CHINESE LONGICORN BEETLES OF THE GENUS LINDA (Coleoptera: Cerambycidae)¹

J. LINSLEY GRESSITT

Lingnan Natural History Survey and Museum, Lingnan University, Canton, China

Linda is closely related to the large genus Oberea, and differs from it principally in having the prothorax quite short, strongly though bluntly tuberculate laterally, more or less swollen or nodse on the disc, and transversely grooved or constricted near apex and base, and in having the elytra considerably broader than the basal portion of the prothorax. Linda is largely Chinese in its constituency, and only a few species occur outside the country, in neighboring areas including Indo-China, Assam and perhaps Burma and the East Indies.

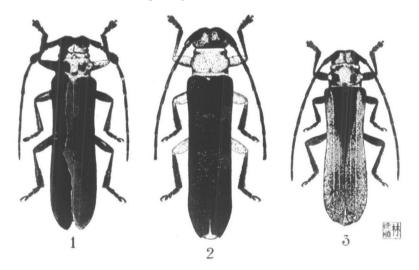


Fig. 1. Linda fasciculata Pic; female; W. Hills, near Kunming, Yunnan. (\times 2.5)

Fig. 2. Linda major Gressitt; holotype, female. × (2.5)

Fig. 3. Linda nigroscutata (Fairmaire); female; Kunming, Yunnan. × (2.5)

Linda was erected in 1864 by Thomson for one of two Chinese species which had been earlier described in Amphionycha by Chevrolat. In 1902 Fairmaire erected the genus Miocris for a single new species, nigroscutatus, from Yunnan. This genus was placed by Fairmaire in the tribe Pyrestini of the subfamily Cerambycinae, and compared with Erythrus and Plutonesthes. In 1907 Pic made a reference to Miocris

 $^{^{1}}$ Contribution from the Lingman Natural History Survey & Museum, Lingman University.

nigroscutatus, but placed it after Linda in a part dealing with a number of Phytoeciini. In the Coleopterorum Catalogus (Aurivillius, 1912 and 1923) and in the Catalogus Insectorum Sinensium (Wu, 1937), Miocris nigroscutatus occurs both in the Pyrestini and the Phytoeciini, with identical references in each instance. This peculiar circumstance can be explained by stating that, though Miocris was placed by its author in the Pyrestini, it actually has no such relationship, but merely resembles members of that tribe in form, coloration and certain superficial structural characterists, and actually belongs in the tribe Phytoeciini of the subfamily Lamiinae. What is more, however, I can find no valid characters to justify the retention of Miocris as a distinct genus. In 1939 Beeson and Bhatia used the combination Linda nigroscutata in a biological paper on the basis of a specimen identification made by a specialist, but without any reference to previous generic placement or indication of new combination.

I am inclined to suspect that the genus *Dasylinda* Thomson may also prove to be a synonym of *Linda*, since most of the characters ascribed to it for separation from the latter may be found in one or two of Pic's Chinese species of *Linda* which I do not believe should be generically separated from the latter.

Genus Linda Thomson

Linda Th., 1864, Syst. Cer. 122, 400 (type: Amphionycha femorata Chevrolat); Lacordaire, 1872, Gen. Col. 9: 851, 870; Savio, 1929, Notes d'Ent. Chinoise 1: 3; Matsushita, 1933, Fac. Agr. Hokkaido Imp Univ. 34: 416, 424; Gressitt, 1939, Lingnan Sci. 18: 98, 107; 1942, Spec. Publ. Lingnan N. H. Surv. & Mus. 8: 40.

Miocris Fairmaire, 1902, Bull. Soc. ent. France, 245 (type: M. nigroscutatus Fairm.), new synonym.

Long, slender, somewhat cylindrical; elytra more or less flattened basally, generally broadened preapically, in dead specimens often appearing dehiscent because of warping from dessication; antennae nearly always shorter than body, cylindrical, not very slender, usually black, sometimes ringed with pale; prothorax transverse, bluntly tuberculate laterally, swollen on disc; elytra more often completely black, in some species predominantly pale; head, prothorax and ventral surfaces of body pale, sometimes marked with black.

In most species the pale parts appear yellowish testaceous to reddish ochraceous in dried specimens, whereas in life they are actually bright pinkish red. The extensive pale coloration of *nigroscutata*, however, appears to be of a slightly different nature, being a permanent orangered, and only slightly paler than in species of *Erythrus* of the tribe Pyrestini (Cerambycinae).

