Revision of the genus *Loxoncus* Schmidt-Göbel, 1846 from the Palaearctic, the Oriental Region and Australia (Coleoptera: Carabidae: Harpalini)

Ревизия рода Loxoncus Schmidt-Göbel, 1846 Палеарктики, Ориентальной области и Австралии (Coleoptera: Carabidae: Harpalini)

В.М. Катаеч Б.М. Катаев

Zoological Institute, Russian Academy of Sciences, Universitetskaya nab., 1, St.Petersburg 199034 Russia. E-mail: blaps@zin.ru Зоологический институт РАН, Университетская наб., 1, Санкт-Петербург 199034 Россия. E-mail: blaps@zin.ru

KEY WORDS: Coleoptera, Carabidae, *Loxoncus*, Palaearctic, Oriental Region, Australia, taxonomy, distribution. КЛЮЧЕВЫЕ СЛОВА: Coleoptera, Carabidae, *Loxoncus*, Палеарктика, Ориентальная область, Австралия, таксономия, распространение.

ABSTRACT. This paper deals with the taxonomy of 18 species of the genus Loxoncus Schmidt-Göbel, 1846 occurring in the Palaearctic, the Oriental Region and Australia. All known species are described and the key for their determination is presented. The species are arranged in the two subgenera, one of which, Xoloncus subgen.n., is erected here for L. microgonus (Bates, 1886) (the type species of the new subgenus) and for L. gynuis sp.n., described newly from Indonesia (Lombok, Java and Sulawesi). The species of the nominative subgenus are arranged in 3 species groups and 4 subgroups. Within *Loxoncus* s. str., the three species are newly described: L. schmidti sp.n. from Nepal, L. hiekei sp.n. from Thailand and L. malaisei sp.n. from Burma. Loxoncus elevatus Schmidt-Göbel, 1846 is treated as a polytypical species with three subspecies: L. e. elevatus from the mainland Southeast Asia, L. e. manilensis ssp.n. from Philippines and L. e. javanensis ssp.n. from Java. Loxoncus incisus Andrewes, 1926 from Sumatra and L. politus Schauberger, 1937 from New Guinea are considered the two separate species, not synonyms of L. marginatus Macleay, 1888. The geographical range of the latter seems to be restricted to Australia. The following new synonymies are proposed: Loxoncus s.str., = Neolissus Landin, 1955, syn.n.; Loxoncus discophorus (Chaudoir, 1852), = Anoplogenius boettcheri Jedlička, 1935, syn.n.; = A. philippinus Jedlička, 1936, syn.n.; Loxoncus planicollis (Bates, 1892), = Coleolissus (Neolissus) unipunctatus Landin, 1955, syn.n.; Loxoncus circumcinctus (Motschulsky, 1857), = Anoplogenius impubis Kolbe, 1886, syn.n.; and Loxoncus microgonus (Bates, 1886), = Anoplogenius andrewesi Jedlička, 1935, syn.n. Lectotypes are designated for Anoplogenius patinalis Bates, 1892, A. nagpurensis Bates, 1892, A. planicollis Bates, 1892, A. renitens Bates, 1886, A. microgonus Bates, 1886 and Haplaner marginatus Macleay, 1888.

РЕЗЮМЕ. В статье рассмотрена таксономия 18 видов рода Loxoncus Schmidt-Göbel, 1846, встречающихся в Палеарктике, Ориентальной области и Австралии. Составлен ключ для определения видов и подвидов. Для каждого валидного таксона приводится морфологическое описание. Представители Loxoncus разделены на два подрода, один из которых, Xoloncus subgen.n., образован для L. microgonus (Bates, 1886) (типовой вид нового подрода) и для L. gynuis sp.n., описанного из Индонезии (Ломбок, Ява и Сулавеси). Представители номинативного подрода, в свою очередь, объедены в 3 видовые группы и 4 подгруппы. В пределах *Loxoncus* s. str. описаны три новых вида: L. schmidti sp.n. из Непала, L. hiekei sp.n. из Таиланда и *L. malaisei* sp.n. из Бирмы. Loxoncus elevatus Schmidt-Göbel, 1846 рассматривается как политипный вид с тремя подвидами: L. e. elevatus из материковой Юго-Восточной Азии, L. e. manilensis ssp.n. из Филиппин и L. e. javanensis ssp.n. с острова Ява. Loxoncus incisus Andrewes, 1926 из Суматры и *L. politus* Schauberger, 1937 с Новой Гвинеи трактуются двумя самостоятельнвыми видами, а не синонимами L. marginatus Macleay, 1888, как это считалось ранее. Ареал этого последнего вида, видимо, ограничен Австралией. Предложены следующие новые синонимы: Loxoncus s.str., = Neolissus Landin, 1955, syn.n.; Loxoncus discophorus (Chaudoir, 1852), = Anoplogenius boettcheri Jedlička, 1935, syn.n.; = A. philippinus Jedlička, 1936, syn.n.; Loxoncus planicollis (Bates, 1892), = Coleolissus (Neolissus) unipunctatus Landin, 1955, syn.n.; Loxoncus circumcinctus (Motschulsky, 1857), = Anoplogenius impubis Kolbe, 1886, syn.n. и Loxoncus microgonus (Bates, 1886), = Anoplogenius andrewesi Jedlička, 1935, syn.n. Для Anoplogenius patinalis Bates, 1892, A. nagpurensis Bates, 1892, A. planicollis Bates, 1892, A. renitens Bates, 1886, A. microgonus Bates, 1886 и Haplaner marginatus Macleay, 1888 обозначены лектотипы.

Introduction

The genus *Loxoncus* Schmidt-Göbel, 1846 comprises 30 described species distributed mostly in the subtropics and tropics of the eastern hemisphere: 15 species in the Oriental Region, 12 species in the Ethiopian Region including Madagascar, 2 species in the southern Palaearctic and one in northern Australia. The species live in wet habitats near the water, usually along seashores and in marshes. In certain localities they are rather numerous. All members are fully winged and capable of flight.

The present paper deals with the taxonomy of the species occurring in the Palaearctic, the Oriental Region and Australia. Particular attention has been given to the most numerous East Asian and Oriental taxa which up to now have not been properly studied. There are only the separate descriptions of the species and the key provided by Schauberger [1938] to the 10 species known to him from the Oriental Region. Another available key published by Jedlička [1935] includes only the species from the Palaearctic Asia and Philippines and is now out of date. The purpose of this paper is to revise all the species known from the Palaearctic, the Oriental Region and Australia and to provide the key for their determination. Because the fauna of the Oriental Region is still poorly understood and a number of species are probably not described, this treatment will hopefully be a basis for the further investigations.

The following abbreviations were used herein for identification of deposition of the examined material: ANIC — Australian National Insect Collection, Canberra, Australia; ISEAN — Institute of Systematics and Ecology of Animals, Siberian Branch, Russian Academy of Sciences, Novosibirsk, Russia; MCSNG — Museo Civico di Storia Naturale, Genova, Italy; MPU — Moscow Pedagogical University, Moscow, Russia; MNHN-Muséum National d'Histoire Naturelle, Paris, France; MNHUB — Museum für Naturkunde an der Humboldt-Universität, Berlin, Germany; MZLU — Museum of Zoology, Lund University, Lund, Sweden; NHML—The Natural History Museum, London, Great Britain; NME-Naturkundemuseum Erfurt, Germany; NMP — National Museum Prague, Czech Republic; SMNHS — Swedish Museum of Natural History, Stockholm, Sweden; TMB Természettudományi Múzeum, Budapest, Hungary; ZISP Zoological Institute, Russian Academy of Science, St. Petersburg, Russia; ZSBSM — Zoologische Sammlung des Bayerischen Staates, München, Germany; cBel -Coll. Dr. I.A. Belousov, St.Petersburg; cKAB — Coll. Dr. O.N. Kabakov, St.Petersburg, Russia; cPUCH — Coll. Dr. A.V. Puchkov, Kiev, Ukraina; cSCHM—Coll. Dr. J. Schmidt, Rostok, Germany; cSHIL — Coll. Dr. V.G. Shilenkov, Irkutsk, Russia; cWR — Coll. Dr. D.W. Wrase, Berlin, Germany.

Measurements were taken as follows: body length from anterior margin of clypeus to elytral apex; width of head as maximum linear distance across head, including compound eyes (WHmax), and as minimum linear distance across neck constriction just behind eyes (WH-

min); length of pronotum (LP) along its median line; length of elytra (LE) from basal ridge in scutellar region to apex of sutural angle; width of pronotum (WP) and elytra (WE) at their broadest place.

Genus Loxoncus Schmidt-Göbel, 1846

Loxoncus Schmidt-Göbel, 1846: plate 3, figure 9, on back cover. Type species: Loxoncus elevatus Schmidt-Göbel, 1846, by monotypy.

DIAGNOSIS. Representatives of the genus *Loxoncus* are easily distinguished from other Stenolophina by the combination of the following characters: mentum and submentum fused at least laterally, apical stylomere of female genitalia flat and with numerous spines along single outer margin, elytra weakly sinuate before apex and lacking scutellar striole, and abdominal sternites glabrous (only with obligatory setae).

DESCRIPTION. Body small to medium size: length 5.5–9.7 mm (in Asian and Australian species), glabrous. Hind wings fully developed.

Head with rather large, hemispherical eyes very narrowly separated ventrally from buccal fissures. Tempora very short, abruptly (almost at 90°) descending to neck. Clypeus often with small incision on each side of anterior margin and base of labrum sometimes visible (Fig. 1). Clypeo-ocular line usually reaching supraorbital furrow, more or less strongly deepened at clypeus. Left mandible not truncate at apex, rather sharp. Mentum with two medial seta, either edentate or with small obtuse tooth medially, fused with submentum laterally or completely; submentum usually with two lateral setae on each side. Epilobes rather narrow, hardly widened anteriorly. Ligular sclerite narrow, usually more or less widened anteriorly, truncate or widely rounded at apex. Paraglossae narrow, much extended beyond ligular sclerite, each separated from latter by deep notch. Penultimate labial palpomere with two long setae at anterior margin and 1–2 apical setae. Antennae comparatively long, densely pubescent from 3rd antennomere on; 1st antennomere with one short seta ventrally and one long seta dorsally; 2nd antennomere with one short ventral seta.

Pronotum with one lateral seta on each side before middle. Apical bead complete, not interrupted medially, separated from discal portion by deep furrow. Basal margin not bordered and not ciliate along basal edge. Basal angles obtuse, usually rounded at apex, rarely sharp. Punctation, if present, restricted usually to pronotal base or only basal foveae.

Elytra weakly sinuate before apex. Humeri rounded, without denticle at apex. Striae complete, impunctate; scutellar striole missing. Basal pore present, situated within 2nd

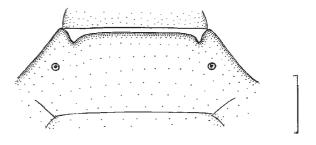


Fig. 1. Loxoncus circumcinctus (Japan, syntype), clypeus and base of labrum. Scale $=0.2\,\mathrm{mm}$.

Рис. 1. Loxoncus circumcinctus (Япония, синтип), наличник и основание верхней губы. Масштаб 0,2 мм.

interval at base of 2nd stria. Third interval in apical third with one discal pore at 2nd stria. Marginal series widely interrupted medially, consisting of 6 (5+1) humeral and 8 (4+2+2) apical setigerous pores.

Anal sternite along apical margin with one pair of setigerous pores in male and two pairs in female (outer one somewhat removed from apical margin). Anterior tibia with three (more rarely 1–2) apical spines on outer margin and one ventroapical spine under apical margin; spines on outer margin usually forming single row with spines on ventral surface. Metafemur with two setigerous pores at hind margin. Tarsi glabrous dorsally. Meta- and mesotarsi (usually only 1st–3rd tarsomeres) with distinct lateral furrow on each side. Fifth tarsomere without setae underneath; 4th protarsomere bilobed or deeply emarginate at apex. Male pro- and mesotarsi either dilated and with adhesive vestiture ventrally or not dilated and lacking such vestiture.

Median lobe of aedeagus arcuate, either with or without apical capitulum; apical orifice in dorsal position, usually extending to basal bulb.

Female genitalia: hemisternite with distal and lateral margins membranous, without any spines or setae; basal stylomere (Figs 123, 132, 135) membranous along its inner margin and represented in fact by two separate sclerites (dorsal and ventral), its dorsal sclerite with group of short stout spines apically; apical stylomere flat, more or less arcuate, sharp at apex, bearing numerous spines along single outer margin and one setigerous pore on inner margin before apex.

REMARKS. As stated in my preceding paper [Kataev, 1997], Loxoncus is most closely related to the genus Hemiaulax Bates, 1892 with a single species *H. dentipennis* (Bates, 1892) from Burma. Within Stenolophina, both genera form together a discrete monophyletic unit on the basis of clearly apomorphic condition of 1) apical stylomere of female genitalia (supplied with a row of numerous spines on the single outer margin) and 2) labium (with mentum and submentum fused at least laterally). By the same characters, these taxa are well distinguished from the other genera of Stenolophina, which, probably all, have more thick apical stylomere with separate dorsal and ventral outer margins and with only one spine on ventral one. Loxoncus markedly differs from Hemiaulax in having the elytra weakly sinuate before apex and without scutellar striole, the glabrous ventral surface of body and the greater number of spines along outer margin of apical stylomere. Besides, basal stylomere of Hemiaulax bears a row of thin setae along apical margin as opposed to that of Loxoncus, which supplies with several small stout spines in apical portion of ventral surface. According to our data, the elytra lacking scutellar striole is characteristic of all species of Loxoncus. As for Anoplogenius (= Loxoncus) szetschuanus Jedlièka, 1935 described from Sichuan, China as a single representative of the genus possessing a distinct scutellar striole, it indeed belongs to the genus Stenolophus Dejean, 1821 (see Kataev, 2002).

The most members of the genus *Loxoncus* are very similar to each other in appearance and in some cases their determination is possible only on the basis of the male genitalia. Interestingly, the structural details of the female genitalia of *Loxoncus* also provide the very safe characters to separate both species and species groups.

In the present paper, the Eurasian and Australian species are united in several species groups and subgroups and two subgenera, one of which is described as new. The characteristics of all these supra-specific taxa are given below. For convenience of determination, the key to the species and subspecies are prepared without regard for belonging of them to subgenera and species groups.

KEY TO SPECIES AND SUBSPECIES

- Specimens from East Asia, Oriental Region and Australia

- 5. Sutural angle of each elytron rather sharp at apex (as in Figs 37–40). Pronotum (Figs 6–7) narrower (WP/LP = 1.36–1.44); in male largely brown, with narrow brownish yellow or reddish yellow lateral margins; in female only medially brown, with very broad reddish yellow lateral margins. Larger: body length 6.9–8.4 mm *L. discophorus*

- Microsculpture on frons and vertex obsolete. Median lobe of aedeagus (Figs 84–85) with large apical capitulum strongly protruding dorsally L. hiekei sp.n.
- Microsculpture on head distinct throughout. Median lobe of aedeagus either lacking apical capitulum or latter much smaller and only weakly protruding dorsally
- 9. Median lobe of aedeagus (Figs 86–87) with small apical capitulum weakly protruding dorsally
- Lateral beads of pronotum narrow up to basal angles (Fig. 23); terminal lamella of median lobe moderately short and notably curved dorsad (Figs 80–81). Philippines
- 11. Sutural angle of each elytron narrowly rounded at apex (Fig. 41); terminal lamella of median lobe moderately

long, weakly curved dorsad (Figs 78-79). Mainland South-

east Asia L. elevatus elevatus Sutural angle of each elytron rather sharp at apex; terminal lamella of median lobe rather long and notably curved dorsad (Figs 83–83). JavaL. elevatus javanensis ssp.n. 12. Sutural angle of each elytron narrowly rounded at apex (as Sutural angle of each elytron rather sharp at apex (as in 13. Male pro- and mesotarsi not dilated (Figs 48 and 50) and without adhesive vestiture ventrtally*. Median lobe of aedeagus short and stout, without apical capitulum (Figs 119–120). Apical stylomere of female genitalia broad, with sharp external angle (Figs 138–139) L. gynuis sp.n. — Male pro- and mesotarsi well dilated (as in Figs 44 and 46) and covering with adhesive vestiture ventrally. Median lobe of aedeagus longer and more slender, with distinct apical capitulum. Apical stylomere of female genitalia narrower, with blunt or rounded external angle (Figs 134 14. Apical capitulum of aedeagus more strongly protruding dorsad (Figs 106–112). Elytral intervals somewhat flat on disc L. marginatus Apical capitulum of aedeagus less stronly protruding dorsad (Figs 103-105). Elytral intervals clearly convex on discL. politus 16. Median lobe of aedeagus with very large teeth in internal sac basally (Figs 63–65). Body stouter, pronotum (Fig. 9) relatively larger, elytra shorter L. planicollis — Teeth in internal sac of median lobe much smaller and more dispersed (Figs 66–68). Body more slender, pronotum (Figs 10-11) relatively smaller, elytra longerL. schmidti sp.n. 17. Base of most teeth in internal sac of median lobe of aedeagus (Figs 88-94) with smooth or only slightly toothed margin. Specimens from Sri LankaL. renitens Base of teeth in internal sac of median lobe of aedeagus (Figs 95–102) with clearly toothed margin. Specimens 18. Dorsum brown to dark brown, legs and antennae brownish yellow. Pronotum (Figs 18-20) largest in anterior third; its sides basally almost rectilinearly converging; basal — Darker: black dorsum and brownish or more rarely brownish yellow legs and antennae; legs at least partly infuscated. Pronotum (Fig. 17) largest at middle or just before it, more strongly and evenly rounded at sides and with more widely rounded basal angles. Median lobe of aedeagus -Figs 95–97. Mainland Southeast Asia L. horni 19. Lateral bead of pronotum ceasing at basal angle; pronotal base more finely punctate (Figs 19-20). Head comparatively smaller (WHmax/WP = 0.73-0.75). Sumatra.....L. incisus — Lateral bead of pronotum prolonged upon base; pronotal base more coarsely punctate (Fig. 18). Head comparatively larger (Whmax/WP = 0.77-0.82). Philippines, ? JavaL. arrowi

Subgenus Loxoncus Schmidt-Göbel, 1846

Loxoncus Schmidt-Göbel, 1846: plate 3, figure 9, on back cover. Type species: Loxoncus elevatus Schmidt-Göbel, 1846, by monotypy. Anoplogenius Chaudoir, 1852: 88. Type species: Stenolophus alacer Dejean, 1831, designated by Lacordaire, 1854: 304.

Lepithrix Nietner, 1857: 151. Type species Lepithrix foliolosa Nietner, 1857 (= Anoplogenius discophorus Chaudoir, 1852), by monotypy.

Megrammus Motschulsky, 1857: 26. Type species: Megrammus circumcinctus Motschulsky, 1857, by monotypy.

Neolissus Landin, 1955: 455, syn.n. Type species: Coleolissus (Neolissus) unipunctatus Landin, 1955 (= Anoplogenius planicollis Bates, 1892), by monotypy.

DESCRIPTION. Male pro- and mesotarsi dilated, each with adhesive vestiture ventrally. Median lobe of aedeagus rather slender, with or without apical capitulum; armature of internal sac consisting of spines or teeth.

COMPOSITION. The nominotypical subgenus contains most of the known Eurasian species, the single Australian one and probably also all the Afrotropical species. The Australian and Eurasian members are organized here in several species groups and subgroups.

REMARKS. The type species of *Anoplogenius* is *Stenolophus alacer* (= *Loxoncus alacer*), the species ranged in Africa and Madagascar. The Afrotropical species were studied by Basilewsky [1951] who did not divided the genus into subgenara. In the present paper, I tentatively include *L. alacer* and other Afrotropical species in the nominative subgenus since, according to Basilewsky (l. c.), they all possess dilated male pro- and mesotarsi both with adhesive vestiture ventrally. Further study is needed to determine their taxonomic position and relations to the Eurasian and Australian species.

The name *Neolissus* was originally proposed for the monotypic subgenus of the genus *Coleolissus* Bates, 1892 (the Selenophori group of the subtribe Harpalina) but the reexamination of the type of the single included species (see below) revealed that the latter is actually a member of *Loxoncus* because it possesses all distinctive features of this genus. It should be noted that N. Ito (Kawanishi Sity, Japan), according to his determinational label under the holotype of *Coleolissus* (*Neolissus*) *unipunctatus* Landin, 1955, also included this species in the genus *Loxoncus* (cited by N. Ito as *Anoplogenius*).

The discophorus group

DESCRIPTION. Lateral beads of pronotum rather broad, strongly widened basad, invisible at basal angles since merged with deep latero-basal depressions. Median lobe of aedeagus lacking apical capitulum; internal sac with numerous narrow teeth of medium size arranged in two parallel rows. Body not unicolour: at least two basal antennomeres, legs and elytral apices notably paler than other body.

COMPOSITION. The group comprises the two species: *L. discophorus* and *L. nagpurensis*.

Loxoncus discophorus (Chaudoir, 1852) Figs 6–7, 52–57, 122.

Anoplogenius discophorus Chaudoir, 1852: 90 (Type locality: "environs de Simlah", India).

Lepithrix foliolosa Nietner, 1857: 152 (Type locality: "prope Colombo", Sri Lanka)

Anoplogenius patinalis Bates, 1892: 346 (Type locality: "Bhamo", Burma).

Anoplogenius boettcheri Jedlička, 1935: 138 (Type locality: Manila, Philippines), syn.n.

Anoplogenius philippinus Jedlička, 1936: 17 (Type locality: Manila, Philippines), **syn.n.**

^{*} Externally, males are readily distinguished from females by the number of setae along apical margin of anal sternite (1 pair in males and 2 pairs in females).

