

**A REVISION OF THE ORIENTAL CLAMBIDAE WITH
REFERENCES TO PAPUAN AND HAWAIIAN
SPECIES (COLEOPTERA:
STAPHYLINOIDEA)**

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Abstract: Clambid beetles from the Oriental Region including adjacent parts of the Palearctic and Pacific islands are revised. The family in this region is represented by only the nominate genus, *Clambus*. Twenty species-group taxa are treated including the following 10 described as new: *C. bachmaieri*, *C. ceylonicus*, *C. crinitus*, *C. formosanus indicus*, *C. olympiae*, *C. popei*, *C. setosus*, *C. tomentosus*, *C. topali*, and *C. villosus*. Species are keyed and most illustrated. Zoogeographic relationships of Old World, Australian, and Pacific island faunas are discussed.

The present paper is a contribution to the world revision of the family, completing the regions of the Old World and Australia (Endrödy-Younga 1960, 1961a, 1961b, 1965, 1972). The material available for this revision has amounted to little, even though it represents all known specimens of most major collections. The close relationship between faunas of the Oriental and adjacent regions made it advisable to include species from Pacific islands and some from parts of the Palearctic.

Of 205 specimens treated in the present paper, 148 belong to 1 form, *Clambus formosanus indicus*, n. subsp. from a single collection. The remainder includes the 2 named species and 9 new species. Collection localities were scattered, leaving vast areas without data. Single localities did not show a large variety of species. Several species were collected from only 1 locality, suggesting that they may have limited distributions. It is likely that a considerable number of species remain to be reported from these areas.

The biotope data presented here agree largely with general observations. The majority of specimens were extracted from forest litter and 1 specimen was sifted from mushrooms, probably from the surrounding compost. It is remarkable that in Vietnam 5 specimens out of 12 were collected at light whereas in Europe and in tropical Africa clambids were hardly ever collected at light.

The material which has been studied through the course of this revision appears sufficient for some preliminary conclusions on zoogeographic relationships. The revision will not be completed until the New World faunas have been studied, at which stage further conclusions can be drawn.

ZOOGEOGRAPHY

Two areas of the regions which have already been investigated can be noted as development centers of the family—the Mediterranean area of the Palearctic Region and the

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tropical part of the Oriental Region, including the Melanesian Archipelago and New Guinea. The remainder of the Palearctic Region, the northern part of the Oriental Region, and the tropical Ethiopian Region offer a more uniform fauna with less autochthonous characteristics and are considered as penetration areas of the family. The position of the Australian Region is unclear due to insufficient material.

The concept of development centers is based on the accumulation of comparatively large numbers of species of several different species groups in 2 well-defined geographical or ecological areas. In both cases, the adjacent areas have smaller and simpler assemblages of species with less or no additional basic characteristics (species groups). These latter are considered as penetration areas.

The situation can best be illustrated by the West Palearctic fauna for which considerable material was available and for which, from the European area in any case, few important new data can be expected. In the Mediterranean area, 22 species of 3 genera are known. Additional species can be expected to be reported from this area. In central Europe north of the Alps, 11 species of 2 genera are known and additional species are unlikely. In northern Europe (i.e., British Isles and Scandinavia) only 5 species of 2 genera are known. All of the species from northern Europe are known from central Europe and only 1 species (the Alpine and Carpathian *Calyptomerus alpestris* Redtb.) in the latter area is not known from the Mediterranean. On the other hand, in the Mediterranean Region 11 endemic species and an essentially endemic genus² have been recorded with very little chance that any of these species will be recorded in central Europe.

Although the Canary Islands are extremely rich in endemic forms of many other groups, this is a typical penetration area for the clambids. The only form known is *Clambus minutus complicans* Woll., a subspecies which is common in southern Europe and northwestern Africa.

Very little is known of the central Asian fauna. From the few data available, one can conclude that the poor temperate and cool continental fauna extends far to the east. It may be possible that a connection exists between the Mediterranean and Oriental development centers through the Middle East.