Nine species of *Linda* were listed from China by Liu in 1934 and Wu in 1937. This paper discusses 15 species, and the total number for the genus now reaches 17. Little is known of the biology of species of *Linda*. In 1929 Savio gave some notes on the habits and larva of *fraterna*, and in 1942 the writer added a small amount of information. Some work has been done on *nigroscutata* in Yunnan (unpublished?) and Assam.

KEY TO THE CHINESE SPECIES OF LINDA

1.	Third antennal segment with a tuft of dark hairs
2.	Elytra not almost entirely black
3.	extreme apices
	Elytra testaceous, with a black area on basal portion of disc of each, gibbosicollis
4.	Antennae entirely black, non-annulated
_	Antennae annulated, at least in part, with pale
5.	Elytra largely red or testaceous 6 Elytra entirely black 7
6.	Elytra entirely black
	with four small black spotsnigroscutata Elytra orange except for pitchy black humeri; pronotum entirely pale; legs
	and ventral surfaces largely pitchytricostata
7.	Elytra subregularly punctured; body more or less stout; antennae relatively thick and shorter than body
	Elytra irregularly punctured; body slender; antennae relatively slender
	and as long as bodygracilicornis
8.	Head and prothorax densely punctured; elytra with round punctures;
	femora entirely testaceous; length over 20 millimeters major Head and prothorax sparsely punctured; elytra with square punctures;
	femora black: length less than 20 millimeters
9.	Antennae irregularly ringed with pale; ground color broadly testaceous
	on bases of fourth to sixth segments, and sometimes with pale hairs on
	bases of seventh and eighth segments
	following segments
10.	Sides of hind thorax partly black, the remainder red
	Sides of hind thorax entirely testaceous (or red?)pratti
11.	Sixth and following antennal segments entirely black; scutellum rounded- truncate apically; elytra broadly and subobliquely truncate apically,
	signaticornis
	Sixth to eighth antennal segments with pale hairs at bases; scutellum broadly emarginate apically; elytra emarginate apicallyfraterna
12.	Antennae ringed with pale hairs on bases of fourth and following segments;
	elytra with more than six rows of punctures
	Antennae ringed with pale hairs on bases of third and following segments;
	vertex largely black; sides of prothorax feebly swollen; elytra with only about six rows of punctures
13.	Ventral surfaces of body entirely testaceous: elytra entirely black14
	Ventral surfaces of body largely black; elytra pale apically and along suturenigriventris
14.	Elytra with about 12 punctures across middle of each; prothorax mod-
	erately swollen laterally; pronotal disc subevenly convex (S. E. China), femorata
	Elytra with about 16 punctures across middle of each; prothorax strongly
	protuberant laterally; pronotal disc with three prominent partly isolated
	tubercles (Formosa)annulicornis

1. Linda annulicornis Matsushita

Linda annulicornis Mats., 1933, Jl. Fac. Agric. Hokkaido Imp. Univ. 34: 424, fig. 1

Head, prothorax and ventral surfaces of body pinkish (testaceous in dried specimens); elytra entirely black; antennae ringed with pale on bases of fourth and following segments; elytra with about 12 punctures across middle of each.

Some specimens (California Academy of Sciences) were taken in Formosa in 1932 and 1934 by the writer.

Distribution: Formosa1.

2. Linda apicalis Pic

Linda apicalis Pic, 1906, Mat. Long. 6(1): 17; Gressitt, 1942, Spec. Publ. Lingnan N. H. Surv. & Mus. 8: 40.

Moderately robust and slightly elongate; dull; partly black, partly testaceous; antennae slightly exceeding middle of body, black, third and following segments ringed with gray basally, the third very thick and bearing a weak brush of hairs apically; head testaceous, extensively marked with black on each side of vertex and frons; prothorax short and broad, swollen, testaceous; scutellum testaceous; elytra slightly constricted towards middle, black, a large apical spot, and a narrow lateral margin, testaceous; legs black with anterior femora, the basal portions of middle femora, and the coxae entirely, testaceous. Length 22 mm. (After Pic).

A specimen from Tibet is in the American Museum of Natural History in New York. New to Tibet.

Distribution: Yunnan¹; Tibet.

3. Linda atricornis Pic

Linda atricornis Pic, 1924, Mel. Exot. Ent. 41: 19¹; Savio, 1929, Notes d'Ent. Chinoise 1: 3²; Gressitt, 1939, Notes d'Ent. Chinoise 6: 126³; 1940, ibid. 7: 197⁴; 1942, Spec. Publ. Lingnan N. H. Surv. & Mus. 7: 10⁵; 1942, ibid. 8: 41.

