonkin.
C. miara, Mab. Tonkin.
C. Herziana, Mlldff. Hainan.
C. rhinocerotica, Hde. Cochin China.
C. Franciscanorum, Gredl.; var. *purpurea*, Gredl. China.
C. seriatisetæ, Roch. Cambodia.
C. Malayana, Mlldff. Perak.
C. percussa, Hde. China.
C. brevisetæ, Pfr. Siam; Perak.
C. microtricha, Mlldff.¹³ Annam.

¹ Op. cit., vol. v (1902), p. 18, fig. 3.

² Nachr. Blatt Deutsch. Mal. Ges., 1903, p. 156.

³ Ante, p. 110.

⁴ Ann. & Mag. Nat. Hist., ser. vi, vol. xv (1895), p. 232; vol. xvi, p. 363, pl. xx, fig. 12.

⁵ Land-Mollusken von Celebes, 1899, p. 198, pl. xxv, fig. 249.

⁶ Ante, p. 109.

⁷ Journ. de Conchyl., 1899, p. 28, pl. i, fig. 3.

⁸ Nachr. Blatt Deutsch. Mal. Ges., 1902, p. 156.

⁹ Proc. Zool. Soc., 1894, p. 150, pl. xvi, fig. 10.

¹⁰ Ante, p. 109.

¹¹ Nachr. Blatt Deutsch. Mal. Ges., 1901, p. 73.

¹² Loc. cit., p. 113.

¹³ Nachr. Blatt Deutsch. Mal. Ges., 1898, p. 71.

- C. tenella*, Pfr. Siam.
C. submissa, Desh. China.
C. deliciosa, Pfr. Cambodia.
C. remoratrix, Morl. Cambodia.
C. Lemeslei, Morl.¹ Tonkin.
C. Marimberti, Bav. & Dautz.² Tonkin.
C. Balansai, Morl.; var. *cincta*, Dautz. & Fisch.³ Tonkin.
C. quinararia, Pfr. Cambodia.
C. Shanica, Bedd. Burma.
C. Colletti, Bedd. Burma.
C. bifoventata, Bens. Burma.
C. diplochone, Mlldff.⁴ Annam.
C. nautiloides, Val. *Hab.*?
C. Samuiana, Mlldff.⁵ Samui Archipelago.
C. crassula, Phil. = *Storiana*, Mouss. Java; Sumatra.
C. Gereti, Bav. & Dautz.⁶ Tonkin.
C. brachystoma, Mart.⁷ Borneo.
C. Kühni, Mlldff.⁸ Buru.
C. helicinioides, Mouss. Java.
C. Everetti, H. Ad. Borneo.
C. tetragyra, Mlldff.⁹ Java.
C. Fruhstorferi, Mlldff.¹⁰ Java.
C. transversalis, Mouss. Java; Bali.
C. conjecta, Smith.¹¹ Sumba.
C. hemiopta, Bens. Andaman Islands.
C. meander, G.-A. Borneo.
C. plena, G.-A.; Labuan. Var. *Celebensis*, Smith¹²; Celebes.
C. tabularis, Gude.¹³ Sumatra.
C. Sykesi, n.sp.¹⁴ Sumatra.
C. albodentata, Smith.¹⁵ Flores.
C. Sibutuensis, Smith.¹⁶ Sulu Islands.
C. Suluana, Mlldff.¹⁷ Sulu Islands.
C. Penangensis, Stol. Perak; Penang.

¹ Journ. de Conchyl., 1891, p. 249, pl. vii, fig. 1.

² Journ. de Conchyl., 1905, p. 90, pl. iii, figs. 5-9.

³ Op. cit., 1900, pp. 111, 440, pl. x, figs. 4-6.

⁴ Nachr. Blatt Deutsch. Mal. Ges., 1898, p. 72.

⁵ Proc. Zool. Soc., 1894, p. 150.

⁶ Journ. de Conchyl., 1900, pp. 112, 442, pl. ix, figs. 7-9.

⁷ Sitz. Ber. Ges. naturf. Berlin, 1903, p. 422.

⁸ Nachr. Blatt Deutsch. Mal. Ges., 1902, p. 198.

⁹ Ib., 1897, p. 68.

¹⁰ Ib., 1897, p. 68.

¹¹ Ann. & Mag. Nat. Hist., ser. vii, vol. iii (1899), p. 410.

¹² Proc. Malac. Soc., vol. ii (1896), p. 97.

¹³ Journ. Malac., vol. x (1903), p. 48, pl. iii, fig. 5.

¹⁴ Ante, p. 110.

¹⁵ Ann. & Mag. Nat. Hist., ser. vii, vol. iii (1899), p. 411; Gude, Journ. of Malac., vol. x (1903), pl. iii, fig. 7.

¹⁶ Ann. & Mag. Nat. Hist., ser. vi, vol. xiii (1894), p. 53, pl. iv, fig. 4.

¹⁷ Nachr. Blatt Deutsch. Mal. Ges., 1894, p. 209.

- C. tomentosa*, Pfr. Borneo ; Sumatra ; Banguay ; Karamon.
C. Kinabaluensis, Kob.¹ = *Kinibalensis*, Kob.² Borneo.
C. Dammaensis, Smith³ = *subcarinata*, Mlldff.⁴ Damma Island ;
 Oinainisa Island.
C. Euphrosyne, Smith.⁵ Panalingoan I., S.W. of Palawan.
C. brevidens, Pfr. Mindoro.
C. albolabris, Pils.⁶ Loo Choo.
C. Hirasei, Pils.⁷ Japan.
C. subsulcata, Mlldff.⁸ Philippine Islands.
C. Fultoni, Mlldff.⁹ Mindoro.
C. Malbatensis, Hid.¹⁰ Philippine Islands.
C. Malangensis, Bullen.¹¹ Java.
C. Leytensis, Mlldff.¹² ; Luzon ; Leyte. Var. *Samarensis*, Mlldff.¹³ ;
 Samar.
C. quieta, Rve. Mindanao.
C. inquieta, Dohrn.¹⁴ Palawan.
C. bracteata, Pils.¹⁵ Japan.
C. fragilis, Gude.¹⁶ Japan.
C. pumila, Gude.¹⁷ Japan.
C. oscitans, Mart. Japan.
C. Echizenensis, Pils.¹⁸ Japan.
C. perpunctata, Pils.¹⁹ Japan.
C. Tosana, Pils. ; ²⁰ var. *Osumiensis*, Pils.²¹ Japan.
C. obscura, Pils.²² Loo Choo.