The tropical Ethiopian fauna appears to represent a penetration area of both the tropical Oriental and Mediterranean development centers. The number of species is comparatively small and most possess large distribution areas similar to the species of central and northern Europe. All known Ethiopian species belong only to the cosmopolitan genus *Clambus*. In my revision of the Ethiopian clambids (1961b), 7 species were described, based on a collection of 40 specimens. I collected more than 200 clambids in Ghana, West Africa, but found only 1 additional subspecies of *C. variolosus*. The other 3 species found in Ghana were identical with 3 central African species.

The faunal relationships of the tropical Ethiopian Region point to the development centers discussed above. For example, one of the forms described from Kiwu is a subspecies

2. The genus *Loricaster* Muls. & Rey has a wide distribution in the Mediterranean. A doubtful species (*L. glaber* Port.) has been described from Japan, and a further species from California.

of a West Palearctic species of broad distribution (*C. minutus infuscatus* E.-Y.). Another species (*C. pygmaeus* E.-Y.) known from Zaïre and from West Africa shows morphological relationships to the tropical Oriental *biroi* group. Curiously, the deep punctations of the apical 1/2 of the elytra is known only in a central and west African species (*C. variolosus* E.-Y.) and in 2 southern Australian species (*C. domesticus* Broun and *C. simsoni* Blackb.), with no such form in the Oriental Region. It is, however, too early to draw any genetic conclusions from this similarity.

Little is known of the fauna of the southern African Subregion. The only 2 species may be more closely related morphologically to forms of the Mediterranean than to those of the Oriental development center.

The 2nd development center is the Oriental-Papua New Guinea Region. Biogeographical connections of the northern continental part of the Oriental Region are strongly Palearctic. The 2 forms known from the Haldwani District of India (*C. crinitus*, n. sp. and *C. formosanus indicus*, n. ssp.) are related to the western Palearctic *C. pubescens* Redtb. and the eastern Palearctic races of *C. formosanus* E.-Y., respectively. The tropical continental fauna (Burma, Vietnam) and the fauna of Sri Lanka (Ceylon) are composed of some Palearctic elements and some with affinities to tropical forms of the Melanesian archipelago and Papua New Guinea. The Sri Lankan *C. villosus*, n. sp. is clearly a member of the Palearctic *minutus* group and *C. ceylonicus*, n. sp. of the archipelagic long setose *biroi* group.

The Papua New Guinea species, including those of the Solomon Islands, belong without exception to the *biroi* group, characterized by long setae on both dorsal and ventral surfaces. The species group extends to Vietnam (*C. setosus*, n. sp.), Sri Lanka (*C. ceylonicus*, n. sp.) and probably as far as central and western Africa through *C. pygmaeus* E.-Y., the only similar setose species of the Ethiopian region.

The Australian-New Zealand fauna seems to be isolated from the archipelagic or continental Oriental fauna. The endemic genus of New Zealand, Tasmania and southern Australia, *Sphaerotherax* E.-Y., does not reach the northern part of the Australian continent and the few *Clambus* species known indicate only a distant phylogenetic relationship to species of adjacent regions.

The curious distribution of *Calyptomeres dubius* Marsh. does not help in the understanding of the genesis of the family. The species has a broad distribution in the western Palearctic Region, but was also collected in South Africa and Tasmania. Importation is suggested rather than relicts of an ancient and larger distribution.

SYSTEMATICS

Names of institutions providing material for study are symbolized or abbreviated as follows:

- BMNH British Museum (Natural History), London
BUDAPEST Hungarian Natural History Museum, Budapest

GENEVA Natural History Museum, Geneva
 MOSCOW Zoological Museum, Moscow University, Moscow
 PRAHA National Museum of Natural History, Praha

The Clambidae is represented by only the nominate genus in the Oriental Region.

GENUS **Clambus** Fischer von Waldheim

Clambus Fisch., 1820, Ent. Russ. 1: 20. — Endrödy-Younga, 1959, Opusc. Ent. 24: 90.
Sternuchus Leconte, 1850, In: Agassiz & Cabot, Lake Superior: its physical character, veget., and animals . . . part 2(4): 222.