Head (except eyes, labrum and mandibles), prothorax, scutellum, ventral surface of body, basal thirds of femora, extreme bases of tibiae, and tarsal claws, reddish testaceous; antennae, elytra, eyes, labrum, mandibles and most of legs black; pale portions clothed with fine silvery pubescence and erect hairs; bases of clytra and undersurfaces of antennae with sparse erect black hairs. Head densely and coarsely rugulose-punctate; vertex shallowly grooved; inferior eye-lobes slightly broader than deep; antennae five-sixths as long as body, scape nearly as long as third segment, following gradually shorter; prothorax one-half again as broad as long, swollen above and behind middle of each side, its surface densely punctured except on each side of middle of disc; scutellum declivitous, truncate, elytra two and one-half times as long as head and prothorax united, slightly narrowed in middle, each impressed with about ten subregular rows of deep, squarish punctures, most of them larger than distances separating them, apices obliquely emarginate-truncate. Length 14-18.5 mm.; breadth 3.5-4.2.

A specimen (American Mus. Nat. Hist.) was collected at Yenping, Fukien Prov., June 12, 1917, probably by the Rev. Harry Caldwell.

Distribution: Kiangsu (Shagnhai ¹ ², Kao-ghiao², Lou-bou²); Chekiang (Tien-mu Shan³); Fukien (Yen-ping⁴); Chahar (Yangkiaping⁴); N.E. Szechuan; Sikang: "Upper Kuanhsien." ⁵

4. Linda fasciculata Pic

Linda fasciculata Pic, 1902, Mat. Long. 4 (1): 32¹, Fig. 1; Gressitt, 1942, Spec. Publ.
 Lingnan N. H. Surv. & Mus. 7:10²; 1942, ibid. 8: 40.

Moderately long; prothorax and scutellum reddish ochraceous; ventral surfaces of body almost entirely reddish or yellow; head, antennae, elytra and legs largely black. Head black between and behind eyes, remainder yellow; antennae not reaching elytral apices, black, with bases of third to seventh segments ringed with whitish cinereous, the third having a brush of dark hairs apically; prothorax

short, very broad, distinctly tuberculate at sides; elytra a little broader than prothorax, very long, slightly constricted at middle, subangulately rounded at apices, which are narrowly reddish, deeply and rather closely punctured and with traces of feeble costae: legs black except for yellow femora and bases of tibiae of anterior pair and bases of femora and tibiae of middle pair: ventral surfaces of body vellow with sides of breast largely black. Length 17-21 mm.; breadth 3.8-5.

Three specimens (Lingnan Nat. Hist. Mus.) were taken in the Western Hills, alt. 2100 meters, near Kunming, Yunnan Prov., July 7,

1940, by the writer.

Distribution: "Szechuan" ("Mongtze"); Yunnan (Western Hills2. near Kunming).

5. **Linda femorata** (Chevrolat)

Amphionycha femorata Chevr., 1852, Rev. Zool. (2) 4: 4181.

Lingnan N. H. Surv.; Mus. 7: 108; 1942, ibid 8: 41.

Ventral surfaces, prothorax, scutellum, head and femora largely testaceous; elytra and antennae black, latter clothed with silvery gray pubescence on bases of fourth to last segments; head with a black band across vertex; legs black except for basal two-thirds of middle and hind femora and basal fourth-fifths of anterior pair. Antennae four-fifths as long as body; scape fully as long as third segment; prothorax nearly twice as broad as long, swollen at sides and on disc; elytra deeply and subseriately punctured on basal two-thirds. Length 17-20 mm.; breadth 4.2-5.

Two specimens are in the Lingnan Nat. Hist. Mus. from southwestern China: Shui-tang, alt. 6800-8000 feet, pine mountains 20 miles east of Yunnan-fu (Kunming), Yunnan, Aug. 28, 1934, E. R. Tinkham, and Kweiyang, alt. 1060 meters, Kweichow, July 12, 1940, J. L. Gressitt.

Distribution: Kiangsu (Shanghai 1,3); Chekiang (T'ien-mu Shan6); Kiangsi (Hong Shan4); Fukien; Kwangtung (Tai-yong5); Kwangsi (Ling-yuen⁷); Kweichow (Kweiyang⁸); Yunnan (Shui-tang⁸); Formosa (Kosempo²).