TYPE MATERIAL. Syntypes (?) with common botton label "discophorus Chaud., Dinapus Boys Deyrolle" in the former Chaudoir's collection (now in MNHN): 2 ??, "Ind. or. bor."; and 1 ?", "var. Ind. or. bor.".

Syntypes of *Lepithrix foliolosa*: $1 \subsetneq$ with label "*Lepithrix foliolosa* Nietn*" and $2 \circlearrowleft \circlearrowleft$, $1 \subsetneq$ labelled "Ceylon, Nietner" (all in MNHUB); $1 \subsetneq$, with labels "*Lepithrix foliolosa*" and "Nietner, Ceylon" (MNHN).

Lectotype of *Anoplogenius patinalis* (designated here for purposes of fixation of species name), ♂ with labels: Bhamo, Burmania, Fea, VII. 1886", "Typus", "patinalis Bates", "Anop. patinalis (es tip) Bates", "Anoplogenius patinalis Bates [Bates' handwriting]", "Mus. Civ. Genova" (MCSNG); and a paralectotype (?): ♀, "Toungoo, L. Fea, V—X.88", "Anoplogenius patinalis Bates" (MNHN).

Holotype of *Anoplogenius boettcheri*, ♂ with labels: "Type", "Philippine Is., Coll. Böttcher, B.M. 1929–201", "*Anoplogenius Böttcheri* sp.n., type, det. Ing. Jedlička" (NHML) and 2 paratypes: ♂ labelled as holotype and 2 ♂ ♂ with geographical label "Philippine Islands, Manila, 2:XI:1914, Coll. Böttcher" (NHML; NMP).

Holotype of *Anoplogenius philippinus*, ♀ with labels: "Type", "Philippine Islands, Manila, 29.X.1914, Coll. Böttcher", "Philippine Is., Coll. Böttcher, B.M. 1929–201", "*Anoplogenius philippinus* sp.n., type, det. Ing. Jedlička" (NHML).

nus sp.n., type, det. Ing. Jedlička" (NHML). OTHER MATERIAL. India: 1 $^{\circ}$, "Coromandel", "Discophorus Chaud.", "Ex Musaeo Mniszech" (MNHN);1 ♀, Assam, Kaziranga, Bagori, V.1961 (MNHUB). China: Taiwan: 1 ex., "Formosa, Sauter", "Amping, 21.VII.1908" [determined by E. Schauberger as Anoplogenius Boettcheri] (TMB). Vietnam: 1 \, "Tonkin Centr., region de Chim-Hoa et de Tuyen-Quan, A. Weiss, 1901" (MNHN); 1 0, 3 99, Hanoi, at light, 3.X. and 1.XI. 1961, O. Kabakov leg. (cKAB; ZISP); 1 \, same data but 25.VIII.1962 (cKAB); 1 $\stackrel{\bigcirc}{}$, same data but 20.IX.1962 (cKAB); 1 $\stackrel{\bigcirc}{}$, same data but 16.V.1962 (cKAB); 1 ♀, Ha-dong, at light, 1.X.1963, O. Kabakov leg. (ZISP); 1 $\stackrel{\frown}{}$, Mts NO Kon-Kuong, 400 m, 20.IV.1962, O. Kabakov leg. (cKAB). **Thailand**: 11 $\stackrel{\frown}{}$ $\stackrel{\frown}{}$ 7 $\stackrel{\frown}{}$ $\stackrel{\frown}{}$ $\stackrel{\frown}{}$ 7 $\stackrel{\frown}{}$ $\stackrel{$ NW Lan Sak, 65 km NW Uthai Thani, VI.1990, W. Thielen leg. (cSCHM; ZISP); 7 ♂♂, 16 ♀♀, 25 km NW Lan Sak, 65 km NW Uthai Thani, ca 220 km NW Bangkok, 110 m, IX.1990, W. Thielen leg. (MNHUB; ZISP); 1 o, same locality, V.1989, W.Thielen leg. (cWR); 1 ♂, Khon Kaen, at light, 25.V.1980, S. Saowakontha leg. (MNHUB); 1 ♂, 1 ♀, Chieng Mai, IX.1981, J. Sanguansermsti leg (MNHUB); 1 ♂, same data but 4X.1981 (MNHUB); 2 ♀♀, Lom-Sak, 40 km n. Phutchabum, 1986, W.Thielen leg. (cWR). Philippines: 1 \, Manila, Luzon, 19.II.1914, Böttcher leg. (MNHUB).

NOT LOCATED: 1 \circlearrowleft , 1 \updownarrow , "Acc. No 4690 Lot Govt. Lab. Coll., collected by C.S. Banks" (MNHUB); 1 \circlearrowleft , "India or., Pachmeria" (MNHUB).

DESCRIPTION. In males body length 6.9–7.8 mm, width 2.8–3.2 mm, in females 7.8–8.4 and 3.2–3.5 mm, respectively.

Dimorphous: in male, upperside dark brown to black, slightly shining, rather weakly iridescent on elytra; base of mandibles and labrum, very narrow lateral margins of pronotum along lateral depression, apex of elytra (more widely towards base on 5th and 9th intervals) brownish yellow; underside dark brown, with brownish yellow median part of prosternum, pronotal and elytral epipleura, three last abdominal sternites (mainly in their apical portions) and pro- and mesocoxae. By contrast, in female pronotum only medially brown, with very broad reddish yellow or brownish yellow lateral margins; elytra with apex and three lateral intervals throughout as well as basal bead-, reddish yellow; and head underneath and abdominal sternites nearly throughout reddish or brownish yellow. In both sexes, palpi, antennae and legs brownish yellow; antennae beginning from 3rd (sometimes 2nd) antennomere and basal portion of elytral epipleura (in male) more or less strongly infuscated.

Head not large: in both sexes, WHmax/WP = 0.71-0.75, WHmin/WP = 0.52-0.55. Labrum rounded anteriorly; apical

margin of clypeus more or less rectilinear. Frontal suture superficial; frontal foveae moderate, somewhat deep; clypeo-ocular line becoming obsolete just before supraorbital furrow. Mentum without medial tooth. Ligular sclerite slightly widened at apex. Antennae extending approximately to one-sixth of elytra. Dorsal surface of head throughout with distinct microsculpture consisting of isodiametric meshes.

Pronotum (Figs 6–7) moderately convex, 1.36–1.44 times as wide as long, widest usually just before middle, sometimes in middle. Sides rather strongly and evenly rounded up to widely rounded basal angles, with lateral pore in anterior third. Apical margin very weakly emarginate; apical angles not protruding, rounded at apex. Basal margin rectilinear medially, obligue laterally. Lateral beads rather broad, strongly widened basad and merged with deep latero-basal depressions. Basal foveae deep, more or less oval, very finely and irregularly punctate; other surface including convex area between basal foveae impunctate. Microsculpture developed throughout, consisting of distinct isodiametric meshes.

Elytra convex, oblong, slightly rounded at sides, widest behind middle, in males 1.50–1.55 times as long as wide, 2.77–2.87 times as long and 1.32–1.38 times as wide as pronotum (in female these indices 1.51–1.56, 2.91–3.03 and 1.36–1.43, respectively). Sutural angle acutangular, sharp at apex. Basal elytral bead sinuate, arcuately coming to lateral margin. Striae impunctate, comparatively broad, slightly impressed on elytral disc and clearly deepened at apex. Intervals narrowed posteriad, flat on disc and somewhat convex at apex. Microsculpture distinct throughout, consisting of rather weakly transverse meshes.

Apex of anal sternite in both sexes rounded. Anterior tibia slender, hardly widened apically, usually with only 1 apical spine on outer margin. Male protarsi moderately dilated, mesotarsi weakly dilated; 1st—4th protarsomeres and 2nd—4th mesotarsomeres each with adhesive vestiture ventrally. Fourth pro- and mesotarsomeres in both sexes bilobed, each with long narrow lobes.

Median lobe of aedeagus (Figs 52–57) comparatively narrow, arcuate, with comparatively large basal bulb and without apical capitulum. Terminal lamella flat and broad, much longer than wide, slightly narrowed before apex and rounded apically (dorsal aspect). Internal sac with several small narrow teeth arranged in two parallel rows medially.

Female genitalia (Fig. 122) with very narrow hemisternite; basal and apical stylomere small and narrow; apical one nearly straight, curved only at apex and with lesser number (about 7–10) of spines than in other species.

DISTRIBUTION. The species is widely distributed in Southeast Asia. It is known from India, Shri Lanka, Burma, Taiwan, Vietnam, Thailand and Philippines. Habu [1978] recorded this species from Nepal but female genitalia with very broad apical stylomere illustrated by him (l. c.: Fig. 11) clearly indicate that this record should actually be referred to *L. nagpurensis* (see below).

REMARKS. Characteristics of *L. discophorus* are rather remarkable. Externally, this species is recognizable well on the basis of the nearly discoidal pronotum with deep and broad latero-basal depressions extending apical angles and the sharp apex of sutural angles of elytra. In addition, pronotal microsculpture consists of the distinct, more or less isodiametric meshes as opposed to that of other species, which is transverse and often obliterated. Female genitalia (Fig. 122) are also dissimilar to those of any other known species: they are small, with narrow segments and looking as reduced. It should be recorded, that the female specimens of *L. discophorus*

are recognizable at glance by their coloration with broad reddish yellow lateral margins of pronotum and elytra; in all the other Eurasian and Australian species, the coloration of body, both in males and females, is much darker.

As a consequence of sharp sexual dimorphism in coloration characteristic of this species, the males and females of L. discophorus are often treated as two separate species: females as L. discophorus (=Lepithrix foliolosa) and males as L. patinalis [Schauberger, 1938; see also Csiki, 1932; Lorenz, 1998]. This fact is rather curious since the original description of Lepithrix foliolosa includes the characters of both males and females (Nietner [1857] noted that "male is smaller and of a darker colour") and already Andrewes [1919, 1928] considered all three names (discophorus, foliolosus and patinalis) as synonyms. I agree with the Andrewes's treatment because was able to compare the type specimens of all three taxa. Notice that one of the two examined original specimens of Anoplogenius patinalis is a female (see Type material) but, according to Bates [1892], he had only two male examples: one from Bhamo and another from Toungoo.

Anoplogenius boettcheri and A. philippinus have been described more recently, both from Philippines. The examination of the type specimens of both these taxa revealed that they are also based each on the specimens of Loxoncus discophorus of differing sexes: A. philippinus on a single female and A. boettcheri on four males (the pronotum and male genitalia of the latter taxon are illustrated in Figs 7 and 54–57, respectively). Since L. discophorus does probably not form any distinct geographical populations, I consider both boettcheri and philippinus to be only the synonyms of that species.

Loxoncus nagpurensis (Bates, 1891) Figs 8, 58–59, 121.

Anoplogenius nagpurensis Bates, 1891: CCCXXXIII (Type locality: "Tetara", Chota-Nagpore, India)

Anoplogenius discophorus sensu Habu, 1978: 10 (non Chaudoir, 1852).

TYPE MATERIAL. Lectotype of Anoplogenius nagpurensis (designated here for purposes of fixation of species name), \(\begin{align*} \lambda \text{labelled "Chota-Nagpore, Bengal", "Naren", "Anoplogenius nagpurensis Bates [Bates' handwriting]" (MNHN) and paralectotype (\(\begin{align*} \Delta \text{) labelled "Chota-Nagpore, Bengal" (MNHN).} \end{align*}

(\$\pi\$) labelled "Chota-Nagpore, Bengal" (MNHN).

OTHER MATERIAL. India: 1 \$\pi\$, Djautpur, IX.1927, L.T.

Ronietzko leg. (MNHUB); 1 \$\pi\$, Calcutta (MNHUB); 1 \$\sigma\$, Nagpore (MNHUB). Sri Lanka: 1 \$\pi\$, "Ceylon, Nietr." (MNHUB). Nepal: GANDAKI PROV.: 1 0, Annapurna Mt., Pokhara-See, Mündung River, 850 m, 10.V.1993, J. Schmidt leg (cSCHM); 1 o, 1 ♀, Pokhara-See, 31.X.1992, J. Schmidt leg. (cSCHM; ZISP); BHERI PROV: 1♀, Nepalganj, Hotel Batika, 28°02,59'N 81°36,56'E, 230 m, at light, 18.VÎ.1999, M. Hartmann leg. (NME); 2 o'o', 5 🗣, Nepalganj, Rapti River shore, near airport, 200 m, 30.V.1997, E. Grill leg. (NME; ZISP); 1 $\,^{\circ}$, Bheri shore, S Surkhet, 650 m, 3.VI.1995, J. Weipert leg. (NME); 1 $\,^{\circ}$, 1 $\,^{\circ}$, W Nepalganj, Rapti River, 30.V.1997, M. Hartmann & A. Weigel leg. (NME; ZISP); 2 24.VI.1993, M. Hobley & G. Csorba leg. (TMB); 1 \circlearrowleft , 1 \circlearrowleft , N Katmandu, Safaripark Mauer, 1300 m, 6.VI.1995, A. Weigel leg. (NME; SISP); 4 여여, NW Katmandu, Balaju, Vishnumati River, 1300 m, 17.VI.1999, A. Weigel leg. (NMÉ); 2 ♂♂, 2 ♀♀, NO Katmandu, near Gorkhara-Park, Bagmati River shore, 27°43,01'N 85°18,46'E, 1340 m, 17.VI.1999, M. Hartmann & E. Grill leg. (NME); 6 \circ 7, 7 \circ 7, NE Katmandu, Gorkhana Park, Bagmati River, $27^{\circ}43$,2N $87^{\circ}2$, $6^{\circ}E$, 1300 m, 28.V.1997, M. Hartmann leg. (NME; ZISP); $87^{\circ}7^{\circ}$, $99^{\circ}10^{\circ}$ m, 28.V and 26.VI.1997, A. Weigel leg. (NME; ZISP); 10 C $\stackrel{\bigcirc}{\downarrow}$, same locality, 28.V.1997, E. Grill leg. (NME; ZISP); 4 ex., Katmandu, Bagmati River, 18.X.1987, Winkelmann-Klöck leg.

(cWR); 40 ♂♂, 41 ♀♀, Katmandu Valley, Bagmati River, 1200 m, 11 and 13.X.1992, A. Weigel & J. Weipert leg. (NME; ZISP); $1\ \color{O}$, $1\ \color{Q}$, same locality, 5.V.1993, Kleeberg leg. (cSCHM); $5\ \color{O}$ 3 \(\text{P}\), Bagmati River, 1400 m, 27°42,39'N 85°71,26'E, 29.V.1997, M. Hartmann leg. (NME; ZISP); 10 ♂♂, 14 ♀♀, Katmandu, N Bagmati River, 1300 m, 27.IV.1995, M. Hartmann leg. (NME; ZISP); 6 \circlearrowleft \circlearrowleft , 8 \looparrowright , same data but 6.VI.1995, M. Hartmann & A. Weigel leg. (NME); 4 \circlearrowleft \circlearrowleft , 9 \looparrowright , Katmandu, Bagmati shore, env. Pashupatinath, 27°42'39"N 85°21'26"E, 1395 m, 29.V.1997, E. Grill leg. (NME); 6 ♂♂, 6 ♀♀, Katmandu Valley, Pashupatinath, Bagmati River, 1300 m, 14X.1992, A. Weigel leg. (NME; ZISP); NARAYANI PROV.: 3 ♂ ♂ , Sauraha, Rapti River shore, 27°34,80′N 84°29,49E, 180 m, 18.IV.2000, A. Skale & A. Weigel leg. (NME); 1 ♀, Chitwan, Sauraha, Bagmar Forest, 27–30.VI.1999, V. Patrikeev leg. (MPU). Vietnam: 1 o, Hanoi, 6-8.VI.1962, O. Kabakov leg. (ZISP); 1 \, same locality, at light, 7.XI.1962, O. Kabakov leg. (cKAB); 2 ex., same locality, 10.II.1963, O. Kabakov leg. (cKAB); 1 same locality, 10.XI.1963, O. Kabakov leg. (ZISP); 1 \, Xuan dinh, NW of Hanoi, 26–29.IV.1966, Gy. Topal leg. (cSHIL); 1 ♂, mts SW Cui-Chau, Kon River, 200 m, 15.IV.1963, O. Kabakov leg. (ZISP). Thailand: 1 ♂, 1 ♀, Chieng Mai, 22.I. and 5.III.1982 (MNHUB).

DESCRIPTION. Smaller than *L. discophorus*: in males body length 5.6–7.0 mm, width 2.3–2.9 mm, in females 5.8–7.2 and 2.4–3.1 mm, respectively.

Upperside dark brown to black, shining, iridescent on elytra, with very narrow brownish yellow lateral margins of pronotum along lateral depression; apex of elytra and 2–3 external intervals (in apical portion or nearly throughout) paler than disc, brown to brownish yellow; often labrum also paler than other portions of head. Underside dark brown, with brownish yellow median part of prosternum, pronotal and elytral epipleura, abdominal sternites and pro- and mesocoxae. Palpi, antennae and legs brownish yellow; antennae beginning from 3rd (sometimes 2nd) antennomere and often basal portion of elytral epipleura more or less strongly infuscated.

Head similar to that of the preceding species but slightly larger: in both sexes, WHmax/WP = 0.75–0.82 and WHmin/WP = 0.55–0.60. Mentum with very short and wide medial tooth, widely rounded at apex. Ligular sclerite slightly widened at apex.

Pronotum (Fig. 8) broader than in *L. discophorus*, 1.44–1.62 times as wide as long, widest usually in anterior third. Sides less strongly rounded. Microsculpture developed throughout, consisting of distinct transverse meshes.

Elytra similar to that of *L. discophorus*, convex, oblong, weakly rounded at sides (nearly rectilinearly diverging medially), widest behind middle, but relatively longer: in males 1.51–1.57 times as long as wide, 3.05–3.30 times as long and 1.33–1.42 times as wide as pronotum (in female these indices 1.46–1.53, 3.13–3.26 and 1.34–1.45, respectively) and sutural angle narrowly rounded at apex. Microsculpture much less distinct, consisting of very fine transverse lines.

Apex of anal sternite in both sexes subtruncate. Legs slightly shorter than in *L. discophorus*, anterior tibia stouter, usually with 3 apical spines on outer margin. Male pro- and mesotarsi less dilated.

Median lobe of aedeagus (Figs 58–59) comparatively narrow, arcuate, with comparatively large basal bulb and without apical capitulum. Terminal lamella narrow, longer than wide, evenly narrowed to apex (dorsal aspect). Internal sac with narrow teeth of medium size arranged in two parallel rows.

Female genitalia (Fig. 121) with broad hemisternite, comparatively large basal stylomere and very broad (broader than in other species) apical one; latter bearing about 10–11 spines along outer margin.

DISTRIBUTION. This species is widespread over mainland Southeast Asia from India and Nepal to Vietnam and Thailand. It is known also from Sri Lanka. The species is common in Nepal where it occupies altitudes from 180 to 1400 m.

REMARKS. Loxoncus nagpurensis is similar to L. discophorus in having the pronotum with widely and deeply depressed lateral margins and the median lobe lacking apical capitulum and with numerous narrow teeth of medium size in internal sac. Based on these characters, I include both species in one species group in spite of the fact that they are notably differing from each other in female genitalia. In contrast to very peculiar female genitalia of L. discophorus with small and narrow hemisternite and stylomeres (Fig. 122), the hemisternite and basal stylomere of L. nagpurensis is somewhat similar to that of other species of Loxoncus but apical stylomere (Fig. 121) is extremely broad, much broader not only than in L. discophorus, but also than in all other Eurasian and Australian species. Besides, L. nagpurensis is easily distinguished from L. discophorus by having the smaller size, the rounded apices of each elytron, the more transverse pronotum with clearly transverse microsculpture on disc, and some other characters listed in the description. In coloration, the males and females of L. nagpurensis are rather similar to each other.

The redescription of *Anoplogenius discophorus* provided by Habu [1978] from the material collected in Nepal is really based on the specimens of *L. nagpurensis*. All characters listed by him, in particular the shape of apical stylomere [l. c.: Fig. 11], agree well with the characteristics of the latter species.

The rutilans group

DESCRIPTION. Male protarsi notably dilated. Lateral beads of pronotum rather narrow up to basal angles, not merged with latero-basal depressions. Internal sac of aedeagus with two narrow parallel spiny patches basally and several small and medium-sized teeth apically. Apical stylomere of female genitalia narrow and weakly arcuate. Body entirely, including legs and antennae, dark brown to black.

COMPOSITION. This group includes only L. rutilans.

Loxoncus rutilans (Bates, 1889) Figs 2, 15, 60–62, 123–124.

Anoplogenius rutilans Bates, 1889: 103 (Type locality: "Katha", Burma)

TYPE MATERIAL. Syntypes: 6 37, 4 99, labelled "Katha, Birmania, Fea VI. 1885" and "Anoplogenius rutilans sp.n. [Bates' handwriting]" (MNHN; MNHUB; ZISP).

OTHER MATERIAL. **Burma**: $1 \circlearrowleft 1, 1 \circlearrowleft 1, \text{"Teinzo}$, Birmania, Fea, Maggio, 1886" (MNHUB). **Cambodia**: $1 \circlearrowleft 1, 1 \circlearrowleft 1, \text{"Cambodia"}$, "PP" (MNHN). **Vietnam**: $2 \circlearrowleft 1, 2 \circlearrowleft 1, 12 \circlearrowleft 120 \end{cases}$ MNHE of Ho Chi Minh, env. of Cat Tien, 11-15.VII.1995, A. Napolov leg. (MPU; ZISP). **Sikkim**: $1 \circlearrowleft 1, \text{"Himalaja}$, Sikkim" (MNHUB).