SERIAL KEY TO ORIENTAL & PACIFIC SPECIES OF *Clambus*

- 1 (4). Whole body densely clothed with long pubescence (see Palearctic spp. *C. pubescens* Redtb. and *C. armadillo* Deg.)
- 2 (3). Smaller, pubescence denser and somewhat finer. Less convex, sutural profile of elytra in lateral view almost straight (FIG. 2 A). Head longitudinally less convex, dorsal profile in lateral view joining clypeal margin at about 45° (FIG. 2 D). Dorsal surface finely shagreened, elytra behind basal 1/3 densely punctuate, punctures large, intervals at apical 1/3 narrow with microsculpture distinct. Transverse crest of metasternum hardly elevated. Aedeagus (FIG. 4 A, B). Length 1.1 mm. India **crinitus**, n. sp.
- 3 (2). Larger, pubescence less dense, hairs stronger, more erect. More convex, sutural profile of elytra in lateral view finely arcuate. Head longitudinally more convex, dorsal profile in lateral view joining clypeal margin almost at 90° (FIG. 2 E). Head, pronotum and basal 1/2 of elytra shiny, only apical 1/2 of last with oblique shagreen around punctures. Punctuation of elytra less dense, intervals broader than punctures. Transverse crest of metasternum considerably elevated. Aedeagus (FIG. 4 E, F). Length 1.2 mm. Vietnam. **tomentosus**, n. sp.
- 4 (1). Pubescence different.
- 5 (18). Head, pronotum and elytra with few, very long and erect setae, transverse crest of metasternum with a line of long leaning setae.
- 6 (11). Larger, body length 1 mm and over.
- 7 (8). Horizontal, distal plate of metasternum longitudinally concave with transverse line of distinct large punctures. Everywhere very shiny, without any shagreen. Temporal angle of head rounded and situated in level with hind margin of eyes; temporal margin finely arcuate in front of angle. Aedeagus (FIG. 4 C, D). Length 1.25 mm. Vietnam. **setosus**, n. sp.
- 8 (7). Distinct transverse depression of horizontal plate of metasternum without punctures or metasternum only slightly convex.
- 9 (10). Sutural profile of elytra in lateral view flattened in middle, arcuate at scutellum and apex (FIG. 2 B). Transverse depression of horizontal plate of metasternum deep at sides and also distinct in middle, whole surface smooth and shiny. Front angle of pronotum less rounded, closer to rectangular (ca 110°). Length 1.0-1.1 mm. Aedeagus (FIG. 4 G, H). Sri Lanka. **ceylonicus**, n. sp.
- 10 (9). Sutural profile of elytra in lateral view almost evenly arcuate, not flattened in middle. Horizontal plate of metasternum moderately concave in whole breadth, very distinctly shagreened. Front angle of pronotum more rounded, more obtuse-angular (ca 130°). Aedeagus (FIG. 5 A, B). Length 1.1 mm. New Guinea. **biroi**
- 11 (6). Smaller, body length (even with head extended) less than 1 mm.