6. Linda fraterna (Chevrolat)

Anphionycha fraterna Chevr., 1852, Rev. Zool. (2) 4: 4191.

Anphonycha fraterna Chevr., 1852, Rev. Zool. (2) 4: 419.

Oberea seminigra Fairmaire, 1887, Ann. Soc. Ent. Belg. 31: 1342.

Linda fraterna, Gahan, 1894, Trans. Ent. Soc. London: 486; Savio, 1929, Notes d'Ent. Chinoise 1: 5-8, figs. 1-73; Liu, 1934, Lingnan Sci. Jl. 13: 6584; Gressitt, 1937, ibid. 16: 6205; 1939, ibid. 18: 1085; 1939, Notes d'Ent. Chinoise 6: 1277; 1940, Lingnan Sci. Jl. 19: 198; 1942, ibid, 20: 2149; 1942, Spec. Publ. Lingnan N. H. Surv. & Mus. 1: 54, fig. 4019; ibid. 8: 41.

Linda seminigra, Fairmaire, 1895, Ann. Soc. Ent. Belg. 39: 188.

Linda seminigra var. subtestacea Pic, 1906, Mat. Long. 6 (1): 1711. Linda seminigra var. luteonotata Pic, 1907, Mat. Long. 6 (2): 2412.

Reddish testaceous; elytra entirely black; occiput partly black; antennae and legs largely black; antennae testaceous on basal half of fourth, and extreme bases of fifth to eighth segments; metaepisternalmetasternal suture black; legs testaceous on basal portions of femora. Prothorax one-half again as broad as long, strongly swollen above, finely punctured; elytra with deep, subregular punctures and with three

feebly raised longitudinal lines. Length 9.5-17 mm.; breadth 1.9-4.5. One specimen (Lingnan Nat. Hist. Mus.) was taken at Lung-pinghui, Lien Distr., N. Kwangtung, May 18-20, 1934, by F. K. To. The Musée Heude has specimens from Chusan and Mo-kan Shan in Chekiang, and from Fukien.

Host plants: Prunus japonica Thunb.⁸, Cydonia japonica Pers.³ (Shanghai); Rubus sp.^{9,10} (Kwangtung).

Distribution: Kiangsu (Shanghai^{1,3}, Wou-si³, Tcheng-kiang³, Nanking4; Chekiang2 (T'ien-mu Shan7, Chusan, Mo-kan Shan); Kiangsi (Hong Shan⁵); Fukien; Kwangtung (White Cloud Mt.⁶, near Canton, Taam-yuen-tung⁶, Lung-ping-hui, Yao Shan⁶, Loh-kung⁸, Waichow⁹); Yunnan^{11,12}; Formosa.

7. Linda gibbosicollis Pic

Linda gibbosicollis Pic, 1915, Mel. Exot. Ent. 13: 121; Gressitt, 1942, Spec. Publ. Lingnan N. H. Surv. & Mus. 8: 41.

Elongate; opaque; black; head partly, and thorax, scutellum and femora more or less, testaceous; elytra testatceous, marked on disc with black, largely testaceous posteriorly; antennae black, third and following segments ringed with gray basally; prothorax short, strongly tuberculate on disc. Length 19 mm. (After Pic).

Distribution: Tibet1.

8. Linda gracilicornis Pic

Linda gracilicornis Pic, 1907, Mat. Long. 6 (2): 241; Gressitt, 1942, Spec. Publ. Lingnan N. H. Surv. & Mus. 7: 102; 1942, ibid. 8: 41.

Moderately narrow and elongate; testaceous, with mouth-parts, eyes, antennae, elytra, tibiae (except at bases) and tarsi, black; head testaceous, quite deeply grooved along middle; antennae long and slender, nearly reaching elytral apices, entirely black; prothorax testaceous, short, moderately broadened, swollen at sides, narrowed and weakly constricted anteriorly and posteriorly, raised, but not gibbous, on center of disc; scutellum testaceous; elytra black, broader than prothorax, slightly constricted towards middle, obliquely emarginate apically with external angles prominent, discs lacking distinct costae, strongly and irregularly punctured; ventral surfaces of body testaceous, chest marked with black; femora and bases of tibiae testaceous, remainder of legs black. Length 20 mm. (After Pic).