DESCRIPTION. In males body length 8.0–8.7 mm, width 3.2–3.6 mm, in females 8.4–8.7 and 3.5–3.6 mm, respectively.

Body entirely black, strongly iridescent on elytra and pronotum; at most underside, palpi, antennae and legs slightly paler, brown to dark brown; 1st–2nd antennomeres always infuscated.

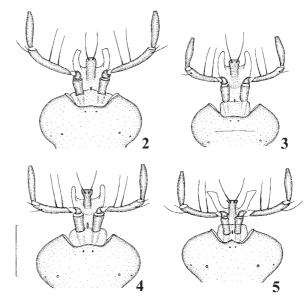
Head moderate (WHmax/WP = 0.68–0.69 in male and 0.69–0.71 in female, WHmin/WP = 0.50–0.51 in male and 0.52–0.53 in female). Labrum rounded anteriorly; apical margin of clypeus only scarcely emarginate, more or less rectilinear in middle. Frontal suture hardly impressed; frontal foveae rather small; clypeo-ocular line becoming very thin near eye but distinct up to supraorbital furrow. Mentum (Fig. 2) without distinct medial tooth, but medial portion of its anterior margin within incision scarcely roundly protruding. Ligular sclerite somewhat parallel-sided, almost not widened at apex. Penultimate labial palpomere rather long, relatively

longer than that in other species. Antennae comparatively long, extending approximately to one-fifth of elytra. Dorsal surface of head throughout with distinct microsculpture consisting of isodiametric meshes.

Pronotum (Fig. 15) moderately convex, rather broad, 1.46–1.57 times as wide as long, widest before middle; sides evenly rounded anteriorly, almost straight or very widely rounded in basal half. Apical margin very weakly emarginate; apical angles not protruding, widely rounded at apex. Basal margin rectilinear medially, obligue laterally; basal angles well marked, obtuse, rounded at apex. Lateral bead rather narrow up to basal angles, not merged with broad latero-basal depressions. Basal foveae slightly deepened, somewhat oval; finely and irregularly punctate; in some specimens punctation extended to lateral bead; other surface including convex area between basal foveae impunctate. Microsculpture transverse, strongly obliterate.

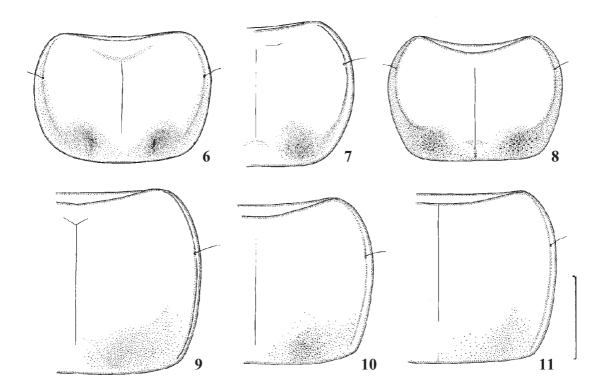
Elytra convex, oblong, widest behind middle, in males 1.54–1.59 times as long as wide, 2.87–2.91 times as long and 1.23–1.26 times as wide as pronotum (in female these indices 1.50–1.56, 2.95–3.03 and 1.24–1.30, respectively). Sutural angle acutangular, rather sharp at apex. Basal elytral bead weakly sinuate, arcuately coming to lateral margin. Striae impunctate, comparatively broad (paricularly at apex), slightly deepened on elytral disc and clearly deepened at apex. Intervals narrowed posteriad, weakly convex on disc and markedly convex before apex. Microsculpture obliterate, consisting of poorly visible transverse lines.

Apex of anal sternite in male subtruncate, in female rounded. Legs long; protibiae each usually with 3 apical spines on outer margin. Male protarsi rather strongly dilated, mesotarsi weakly dilated; 1st—4th protarsomere and 2nd—4th mesotarsomeres with adhesive vestiture ventrally. Fourth pro- and mesotarsomeres in both sexes bilobed, with much longer lobes in male.



Figs 2–5. Loxoncus, labium. 2 — L. rutilans (Burma, Katha, syntype); 3 — L. circumcinctus (Hanoi); 4 — L. schmidti sp.n. (Nepal, paratype); 5 — L. microgonus (Burma, Rangoon). Scale = 0.5 mm.

Рис. 2—5. Loxoncus, нижняя губа. 2 — L. rutilans (Бирма, Ката, синтип); 3 — L. circumcinctus (Ханой); 4 — L. schmidti sp.n. (Непал, паратип); 5 — L. microgonus (Бирма, Рангун). Масштаб 0.5 мм



Figs 6–11. Loxoncus, pronotum. 6–7 — L. discophorus (6 — Sri Lanka, syntype of Lepithrix foliolosa; 7 — Philippines, holotype of Anoplogenius boettcheri); 8 — L. nagpurensis (Nepal); 9 — L. planicollis (Burma, lectotype); 10–11 — L. schmidti sp.n. (Nepal: 10 — paratype; 11 — holotype). Scale = 1.0 mm.

Рис. 6—11. Loxoncus, переднеспинка. 6—7 — L. discophorus (6 — Шри Ланка, синтип Lepithrix foliolosa; 7 — голотип Anoplogenius boettcheri); 8 — L. nagpurensis (Непал.); 9 — L. planicollis (Бирма, лектотип); 10-11 — L. schmidti sp.n. (Непал. 10 — паратип; 11 — голотип). Масштаб 1,0 мм.

Median lobe of aedeagus (Figs 60–62) comparatively narrow and weakly arcuate, angulate at apex and with apical capitulum protruding dorsally (lateral aspect). Terminal lamella notably longer than wide, evenly narrowed to apex (dorsal aspect). Internal sac of aedeagus with two narrow parallel spiny patches basally, with group of small and medium-sized teeth apically and with one larger tooth close to apex (latter sometimes absent).

Female genitalia (Fig. 123–124) with broad hemisternite; basal stylomere moderately widened apically; apical stylomere very long, narrow and weakly arcuate, with rounded outer angle.

DISTRIBUTION. Known from Burma, Cambodia, Vietnam and Sikkim.

REMARKS. This species is rather dissimilar in appearance to any other species. It is easily recognized by dark, usually black, coloration of the body, including legs and antennae. Male and female genitalia are also rather peculiar. Median lobe of aedeagus (Figs 60–62) has two large and narrow parallel spiny patches in internal sac, which are lacking in the other species known to me from Eurasia and Australia. Female genitalia (Fig. 123–124) are characterized by very long (longer than in other species), narrow and weakly arcuate apical stylomere. These features seem to me to be sufficient to include *L. rutilans* in the separate species group.

The species demonstrates variability in male genitalia: the apical capitulum varies in its position from oblique (Fig. 61) to nearly transverse (Fig. 62) and the apical tooth in internal sac is absent in some specimens. The nature of this variability should be studied on the basis of the more abundant material.

The elevatus group

DESCRIPTION. Male protarsi notably dilated. Lateral beads of pronoum rather narrow up to basal angles, not merged with latero-basal depressions (if latter present). Internal sac of aedeagus with group of rather large or mediumsized teeth arranged sometimes in longitudinal rows. Apical stylomere of female genitalia clearly arcuate, more or less strongly widened basally. Body not unicolour: at least two basal antennomeres, legs and elytral apices paler.

COMPOSITION. The group consists of four subgroups.

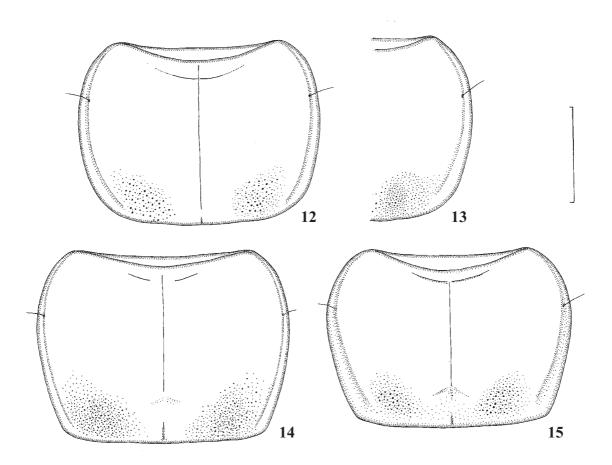
The elevatus subgroup

COMPOSITION AND DIAGNOSIS. The subgroup includes the three species (*L. elevatus*, *L. hiekei* sp.n. and *L. malaisei* sp.n.) characterized each by the small body size, the notably deepened latero-basal depressions and the male genitalia with large teeth in internal sac; bases of these teeth are smooth, not toothed at margin.

Loxoncus elevatus Schmidt-Göbel, 1846 Figs 22–24, 41, 78–83, 123–124.

Loxoncus elevatus Schmidt-Göbel, 1846: on back cover, plate 3, figure 9 (Type locality: Burma).

Anoplogenius renitens sensu Bates, 1892: 346 (non Bates, 1886). DESCRIPION. Small: in males body length 5.6–6.2 mm, width 2.3–2.7 mm, in females 5.4–6.0 mm and 2.2–2.5 mm, respectively.



Figs 12–15. Loxoncus, pronotum. 12–13 — L. circumcinctus (12 — Japan, syntype; 13 — Maritime Territory); 14 — L. procerus (Talysh); 15 — L. rutilans (Burma, Katha, syntype). Scale = 1.0 mm.

Рис. 12—15. Loxoncus, переднеспинка. 12—13 — L. circumcinctus (12 — Япония, синтип; 13 — Приморский край); 14 - L. procerus (Талыш); 15 - L. rutilans (Бирма, Ката, синтип). Масштаб 1,0 мм.

Upperside brown to dark brown, rarely nearly black, shining, with green hue, clearly iridescent on elytra and pronotum; lateral bead of pronotum, apex of elytra, 2–3 external intervals (in apical portion or nearly throughout), often also labrum, base of mandibles and basal elytral bead paler, brownish yellow. Underside paler than dorsum, with brownish yellow median part of prosternum, pronotal and elytral epipleura, abdominal sternites and pro- and mesocoxae. Palpi, antennae and legs brownish yellow to yellow; antennae beginning from 3rd antennomere and often basal portion of elytral epipleura infuscated.

Head rather large (WHmax/WP = 0.76–0.81 in male and 0.77–0.82 in female, WHmin/WP = 0.54–0.59 in male and 0.58–0.62 in female). Labrum rounded anteriorly; apical margin of clypeus only scarcely emarginate, more or less rectilinear in middle. Frontal suture slightly impressed; frontal foveae rather broad; clypeo-ocular line distinct up to supraorbital furrow. Mentum with very short obtuse medial tooth directed ventrad. Ligular sclerite somewhat narrow, slightly widened to apex. Antennae rather long, extending approximately to one-fifth of elytra. Dorsal surface of head throughout with distinct microsculpture consisting of isodiametric meshes.

Pronotum (Figs 22–24) moderately convex, 1.34–1.48 times as wide as long, widest in anterior third where lateral pores located; sides evenly rounded anteriorly, usually almost

straight, more rarely very widely rounded before obtuse, well marked basal angles with rounded apex. Apical margin very weakly emarginate; apical angles not protruding, rounded at apex. Basal margin rectilinear medially, obligue laterally. Lateral bead rather narrow, at most only scarcely widened to basal angles, not merged with broad and somewhat deep latero-basal depressions and visible up to basal angles. Base, except for its medial portion, comparatively coarsely and irregularly punctate; often punctation extended to convex area between basal foveae; other surface impunctate. Microsculpture distinct throughout, consisting of fine transverse meshes.

Elytra convex, somewhat oval and broad, widest behind middle, in males 1.46–1.57 times as long as wide, 2.88–3.04 times as long and 1.35–1.49 times as wide as pronotum (in female these indices 1.48–1.57, 3.04–3.19 and 1.39–1.47, respectively), often slightly depressed in scutellar area. Sutural angle acutangular, narrowly rounded at apex (in *L. elevatus javanensis* ssp.n. rather sharp). Basal elytral bead weakly sinuate, arcuately coming to lateral margin. Striae impunctate, comparatively broad, superficial on disc and slightly deepened at apex. Intervals narrowed posteriad, almost absolutely flat or scarcely convex on disc and clearly convex before apex. Microsculpture on disc very fine, consisting of narrow transverse meshes.

Apex of anal sternite rounded in both sexes but in male much more widely than in female, nearly subtruncate. Legs comparatively short; protibiae notably widened to apex, each usually with 3 apical spines on outer margin. Male protarsi notably dilated, mesotarsi weakly dilated; 1st—4th protarsomeres and 2nd—4th mesotarsomeres each with adhesive vestiture ventrally. Fourth pro- and mesotarsomeres in both sexes bilobed, with much longer lobes in male.

Median lobe of aedeagus (Figs 78–83) weakly arcuate, with apical portion curved dorsad and lacking apical capitulum. Terminal lamella narrow and long, much longer than wide, evenly and scarcely narrowed to rounded apex (dorsal aspect). Internal sac of aedeagus with 4–5 large teeth, each with wide oval base.

Female genitalia (Fig. 128) with broad hemisternite; basal stylomere slightly widened apically; apical stylomere rather narrow and clearly arcuate, with more or less distinct outer angle.

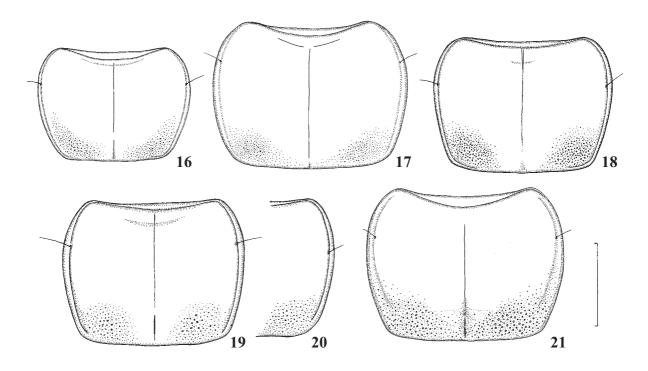
DISTRIBUTION. The species is widely distributed over Southeast Asia from southern China (Yunnan) across Burma, Thailand, Cambodia and Vietnam to Philippines and Java.

REMARKS. Since H.M. Schmidt-Göbel did not published the formal description of *L. elevatus*, the identification of this species is based only on fine and detailed illustrations provided by him on Tabl. 3 in his work on Burmese carabids [Schmidt-Göbel, 1846], which were compared by me with the available material on *Loxoncus* from Burma. Of three species known to me from this region

and very similar to each other in appearance, the preference was given to the most known and most numerous one. It is worth noting that the depression of scutellar area of elytra depicted by Schmidt-Göbel is rather common feature of the species, which is treated here as *L. elevatus*, and is not observed in the available specimens of two other related species (*L. hiekei* sp.n. and *L. malaisei* sp.n.). Of course, the examination of the type specimens would be extremely useful, but, unfortunately, they seem to be lost because no specimens labelled as *L. elevatus* were found among the Burmese material in the former collection of H.M. Schmidt-Göbel conserved now in NMP (Dr. J. Jelinek, in the letter).

L. elevatus as accepted here is characterized by the small body size (length at most 6.2 mm in the examined specimens), the somewhat deep latero-basal depressions of pronotum and the narrow terminal lamella of median lobe of aedeagus lacking apical capitulum. Since Bates' [1892] mistake, this species was misidentified as L. renitens, but the latter is a separate species probably endemic to Sri Lanka (see below).

The specimens of *L. elevatus* examined from Philippines and Java are distinguished notably from each other and from the specimens examined from mainland Southeast Asia including Burma, the type locality of *L. elevatus*. Although the available material is small, I believe that *L. elevatus* is represented at least by three distinct geographical forms treated here as subspecies. Further study of geographical variation of this species is very necessary.



Figs 16–21. Loxoncus, pronotum. 16 — L. renitens (Sri Lanka, lectotype); 17 — L. horni (Thailand); 18 — L. arrowi (Philippines, holotype); 19–20 — L. incisus (Sumatra: 19 — holotype; 20 — paratype); 21 — L. marginatus (Australia, Lakefield National Park). Scale = 1.0 mm.

Рис. 16-21. Loxoncus, переднеспинка. 16-L. renitens (Шри Ланка, лектотип); 17-L. horni (Таиланд); 18-L. arrowi (Филиппины, голотип); 19-20-L. incisus (Суматра: 19- голотип; 20- паратип); 21-L. marginatus (Австралия, Национальный парк Лейкфилд). Масштаб 1,0 мм.

Loxoncus elevatus elevatus Schmidt-Göbel, 1846 Figs 22, 41, 78–79, 128.

MATERIAL: China: YUNNAN: 1 \, Ganlamba, 540 m, 13.III.1957, Pu Fu-di leg. (ZISP). Vietnam: 1♂, "Hoa Binn, Indo-Chine, G. Babault, Muséum Paris, 19., Guy Babault" (MNHN); 1 \, "Museum Paris, Saigon, Coll. A. Bonhoure, 1909" (MNHN); 1 o', mts near Dao Chu, Tam Dao, 400 m, 15.XII.1961, O. Kabakov leg. (ZISP); 1 $^{\circ}$, Dong-Nai, Ma-Da forest, 13.VI.1995, T. Sergeeva leg. (ZISP); 1 $^{\circ}$, 2 $^{\circ}$, "Annam, Phuc-Son, Nov. Dez. H. Fruhstorfer" (MNHUB); 2 ex., Ho Chi Minh city, Tham-Da, XI—XII.1000, K. XII.1988, Korsun leg. (MPU). **Burma**: 1 \circlearrowleft , 1 \circlearrowleft , Palon (Pegù), VIII—IX.1987, L. Fea leg. (ZISP); 1 \circlearrowleft , Tenasserim, Helfer leg. (ZISP); 1 o, Moulmein, 12.XI.1934, Malaise leg. (SMNHS). Thailand: 12 ♂♂, 10 ♀♀, 25 km NW Lan Sak, 65 km NW Uthai Thani, ca 220 km NW Bangkok, 110 m, IX.1990, W. Thielen leg. (MNHUB; ZISP); 1 ex., same locality, X.1989, W. Thielen leg. (cWR); 6 \circlearrowleft 9 \circlearrowleft , 9 \hookrightarrow 25 km NW Lan Sak, 65 km NW Uthai Thani, VI.1990, W. Thielen leg. (NME; cSCHM; ZISP); 1 ex., same locality, V.1989, W. Thielen leg. (cWR); 2 ex., Lom-Sak, 40 km n. Phutohabun, 1986, W. Thielen leg. (cWR); 1 o, 6 c, Khon Kaen, at light, 21 and 25.II, 23.I.1981, S. Saowakontha leg. (MNHUB; ZISP); 3 of of, Chieng Mai, 22.I.1982, Dr. J. Sanguansermsri leg. (MNHUB; ZISP).

NOT LOCATED: 1 ♂, "Ind. or., Helf. Schn., N 52817" (MNHUB).

DESCRIPTION. In males body length 5.6–6.2 mm, width 2.3–2.7 mm, in females 5.4–6.0 and 2.2–2.5 mm, respectively.

Lateral beads of pronotum scarcely widened basally (Fig. 22). Sutural angle of elytra narrowly rounded at apex (Fig. 41); elytral intervals nearly absolutely flat on disc. Terminal lamella of median lobe moderately long, weakly curved dorsad (Figs 78–79).

Proportions: WP/LP = 1.34-1.48; LE/WE = 1.46-1.55 in males and 1.42-1.57 in females; LE/LP = 2.92-3.04 in males and 3.04-3.19 in females; WE/WP = 1.39-1.49 in males and 1.39-1.47 in females; WHmax/WP = 0.76-0.81 in males and 0.77-81 in females; WHmin/WP = 0.54-0.59 in males and 0.58-0.62 in females.

DISTRIBUTION. Southern China (Yunnan), Burma, Cambodia [after Bates, 1892: as *Anoplogenius renitens*], Thailand, Vietnam.

Loxoncus elevatus manilensis **ssp.n.** Figs 23, 80–81.

TYPE MATERIAL. Holotype, ♂, "Pilippinen, Manila, lux, 2.II.1914" (MNHUB).

DESCRIPTION. Body length 6.0 mm, width 2.5 mm.

Lateral beads of pronotum narrow up to basal angles (Fig. 23). Sutural angle of elytra narrowly rounded at apex (as in Fig. 41); elytral intervals scarcely convex on disc. Terminal lamella of median lobe moderately short and notably curved dorsad (Figs 80–81).

Proportions: WP/LP = 1.40; LE/WE = 1.55; LE/LP = 3.04; WE/WP=1.40; WHmax/WP=0.80; WHmin/WP=0.56. DISTRIBUTION. Known only from Philippines.

ETYMOLOGY. The subspecies name refers to the type locality "Manila".

Loxoncus elevatus javanensis **ssp.n.** Figs 24.

TYPE MATERIAL. Holotype, \circlearrowleft , Indonesia, "Java, Buitenzorg, 22–25.VII.1907, Bar. Brüggen leg." (ZISP).

DESCRIPTION. Body length 5.6 mm, width 2.3 mm.

Lateral beads of pronotum scarcely widened basally (Fig. 24). Sutural angle of elytra somewhat sharp at apex

(as in Fig. 39); elytral intervals scarcely convex on disc. Terminal lamella of median lobe rather long and notably curved dorsad (Figs 82–83).

Proportions: WP/LP = 1.38; LE/WE = 1.57; LE/LP = 2.88; WE/WP = 1.35; WHmax/WP = 0.77; WHmin/WP = 0.57.

DISTRIBUTION. Indonesia: Java.

ETYMOLOGY. The subspecies name refers to Java where the holotype was collected.

Loxoncus hiekei **sp.n.** Figs 26, 84–85.

TYPE MATERIAL. Holotype, oʻ, **Thailand**, "Khoen Kaen, lux, 23.I.1981, leg. S. Saowakontha" (MNHUB).