- 12 (13). Setae of elytra extremely long, 1-1/2 × as long as the distance between insertions of setae or almost 2 × as long as the longitudinal diameter of eye (10-11:6.5). Horizontal plate of metasternum longer in middle than 1/2 of lateral length (8.5:16) (FIG. 3 A). Aedeagus (FIG. 5 E, F). Length 0.93 mm. Solomon Islands. **olympiae**, n. sp.
- 13 (12). Setae of elytra shorter, about as long as distance between insertions or diameter of eye. Horizontal plate of metasternum not longer in middle, or much shorter than 1/2 of lateral length.
- 14 (15). Sutural profile of elytra in lateral view evenly arcuate (as in FIG. 2 C). Aedeagus (FIG. 5 I, J). Length 0.9 mm. New Guinea. **rotundus**
- 15 (14). Sutural profile of elytra in lateral view more or less flattened in middle (as in FIG. 2 B).
- 16 (17). Sutural profile of elytra distinctly flattened in middle, sharply curved to apex at apical 1/3 (FIG. 2 B). Lateral margins of elytra straight and semiparallel at proximal 1/2. Elytral setae erect, vertical or almost vertical. Front angle of pronotum more obtuse angular and more flatly arcuate. Brown with discs of pronotum and elytra darker. Aedeagus (FIG. 5 G, H). Length 0.84-0.87 mm. Solomon Islands. **poppei**, n. sp.
- 17 (16). Elytra almost evenly arcuate both in dorsal and lateral view. Elytral setae suberect, directed posteriorad. Front angle of pronotum more distinct, less obtuse-angular and more sharply arcuate. Unicolorous, light reddish brown. Aedeagus (FIG. 5 C, D). Length 0.85 mm. New Guinea. **novaguineensis**
- 18 (5). Pubescence of pronotum and elytra, if visible, very short, sometimes longer and denser on clypeus and ventral surfaces than elsewhere.
- 19 (20). One of the largest species of the genus, 1.6 mm. Temporal angle of head broadly rounded, situated in front of middle of eyes. Pubescence short and fine, more apparent at clypeus and ventral surface. 8th segment of antennae as broad as long. Hawaiian Islands. **octobris**
- 20 (19). Much smaller, body length not reaching 1.3 mm.
- 21 (24). Horizontal plate of metasternum long in middle, 1/3 as long as lateral length, or longer (FIG. 3 B, D).
- 22 (23). Temporal angle of head obtuse-angular, situated just behind middle of eyes (FIG. 1 A). Pubescence of clypeus long, hairs somewhat erect and much longer than the distance between their insertions; pubescence of pronotum and elytra very short (see Palearctic *minutus* group). 7th and 8th segments of antennae longer than broad. Aedeagus (FIG. 6 A, B). Length 1.1 mm. Sri Lanka. **villosus**, n. sp.
- 23 (22). Temporal angle of head strongly pronounced and situated behind eyes. Pubescence everywhere short, only denser at clypeus. 7th and 8th segments of antennae broader than long. Aedeagus (FIG. 6 C, D). Length 1.1 mm. Japan. **nipponicus**
- 24 (21). Horizontal plate of metasternum very short in middle, 1/4 as long as lateral length or shorter (FIG. 3 C).
- 25 (26). Hind margin of metasternum with line of very fine punctures (see Palearctic *C. minutus* Sturm). Aedeagus (FIG. 7 E, F). Length 0.9 mm. Sri Lanka. **pumilus**
- 26 (25). Hind margin of metasternum without line of fine punctures, metasternum and femoral plate joining along a fine, sharp line.
- 27 (28). Larger, over 1 mm. Front angle of pronotum pronounced and separated from hind angle by a distinct lateral margin. Lateral margin of eye diverging distally from temporal margin. Elytra more convex, sutural profile stronger and more evenly arcuate in lateral view. Usually dark brown. Length 1.1-1.3 mm. Japan, Formosa, India. **formosanus**
- 28 (27). Smaller, body length less than 1.0 mm.
- 29 (32). Temporal angle of head not indented at tip, slightly acute-angular, diagonally measured about 1/2 diameter of eye.
- 30 (31). Head less convex in lateral view, dorsal line joining clypeal margin at about 50°. Lateral margin of pronotum somewhat more flattened arcuate. Aedeagus longer, 0.26 mm, and broader, with

- transparent longitudinal central line. Fused parameres slightly asymmetrical, narrowly arcuate at apex (FIG. 7 C, D). Length 0.75–0.79 mm. Vietnam. **topali**, n. sp.
- 31 (30). Head more convex, dorsal line in lateral view joining clypeal margin at about 70°. Lateral margin of pronotum more arcuate. Aedeagus shorter, 0.19 mm, and narrower, without transparent central line. Fused parameres symmetrical, broadly emarginate at apex (FIG. 7 A, B). Length 0.65 mm. Burma. **flaveolus**
- 32 (29). Temporal angle of head slightly acute-angular but finely indented at apex, marking the proximal end of the collar fossa; angle diagonally measured about 2/3 diameter of eye. Lateral margin of eye diverging distally from temporal margin (FIG. 1 C). Aedeagus (FIG. 6 E, F). Length 1 mm. Vietnam. **bachmaieri**, n. sp.