Two specimens (University of Nanking Coll. of Agric. and Lingnan Natural History Museum) were taken at Chengtu, Szechuan in June, 1938, and in upper Kwan-hsien, near the Szechuan-Sikang border, by the University of Nanking. These do not agree completely with Pic's description, and are referred tentatively to this species. the ventral surfaces of the body entirely pale, and the femora largely black. The Chengtu specimen measures 17.5 mm. in length and 3.5

in breadth.

Distribution: Yunnan¹: Szechuan².

9. Linda macilenta Gressitt, new species

Male.—Head, prothorax and ventral surfaces largely pale and elytra black; head reddish, pitchy black on vertex and upper part of frons, except median line, and front of antennal support, as well as side of neck behind upper portion of eye; labrum, mandibles, margins of genae, and distal palpal segments pitchy; antennae black with basal fifth or so of third and following segments ringed with pale hairs; prothorax and scutellum testaceous; ventral surfaces of body reddish testaceous; legs black with coxae and basal two-thirds to four-fifths of femora testaceous; tarsal claws reddish. Head, thorax and abdomen clothed with thin silvery buff pubescence and some flying hairs; elytra with short dull

reddish hairs; antennae without any tufts of hairs.

Head as broad as prothorax, convex anteriorly, medially grooved, deeply and somewhat closely punctured. Antennae nearly as long as body, rather slender; scape about as long as third segment; third to tenth gradually decreasing in length, subcylindrical; eleventh about as long as sixth. Prothorax nearly as long as broad, subrectangular, very feebly swollen laterally, moderately and subevenly convex on disc; surface rather sparsely and not very deeply punctured. Scutellum relatively small, slightly broader than long, subtrapeziform. Elytra narrow, obliquely subemarginate-truncate apically; disc of each with six subregular rows of deep squarish punctures at middle, the fifth row from suture uneven and almost a double row, punctures somewhat confused at base and towards apex, much finer near the latter. Ventral surfaces irregularly punctured. Posterior femora not quite reaching to apex of second abdominal segment. Length 14 mm.; breadth 2.55.

Holotype, male (No. 58,338 U. S. Nat. Mus.) Mt. Omei, 10,000 ft.,

Szechuan Province, W. China, July, 1936, D. C. Graham.

Differs from *L. femorata* (Chevr.) in being more narrow with the prothorax less swollen laterally and the antennae ringed with pale hairs from third instead of fourth segment, the ventral surface without any black marking.

10. Linda major Gressitt

(Fig. 2)

Linda major Gress., 1942, Spec. Publ. Lingnan N. H. Surv. & Mus. 3: 81; 1942, ibid. 8: 41.

Female.—Large; subcylindrical; relatively broad; pronotal disc subevenly swollen. Body orange testaceous to reddish ochraceous in dried
specimen (probably pinkish red in life); labrum, eyes, antennae, elytra,
tarsi and distal two-thirds of tibiae black: head reddish ochraceous,
slightly paler above and darker on clypeus and palpi; mandibles reddish
on outer faces, pitchy black below and distally; antennae entirely black,
finely clothed with silvery pubescence basally and with closer and
thinner dull golden brown pubescence distally, with a few fine subperpendicular hairs below: pale on scape and blackish beyond; prothorax
orange testaceous with a slight ochraceous tinge; scutellum ochraceous;
elytra black except at extreme edge bordering scutellum, which is
ochraceous; ventral surfaces of body orange testaceous with a slight
ochraceous tinge; femora and bases of tibiae reddish ochraceous,

remainder of legs black with heavy dull golden brown hairs; tarsal claws pitchy red. Body surfaces largely clothed with pale golden buff pubescence; elytra thinly clothed with reddish black pubescence and with a few fine suberect black hairs basally.

Head not quite as broad as prothorax, coarsely and densely rugosepunctate, depressed and grooved between antennal insertions and slightly raised between superior eve-lobes. Antennae about four-fifths as long as body, moderately stout, slightly compressed; scape not quite as long as third segment; third a little longer than fourth; following segments gradually decreasing in length. Prothorax slightly more than one-third again as broad as long, heavily and somewhat closely punctured; sides broadly and bluntly swollen; disc evenly convex except for an upward prolongation of each lateral swelling near posterior margin. Scutellum broader than long, declivitous, slightly emarginate-truncate apically, minutely punctured. Elytra broadest at base, feebly narrowed in central portion and very slightly broadened preapically; apices narrowed and obliquely subemarginate-truncate; surface of each deeply impressed with subrounded punctures arranged in about ten irregular longitudinal rows, the punctures becoming smaller and more irregular posteriorly, but extending as far as apices. Ventral surfaces of body heavily punctured at sides of metathorax and first abdominal segment, much more finely punctured towards apex of abdomen. Length 22.4 mm.: breadth 4.8.