Paratypes: 2 on same data as holotype (MNHUB; ZISP). DESCRIPTION (male). Very similar to *L. elevatus* in colour, body size (length 5.8–6.1 mm, width 2.4–2.6 mm) and external characters but median lobe of male genitalia (Figs 84–85) with smaller basal bulb, shorter terminal lamella and large oblique apical capitulum protruding both ventrad (roundly) and dorsad (sharply); internal sac with more numerous (13–14), slightly smaller teeth arranged in two more or less parallel rows. Microsculpture on frons and vertex strongly obliterated; meshes indistinct, only poorly visible. Pronotum (Fig. 26) comparatively larger than that in *L. elevatus*. Sutural angle of elytra rather sharp, at most only hardly blunted at apex.

Proportions: WP/LP = 1.40–1.49; LE/WE = 1.53–1.55; LE/LP = 2.83–2.94; WE/WP = 1.29–1.30; WHmax/WP = 0.74–0.77; WHmin/WP = 0.54–0.56.

DISTRIBUTION. Known only from the type locality (Khoen Kaen) in North East Thailand.

REMARKS. Loxoncus hiekei sp.n. occurs sympatricly with the rather common nominotypical subspecies of L. elevatus which is extremely similar in external characters to the new species. Except for the male genitalia, L. hiekei sp.n. may be distinguished from L. elevatus elevatus by the highly reduced microsculpture on head and the more sharp sutural angle of elytra.

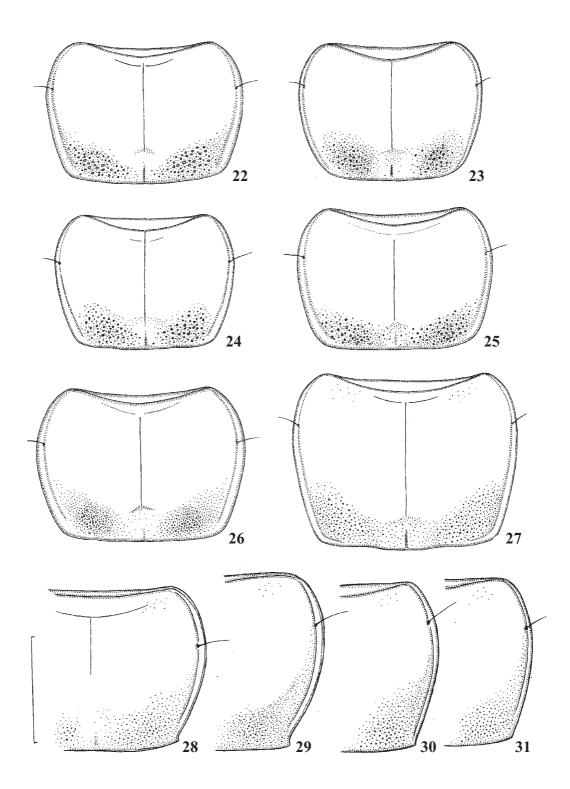
ETYMOLOGY. Named after my friend, the famous entomologist F. Hieke (Berlin) who provided me the very interesting material on the genus *Loxoncus* including this new species.

Loxoncus malaisei **sp.n.** Figs 25, 86–87.

TYPE MATERIAL. Holotype, ♂, **Burma**, "Tenasserim, Mekane, 90 km E of Moulmein, 200 m, 2−8.XI[19]34, Malaise", labelled also "*Anoplogenius renitens* Bates, H.E. Andrewes det." (SMNHS).

DESCRIPTION (male). Like preceding species, this new species very similar to *L. elevatus* in colour, body size (length 6.1 mm, width 2.5 mm) and external characters but well distinguished by male genitaia: median lobe (Figs 86–87) weakly arcuate, with large basal bulb and small apical capitulum protruding both ventrad and dorsad; terminal lamella rather short, slightly longer than wide, strongly narrowed to somewhat acute apex; internal sac with group of 8 rather large teeth medially. Elytral microsculpture more distinct than that in *L. elevatus* and *L. hiekei* sp.n. Basal angles of pronotum (Fig. 25) obtuser, rather widely rounded. Elytral disc with weakly impressed striae and scarcely convex intervals; sutural angle somewhat sharp but clearly blunt at apex.

Proportions: WP/LP = 1.44; LE/WE = 1.55; LE/LP = 2.96; WE/WP = 1.32; WHmax/WP = 0.77; WHmin/WP = 0.57.



Figs 22–31. Loxoncus, pronotum. 22 — L. elevatus elevatus (Thailand); 23 — L. e. manilensis ssp.n. (Philippines, holotype); 24 — L. e. javanensis ssp.n. (Java, holotype); 25 — L. malaisei sp.n. (Burma, holotype); 26 — L. hiekei sp.n. (Thailand, holotype); 27 — L. gynuis sp.n. (Batavia, holotype); 28–31 — L. microgonus (28 — Sri Lanka; 29 — India, Chota-Nagpore; 30 — Philippines; 31 — India, Assam). Scale = 1.0 mm.

Рис. 22—31. *Loxoncus*, переднеспинка. 22 — *L. elevatus elevatus* (Таиланд); 23 — *L. e. manilensis* ssp.n. (Филиппины, голотип); 24 — *L. e. javanensis* ssp.n. (Ява, голотип); 25 — *L. malaisei* sp.n. (Бирма, голотип); 26 — *L. biekei* sp.n. (Таиланд, голотип); 27 — *L. gynuis* sp.n. (Батавия, голотип); 28—31 — *L. microgonus* (28 — Шри Ланка; 29 — Индия, Чхота-Нагпур; 30 — Филиппины; 31 — Индия, Ассам). Масштаб 1,0 мм.

DISTRIBUTION. Known only from the type locality (Mekane, 90 km E of Moulmein) in Burma.

REMARKS. Like the preceding species, this new species seems to occur sympatricly with the more common and more widely distributed *L. elevatus elevatus*. Both taxa are best distinguished from each other by the male genitalia (see Description).

ETYMOLOGY. Named after the famous entomologist R. Malaise, a member of the Swedish Expedition to Burma in 1934, who collected this new species.

The planicollis subgroup

COMPOSITION AND DIAGNOSIS. The subgroup contains the two species (*L. planicollis* and *L. schmidti* sp.n.) characterized both by the large body size and the male genitalia with large or medium-sized teeth in internal sac, each with wide oval base not toothed at margin. Ligular sclerite rather strongly widened at apex (Fig. 4).

Loxoncus planicollis (Bates, 1892) Figs 9, 63–65.

Anoplogenius planicollis Bates, 1892: 345 [Type locality: "Palon (Pegu)", Burma].

Coleolissus (Neolissus) unipunctatus Landin, 1955: 455 (Type locality: Rangoon, Burma), syn.n.

TYPE MATERIAL. Lectotype of Anoplogenius planicollis (designated here for purposes of fixation of species name), ♂ with labels: "Palon (Pegu), L. Fea, VIII. IX. 87", "planicollis Bates", "Anoplogenius planicollis (es. tip.) Bates", "Syntypus Anoplogenius planicollis Bates, 1892", "Museo Civico di Genova" (MCSNG), and 4 paralectotypes (2 ♂ ♂ , 2 ♀♀) with geographical labels as in lectotype (MCSNG; MNHN).

Holotype of *Coleolissus unipunctatus*, ♀ with labels: "Burma, Rangoon, 25–30/11–34, Malaise", "*Coleolissus (Neolissus) unipunctatus* Ldn., B.O. Landin det." and "*Anoplogenius unipunctatus* (Landin), det. N. Ito, 1994" (SMNHS).

DESCRIPTION. Large: in males body length 8.8–9.3 mm, width 3.7–3.8 mm, in females 9.4–9.7 and 3.8–3.9 mm, respectively.

Brown to black, upperside shining, clearly iridescent on elytra and pronotum; lateral bead of pronotum, apex of elytra, 2–3 external intervals mainly in apical portion, median part of prosternum, pronotal and elytral epipleura, abdominal sternites and pro- and mesocoxae, often also labrum and base of mandibles reddish brown or brownish yellow; besides frons usually with three reddish oval spots arranged in arcuate transverse row. Palpi, antennae and legs brownish yellow to yellow; antennae and often basal portion of elytral epipleura infuscated.

Head moderate (WHmax/WP = 0.65–0.69 in male and 0.69–0.70 in female, WHmin/WP = 0.51–0.52 in male and 0.52–0.53 in female). Labrum very widely rounded, almost straight anteriorly; apical margin of clypeus only scarcely emarginate, more or less rectilinear in middle. Frontal suture weakly impressed; frontal foveae rather small, with clypeo-ocular line distinct up to supraorbital furrow. Mentum with extremely short and wide obtuse medial tooth directed ventrad (visible only from behind). Ligular sclerite rather strongly widened at apex. Antennae rather long, extending approximately to one-fifth of elytra. Dorsal surface of head throughout with microsculpture consisting of very fine isodiametric meshes.

Pronotum (Fig. 9) moderately or weakly convex, 1.41–1.49 times as wide as long, widest about middle; sides evenly rounded up to very obtuse, usually well marked basal angles with rounded apex. Apical margin very weakly emarginate;

apical angles not protruding, rounded at apex. Basal margin rectilinear medially, obligue laterally. Lateral bead rather narrow, at most only scarcely widened posteriad, visible up to basal angle. Latero-basal areas slightly flattened, finely punctate. Basal foveae broad and shallow, usually separated from lateral bead by convexity. Microsculpture on disc obsolete, meshes poorly visible.

Elytra moderately convex, oblong, scarcely rounded at sides medially, widest behind middle, in males 1.49–1.57 times as long as wide, 2.75–2.80 times as long and 1.27–1.31 times as wide as pronotum (in female these indices 1.58–1.63, 2.88–2.93 and 1.23–1.24, respectively). Sutural angle acutangular, somewhat sharp at apex (as in Fig. 37). Basal elytral bead weakly sinuate, arcuately coming to lateral margin (as in Fig. 34). Striae impunctate, comparatively broad, superficial on disc and slightly deepened at apex. Intervals narrowed posteriad, flat on disc and clearly convex before apex. Microsculpture on disc obsolete, meshes poorly visible.

Apex of anal sternite weakly emarginate in male, rounded in female. Protibiae notably widened to apex, each usually with 3 apical spines on outer margin. Both protarsi and mesotarsi of male notably dilated (protarsi more strongly than mesotarsi), with 1st–4th tarsomeres bearing adhesive vestiture ventrally (1st mesotarsomere only with a pair of scales apically). Fourth pro- and mesotarsomeres in both sexes bilobed, with much longer lobes in male.

Median lobe of aedeagus (Figs 63–65) weakly arcuate, with small basal bulb and apical portion roundly curved dorsad. Terminal lamella narrow and long, much longer than wide, slightly narrowed to apex (dorsal aspect). Internal sac with 6 very large curved teeth basally: 5 along left side and 1 at right side, each tooth with wide oval base, and 1–2 smaller teeth apically.

DISTRIBUTION. Known only from Burma.

REMARKS. Loxoncus planicollis is a largest species amongst all the Eurasian and Australian representatives of the genus; it is characterized also by the strongly widened apex of ligular sclerite and the very large teeth in internal sac of aedeagus. The species was originally described by Bates [1892] from the specimens collected in Bhamo and Palon, Burma. Landin [1955] erroneously described the same species as Coleolissus (Neolissus) unipunctatus from the single female collected in Rangoon, Burma. The opinion about the identity of both these taxa is based on the comparison of their type specimens.

Loxoncus schmidti **sp.n.** Figs 4, 10–11, 34, 37, 66–68, 126.

TYPE MATERIAL. Holotype, ♂, **Nepal**, Annapurna-Region, Birothanti-Flussufer, ca. 1400 m, 8.X.1992, leg. J. Weipert (NME). Paratypes: **Nepal**, 1♀, Pokhara-See, 31.X.1992, leg. J. Schmidt (cSCHM); 3♀♀, Himalaya, Annapurna Mts, Pokhara-See, Fluss-Mundung, 850 m, 10.V.1993, leg. J. Schmidt (cSCHM; ZISP).

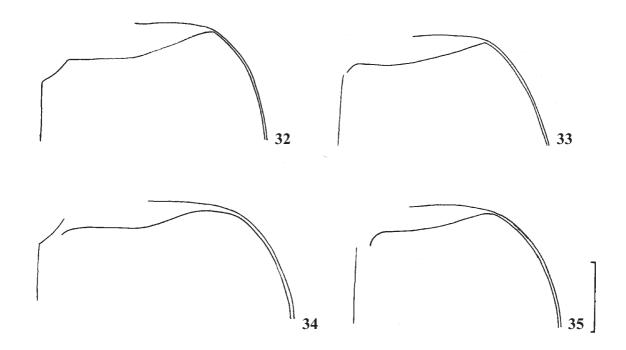
ADDITIONAL MATERIAL (not included in the type series).

7, **Sri Lanka**, "Ceylon, Nietner", "52822" (MNHUB).

DESCRIPTION. Very similar to preceding species in size, colour and morphology.

In male body length 9.1 mm, width 3.8 mm, in females 8.3–9.2 and 3.4–3.8 mm, respectively. Body more slender, with relatively smaller pronotum (Figs 10–11); latter widest in middle or before it. Median lobe of aedeagus (Figs 66–68) similar to that of *L. planicollis* but basal bulb larger, terminal lamella slightly shorter and teeth in internal sac much smaller and more dispersed.

Female genitalia (Fig. 126) with broad hemisternite; basal stylomere markedly widened apically; apical stylomere clearly arcuate, with broad base and distinct outer angle.



Figs 32–35. Loxoncus, humeral angle. 32–33 — L. circumcinctus (32 — Japan, syntype; 33 — Maritime Territory); 34 — L. schmidti sp.n. (Nepal, paratype); 35 — L. incisus (Sumatra, paratype). Scale = 0.5 mm.

Рис. 32-35. Loxoncus, плечевой угол. 32-33-L. circumcinctus (32-Япония, синтип; 33-Приморский край); 34-L. schmidti sp.n. (Непал, паратип); 35-L. incisus (Суматра, паратип). Масштаб 0,5 мм.

Proportions: WP/LP = 1.39-1.47; LE/WE = 1.54 in male and 1.54-1.57 in females; LE/LP = 2.85 in male and 2.89-3.02 in females; WE/WP = 1.33 in male and 1.28-1.37 in females; WHmax/WP = 0.69 in male and 0.73-0.74 in females; WHmin/WP = 0.53 in male and 0.55-0.58.

DISTRIBUTION. Nepal, ? Sri Lanka.

REMARKS. This new species is closely related to *L. planicollis* from Burma. The both species are very similar to each other in external characters but well distinguished by the male genitalia, especially the armature of internal sac (see Description and Key). Although each of these species is known only from a few specimens and their real distribution areas are apparently more extended, I believe the both species to be vicariant.

A female labelled "Ceylon, Nietner", which was not included in the type series of *L. schmidti* sp.n., agrees in its characteristics with the specimens from Nepal but was collected far away from there and the examination of additional material from Sri Lanka including the male is very needed to clarify its taxonomic position.

ETYMOLOGY. Named after my friend and colleague, the famous carabidologist J. Schmidt (Rostock), who collected the most examples of the type series of this species.

The circumcinctus subgroup

COMPOSITION AND DIAGNOSIS. The subgroup includes the two Palaearctic species (*L. procerus* and *L. circum-cinctus*) characterized each by the medium-sized body and the male genitalia with large apical capitulum protruding both ventrally and dorsally. Internal sac is with large teeth, most of which possess wide oval bases, not toothed at margin.

Loxoncus procerus (Schaum, 1858) Figs 14, 69–75, 125.

Stenolophus procerus Schaum, 1858: 274 (Type locality: "Syria"). Stenolophus Grandis Peyron, 1858: 380 [Type locality: "environs de Tarsous (Caramanie)", Turkey].

Stenolophus morio sensu Reitter in Hauser, 1894: 35 (non Ménétriés, 1832).

MATERIAL EXAMINED. **Albania**: 1 ♂, 3 ♀♀, "Apfelb. Albanien", "Bojana Albanien" (TMB); 1 ♂, 1 ♀, "Oboti Bojana" (TMB). Greece: Korfu, Kerkyra, V.1964, Palm leg. (MZLU); Korfu, Latri (MZLU); Korfu, Valianiti (MZLU). **Bulgaria**: Popotamo (MZLU). Turkey: 3 o'o', "Scutari Bojana" (TMB); 1 ♀, Artvin (Coll. Lutshnik) (ZISP). Russia: 1 ♂, Stavropol Prov., the lower reaches of Kuma River (Coll. V. Lutshnik) (ZISP). Azerbaijan: 1 ♀, "Caucasus, Kreis-Nucha, E. Koenig" (ZISP); 1 ♂, Kyzyl-Agach Nature Reserve, 7-8.1967, N. Antropova leg. (ZISP); 1 o, Dyman, Zuvant, Lenkoran, 25.V.1909, A. Kirichenko leg. (ZISP); 1 ♂, Razgov, Zuvant, Lenkoran, 11.VI.1909, A. Kirichenko leg. (ZISP); 6 ♂♂, 4 ♀♀, Kumbashi, Lenkoran, 25.IV.−13.V.1909, A. Kirichenko leg. (ZISP); 2 \, \, Lirik, Lenkoran, 21.V.1909, A. Kirichenko leg. (ZISP); 1 $\stackrel{\frown}{+}$, env. Lenkoran, 14.VI.1911, Mlokosevich leg. (ZISP); 1 $\stackrel{\frown}{\circ}$, "Lenkoran" (ZISP); 1 ♀, "Lenkoran (Coll. V. Lutshnik)" (ZISP); 1♀, "Lenkoran, V.1906 (Coll. E. Fisher)" (ZISP); 1♂, "Lenkoran Leder (Reitter)" (TMB); 1♂, Tangyarud, Talysh, 4.V.1909, A. Kirichenko leg. (ZISP); 1♀, Lenkoran, Talysh, 8.V.1909, A. Kirichenko leg. (ZISP); 1 \, "Talysh, VII.1932" (ZISP); 2 \, \tau \, "Aresch, Caucasus, A. Schelkownikiw leg." (ZISP); 2 \, \tau \, \tau \, "Aresch, Kaukasus" (TMB); 1 \, \tau "Transcaucasus" (Coll. V. Lutshnik) (ZISP). Iran: 1 \circlearrowleft , "Kerman: Bampur, 2–3.VI.1898, N. Zarudny leg." (ZISP); 1 \circlearrowleft , Astrabad, 29.V.1904, Filippovich leg. (ZISP); 3 \circlearrowleft , Enzeli, 14–16.VI.1915, B Iljin leg. (ZISP); 1 ♂, Chuillan Prov., Lahijan, a. Kaspi Meer, 200 m, VII.-VIII.1961, J. Klapperich leg. (TMB). Turkmenistan: 1 ♀, "Repetek (teste Hauser)" (ZISP); 1 ♀, "Aschabad (teste Hauser)" (ZISP). **Uzbekistan**: $1 \circlearrowleft$ ", "Mazar, northern slope of Karatau Mt., Kokand. uezd, Fergan.", 20.IV.1913, Minkwitz leg. (ZISP); $2 \circlearrowleft$ ", $4 \circlearrowleft$, Kammashi, 27–30.VI., 24.VII.1932, V. Gussakovskij & A. Rodd leg. (ZISP).

QUESTIONABLE LOCALITY: 1 , "Hist.-Coll. (Coleoptera), Nr 52820 (3 ex.), *Anoplogenius radiatus* N., Java — India orient., Zool. Mus. Berlin" (MNHUB).

DESCRIPTION. In males body length 7.6–9.3 mm, width 3.1–3.7 mm, in females 8.0–9.2 and 3.2–3.7 mm, respectively.

Brown to nearly black; upperside shining, rather strongly iridescent on elytra and less so on pronotum; lateral bead of pronotum, median part of prosternum, pronotal and elytral epipleura, abdominal sternites and pro- and mesocoxae, often also labrum and base of mandibles reddish brown or brownish yellow; besides apex of elytra (more expanded towards base on 1–3 external intervals) usually slightly paler than disc. Palpi, antennae and legs brownish yellow to yellow; antennae beginning from 3rd segment on and often basal portion of elytral epipleura more or less infuscated.

Head moderate (WHmax/WP = 0.70–0.72 in male and 0.72–0.75 in female, WHmin/WP = 0.53–0.55 in male and 0.56–0.59 in female). Labrum very widely rounded, almost stright anteriorly; apical margin of clypeus more or less rectilinear in middle. Frontal suture weakly impressed; frontal foveae moderately broad, with clypeo-ocular line distinct up to supraorbital furrow. Mentum with distinct, wide and obtuse medial tooth. Ligular sclerite moderately widened at apex. Antennae moderately long, extending to base of elytra. Dorsal surface of head throughout with fine microsculpture consisting of distinct isodiametric meshes.

Pronotum (Fig. 14) moderately convex, 1.36–1.44 times as wide as long, widest usually in anterior third and rounded at sides (more widely in basal portion). Apical margin very weakly emarginate; apical angles not protruding, rounded at apex. Basal margin rectilinear or very widely rounded medially, obligue laterally. Basal angles either well marked, obtuse or rather widely rounded at apex. Lateral bead rather narrow, slightly widened posteriad, visible up to basal angle. Latero-basal areas slightly flattened, finely punctate. Basal foveae broad and shallow. Microsculpture on disc visible throughout, consisting of transverse meshes.