¹ Smith : Proc. Zool. Soc., 1895, p. 113, pl. iii, fig. 16.

² Conch. Cab., *Helix*, Abth. iv (1894), p. 706, pl. cci, figs. 5, 6.

³ Ann. & Mag. Nat. Hist., ser. vi, vol. xiv (1894), p. 62.

⁴ Nachr. Blatt Deutsch. Mal. Ges., 1899, p. 156.

⁵ Proc. Zool. Soc., 1895, p. 113, pl. iii, fig. 17. Conch. Cab., *Helix*, Abth. iv (1897), p. 884, pl. cccxxviii, fig. 7. Hid., Obras Malac., vol. i (1901), p. 190, pl. clviii, fig. 3.

⁶ Nautilus, vol. xvi (1902), p. 76.

⁷ Proc. Acad. Philad., 1901 (1902), p. 565.

⁸ Nachr. Blatt Deutsch. Mal. Ges., 1894, p. 95. Hidalgo : Obras Malac., vol. i (1901), p. 190, pl. cxxxiv, figs. 1-3.

⁹ Abh. Naturf. Ges., Gortitz, vol. xxii (1898), p. 95, reprint p. 70.

¹⁰ Obras Malac., vol. i (1901), p. 132, p. 189, pl. xx, fig. 10.

¹¹ Proc. Malac. Soc., vol. vi (1905), p. 192, pl. xi, fig. 2.

¹² Nachr. Blatt Deutsch. Mal. Ges., 1890, p. 203 ; Ber. Senck. Ges., 1893, p. 80, pl. iii, fig. 8.

¹³ Abh. Naturf. Ges., Gortitz, vol. xxii (1898), p. 95, reprint p. 70.

¹⁴ Conch. Cab., *Helix*, vol. iv (1893), p. 652, pl. clxxxvii, figs. 9, 10 ; Astrolabe Bay, New Guinea ; ? error. Hid., Obras Malac., vol. i (1901), p. 192.

¹⁵ Nautilus, vol. xvi (1902), p. 21.

¹⁶ Proc. Malac. Soc., vol. iv (1900), p. 70, pl. viii, figs. 18-20 ; Pils. ib., vol. vi (1905), p. 290, pl. xiv, figs. 14, 16-19 (anatomy).

¹⁷ Proc. Acad. Philad., 1901, p. 617.

¹⁸ Nautilus, vol. xvi (1903), p. 116.

¹⁹ Ib., vol. xv (1902), p. 116.

²⁰ Ib., vol. xvi (1903), p. 134 ; vol. xvii (1903), p. 31.

²¹ Proc. Acad. Philad., 1904, p. 629.

²² Ib., p. 628.

Section ALBERSIA, H. Ad.

C. granulata, Q. & G. New Guinea, Waigiou.

C. Waigiouensis, Sykes.¹ Waigiou.

C. pubiceps, Mart.; Halmaheira; Batjan; = *Waterstraati*, Mlldff.²; Obi.

C. Obiensis, Mart.³ = *Obiana*, Mlldff.⁴ = *omissa*, Dautz.⁵ Obi.

C. subsphærica, Fult.⁶ Gebi Island.

C. ariontiformis, Kob.⁷ Djamma Island, New Guinea.

C. pseudocorasia, Strub. Halmaheira.

C. zonulata, Fér. = *lemniscata*, Less. New Guinea; Waigiou; Aru Islands. Var. *Recluziana*, Le Guil.; New Guinea.

C. tenuis, Pfr. *Hab.*?

EXPLANATION OF PLATE XIII.

FIG. 1. *Chloritis Beddomei*, n.sp.

FIGS. 2, 2a. „ *holoserica*, n.sp.

„ 3, 3a. „ *teres*, n.sp.

FIG. 4. „ *fraudulenta*, n.sp.

FIGS. 5-5b. „ *Challengeri*, n.sp.

„ 6-6c. „ *astæus*, n.sp.

„ 7-7c. „ *Agamemnon*, n.sp.

„ 8-8c. „ *rufofasciata*, n.sp.

„ 9-9b. „ *Mansonensis*, n.sp.

„ 10-10c. „ *Sykesi*, n.sp.

„ 11-11c. „ *eurychasma*, n.sp.

¹ Journ. of Malac., vol. xi (1904), p. 88, pl. ix, fig. 16.

² Nachr. Blatt Deutsch. Mal. Ges., 1902, p. 189.

³ Sitz. Ber. Ges. naturf. Berlin, 1898, p. 161; Arch. für Naturg., 1899, p. 28, pl. iii, figs. 6, 7.

⁴ Nachr. Blatt Deutsch. Mal. Ges., 1902, p. 191.

⁵ Le Naturaliste, vol. xxiv (1902), p. 247, fig. 2.

⁶ Journ. of Malac., vol. xi (1904), p. 53, pl. iv, figs. 8, 9.

⁷ Conch. Cab., *Helix*, Abth. iv (1894), p. 707, pl. cci, figs. 9, 10.



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