The holotype, a female, is in the collection of the College of Agriculture, University of Nanking. This species was rather briefly diagnosed

in the original description.

Differs from *Linda atricornis* Pic in being larger and of much stouter build, in having the head and pronotum more densely punctured, the elytra with less regular puncturation and with round instead of square punctures, and in having the sutural borders of the elytra, and the femora entirely, ochraceous. This is probably the largest species of the genus.

Distribution: Anhwei (Hwang Shan1).

11. Linda nigriventris Heller

Linda nigriventris Heller, 1923, Ent. Blätter 19: 741; Gressitt, 1942, Spec. Publ. Lingnan N. H. Surv. & Mus. 8: 41.

Black; prothorax, scutellum, apical fifth and lateral margins of elytra, femora, mesosternum, half of middle femora, base of posterior coxae, and last abdominal segment entirely, testaceous. Body extremely narrow; head black, dark brown behind vertex, clothed with rows of black, suberect hairs, coarsely seriate-punctate, a row of large punctures fringing superior eye-lobes; third to eighth antennal segments briefly white basally; prothorax coarsely punctured except for a series of swellings forming an arched transverse row, outer posterior tubercle clothed with fine white hairs; scutellum yellow, impunctate; elytra coarsely punctured between three impunctate costae, outermost costa joining external margin, punctures disappearing before apices, black, brownish along suture, becoming testaceous posteriorly, joining testaceous marginal stripes before apices, leaving black portion of each rounded behind; ventral surfaces black, pro- and mesosterna, entire

anterior, and bases of middle and posterior, femora, and last abdominal segment, testaceous. Length 19 mm.; breadth 4.5. (After Heller). *Distribution:* Szechuan (Kwan-hsien¹); Sikang (Ta-tsien-lu¹).

12. Linda nigroscutata (Fairmaire)

(Fig. 3)

Miocris nigroscutatus Fairmaire, 1902, Bull. Soc. Ent. France: 245¹.

Linda nigroscutata, Beeson & Bhatia, 1939, Ind. For. Rec., Ent. (n. s.) 5: 130²;

Gressitt, 1942, Spec. Publ. Lingnan N. H. Surv. & Mus. 8: 40.

Body bright orange-red; antennae, eyes, labrum and legs black; pronotum with four small round black spots in form of a trapeze on disc; elytra with an elongate scutum-shaped black mark behind scutellum, reaching to end of basal quarter or basal third of suture, and the humeri generally also marked with a black spot; metathorax and abdomen largely black, but with posterior border of each sternite, and most of last abdominal sternite, orange. Antennae four-fifths as long as body in male and two-thirds as long as body in female; prothorax strongly swollen at each side and on center of disc; elytra broadened preapically and rounded apically, impressed with numerous close, irregular punctures, and with three feeble longitudinal costae on each. Length 15.8–19.6 mm.; breadth at humeri 3.5–4.4.

Numerous specimens (Tsing-hua Univ.; Lingnan Nat. Hist. Mus.) were reared from apple at Kunming (Yunnan-fu), alt. 6000 feet, Yunnan Prov., S. W. China, May and June, 1940, by Mr. Ying-tou Mao.

Host plant: Pyrus malus² (Apple).

Distribution: Yunnan (Mouy-tse¹ and Kunming); Assam².

13. Linda pratti Pic

Linda pratti Pic, 1902, L'Echange 18 ("17"): 31; Gressitt, 1942, Spec. Publ. Lingnan N. H. Surv. & Mus. 7: 102; 1942, ibid. 8: 41.

Dull, clothed with a yellow and gray pubescence (much reduced on pale areas); black and testaceous; most of anterior portion of body and ventral surfaces testaceous: head broad, marked with black on antennal supports and behind eyes; vertex grooved; frons convex; eyes black; mandibles and apex of labrum dark; antennae not reaching elytral apices, attenuated, black, more or less testaceous at bases of fourth, fifth and sixth segments; prothorax entirely testaceous, short, margins sinuous, moderately swollen below middle of each side, behind which there is a groove, disc with a feeble longitudinal carina; scutellum broad, with testaceous pubescence; elytra black, slightly broader than prothorax, weakly constricted at middle, emarginate apically, with external angles prominent, surfaces with strong punctures subregularly arranged in longitudinal series, lacking distinct costae: wings dark: pygidium testaceous; ventral surfaces of body entirely testaceous; legs black with bases of femora, and sometimes bases of tibiae, more or less testaceous. Length 17 mm. (After Pic).