Elytra moderately convex, oblong, only scarcely rounded at sides, widest behind middle, in males 1.56–1.64 times as long as wide, 2.77–2.95 times as long and 1.27–1.30 times as wide as pronotum (in female these indices 1.58–1.63, 2.78–2.99 and 1.29–1.34, respectively). Sutural angle rectangular or slightly less 90°, rather sharp at apex. Basal elytral bead weakly sinuate, usually more or less arcuately, sometimes nearly angularly coming to lateral margin. Striae impunctate, comparatively broad, superficial on disc and slightly deepened at apex. Intervals narrowed posteriad, flat on disc and clearly convex before apex. Microsculpture on disc suppressed, consisting of poorly visible narrow transverse meshes.

Apex of anal sternite weakly emarginate in male, rounded or subtruncate in female. Protibiae notably widened to apex, each usually with 3 apical spines on outer margin. Both protarsi and mesotarsi of male notably dilated (protarsi more strongly than mesotarsi), with 1st-4th tarsomeres bearing adhesive vestiture ventrally (1st mesotarsomere only with a pair of scales apically). Fourth pro- and mesotarsomeres in both sexes bilobed, with much longer lobes in male.

Median lobe of aedeagus (Figs 69–75) weakly arcuate, with large basal bulb and large apical capitulum protruding ventrally and dorsally. Terminal lamella narrow and short, approximately as long as wide, slightly narrowed before rounded apex (dorsal aspect). Internal sac with 2 rather large teeth basally and group of 8–9 smaller teeth apically.

Female genitalia (Fig. 125) with broad hemisternite; basal stylomere moderately widened apically; apical stylomere clearly arcuate, with rounded outer angle.

DISTRIBUTION. Widely distributed across the East Mediterranean Region, Near East and Middle Asia. The species is known from Italia (Sardinia), Albania, Bulgaria, Greece, Turkey, Syria, Israel, Iraq, Iran, Azerbaijan, southern Russia (Caspian Sea Region), Turkmenistan, Uzbekistan, Afghanistan [after Jedlička, 1955] and Kazakhstan [after Ishkov & Kabak, 1995]; it was recorded also from Algeria [Bedel, 1899].

REMARKS. Loxoncus procerus is a single species of the genus occurring in the western portion of the Palaearctic. The identification of this species creates no problems because its geographical range is isolated from the ranges of all other species. In appearance and median lobe of aedeagus with large apical capitulum, L. procerus is rather similar to the East Asian L. circumcinctus but notably differs in the following characters: the coloration usually darker (elytra mainly only at apex slightly paler), the medial tooth of mentum more developed, the pronotum more widened anteriorly, with less rounded sides and less deep latero-basal depressions, the elytra not denticulate at apex and with more evenly rounded inner humeral angle, and the median lobe of aedeagus with nearly transverse apical capitulum.

The male specimen from "Java" (see Material examined), one of the series with the same label data, was apparently mislabelled because it possesses all the characters of *L. procerus* and is clearly a member of this Palaearctic species.

Loxoncus circumcinctus (Motschulsky, 1857) Figs 1, 3, 12–13, 32–33, 36, 76–77, 127.

Harpalus cyanescens Hope, 1845: 15 (non Motschulsky, 1844; Type locality: "Canton" [= Guangzhou], China).

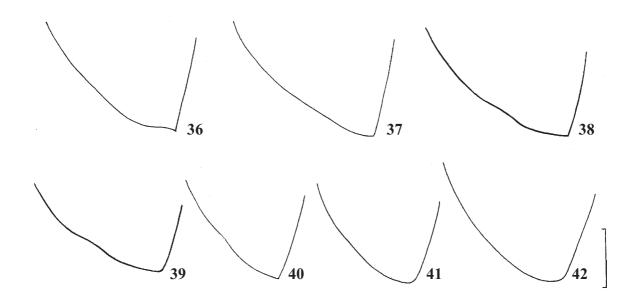
Megrammus circumcinctus Motschulsky, 1857: 27 (Type locality: "Japon").

Anoplogenius impubis Kolbe, 1886: 177 (Type locality: "Bei Soeul", Korea), syn.n.

TYPE MATERIAL. Syntype of *Megrammus circumcinctus*, ♀ with labels "Japonia" and "*Megrammus circumcinctus* Motsch., Japonia [Motschulsky's handwriting]" (ZISP).

Holotype of *Anoplogenius impubis*, ♀ with labels: "Korea, Gottsche", "Soeul, 8. 84", "63 691", "*impubis* Kolbe*, Korea, 1886", "Hist.-Coll. (Coleoptera) Nr. 63691 (1 ex). *Anoplogenius impubis* Kolbe, Korea, Gottsche, Zool. Mus. Berlin", "Zool. Mus. Berlin" (MNHUB).

OTHER MATERIAL. **Russia**: MARITIME TERR.: 7 ♂♂, 6 ♀♀, the lower reaches of Suputinka River, 24.VI.1961, O. Kabakov leg. (cKAB; ZISP); 1 ♂, Ugolnaya Station, Peschanka River, at light, 1.VIII.1960, L. Anufriev leg. (ZISP); 3 ex., Chernyshevka, at light, 5.VII.1995 (ISEAN); 2 ex., Pokrovka-Novogeorgievka, Razdolnaya River (cPUCH); 2 o o, Suchan [= Partizank], 7. and 13.VII.1951, V. Kurnakov leg. (ZISP). **Korea**: 2 ♀♀, "Kansong, 12.VII.1900, P. Schmidt leg. (ZISP); 3 ♀♀, Khoankhado Prov., Sarivon, 20.VII.1950, N. Borkhsenius leg. (ZISP); 34 ex. (♂♂ and ♀♀), Sarivon, VI-VII.1956, M. Magyar leg. (TMB); 1 ♀, same data but 11.VII.1956 (ZISP); 2 ♀♀, "Korea, Söul, 8.84, Gottsche" (MNHUB); 1 ♂ "Korea, 1946" (MNHUB). **China**: 1 ♂, "China, Yang-tse Kiang" (ZISP); 1 \circlearrowleft , 2 \circlearrowleft , "Thinthong, China, Xántus" (TMB); 2 \circlearrowleft , "Koyu-Tchéou, Rég. de Pin-Fa, Père Cavalerie 1908" (MNHN); ANHUI: 2 ♂♂, 1 ♀, Anhui, 25.V.1956 (ZISP); SHANGHAI: 1♀, "Schangaë, China, Xántus" (TMB); SICHUAN: 1 ♂, 1♀, Tatsienlu" (MNHUB; TMB); 1 , Emei-Shan Mt. (SW Slope), 1500 m, 17.V.2001, I. Belousov & A. Korolev leg. (cBel); 1 ♂, "Wassuland, Chunghwa, Reitter" (TMB); 1 ♀, Chundin, 300 m, 5.VII.1955, Bustshik leg. (ZISP); 1 ♂, 1♀, "Beipei near Chungking", 28.VII.1956, Hwang Tien-yun leg. (ZISP); JIANGSU: 1 ex., "Provins Kiangsu, Kolthoff" (SMNHS); ZHEJIANG: 1\, "Chekiang, leg. Suenson" (MNHUB); JIANGXI: 2 QQ, "Kiang-Si, T'en-gan"



Figs 36–42. Loxoncus, apex of left elytron. 36 — L. circumcinctus (Maritime Territory); 37 — L. schmidti sp.n. (Nepal, paratype); 38 — L. incisus (Sumatra, holotype); 39 — L. arrowi (Philippines, holotype); 40 — L. renitens (Sri Lanka); 41 — L. elevatus (Thailand); 42 — L. politus (New Guinea, paratype). 36–37, 39–42 — females; 38 — male. Scale = 0.5 mm.

Рис. 36-42. Loxoncus, вершина левого надкрылья. 36-L. circumcinctus (Приморский край); 37-L. schmidti sp.n. (Непал, паратип); 38-L. incisus (Суматра, голотип); 39-L. arrowi (Филиппины, голотип); 40-L. renitens (Шри Ланка); 41-L. elevatus (Таиланд); 42-L. politus (Новая Гвинея, паратип). 36-37, 39-42- самки; 38- самец. Масштаб 0,5 мм.

(MNHUB); 3 0707, 3 99, "Museum Paris, Kiang-si, A. David, 1874" (ZISP); YUNNAN: 6 ♂♂, 9 ♀♀, "Jindun", 1200 m, 21, 25, 26, 28.IV, 9 and 17.V.1957, A. Monschadsky leg. (ZISP); 1 ♂, 1 9, "Kingtung", 1170 m, at light, 7–23.VI.1956, O. Kryzhanovskij leg. (ZISP); 7 ♂♂, same locality, 1200 m, 25.IV.–9.V.1957, A. Monschadsky leg. (ZISP); 1 \, "Hokow, mouth of the Nanchiho near Vietnam frontier", 200 m, at light, 11.VI.1956, Hwang Keyen leg. (ZISP). Japan: 1 °, 1 \updownarrow , Ijiri, Kyoto, 15.VII.1989, N. lto leg. (ZISP); 1 °, Mitake, 24.VI.1934, Tanizawa leg. (ZISP); 1 °, Tsuruga, 9.IX.1917, Roshkovskij leg. (ZISP); 1 \, Tonokura, Tsuru, Jamanashi, 29.VI.1974, H. Nakomura leg. (TMB); 1 ♂, Honshu, Ibaraki, Tsukuba, 13-20.IX.1999, S. Belokobylskij & K. Konishi leg. (ZISP); 1 ♂, 2 ♀♀, same locality, 27.IX-5.X.1999, S. Belokobylskij & K. Konishi leg. (ZISP); 1 ♀, same locality, 15.VIII.1999, S. Belokobylskij & K. Konishi leg. (ZISP); 1 ♂, Tsikuba — Gakuer, Ibaragi Pref., 9.V.1982, M. Ohara leg. (ZISP); 3 o o o , 1 ♀, Kanagawa Pref., Ebino-shi, 30.VII.1984, K. Wada leg. (MNHUB); 1♂, Hiratuka, Kanagawa-ken, 23.VII.1958, S. Nomura leg. (TMB); 2 ♀♀, Watarase-yusuichi, Tochigi Pref., 27.VI.1976, Oshima leg., (MNHUB); 2 ♂♂, 1 ♀, "Yedo, Hilgendorf" (MNHUB); 2 ♂♂, 1 ♀, "MNHUB); 1 ♂, 1 \, Kyushu, Sobo Mt., 15.VI.1960, K. Mizusawa leg. (TMB); 1 \, , Kyushu, Omuta, Fukuoka, 10.VII.1982, K. Sakai leg. (ZISP); 1 2, "Nagasaki, C. Gottsche" (MNHUB); 1 ♂, 1 ♀, "Nagasaki, Japonia, Xántus" (TMB); 1 \, Kinsakubaru, Amami — Ooshima, 30.VI.1984, M. Ohara leg. (ZISP); 1 \, Tomochi, Kumamoto, 24.VI.1982, Maegata leg. (ZISP); 1 \, "Japon" (MNHUB); 1 \, "Japan, coll. Hiller" (MNHUB); 1 \, "Japan (Hiller), coll. Thieme" (MNHUB); 3 ex., "Japan, Kolthoff" (SMNHS).

DESCRIPTION. In males body length 7.3–8.6 mm, width 2.8–3.5 mm, in females 7.4–9.2 and 2.9–3.8 mm, respectively.

Brown to nearly black; upperside shining, rather strongly iridescent on elytra and less so on pronotum; lateral bead of pronotum, apex of elytra, three external intervals (usually throughout), basal elytral bead, median part of prosternum, pronotal and elytral epipleura, abdominal sternites and proand mesocoxae, often also labrum, base of mandibles and lateral margins of pronotum inside of lateral bead reddish

brown or brownish yellow. Palpi, antennae and legs brownish yellow to yellow; antennae beginning from 3rd segment on and often basal portion of elytral epipleura more or less infuscated.

Head moderate (WHmax/WP = 0.71–0.73 in male and 0.70–0.74 in female, WHmin/WP = 0.53–0.56 in male and 0.55–0.58 in female). Labrum very widely rounded or straight anteriorly; apical margin of clypeus more or less rectilinear in middle (Fig. 1). Frontal suture usually weakly impressed; frontal foveae moderately broad, with clypeo-ocular line distinct up to supraorbital furrow. Mentum (Fig. 3) without distinct medial tooth, but medial portion of its anterior margin within incision scarcely roundly protruding. Ligular sclerite moderately widened at apex. Antennae moderately long, extending approximately to anterior sixth of elytra. Dorsal surface of head throughout with fine microsculpture consisting of distinct isodiametric meshes.

Pronotum (Fig. 12–13) moderately convex, 1.32–1.43 times as wide as long, widest usually before middle and rather evenly rounded at sides. Apical margin weakly emarginate; apical angles only hardly protruding, rather narrowly rounded at apex. Basal margin more or less rectilinear medially, obligue laterally. Basal angles rather widely rounded at apex. Lateral bead rather narrow, slightly widened posteriad, visible usually up to base, sometimes merged with moderately deep latero-basal areas just before basal angles. Fine punctation restricted to latero-basal depressions, usually absent on convex area between basal foveae. Microsculpture on disc visible throughout, consisting of fine transverse meshes.

Elytra moderately convex, oblong, only scarcely rounded at sides, widest usually behind middle, more rarely at middle, in males 1.58–1.64 times as long as wide, 2.78–2.80 times as long and 1.27–1.31 times as wide as pronotum (in females these indices 1.55–1.66, 2.83–3.11 and 1.30–1.39, respectively). Elytral apex slightly truncate; sutural angle sharp,

slightly denticulate (Fig. 36). Basal elytral bead usually more or less angularly coming to lateral margin (Figs 32–33). Striae impunctate, comparatively broad, slightly impressed on disc and clearly deepened at apex. Intervals narrowed posteriad, scarcely convex on disc and markedly convex before apex. Microsculpture on disc suppressed, consisting of very fine, poorly visible transverse meshes.

Apex of anal sternite slightly truncate or hardly emarginate in male, rounded in female. Protibiae notably widened to apex, each usually with 3 apical spines on outer margin. Both protarsi and mesotarsi of male notably dilated (protarsi more strongly than mesotarsi), with 1st—4th tarsomeres bearing adhesive vestiture ventrally (1st mesotarsomere only with a pair of scales apically). Fourth pro- and mesotarsomeres in both sexes bilobed, with much longer lobes in male.

Median lobe of aedeagus (Figs 76–77) arcuate, with moderate basal bulb and large oblique apical capitulum protruding sharply dorsad. Terminal lamella rather short, triangular, slightly longer than wide, acute at apex (dorsal aspect). Internal sac with 2 small teeth inside of basal bulb, 4 large teeth more apically and a spiny patch close to apical lamella.

Female genitalia (Fig. 127) with broad hemisternite; basal stylomere moderately widened apically; apical stylomere clearly arcuate, with broad base and more or less rounded outer angle.

DISTRIBUTION. The species is widely distributed over East Asia; it is known from Far East of Russia (Maritime Territory), Japan, Korea, and north-eastern, eastern and southern China (Anhui, Jiangsu, Jianxi, Shanghai, Zhejiang, Sichuan, Yunnan, Guangdong, Guangxi).

REMARKS. Except for the male genitalia, in most cases the species is easily recognizable by the elytra each with angulate inner humeral angle (Figs. 32–33) and slightly denticulate sutural angle (Fig. 36). Besides, the geographic pattern of distribution of *L. circumcinctus* also alleviates the problem of determination since it is the only representative of the genus in most part of its geographic range.

Anoplogenius impubis was described on the basis of a single male collected near Seoul, Korea. According to the original description, this species is similar to A. circumcinctus but distinguished mainly by having smaller body size (length 7 mm), paler coloration and shorter pronotum narrowed posteriad more strongly. Based on the re-study of the holotype, I believe that this species was really described from a very small (7.3 mm), weakly pigmented female of L. circumcinctus with deformated pronotum. Thereby I consider Anoplogenius impubis the synonym of the latter.

The renitens subgroup

COMPOSITION AND DIAGNOSIS. The subgroup comprises the six species (*L. renitens*, *L. horni*, *L. arrowi*, *L. incisus*, *L. politus* and *L. marginatus*) characterized each by the medium-sized body and the aedeagus with apex curved or protruding dorsad. Internal sac is with the medium-sized teeth each with oval base toothed usually at margin. Latero-basal depressions of pronotum are rather shallow.

REMARKS. The members of this subgroup are most difficult in the taxonomical respect since demonstrate substantial similarity to each other in details of coloration, external morphology and genitalic characteristics. All the included species are probably allopatric and evolved as the result of dispersal of one ancestor species from Southeast Asia via Indonesia and New Guinea to Australia. Within this subgroup, *L. renitens* from Sri Lanka on the one hand and the two closely related species, *L. politus* from New Guinea and

L. marginatus from Australia, on the other hand, are more markedly separated morphologically from the other species distributed in the mainland Southeast Asia, Sunda Isles and Philippines. The status of some species of this subgroup should be clarified on the basis of the more abundant material.

Loxoncus renitens (Bates, 1886) Figs 16, 40, 88–94, 129.

Anoplogenius renitens Bates, 1886: 79 (Type locality: Colombo, Sri Lanka).

TYPE MATERIAL. Lectotype of *Anoplogenius renitens* (designated here for purposes of fixation of species name), ♂ with labels "Ceylon" and "*Anoplogenius renitens* Bates [Bates' handwriting]" (MNHN).

OTHER MATERIAL. **Sri Lanka**. 1 ♂, "Ceylon, Mus. Colomb." (MNHUB); 1 ♂, 2 ♀♀, "Ceylon, Nietner" (MNHUB); 1 ♂, Kitugala, forest floor, 20.II.1997, P. Udovichenko leg. (MPU).

DESCRIPTION. Comparatively small: in males body length 6.1–6.3 mm, width 2.5–2.6 mm, in females 6.8–6.9 mm and 2.8–2.9 mm, respectively.

Upperside dark brown to black, shining, with bluish hue, rather strongly iridescent on pronotum and elytra; lateral bead of pronotum, three lateral intervals (except for humeral area) and apex of elytra brownish yellow; sometimes also base of mandibles and labrum paler. Underside dark brown, with paler median part of prosternum, pronotal and elytral epipleura, three last abdominal sternites and pro- and mesocoxae. Palpi, antennae and legs brownish yellow to brown; antennae beginning from 3rd (sometimes 2nd) antennomere and basal portion of elytral epipleura more or less strongly infuscated.

Head large (in both sexes, WHmax/WP = 0.80–0.81, WHmin/WP=0.58–0.62). Labrum rounded anteriorly; apical margin of clypeus more or less rectilinear. Frontal suture slightly impressed; frontal foveae large; clypeo-ocular line distinct up to supraorbital furrow. Mentum with very short and wide medial tooth, widely rounded at apex. Ligular sclerite slightly widened at apex. Antennae comparatively long, extending approximately to one-quarter of elytra. Dorsal surface of head throughout with distinct microsculpture consisting of isodiametric meshes.

Pronotum (Fig. 16) moderately convex, 1.37–1.41 times as wide as long, widest in apical third where lateral setigerous pores located; pronotal sides evenly rounded anteriorly, almost straight or very widely rounded in basal half. Apical margin very weakly emarginate; apical angles not protruding anteriorly, rounded at apex. Basal margin rectilinear or slightly rounded medially, obligue laterally; basal angles obtuse, rather broadly rounded at apex. Lateral beads narrow, not widened basad, continuing slightly to lateral portions of basal margin. Basal foveae shallow and broad, each extended laterally nearly up to lateral furrow forming on each side of pronotal base broad latero-basal depression; latter distinctly and irregularly punctate; other surface including convex area between basal foveae impunctate. Microsculpture developed throughout, consisting of very fine transverse meshes.

Elytra convex, oval, widest behind middle, in males 1.51–1.52 times as long as wide, 2.82–2.91 times as long and 1.32–1.40 times as wide as pronotum (in females these indices 1.51–1.55, 2.90–2.97 and 1.36–1.41, respectively). Sutural angle nearly rectangular, sharp at apex (Fig. 40). Basal elytral bead sinuate, arcuately coming to lateral margin. Striae impunctate, comparatively broad, slightly impressed on elytral disc and clearly deepened at apex. Intervals narrowed posteriad, flat on disc and somewhat convex at apex. Microsculpture obliterate, consisting of poorly visible transverse meshes.

Apex of anal sternite in male slightly truncate, in female rounded. Male protarsi moderately dilated, mesotarsi weakly dilated; 1st–4th protarsomeres and 2nd–4th mesotarsomeres each with adhesive vestiture ventrally. Fourth pro- and mesotarsomeres in both sexes bilobed.

Median lobe of aedeagus (Figs 88–94) comparatively narrow, arcuate, with large basal bulb and apex strongly curved dorsad (lateral aspect). Terminal lamella narrow, much longer than wide, narrowed apically (dorsal aspect). Internal sac with one spine of medium size apically and with 4–7 spines of similar size situated in medial and basal portions of median lobe. Bases of spines large and oval, smooth or slightly toothed at margins.

Female genitalia (Fig. 129) with broad hemisternite; basal stylomere moderately widened apically; apical one comparatively narrow, with rounded external angle.

DISTRIBUTION. The species was described from Colombo and its distribution seems to be restricted to Sri Lanka.

REMARKS. Loxoncus renitens is a smallest species within the subgroup; it is distinguishable also by the male genitalia: the internal sac has fewer teeth than in other related species and bases of these teeth are smooth or only slightly toothed at margin. This species is usually confused with L. elevatus but well differing from it in the male genitalia, the less depressed latero-basal areas of pronotum and the sharp sutural angle of elytra (not rounded at apex as in L. e. elevatus and L. e. manilensis ssp.n.). In addition, lateral bead of pronotum in L. renitens is slightly prolonged to the base in distinct to that of L. elevatus, which is ceasing at basal angles.

Loxoncus incisus (Andrewes, 1926), **stat. rest.** Figs 19–20, 35, 38, 43, 98–102, 132–133.