Distribution: N. Kiangsi (Kiukiang¹); Kiangsu (Nanking²).

There is little in the original description of this form to separate it from *fraterna* and it may possibly prove to be a subspecies or synonym of the latter.

14. Linda signaticornis Schwarzer

Linda signaticornis Schw., 1925, Ent. Blätter 21: 1541.

Head, prothorax, scutellum and ventral surfaces reddish yellow, except for a blackish area on part of metasternum; elytra and legs black with basal half of fourth segment reddish yellow and extreme base of fifth grayish. Head closely and strongly punctured; pronotum finely and sparsely punctured; both with fine grayish pubescence; scutellum truncate apically, transverse; elytra closely and subregularly punctured, obliquely truncate apically. Length 13 mm.

Several specimens (California Academy of Sciences) were taken in southern Formosa by the writer.

Distribution: Formosa¹ (Kosempo, Kankau, Sokutsu, Kusukusu).

15. Linda tricostata Gressitt, new species

Male.—Dorsal surfaces largely pale, antennae black and ventral surfaces pitchy: head and prothorax pale reddish ochraceous, mouth-parts and prosternum pitchy black; antennae completely black, non-annulated; scutellum ochraceous; elytra orange testaceous, pitchy black on humeri; ventral surfaces largely pitchy, but with scattered areas of reddish brown or ochraceous; abdomen largely pitchy brown; legs blackish, anterior femur largely testaceous, the other femora pitchy. Dorsal surface clothed with thin pale pubescence and erect brownish to pitchy hairs; ventral surfaces with reddish to golden pubescence; antennae with close pitchy pubescence.

Head not quite as broad as prothorax, feebly convex in front, slightly concave between antennal insertions, grooved on vertex and occiput, rather coarsely and in large part closely punctured. Antennae not quite as long as body, moderately stout, most of segments slightly expanded ectoapically; scape not quite as long as third segment; third distinctly longer than fourth; fourth to tenth gradually decreasing in length, last cylindrical and suddenly acuminate distally. Prothorax nearly one-third again as broad as long, narrower at apex than at base, distinctly and evenly swollen at sides; disc with four feeble swellings; one on each side of center, one at center and one behind center; surface coarsely and in part closely punctured. Scutellum trapeziform, slightly swollen in center, truncate posteriorly. Elytra narrowest somewhat behind middle, apex of each gradually and obliquely narrowed externally and suddenly oblique internally, forming a rounded-obtuse angle; surface deeply, coarsely and closely punctured in about ten irregular rows divided in four areas by three costae, the punctures mostly separated by less than their diameters. Ventral surface somewhat heavily punctured at sides of hind thorax and first abdominal segment. Posterior femur reaching just beyond end of second abdominal sternite. Length 15.3 mm.; breadth 3.3.

Holotype, male (No. 58,339 U. S. Nat. Mus.) Kunming (Yunnan-fu), Yunnan Prov., S. W. China, Aug. 1, 1944, Dr. Liu Chung-lo (C. L. Liu) (Exper. No. 2218).

Differs from L. nigroscutata (Fairm.) in lacking the dark mark behind scutellum and in having the pronotum entirely pale.

BIBLIOGRAPHY

Aurivillius, C. 1912. Coleopterorum Catalogus. Cerambycinae. Schenkling and Junk 39: 1-574 (ref. p. 290).
1923. Coleopterorum Catalogus. Lamiinae, second part. Schenkling and

Junk 74: 323-704 (ref. p. 539).

Beeson, C. F. C. and Bhatia, B. M. 1939. On the biology of the Cerambycidae (of India, Burma and Ceylon) (Coleopt.) Ind. For. Rec. (n. s.) Ent. 5 (1) 1-235, 17 text figs., 8 pls. (ref. p. 130).

Payma Mag. Zool. (2) 4: 415-419.

Chevrolat, A. 1852. Dix coléoptères nouveaux. Revue Mag. Zool. (2) 4: 415-419. Fairmaire, Léon. 1887. Coléoptères de l'intérieur de la Chine. Ann. Soc. Ent. Belg. 31: 87-136 (ref. p. 134).