Anoplogenius incisus Andrewes, 1926: 279 (Type locality: Fort de Kock, Sumatra).

TYPE MATERIAL. Holotype, ♂ with labels: "Type", "Fort de Kock, W. Sumatra, E. Jacobson. B.M. 1926–2.", "Fort de Kock (Sumatra), 920 m, 1924, leg. E. Jacobson", "Anoplogenius incisus Andr. Type, H. E. Andrewes det." (NHML). Paratypes: ♂ with

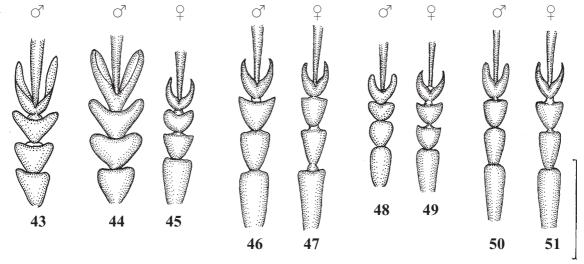
labels: "Cotype", "Fort de Kock (Sumatra), 920 m, 1924, leg. E. Jacobson", "Anoplogenius incisus Andr., cotype. H.E. Andrewes det.", "H.E. Andrewes Coll., B.M. 1945–97" (NHML); $^{\circ}$ with labels "Fort de Kock, Sumatra, 920 m, Jan. 1921, leg. E. Jacobson", "cotype", "Anoplogenius incisus Andr., Cotype, det. H.E. Andrewes, 1926" (MNHUB); $^{\circ}$ with labels: "Tjinta Radja, Sumatra, Mjoberg" and "Anoplogenius incisus Andr., Cotype, H.E. Andrewes" (SMNHS).

DESCRIPTION. In males body length 7.5–7.6 mm, width 3.0–3.1 mm, in female 7.6 mm and 3.1 mm, respectively.

Upperside brown to dark brown (head usually darkest), shining, hardly iridescent on pronotum and elytra; lateral beads of pronotum, three lateral intervals and apex of elytra brownish yellow. Underside brown, with paler median part of prosternum, pronotal and elytral epipleura, three last abdominal sternites and pro- and mesocoxae. Palpi, antennae and legs brownish yellow; 3^{rd} – 11^{th} antennomeres and basal portion of elytral epipleura slightly infuscated.

Head comparatively large (WHmax/WP = 0.73–0.74 in males and 0.75 in female). Labrum and clypeus anteriorly more or less rectilinear. Frontal suture and clypeo-ocular line at clypeus moderately deep; latter bacoming shallow towards eye, reaching supraorbital furrow. Mentum with very short and wide medial tooth, widely rounded at apex. Ligular sclerite notably widened and truncate at apex. Antennae extending approximately to one-quarter of elytra. Dorsal surface of head throughout with distinct microsculpture consisting of isodiametric meshes.

Pronotum (Fig. 19–20) moderately convex, 1.29–1.42 times as wide as long, widest in apical third where lateral setigerous pores located; pronotal sides evenly rounded anteriorly, becoming almost straight in basal half. Apical margin very weakly emarginate; apical angles not protruding anteriorly, rounded at apex. Basal margin slightly rounded; basal angles obtuse, tather broadly rounded at apex. Lateral beads narrow, not widened basad, disappearing just at basal angles. Basal foveae shallow and broad, each separated from lateral furrows by narrow and flattened convexity. Latero-basal areas finely and comparatively densely punctate. Area between basal foveae convex, impunctate. Microsculpture developed throughout, consisting of very fine transverse meshes.



Figs 43–51. Loxoncus, tarsus. 43 — L. incisus (Sumatra, paratype); 44–47 — L. marginatus (Australia); 48–51 — L. gynuis sp.n. (Batavia). 43–44, 48 — male protarsus; 45, 49 — female protarsus; 46, 50 — male mesotarsus; 47, 51 — female mesotarsus. Scale = 0.5 mm.

Рис. 43-51. Loxoncus, лапка. 43-L. incisus (Суматра, паратип); 44-47-L. marginatus (Австралия); 48-51-L. gynuis sp.n. (Батавия). 43-44, 48- передняя лапка самца; 45, 49- передняя лапка самки; 46, 50- средняя лапка самца; 47, 51- средняя лапка самки. Масштаб 0,5 мм.

Elytra convex, oblong, in males 1.57–1.58 times as long as wide, 2.74–2.82 times as long and 1.35–1.36 times as wide as pronotum (in female these indices 1.55, 3.00 and 1.36, respectively), widest behind middle and scarcely rounded at sides. Sutural angle sharp at apex (Fig. 38). Basal elytral edge slightly sinuate, arcuately coming to lateral margin (Fig. 35). Striae impunctate, slightly impressed. Intervals somewhat flat, weakly convex at apex. Microsculpture obliterate, consisting of poorly visible transverse lines.

Apex of anal sternite scarcely rounded in both sexes. Male protarsi (Fig. 43) rather strongly dilated, mesotarsi weakly dilated; both with adhesive vestiture ventrally.

Median lobe of aedeagus (Figs 98–102) comparatively narrow, arcuate, with apex strongly curved dorsad (lateral aspect). Terminal lamella very narrow, much longer than wide, not widened apically (dorsal aspect). Internal sac with one spine of medium size apically and with 6–13 spines of similar size (each toothed at its basal margin) situated in medial and basal portions of median lobe.

Female genitalia (Fig. 132–133) with broad hemisternite; basal stylomere moderately widened apically, apical one comparaively narrow, with somewhat distinct external angle.

DISTRIBUTION. Indonesia: Sumatra.

REMARKS. *Loxoncus incisus* was described from the series collected in Sumatra (including the holotype), Nias, Java, Lombok, Celebes (= Sulawesi) and New Guinea (Dorey). However, the examination of the type series revealed that this taxon is actually based on the two different, but very similar, species and that only the paratypes from Sumatra (probably also from Nias but no specimens from there were examined) are identical to the holotype. The paratypes from Java, Lombock, Celebes and New Guinea (really also Celebes or the Moluccas: see Darlington [1962: 330–331]) belong to the separate species newly described below. The both species are easily distinguished from each other not only by the male and female genitalia but also by the male pro- and mesotarsi which are notably dilated in *L. incisus* and narrow, without ventral adhesive vestiture in the new species.

Darlington [1968] listed *L. incisus* as possibly cospecific with *L. marginatus* described from Australia and this treatment was accepted by Lorenz [1998]. In my opinion, *L. incisus* is a separate species markedly differing from *L. marginatus* in the sharp apex of sutural angle of elytra (not narrowly rounded as in the latter species and in *L. politus*) and in the more slender median lobe of aedeagus with more straightapical portion and smaller basal bulb.

L. incisus is similar to *L. renitens* both in the external characters and the male and female genitalia but larger and has usually more numerous teeth in internal sac, most of which are clearly toothed at basal margin. In addition, the lateral beads of pronotum in *L. incisus* are disappearing at basal angles and not prolonged to the base as in *L. renitens*.

Loxoncus horni (Schauberger, 1938) Figs 17, 95–97, 131.

Anoplogenius Horni Schauberger, 1938: 53 (Type locality: "Cochin-China", = Vietnam).

MATERIAL. **Vietnam**: $1 \circlearrowleft 7$, $1 \circlearrowleft 9$, Hanoi, at light, 1.XI. and 20.XII.1961, O. Kabakov leg. (ZISP); $1 \circlearrowleft 7$, same locality, 6-8.VI.1962, O. Kabakov leg. (ZISP). **Laos**: $2 \circlearrowleft 7 \circlearrowleft 7$, $3 \circlearrowleft 9 \circlearrowleft 9$, Vientian, 21-25.I. and 1.II.1986, O. Kabakov leg. (ZISP). **Thailand**: $1 \circlearrowleft 7$, $2 \circlearrowleft 9$, North East, Khon Kaen, at light, 21 and 25.II.1981, S. Saowakontha leg. (MNHUB); $1 \circlearrowleft 9$, same data but 23.I.1981 (MNHUB); $1 \circlearrowleft 7$, $25 \varliminf 8$ km NW Lan Sak, $65 \varliminf 8$ NW Uthai Thani,

ca 220 km NW Bangkok, 110 m, IX.1990, W. Thielen leg. (MNHUB); 2 $^{\circ}$ C $^{\circ}$, 3 $^{\circ}$ C $^{\circ}$, 25 km NW Lan Sak, 65 km NW Uthai Thani, VI.1990, W. Thielen leg. (cSCHM). **Malaysia**: 1 $^{\circ}$ C, Penang, 6.I $^{\circ}$ 1.II.1981, T. Palm & B. Ferringhi leg. (MZLU).

DESCRIPTION. Very similar in appearance to preceding species but darker (black dorsum and brownish or brownish yellow legs and antennae; legs at least partly infuscated); pronotum (Fig. 17) largest at middle or just before it, more strongly and evenly rounded at sides and with more widely rounded basal angles. Median lobe of aedeagus (Figs 95–97) a little more slender than that of *L. incisus* and usually with more number (11–17) of spines in internal sac. Female genitalia (Fig. 131) similar to that of *L. incisus*.

Proportions: WP/LP = 1.29-1.42; LE/WE = 1.50-1.59 in males and 1.51-1.56 in females; LE/LP = 2.66-2.82 in males and 2.79-2.97 in females; WE/WP = 1.29-1.35 in males and 1.31-1.39 in females; WHmax/WP = 0.71-0.76 in males and 0.72-0.76 in females; WHmin/WP = 0.53-0.56 in males and 0.56-0.57 in females.

Body length in males 6.8–7.5 mm, width 2.8–3.1 mm, in females 6.6–8.0 and 2.7–3.2 mm, respectively.

DISTRIBUTION. Laos, Vietnam, Thailand and Malaysia. REMARKS. Very similar to the preceding species in appearance and in male and female genitalia (see Description) and since the geographic ranges of both species are isolated, it is possible that they are only subspecies of one species.

Loxoncus arrowi (Jedlička, 1935) Figs 18, 39, 131.

Anoplogenius arrowi Jedlička, 1935: 138 (Type locality: Manila, Philippines).

TYPE MATERIAL. Holotype, ♀ with labels: "Type", "Philippine Is., Coll. Böttcher, B.M. 1929–201", "Philippine Islands, Manila, 2.XII.1914, Coll. Böttcher", "Anoplogenius Arrowi sp.n., type, det. Ing. Jedlička" (NHML).

OTHER MATERIAL. ♀, "Hist.-Coll. (Coleoptera), Nr. 52820 (2 ex.), *Anoplogenius radiatus* N., Java — India orient., Zool. Mus. Berlin" (MNHUB).

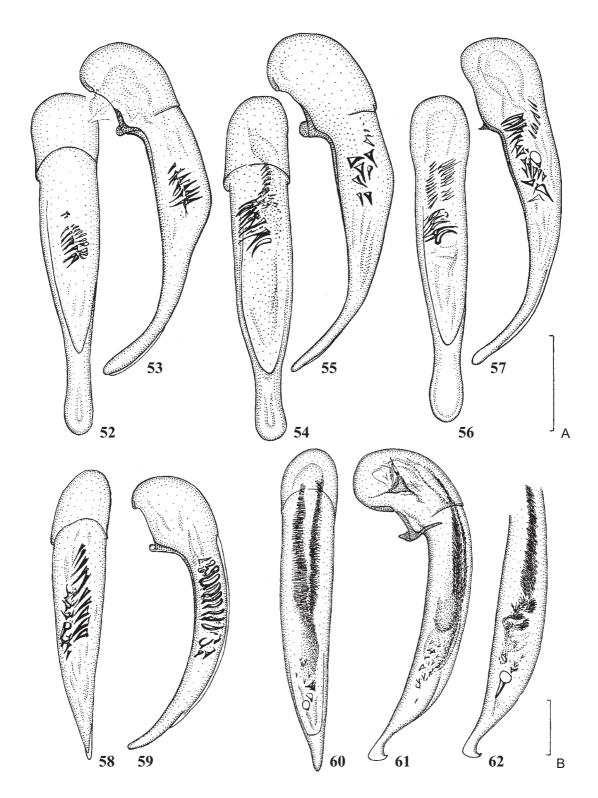
DESCRIPTION. Body length 7.4 mm, width 3.0 mm. Very similar in external characters and female genitalia to *L. incisus*.

Dark brown; dorsum shining, scarcely iridescent on pronotum and elytra; lateral margins of pronotum along lateral furrows, three marginal intervals (except for humeral portions) and apex of elytra, palpi, two basal antennomeres and legs brownish yellow; pronotal epipleura and apical portion of elytral epipleura also paler, brownish yellow.

Head comparatively larger than in L. incisus (WHmax/WP = 0.77), throughout with microsculpure consisting of distinct isodiametric meshes. Pronotum (Fig. 18) slightly narrower, 1.33 times as wide as long, notably narrowed basad; sides evenly rounded anteriorly, almost straight posteriorly; basal angles well marked, rounded at apex; lateral beads narrow, prolonged to lateral portions of pronotal base; basal punctation slightly more coarse than in L. incisus; microsculpture consisting of fine but clearly visible throughout transverse meshes. Elytra similar to those of L. incisus, 1.55 times as long as wide, 2.85 times as long and 1.36 times as wide as pronotum; sutural angles nearly rectangular, somewhat sharp at apex (Fig. 39); microsculpture consisting of very fine narrow transverse meshes. Apical stylomere of female genitalia (Fig. 131) rather narrow, as in L. incisus.

DISTRIBUTION. Philippines, ? Java.

REMARKS. Described from a single female from Philippines. The taxonomic position and status of this species is



Figs 52–62. Loxoncus, median lobe of aedeagus. 52–57 — L. discophorus [52–53 — Sri Lanka; 54–57 — Philippines, holotype (54–55) and paratype (56–57) of Anoplogenius boettcheri]; 58–59 — L. nagpurensis (India, Chota-Nagpore); 60–62 — L. rutilans (60–61 — Vietnam; 62 — Burma, Katha, syntype). 52, 54, 56, 58, 60 — dorsal aspect; 53, 55, 57, 59, 61–62 — lateral aspect. Scales = 0.5 mm (A: 52–59; B: 60–62).

Рис. 52–62. *Loxoncus*, срединная доля эдеагуса. 52–57 — *L. discophorus* [52–53 — Шри Ланка; 54–57 — Филиппины, голотип (54–55) и паратип (56–57) *Anoplogenius boettcheri*]; 58–59 — *L. nagpurensis* (Индия, Чхота-Нагпур); 60–62 — *L. rutilans* (60–61 — Вьетнам; 62 — Бирма, Ката, синтип). 52, 54, 56, 58, 60 — дорсальный вид; 53, 55, 57, 59, 61–62 — вид сбоку. Масштаб 0,5 мм (А: 52–59; В: 60–62).

unclear because only a female is known. I consider *L. arrowi* to be closely related to *L. incisus* or even the both should be treated as geographical forms of one species owing to their remarkable similarity to each other. The main character distinguishing the both taxa is the lateral bead of pronotum, which is prolonged to the base in *L. arrowi* (Fig. 18) and ceasing at basal angle in *L. incisus* (Fig. 19–20). The additional material from Philippines is very needed to determine the taxonoical status of *L. arrowi*.

The female examined from "Java" agrees rather well in the external characters and the genitalia with the holotype of *L. arrowi* and seems to belong to the same species; like in the holotype, the lateral pronotal bead of the female from "Java" is clearly prolonged to the base. However, it is possible, that the locality "Java" is indicated on the label erroneously because the series at MNHUB, with the same labels, includes also the male of the Palaearctic *L. procerus* (see above).

Loxoncus politus (Schauberger, 1937), stat. rest. Figs 42, 103–105, 136.

Anoplogenius politus Schauberger, 1937: 273 (Type locality: "Tigerinsel", = New Guinea).

TYPE MATERIAL. Holotype, ♂ with labels: "Tiger Island", "Birger Morner", "Type", "Anoplogenius politus Schaub, det. Dr. E. Schaub." (SMNHS). Paratypes: 2 ♂♂, 1 ♀, same data as holotype (SMNHS).

OTHER MATERIAL. **New Guinea**: 1 ♂, "D. N. Guinea, Mdg. d. L. Schultze-Fluss. Kaiserin Augustafl. Exp., 7.VI.1912, S.G. Bürgers" (MNHUB); 1 ♂, "D. N. Guinea, Aprilfluss, Kais. Augustafl. Exp., VI.1912, S. Ledermann" (MNHUB); 1 ♀, "D. N. Guinea, Dampfer Ankerplatz 1, Kaiserin Augustafl. Exp., 13.V.1912, S.G. Bürgers" (MNHUB).

DESCRIPTION. In males body length 6.8–8.2 mm, width 2.8–3.3 mm, in females 8.0–8.1 and 3.8–3.9 mm, respectively.

Brown to dark brown, sometimes nearly black; dorsum shining, with green lustre, more or less iridescent on pronotum and elytra; lateral bead of pronotum, usually apex and often also 1–3 lateral intervals of elytra (mainly only in their apical portion) slightly paler, reddish brown; in most specimens also median part of prosternum, pronotal and elytral epipleura (latter chiefly only in apical portion), abdominal sternites and pro- and mesocoxae paler. Palpi, antennae and legs brown to brownish yellow, antennae more or less infuscated mainly from 3rd antennomere on; in some specimens 1–2 basal antennomeres slightly infuscated apicacally.

Head comparatively large (in males, WHmax/WP = 0.72–0.76, WHmin/WP = 0.55–0.57; in females, these indices 0.74–0.75 and 0.57–0.58, respectively). Labrum and clypeus anteriorly more or less rectilinear. Frontal suture slightly impressed; clypeo-ocular line reaching supraorbital furrow, very shallow posteriorly. Mentum without medial tooth. Ligular sclerite slightly widened apically. Antennae extending to base of elytra. Dorsal surface of head throughout with distinct microsculpture consisting of isodiametric meshes.

Pronotum moderately convex, 1.34–1.41 times as wide as long, widest before middle, approximately in anterior third; its sides usually entirely rounded, more rarely almost rectilinearly converging basally. Apical margin only scarcely emarginate; apical angles not protruding anteriorly. Basal margin more or less rectilinear; basal angles rather widely rounded at apex. Lateral bead narrow, almost not widened basad, usually slightly continuing to lateral areas of basal margin. Basal foveae somewhat deep and flat, expanded laterally up to lateral furrows forming on each side rather flat latero-basal depression. Area between latter slightly flattened or convex. Base of pronotum

densely punctate, with larger punctures in latero-basal depressions. Microsculpture developed throughout, consisting of fine, somewhat suppressed transverse meshes.

Elytra convex, oblong, in males 1.50–1.56 times as long as wide, 2.68–2.85 times as long and 1.29–1.38 times as wide as pronotum (in females these indices 1.49–1.54, 2.94–2.95 and 1.35–1.41, respectively), weakly rounded at sides and widest just behind middle. Sutural angle narrowly rounded at apex in both sexes (Fig. 42). Basal elytral edge weakly sinuate, arcuately coming to lateral margin. Striae impunctate, comparatively wide, impressed on disc and slightly deepened at apex. Intervals somewhat convex, more markedly apically than basally. Microsculpture very fine, consisting of narrow and long, poorly visible transverse meshes.

Apex of anal sternite in male scarcely truncate, in female rounded. Protibiae notably widened to apex, each usually with 3 apical spines on outer margin. Male protarsi rather strongly dilated, mesotarsi moderately dilated; both with 1st-4th tarsomeres bearing adhesive vestiture ventrally (1st mesotarsomere only with a pair of scales apically). Fourth pro- and mesotarsomeres in both sexes bilobed, with much longer lobes in male.

Median lobe of aedeagus (Figs 103–105) arcuate, with rather large basal bulbe and with apical portion clearly curved ventrad. Terminal lamella narrow, markedly longer than wide, slightly narrowed to apex (dorsal aspect). Apical capitulum oblique, protruding dorsally. Armature of internal sac consisting of 1–2 teeth of medium size apically and several (4–7) teeth medially and basally (each of basal and median teeth clearly toothed at basal margin).

Female genitalia (Fig. 135–136) with broad hemisternite; basal stylomere moderately widened apically; apical one rather narrow, hooked at apex, with rounded outer angle.

DISTRIBUTION. New Guinea.

REMARKS. The species was described from "Tigerinsel" (= New Guinea). According to Darlington [1968: 68], the types are probably off Celebes (= Sulawesi) rather than New Guinea. I don't know if this opinion is correct but both the holotype and paratypes of *L. politus* fit the other material examined by me from New Guinea and notably differ from the specimens examined from all other localities. In the same work, Darlington tentatively listed *L. politus* as a synonym of *L. marginatus* (see also Lorenz, 1998), but both taxa are distinguished from each other by the male genitalia (see Key) and I prefer to consider them the separate species.