1902. Descriptions de Coléoptères de Mouy-tse. Bull. Soc. Ent. France 1902: 243-245.

Gahan, C. J. 1894. Supplemental list of the Longicorn Coleoptera obtained by Mr. J. J. Walker, R. N., F. L. S., during the voyage of H. M. S. "Penguin," under the command of Captain Moore, R. N. Trans. Ent. Soc. London

1894: 481-488 (ref. p. 486).

Gressitt, J. L. 1937. New longicorn beetles from China, IV. Lingnan Sci. Jl. 16: 595-621, pls. 19-20 (ref. p. 620).

1939. A Study of the longicorn beetles of Kwangtung Province, S. China. Lingnan Sci. Jl. 18: 1-122, pls. 1-3 (ref. pp. 98, 107-08).
1939. A collection of longicorn beetles from T'ien-mu Shan, East China. Notes

d'Ent. Chinoise 6: 81-132 (ref. pp. 126-7).

1940. Supplement to "A study of the longicorn beetles of Kwangtung Province, S. China." Lingnan Sci. Jl. 19: 1-20, pl. 1 (ref. p. 19).

1940. Coléoptères longicornes chinois du Musée Heude. Notes d'Ent.

1940. Coléoptères longicornes chinois du Musee Fieude. Notes d'Ent. Chinoise 7: 171-202, pls. 1-5 (ref. p. 197).
1942. Destructive long-horned beetle borers at Canton, China. Spec. Publ. Lignan N. H. Surv. & Mus. 1: 1-60, 44 text figs. (ref. p. 54, fig. 40).
1942. Second supplement to "A study of the longicorn beetles of Kwangtung Province, S. China. Lingnan Sci. Jl. 20: 205-214, pl. 8 (ref. p. 214).
1942. New longicorn beetles from China, X. Spec. Publ. Lingnan N. H. Surv.

& Mus. 7: 1-10, pl. 1 (ref. p. 10).

1942. A provisional synopsis of the longicorn beetles of China, II—Subfamily

1942. A provisional synopsis of the longicorn beetles of China, II—Subfamily Lamiinae. Spec. Publ. Lingnan N. H. Surv. & Mus. 8: 1-44 (ref. p. 40).

Heller, K. M. 1923. Die Coleopteren-ausbeute der Stötznerschen Sze-Tschwan-Expedition 1913-1915. Ent. Blätter 19: 61-79, 3 figs. (ref. p. 74).

Lacordaire, T. 1872. Histoire naturelle des insectes. Genera des coléoptères. Longicornes. Paris. 9 (part 2): 410-930 (ref. pp. 851, 870).

Liu, Gaines (K. C.). 1934. Catalogue of the phytophagous beetles of China. Lingnan Sci. Jl. 13: 109—133, 239-250, 633-660 (ref. pp. 121, 657-8).

Matsushita, M. 1933. Beitrag zur Kentniss der Cerambycidon des Japanischen Reichs. Jl. Fac. Agr. Hokkaido Imp. Univ. 34: 157-445, pls. 1-5 (ref. pp. 416, 424-5).

Pic. M. 1902. Espèces ou variétés presumées pouvelles proposant de China.

Pic, M. 1902. Espèces ou variétés presumées nouvelles provenant de Chine. Matériaux Longicornes 4 (1): 28-32 (ref. p. 32).
1902. Coléoptères asiatiques nouveaux. L'Echange 18 ("17"): 1-3 (ref. p. 3).
1906. Nouveaux longicornes de Chine et du Japon. Matériaux Longicornes

6 (1): 16-18 (ref. p. 17). 1907. Sur divers longicornes de la Chine et du Japon. Matériaux Longicornes

6 (2): 20-25 (ref. pp. 24-5).

1915. Nouveautés de diverses familles. Mélanges Exotico Entomologiques 13: 2–13 (ref. p. 12). 1924. Nouveautés diverses. Mélanges Exotico Entomologiques 41: 1–32

(ref. p. 19).

Savio, A. 1929. Longicornes Chinoise 1 (1): 1-9, 1 pl. Longicornes de bas Yang-tse. Genre: Linda. Notes d'Ent.

Thomson, J. 1864. Systema Cerambycidarum, ou exposé de tous les genres compris dans la famille des Cerambycides et familles limitrophes. Mem. Soc. Roy. Sci. Liége 19: 1-578 (ref. pp. 122, 400).

Wu, C. F. 1937. Catalogus Insectorum Sinensium. Peiping 3: 1-1312 (ref. pp. 700, 770-2).