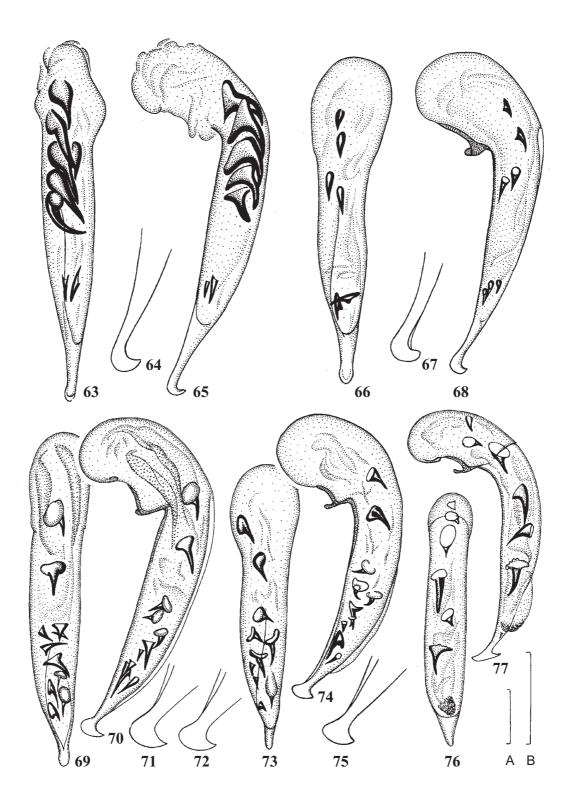
L. politus easily differs from the related L. incisus, L. horni and L. arrowi, amongst other things, in the sutural angle of each elytron narrowly rounded at apex (Fig. 42) and the apical portion of aedeagus more strongly bent ventrad (Fig. 105); in addition, the aedeagus of L. politus has the basal bulb relatively larger and the apical capitulum only scarcely protruding dorsad (Fig. 104).

Loxoncus marginatus (Macleay, 1888) Figs 21, 44–47, 106–112, 134.

Haplaner marginatus Macleay, 1888: 472 (Type locality: King's Sound, Australia).

Nemaglossa macleayi Csiki, 1932: 1059, unnecessary name for Haplaner marginatus Macleay, 1888.

TYPE MATERIAL. Lectotype of *Haplaner marginatus* (designated here for purposes of fixation of species name), ♂ with labels "N.W. Austr", "SYNTYPE", "On permanent loan from MACLEAY MUSEUM, University of Sydney" and "*Haplaner marginatus* Macl. N.W. Australia" (ANIC), and paralectotype, ♂ with labels as in lectotype (ANIC).



Figs 63–77. Loxoncus, median lobe of aedeagus. 63–65 — L. planicollis (Burma, lectotype); 66–68 — L. schmidti sp.n. (Nepal, holotype); 69–75 — L. procerus (69–72 — Talysh; 73–75 — "Java"); 76–77 — L. circumcinctus (Maritime Territory). 63, 66, 69, 73, 76 — dorsal aspect; 65, 68, 70, 74, 77 — lateral aspect; 64, 67, 71–72, 75 — apex of median lobe, lateral aspect. Scales = 0.5 mm (A: 63, 65–66, 68–70, 73–74, 76–77; B: 64, 67, 71–72, 75).

Рис. 63–77. *Loxoncus*, срединная доля эдеагуса. 63–65 — *L. planicollis* (Бирма, лектотип); 66–68 — *L. schmidti* sp.n. (Непал, голотип); 69–75 — *L. procerus* (69–72 — Талыш; 73–75 — "Ява"); 76–77 — *L. circumcinctus* (Приморский край). 63, 66, 69, 73, 76 — дорсальный вид; 65, 68, 70, 74, 77 — вид сбоку; 64, 67, 71–72, 75 — вершина срединной доли, вид сбоку. Масштаб 0,5 мм (A: 63, 65–66, 68–70, 73–74, 76–77; В: 64, 67, 71–72, 75).

OTHER MATERIAL. **Australia**: QUEENSLAND: $1\,$ $\$ 7, Townsville, 16-22.III.1965, Exp. Dr. J. Balogh leg. (TMB); $1\,$ $\$ 7, Qld, 93/28, Lakefield NP, Horseshoe Lag., 25 km E Old Laura, 30.V.1993, M. Baehr leg. (ZSBSM); NORTHERN TERRITORY: $4\,$ $\$ 7 $\$ 7, $3\,$ $\$ 9, Magela Creek, $3\,$ km n. Mudginberri, 3.XI.1984, M. & B. Baehr leg. (ZSBSM; ZISP); $1\,$ $\$ 9, NT, Fogg Dam, b. Coastal Plains Res. Stn., 5.XI.1984, M. & B. Baehr leg. (ZSBSM); $1\,$ $\$ 9, NT, 95/42, West Beines River, 23-24.VIII.1995, M. Baehr leg. (ZSBSM).

DESCRIPTION. In males body length 6.4–7.8 mm, width 2.6–3.2 mm, in females 7.0–7.8 and 2.8–3.3 mm, respectively.

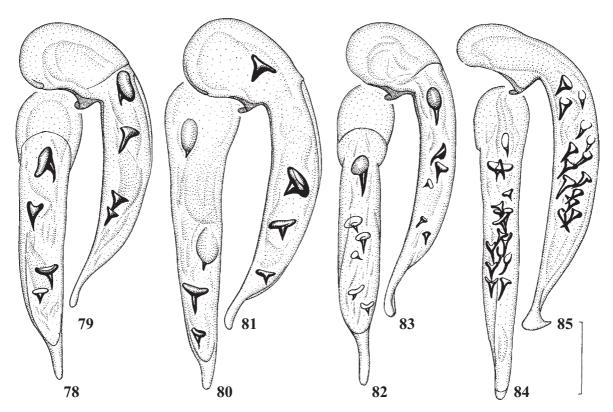
Upperside brown to dark brown, shining, slightly iridescent on pronotum and elytra, and with green lustre in some specimens; lateral margins of pronotum along lateral furrow, three lateral intervals and apex of elytra brownish yellow (pale spot at apex of elytra more expanded basally on 5th and 6th intervals than in 1st—4th intervals). Underside dark brown; median part of prosternum, pronotal and elytral epipleura, abdominal sternites and pro- and mesocoxae brownish yellow. Palpi, antennae and legs also brownish yellow, but antennae more or less infuscated from 3rd antennomere on.

Head comparatively large (in males, WHmax/WP = 0.70–0.78, WHmin/WP = 0.53–0.57; in females, these indices 0.76–0.78 and 0.57–0.59, respectively). Labrum and clypeus anteriorly more or less rectilinear. Frontal suture distinct, slightly impressed; clypeo-ocular line deep at clypeus, shallow at eye, reaching supraorbital furrow. Ligular sclerite slightly widened to apex. Antennae extending approximately to one-six of elytra. Dorsal surface of head throughout with distinct microsculpture consisting of isodiametric meshes.

Pronotum (Fig. 21) moderately convex, 1.32–1.45 times as wide as long, widest before middle; its sides entirely rounded (in some specimens almost rectilinerly converging basally), with lateral setigerous pore in apical third. Apical margin only scarcely emarginate; apical angles not protruding anteriorly. Basal margin more or less rectilinear; basal angles rather well marked, rounded at apex. Lateral furrow narrow, almost not widened basad, usually slightly continuing to lateral areas of basal margin. Basal foveae somewhat deep and flat, expanded laterally up to lateral furrows forming on each side rather flat latero-basal depression. Baso-medial area slightly flattened or convex. Base of pronotum densely punctate, with more coarse punctures in latero-basal depressions. Microsculpture developed throughout, consisting of fine transverse meshes.

Elytra convex, oblong, in males 1.46–1.57 times as long as wide, 2.76–2.90 times as long and 1.31–1.40 times as wide as pronotum (in females these indices 1.48–1.54, 2.72–2.97 and 1.34–1.40, respectively), widest just behind middle and scarcely rounded at sides. Sutural angle narrowly rounded at apex in both sexes (as in Fig. 42). Basal elytral edge sinuate, arcuately coming to lateral margin. Striae impunctate, comparatively wide and slightly deepened. Intervals rather flat basally, weakly convex apically. Microsculpture visible throughout, very fine, consisting of narrow and long transverse meshes.

Apex of anal sternite in male scarcely truncate, in female, rounded. Protibiae notably widened to apex, each usually with 3 apical spines on outer margin. Male protarsi



Figs 78–85. Loxoncus, median lobe of aedeagus. 78–79 — L. elevatus elevatus (Burma, Palon); 80–81 — L. e. manilensis ssp.n. (Philippines, holotype); 82–83 — L. e. javanensis ssp.n. (Java, holotype); 84–85 — L. biekei sp.n. (Thailand, holotype). 78, 80, 82, 84 — dorsal aspect; 79, 81, 83, 85 — lateral aspect. Scale = 0.5 mm.

Рис. 78-85. Loxoncus, срединная доля эдеагуса. 78-79 — L. elevatus elevatus (Бирма, Палон); 80-81 — L. e. manilensis ssp.n. (Филиппины, голотип); 82-83 — L. e. javanensis ssp.n. (Ява, голотип); 84-85 — L. hiekei sp.n. (Таиланд, голотип). 78, 80, 82, 84 — дорсальный вид; 79, 81, 83, 85 — вид сбоку. Масштаб 0,5 мм.

(Fig. 44) rather strongly dilated, mesotarsi (Fig. 46) weakly dilated; 1st–4th protarsoneres and 2nd–4th mesotarsomeres each with adhesive vestiture ventrally (for comparison, female pro- and mesotarsi are illustrated in Figs 45 and 47, respectively). Fourth pro- and mesotarsomeres in both sexes bilobed (in male with much more narrow lobes).

Median lobe of aedeagus (Figs 106–112) arcuate, hooked at apex and with rather large basal bulbe. Terminal lamella narrow, markedly longer than wide, not widened apically (dorsal aspect). Armature of internal sac variable: consisting of two spines of medium size apically and usually also with dorsal row of 4–6 spines in basal bulb and few spines medially (each of basal and median spines clearly toothed at margin of its base).

Female genitalia (Fig. 134) with broad hemisternite; basal stylomere moderately widened apically; apical one rather narrow, with somewhat rounded external angle.

DISTRIBUTION. Australia. According to Moore et al. [1987], the species is distributed mainly along the coast of northern Australia (Western Australia, Northern Territory and Queensland).

REMARKS. *L. marginatus* was described on the basis of the specimens collected in the King's Sound district of north-west Australia. In the male genitalia and the elytra rounded narrowly at apices, this species is very similar to *L. politus* from New Guinea but distinguished from it by having the apical capitulum of aedeagus more transverse and more strongly protruding dorsad. Besides, the elytral intervals of *L. marginatus* are somewhat flat on disc (not convex as in *L. politus*). According to the examined specimens, *L. marginatus* is rather variable in the armature of internal sac (Figs 106, 108–110, 112) but the available material is too sparse to determine the nature of this variation.

Subgenus *Xoloncus* **subg.n.**

Type species: Anoplogenius microgonus Bates, 1886.

DESCRIPTION. Male pro- and mesotarsi not dilated and without adhesive vestiture ventrally. Lateral beads of pronotum rather narrow up to basal angles and not merged with latero-basal depressions (if latter present). Median lobe of aedeagus somewhat stout, without apical capitulum; teeth in internal sac absent. Apical stylomere of female genitalia clearly arcuate, strongly widened basally and with sharp outer angle. Body not unicolour: at least two basal antennomeres, legs and elytral apices paler.

COMPOSITION. The new subgenus includes the two species: *L. microgonus* and *L. gynuis* sp.n.

ETYMOLOGY. The subgeneric name is a derivative of the generic name *Loxoncus*.

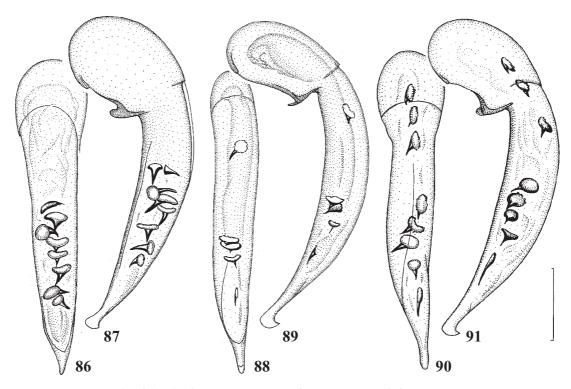
Loxoncus microgonus (Bates, 1886) Figs 5, 28–31, 113–118, 137.

Anoplogenius microgonus Bates, 1886: 78 (Type locality: Colombo, Sri Lanka).

Anoplogenius andrewesi Jedlička, 1935: 138 (Type locality: Manila, Philippines), **syn.n.**

TYPE MATERIAL. Lectotype of Anoplogenius microgonus (designated here for purposes of fixation of species name), ♀ with labels "Ceylon 10 April" and "Anoplogenius microgonus Bates [Bates' handwriting]" (MNHN).

Holotype of *Anoplogenius andrewesi*, ♀ with labels: "Type", "Philippine Is, Böttcher, B.M., 1929–201", "Philippine Islands, Manila, 8.X.1914, Coll. Böttcher", "*Anoplogenius Andrewesi* sp.n., type, det Ing. Jedlička" (NHML) and 4 paratypes (2 ♂♂ and 2 ♀♀), labelled as holotype but 2.XI.1914 and 15.V.1916 (NHML; NMP).



Figs 86–91. Loxoncus, median lobe of aedeagus. 86-87 - L. malaisei sp.n. (Burma, holotype); 88-91 - L. renitens (Sri Lanka; 88-89 - lectotype). 86, 88, 90 - dorsal aspect; 87, 89, 91 - lateral aspect. Scale = 0.5 mm.

Рис. 86-91. Loxoncus, срединная доля эдеагуса. 86-87-L. malaisei sp.n. (Бирма, голотип); 88-91-L. renitens (Шри Ланка; 88-89- лектотип). 86, 88, 90- дорсальный вид; 87, 89, 91- вид сбоку. Масштаб 0.5 мм.

OTHER MATERIAL. China: JIANGXI: 3 ♂♂, 2 ♀♀, "Kiangsi, A. David, 1869" (MNHN); YUNNAN: 1 7, "Cheli", 550 m, 8.IV.1957, D. Panfilov leg. (ZISP); 2 $\stackrel{\bigcirc}{\hookrightarrow}$, 30 km SW Jinpin, 370 m, 17-18.IV.1956, Huai Ke-zhen leg. (ZISP); 1 \, Manshi, 900 m, 16.V.1955, O. Kryzhanovskij leg. (ZISP). India: 1 \, 60 km of "Kochin, Periar" River shore, 19.I.1964, Breev leg." (ZISP); 1 ex., "Himalaya, Simla" (MNHUB); 1 ex., "India or., Nagpore" (MNHUB); 2 ex., "Ind. or.", "Ch[ota]. Nagp[ore].", "coll. Thieme" (MNHUB); 3 ex., "India or." (MNHUB); 1♀, "Calcutta" (MNHN); 1 ♀, "Sunderbaus, Bengal, F.W.C." (MNHN). Sri Lanka: 1 ♀, Southern Province Galle, Koggala Lake, 14-28.XII.1992, G. Kurs leg. (NME); 2 ex., "Ceylon, Mus. Colomb" (MNHUB); 1 ex., "Ceylon, Nietner" (MNHUB). **Burma**: 1 $\stackrel{\circ}{\downarrow}$, "Tenasserim, Kawkareet, Fea. Gen. Febbr. 1887", "Anoplogenius microgonus Bates [Bates' handwriting]" (ZISP); 2 of Rangoon, V-VII, 1887 and XII.1988, L. Fea leg. (ZISP); 1 ex., "Rangoon, Birmania, Fea XII.1888", "81 554" (MNHUB); 2 ex., "Rangoon, Birmania, Fea I.1887" (MNHN; MNHUB); 3 ex., "Birmania, Rangoun, J. Claine, 1902" (MNHN); 2 ex., "Palon (Pegu), L. Fea VIII–IX.87" (MNHUB); 1 ex., S. Shan States, Shwenyang, Inle Lake, N end, 1 ♂, Hanoi, 6–8.VI.1962, O. Kabakov leg. (ZISP); 1 ex., same locality, at light, 15.II.1962, O. Kabakov leg. (cKAB); 2 ex., same locality, at light, 1 and 7.XI.1961, O. Kabakov leg. (cKAB); 1 ex., same locality, at light, 30.X.1961, O. Kabakov leg. (cKAB); 1 \, \, same locality, at light, 20.XII.1961, O. Kabakov leg. (cKAB); 1 $\stackrel{\circ}{\downarrow}$, Saigon, 6.X.1990, Rabtzevich leg. (ZISP); 2 ex., "Saigon, coll. A. Bonhoure, 1909" (MNHN); 7 ex., "Cochinchine, Cho-bao, coll. A. Bonhoure, 1909. XI" (MNHN); 3 ex., "Cap St Jarques, coll. A. Bonhoure, 1909" (MNHN); 3 ex., "Sud-Annam, Pha-Rang, Fruhstorfer" (MNHUB); 3 ex., "Annam, Phuc-Son, Nov. Dez. H. Fruhstorfer" (MNHUB). **Thailand**: 25 ex. (♂♂ and ♀♀), Chieng Mai, 22.VIII., IX, 4.X.1981 and 22.I, 5.III.1982, Dr. J. Sanguansermsri leg. (MNHUB; 1 ♂, 4 ♀♀: ZISP); 2 ex., 25 km NW Lan-Sak, 65 km NW Thai-Thau, ca 220 km NW Bangkok, 110 m, IX.1990 (MNHUB); 39 ex., 25 km NW Lan Sak, 65 km NW Uthai Thani, VI.1990, W.Thielen leg. (NME; cSCHM; ZISP); 8 ex., 25 km NW Lan Sak, X.1989, W. Thielen leg. (cWR; ZISP); 1 ex., Lom-Sak, 40 km of Phutchabum, 1986, W. Thielen leg. (cWR); 1 ex., Tap-Tau, 8-12.I.1984, W. Thielen leg, (MNHUB); 1 ex, Ayutthaya, 3.IV.1989, Malicky leg. (cWR); 1 ex., Fang, Hot Spring, 25.V.1997 M. Snizek leg. (MNHUB); 1 ex., "Siam, Coll. Thieme" (MNHUB); 3 ex., "Siam, Wallau", "Coll. Thieme" (MNHUB). Malaysia: 1 ♂, "Malacca", "Anoplogenius subangulatus Chaud. Typus" (ZISP). Philippines: 2 ex., Manila, at light, 2.XI.1914 (MNHUB); 1 ex., "Luzon, Jagor", "39 218" (MNHUB). **Indonesia**: 1 ex, Sumatra, "Medan, Mjöb." (SMNHS).

NOT LOCATED: 5 ex., "Hinterindien, Friederides L.G." (MNHUB); 5 ex., "Acc. No 4 689, Lot, Govt. Lab. Coll.", "collected by C.S. Banks" (MNHUB).

DESCRIPTION. In males body length 7.3–8.3 mm, width 3.0–3.3 mm, in females 7.1–8.4 and 2.0–3.4 mm, respectively.

Brown to dark brown, rarely nearly black; upperside shining, distinctly iridescent on elytra and pronotum; lateral bead and lateral parts of basal margin of pronotum, median part of prosternum, pronotal and elytral epipleura, abdominal sternites and pro- and mesocoxae, often also labrum, clypeus and base of mandibles reddish brown or brownish yellow; besides apex of elytra (more widely towards base on 1–3 external intervals) usually slightly paler than disc. Palpi, antennae and legs brownish yellow to yellow; antennae beginning from 3rd segment on and basal portion of elytral epipleura more or less infuscated.

Head comparatively large (in males, WHmax/WP = 0.72–0.77, WHmin/WP = 0.55–0.57; in females, these indices 0.74–0.78 and 0.55–0.59, respectively). Labrum and clypeus anteriorly more or less rectilinear. Frontal suture slightly impressed; clypeo-ocular line reaching supraorbital furrow, very shallow

posteriorly. Mentum (Fig. 5) with very broad and obtuse medial tooth. Ligular sclerite markedly widened apically. Antennae extending to base of elytra. Dorsal surface of head throughout with fine microsculpture consisting of isodiametric meshes.

Pronotum (Figs 28–31) moderately convex, rather broad, 1.42–1.51 times as wide as long, widest in anterior third, with sides usually rounded up to sharp, slightly denticulate basal angles; sometimes sides almost rectilinearly converging basally or scarcely sinuate just before basal angles. Apical margin weakly emarginate; apical angles not protruding anteriorly. Basal margin more or less rectilinear medially, oblique laterally. Lateral bead narrow, almost not widened basad, visible nearly up to basal angles. Latero-basal depression somewhat deep, reaching lateral bead, more or less distinctly punctate; area between them convex, smooth or with few, more finer punctures. Very fine punctures usually present also at anterior margin. Microsculpture developed throughout, consisting of fine transverse meshes.

Elytra convex, oblong, in males 1.48–1.56 times as long as wide, 2.82–3.02 times as long and 1.29–1.36 times as wide as pronotum (in females these indices 1.50–1.55, 2.86–3.01 and 1.29–1.35, respectively), weakly rounded at sides and widest behind middle. Sutural angle acutangular, narrowly rounded at apex in both sexes. Basal elytral edge weakly sinuate, arcuately coming to lateral margin. Striae impunctate, comparatively wide, impressed on disc and slightly deepened at apex. Intervals largely flat, convex before apex. Microsculpture very fine, consisting of narrow and long transverse meshes.

Apex of anal sternite slightly truncate, in male sometimes scarcely emarginate. Protibiae notably widened to apex, each usually with 3 apical spines on outer margin. Metatarsi rather short, approximately as long as maximum width of head. Male pro- and mesotarsi not dilated and without adhesive vestiture ventrally. Fourth pro- and mesotarsomeres in both sexes bilobed but lobes rather short.

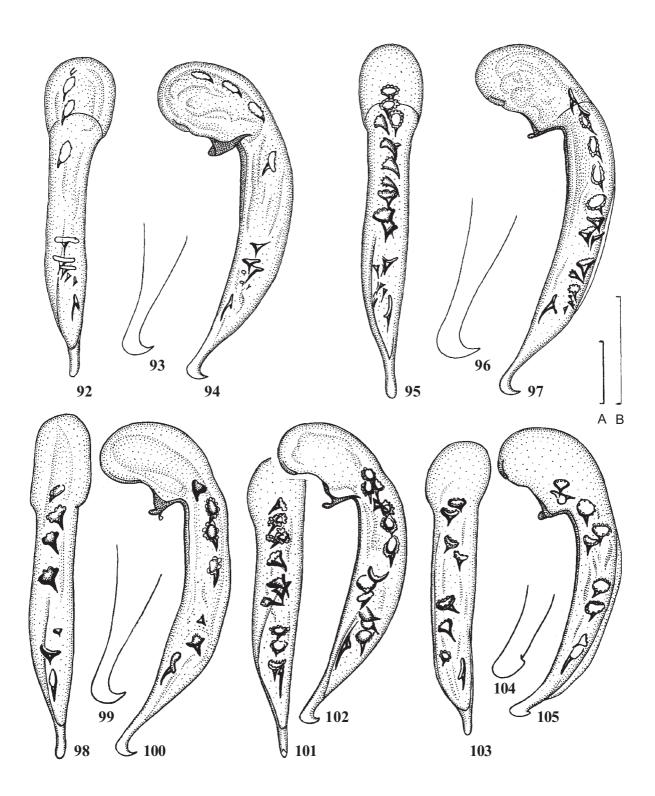
Median lobe of aedeagus (Figs 113–118) somewhat small and robust, arcuate, with rather large basal bulbe and with apical portion thick, directed dorsad (lateral aspect). Apical capitulum lacking. Terminal lamella triangulate, slightly longer than wide, somewhat sharp at apex (dorsal aspect). Internal sac without any sclerotic elements.

Female genitalia (Fig. 137) with broad hemisternite; basal stylomere moderately widened apically; apical stylomere with broad base and sharp outer angle.

DISTRIBUTION. It is a common species widespread in southern China, India, Sri Lanka, Nepal, Burma, Laos, Vietnam, Thailand, Malaysia, Philippines and Indonesia.

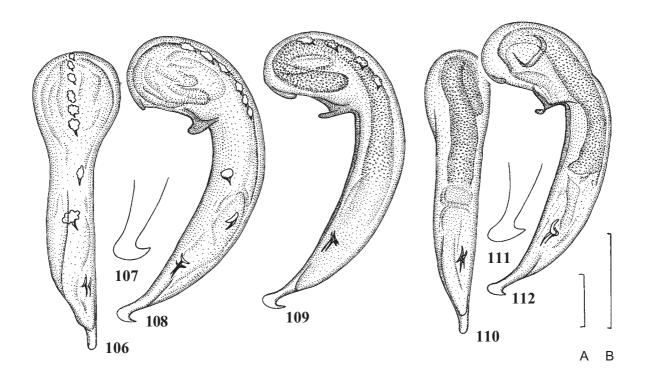
REMARKS. This species is easily recognized from all the other species by the pronotum with sharp, usually denticulate basal angles. Additional important distinctive character of this species, which was probably overlooked by the preceding entomologists, is the unmodified pro- and mesotarsi of male. Interestingly, Bates [1886] in the original description of *Anoplogenius microgonus* stated that the fourth protarsomere in male is not bilobed, as in other members of this genus, but later he [Bates, 1892] was doubtful if the examined specimens were not all females.

L. microgonus described originally from Sri Lanka and Thailand was apparently unknown to Jedlčka [1935] who described the same taxon again from Philippines as a new species Anoplogenius andrewesi without reference to L. microgonus. After the examination of the original specimens of A. Jedlička, I treat the names microgonus and andrewesi as synonyms. The male genitalia of one of the paratypes of Anoplogenius andrewesi are illustrated in Figs 117–118.



Figs 92–105. *Loxoncus*, median lobe of aedeagus. 92–94 — *L. renitens* (Sri Lanka); 95–97 — *L. horni* (Vietnam); 98–102 — *L. incisus* (Sumatra: 98–100 — holotype; 101–102 — paratype); 103–105 — *L. politus* (New Guinea). 92, 95, 98, 101, 103 — dorsal aspect; 94, 97, 100, 102, 105 — lateral aspect; 93, 96, 99, 104 — apex of median lobe, lateral aspect. Scales = 0.5 mm (A: 92, 94–95, 97–98, 100–103, 105; B: 93, 96, 99, 104).

Рис. 92—105. *Loxoncus*, срединная доля эдеагуса. 92—94 — *L. renitens* (Шри Ланка); 95—97 — *L. horni* (Вьетнам); 98—102 — *L. incisus* (Суматра: 98—100 — голотип; 101—102 — паратип); 103—105 — *L. politus* (Новая Гвинея). 92, 95, 98, 101, 103 — дорсальный вид; 94, 97, 100, 102, 105 — вид сбоку; 93, 96, 99, 104 — вершина срединной доли, вид сбоку. Масштаб 0,5 мм (А: 92, 94—95, 97—98, 100—103, 105; В: 93, 96, 99, 104).



Figs 106-112. Loxoncus marginatus, median lobe of aedeagus (Australia: 106-108 — lectotype; 109 — Lakefield National Park; 110-112 — Magela Creek): 106, 110 — dorsal aspect; 108-109, 112 — lateral aspect; 107, 111 — apex of median lobe, lateral aspect. Scales = 0.5 mm (A: 106, 108-110, 112; B: 107, 111).

Рис. 106-112. Loxoncus marginatus, срединная доля эдеагуса (Австралия: 106-108 — лектотип; 109 — националный парк Лейкфилд; 110-112 — Магела Крик): 106, 110 — дорсальный вид; 108-109, 112 — вид сбоку; 107, 111 — вершина срединной доли, вид сбоку. Масштаб 0,5 мм (A: 106, 108-110, 112; B: 107, 111).

Loxoncus gynuis **sp.n.** Figs 27, 48–51, 119–120, 138–139.

TYPE MATERIAL. Holotype. ♂, Indonesia, Java, "Batavia, Biró, 6.2.1898" (TMB).

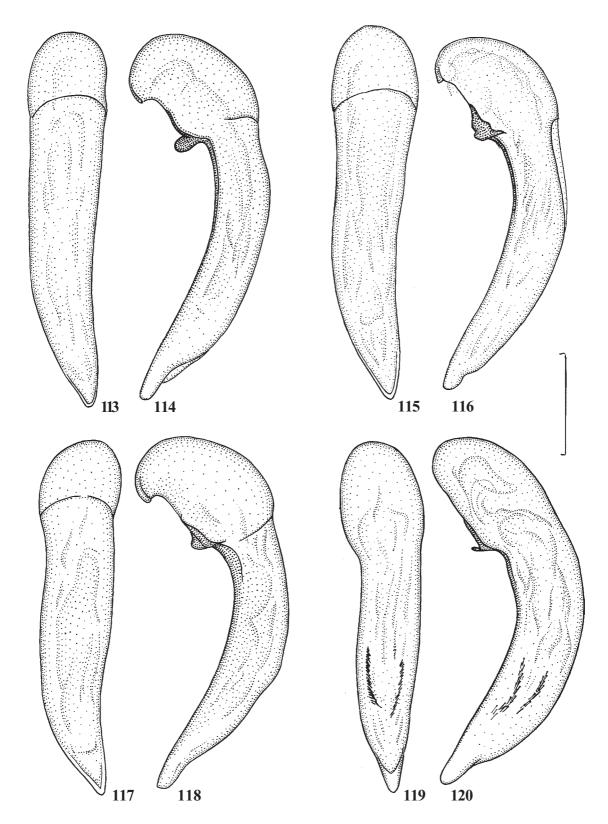
Paratypes. **Indonesia**: $6 \circlearrowleft ? \circlearrowleft , 6 \circlearrowleft ? \circlearrowleft$, same data as holotype (TMB; ZISP); 2 paratypes of *Anoplogenius incisus*: \circlearrowleft labelled as "Cotype", "Batavia, C.W. Andrewes, 98-20", "Under electric light in verandah, June", "Ex. coll. Brit. Mus", "H.E. Andrewes Coll., B.M. 1945-97" (NHML) and \circlearrowleft labelled as "Lomb", "Lombok, Wallace", "Nevinson Coll. 1918-14", "Ex. coll. Brit. Mus.", "Cotype", "H.E. Andrewes Coll., B.M. 1945-97" (NHML); $1 \circlearrowleft$, "Java Occ., Buitzg.", "486", "spec. ? (c. Korb), Java" (ZISP); $1 \backsim$, "Java (Korb)" (ZISP); $1 \backsim$, "radiatus N., Java ...", "52 820", "Hist.-Coll. (Coleoptera), Nr 52820 (1 ex.), *Anoplogenius radiatus* N., Java — India orient., Zool. Mus. Berlin" (MNHUB); $1 \backsim$, West Lombok, Narmada, 14-20.III.1927, S.G. Rensch leg. (MNHUB); $2 \circlearrowleft$ $? \circlearrowleft$, $2 \backsim$, Sulawesi (?), "Dorey, Wallace", "coll. Thieme" (MNHUB).

DESCRIPTION. In males body length 6.9–7.8 mm, width 2.9–3.3 mm, in females 7.0–8.0 and 3.0–3.4 mm, respectively.

Brown to dark brown; dorsum shining, weakly iridescent mainly on elytra; lateral bead of pronotum, median part of prosternum, pronotal and elytral epipleura, abdominal sternites (usually partly), pro- and mesocoxae, sometimes also labrum, clypeus and base of mandibles paler, usually reddish brown to brown; apex of elytra (inner intervals near apex, 1–3 external intervals up to anterior third) usually slightly paler than disc. Palpi, antennae and legs brownish yellow to brown; antennae beginning from 3rd (in some specimens from 2nd) segment on and basal portion of elytral epipleura more or less infuscated.

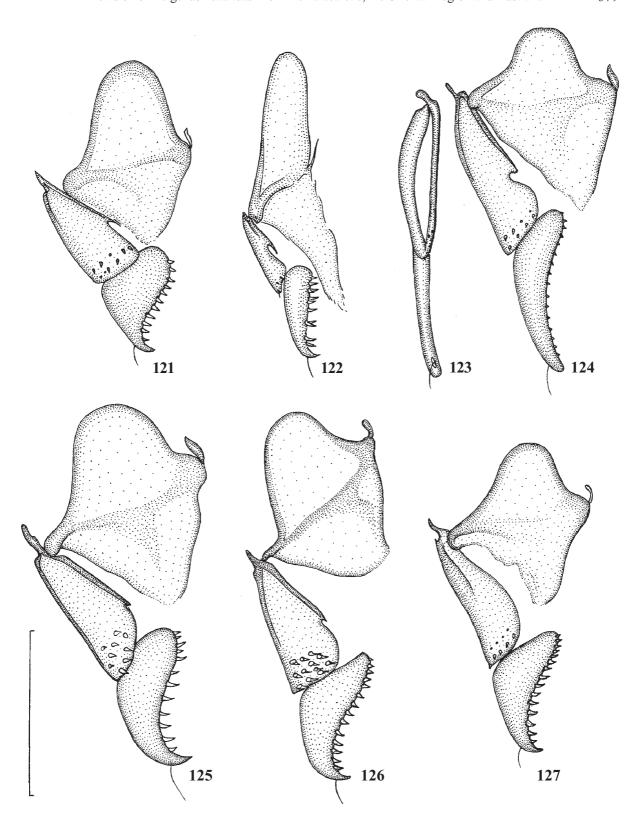
Head comparatively large (in males, WHmax/WP = 0.77– 0.80, WHmin/WP = 0.57–0.59; in females, these indices 0.77–0.81 and 0.58–0.61, respectively). Labrum and clypeus anteriorly very widely rounded or more or less rectilinear. Frontal suture slightly impressed; clypeo-ocular line reaching supraorbital furrow, very shallow posteriorly. Mentum with very short and wide medial tooth, widely rounded at apex. Ligular sclerite slightly widened apically. Antennae extending approximately to one-sixth of elytra. Dorsal surface of head throughout with microsculpture consisting of distinct isodiametric meshes.

Pronotum (Fig. 27) convex anteriorly, somewhat flat posteriorly, rather small, 1.37–1.42 times as wide as long, widest in anterior third, with sides rounded apically and almost rectilinearly converging to base. Basal angles rather well marked, obtuse, rounded at apex. Apical margin weakly emarginate; apical angles not protruding anteriorly, narrowly rounded at apex. Basal margin more or less rectilinear medially, oblique laterally. Lateral bead narrow, not widened basad and slightly continuing to lateral areas of basal margin. Latero-basal depression rather flat and shallow, reaching lateral bead, distinctly, but rather finely, punctate; area between them only scarcely convex, usually more sparcely and more finely punctate. Very fine punctures also present at anterior margin. Microsculpture developed throughout, consisting of distinct, more or less transverse meshes (latter nearly isodiametric along basal margin).



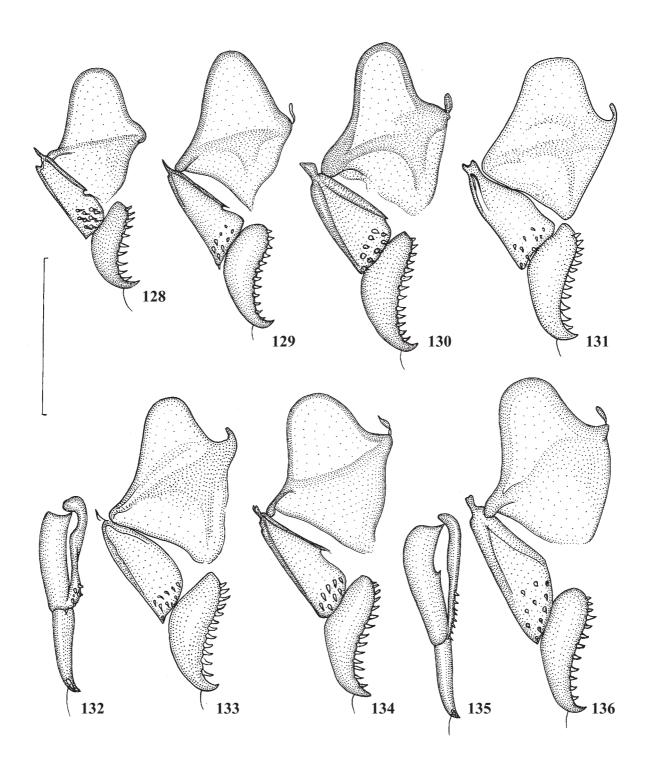
Figs 113–120. Loxoncus, median lobe of aedeagus. 113–118 — L. microgonus (113–114 — Sri Lanka; 115–116 — Philippines; 117–118 — Philippines, paratype of Anoplogenius andrewesi); 119–120 — L. gynuis sp.n. ("Dorey"). 113, 115, 117, 119 — dorsal aspect; 114, 116, 118, 120 — lateral aspect. Scale = 0.5 mm.

Рис. 113–120. Loxoncus, срединная доля эдеагуса. 113–118 — L. microgonus (113–114 — Шри Ланка; 115–116 — Филиппины; 117–118 — Филиппины, паратип Anoplogenius andrewesi); 119–120 — L. gynuis sp.n. ("Дорей"). 113, 115, 117, 119 — дорсальный вид; 114, 116, 118, 120 — вид сбоку. Масштаб 0,5 мм.



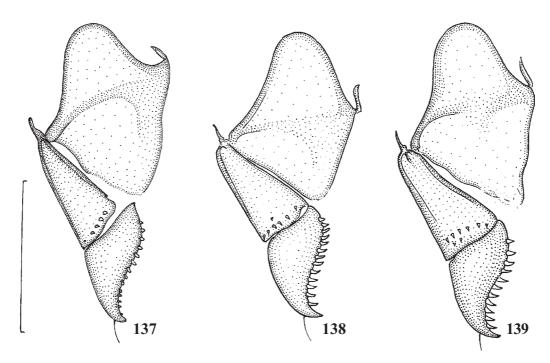
Figs 121–127. Loxoncus, female genitalia. 121 — L. nagpurensis (Vietnam); 122 — L. discophorus (Thailand); 123–124 — L. rutilans (Burma, syntype); 125 — L. procerus (Talysh); 126 — L. schmidti sp.n. (Nepal, paratype); 127 — L. circumcinctus (Yunnan). 121–122, 124–127 — hemisternite and stylus, ventral aspect; 123 — stylus, lateral aspect. Scale = 0.5 mm.

Рис. 121-127. Loxoncus, гениталии самки. 121-L. nagpurensis (Вьетнам); 122-L. discophorus (Таиланд); 123-124-L. rutilans (Бирма, синтип); 125-L. procerus (Тальш); 126-L. schmidti sp.n. (Непал, паратип); 127-L. circumcinctus (Юннань). 121-122, 124-127- полустернит и стилюс, вентральный вид; 123- стилюс, вид сбоку. Масштаб 0,5 мм.



Figs 128–136. Loxoncus, female genitalia. 128 — L. elevatus elevatus (Vietnam); 129 — L. renitens (Sri Lanka); 130 — L. horni (Vietnam); 131 — L. arrowi (Philippines, holotype); 132–133 — L. incisus (Sumatra, paratype); 134 — L. marginatus (Australia, Magela Creek); 135–136 — L. politus (New Guinea, paratype). 128–131, 133–134, 136 — hemisternite and stylus, ventral aspect; 132, 135 — stylus, lateral aspect. Scale = 0.5 mm.

Рис. 128–136. *Loxoncus*, гениталии самки. 128 — *L. elevatus elevatus* (Вьетнам); 129 — *L. renitens* (Шри Ланка); 130 — *L. borni* (Вьетнам); 131 — *L. arrowi* (Филиппины, голотип); 132–133 — *L. incisus* (Суматра, паратип); 134 — *L. marginatus* (Австралия, Магела Крик); 135–136 — *L. politus* (Новая Гвинея, паратип). 128–131, 133–134, 136 — полустернит и стилюс, вентральный вид; 132, 135 — стилюс, вид сбоку. Масштаб 0,5 мм.



Figs 137–139. Loxoncus, hemisternite and stylus, ventral aspect. 137 — L. microgonus (Yunnan); 138-139 — L. gynuis sp.n. (138 — West Lombok; 139 — "Dorey"). Scale = 0.5 mm.

Рис. 137—139. *Loxoncus*, полустернит и стилюс, вентральный вид. 137 — *L. microgonus* (Юннань); 138—139 — *L. gynuis* sp.n. (138 — Западный Ломбок; 139 — "Дорей"). Масштаб 0,5 мм.

Elytra convex, comparatively broad, in males 1.42–1.52 times as long as wide, 2.84–2.93 times as long and 1.39–1.48 times as wide as pronotum (in females these indices 1.45–1.50, 2.94–2.98 and 1.38–1.46, respectively), weakly rounded at sides and widest behind middle. Subapical sinuation, on average, deeper than in other species; sutural angle acutangular, narrowly rounded at apex in both sexes (as in Fig. 42). Basal elytral edge sinuate, arcuately coming to lateral margin. Striae impunctate, comparatively wide, impressed on disc and slightly deepened at apex. Intervals largely flat, weakly convex before apex. Microsculpture distinct throughout, consisting of weakly transverse meshes.

Apex of anal sternite slightly truncate in male, subtruncate in female. Protibiae notably widened to apex, each usually with 3 apical spines on outer margin. Metatarsi rather short, approximately as long as maximum width of head. Male proand mesotarsi (Figs 48 and 50) not dilated and without adhesive vestiture ventrally (for comparison, female pro- and mesotarsi are illustrated in Figs 49 and 51). Fourth pro- and mesotarsomeres in both sexes bilobed but lobes rather short.

Median lobe of aedeagus (Figs 119–120) somewhat small and robust, arcuate, with rather large basal bulbe and apical portion thick and somewhat straight (lateral aspect). Apical capitulum lacking. Terminal lamella short, approximately as long as wide, narrowed to blunt apex (dorsal aspect). Internal sac with only two parallel narrow spiny patches in apical half of median lobe.

Female genitalia (Fig. 138–139) with broad hemisternite; basal stylomere moderately widened apically; apical stylomere with broad base and sharp outer angle.

DISTRIBUTION. Indonesia: Lombok, Java, and Sulawesi. According to Darlington [1962: 330–331], the specimens labelled "Dorey [New Guinea], Wallace" were really taken from Celebes (= Sulawesi) or the Moluccas.

REMARKS. This new species is rather similar in appearance to L. incisus. For this reason the both species are usually mixed in the collections in spite of the fact that they belongs to the two different subgenera and are well distinguished from each other by such important characters as the male and female genitalia and the dilatation of pro- and mesotarsomeres in male. In addition to these characters, L. gynuis sp.n. differs markedly from L. incisus in the more distinct microsculpture on pronotum and elytra, the narrowly rounded elytral apex and the lateral bead of pronotum clearly prolonged to the basal margin. Besides, subapical sinuation of elytra in L. gynuis sp.n. is, on average, deeper than in L. incisus. The same characters easily distinguish the new species from L. horni. It is more difficult to distinguish by the external characters the new species from L. politus and L. marginatus which all have the elytra narrowly rounded at apices. In addition to the characters listed in the key, the new species may be recognized from them by the shorter elytra, the presence in most specimens of fine punctation at apical margin of pronotum between apical angles and median line and the lack of green lustre on dorsum. Although I don't know if L. gynuis sp.n. occurs sympatricly with any of the species of *Loxoncus* s.str. such symparty is very possible.

Within *Xoloncus* subgen.n., *L. gynuis* sp.n. is easily distinguished from the closely related *L. microgonus* by the rounded basal angles of pronotum. Besides, the median lobe of aedeagus of the new species is more arcuate, with longer terminal lamella and with two narrow parallel spiny patches in internal sac (internal sac of *L. microgonus* is lacking any sclerotic elements). As for the female genitalia, they are very similar in both species. The geographical ranges of *L. gynuis* sp.n. and *L. microgonus* seem to be isolated.

ETYMOLOGY. The species name is based on the Greek name "gynê" meaning the female and referring to the effeminate appearance of males of this species.

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