Clambus crinitus Endrödy-Younga, new species

Whole surface clothed with long, leaning, yellow pubescence. Smooth and shiny but elytra distinctly punctate behind middle. Ventral surfaces densely shagreened. Reddish brown. This species is related to the similar Palearctic *C. pubescens* Redtb.

Head broad, but comparatively projected arcuate in front, more than 1-1/2 × as long in front of eyes as length of an eye (13:5.5). Moderately convex, dorsal line in lateral view joining clypeal margin at ca 45° (FIG. 2 D). Temporal angle rounded, very slightly indented, situated at hind 1/3 of eye. Surface shiny, indistinctly shagreened near eye, basal punctures of hairs fine. Pubescence longer in front of eyes, shorter and finer behind. *Pronotum* transversely more convex at front margin, side lobes at front angle vertical. Hind angle hardly more broadly rounded than front angle, lateral margin straight between angles. Surface indistinctly shagreened, shiny, with similar pubescence and punctation as clypeus. *Elytra* longer than combined breadth (29:23). Lateral margins in dorsal view semiparallel at base, strongly arcuate to apex at 2nd 1/3. Sutural profile in lateral view almost straight behind scutellum (resembling *Calyptomerus* spp.), but bent to apex at very end (FIG. 2 A). Shagreen and punctation fine at basal 1/4, punctation strong behind; pubescence similar to that of pronotum. *Ventral surfaces* densely punctate and pubescent, with fine tuft of hairs at apex of anal sternite. Horizontal plate of metasternum short in middle, about 1/4 as long as lateral length. *Antennae* short, club broad; segments from the 5th on shorter than broad. Aedeagus narrow, pointed, tongue-shaped, slightly asymmetrical, 0.3 mm long and 0.05 mm broad at middle; fused parameres asymmetrical with 2 long setae at apex, 0.17 mm long and 0.06 mm broad (FIG. 4 A, B). *Length* 1.1 mm stretched, 0.8 mm with head bent; breadth 0.8 mm.

Holotype ♂ (BMNH), INDIA: Haldwani Distr., Kumaon, H. G. Champion.

The name of the new species refers to the long and comparatively dense pubescence on the dorsal and ventral surface.

The related Palearctic species, *C. pubescens* Redtb., differs in the following characters. Collar fossa of head deeper, resulting in a more distinct indentation of the temporal angle. Head and pronotum more distinctly shagreened, only with fatty sheen. Pubescence finer. Lateral margins of elytra in dorsal view more arcuate; sutural profile in lateral view more evenly arcuate. Dense pubescence of elytra appears first behind middle. Aedeagus more symmetrical, less narrowly pointed, with 2 dark, parallel longitudinal strips.

Clambus tomentosus Endrödy-Younga, new species

Closely related to *C. crinitus*, n. sp. and to *C. pubescens* Redtb. Pubescence long, but less dense and more erect, hairs similarly yellow but stronger. Dark reddish brown, almost black around eyes. More convex, contours of elytra more evenly arcuate both in dorsal and in lateral view.

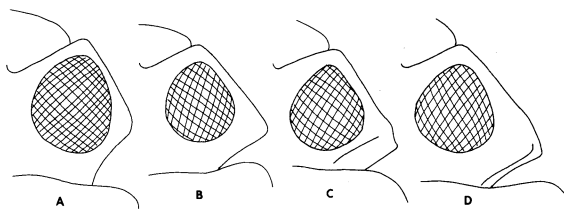


FIG. 1. Right temporal section of head of *Clambus* spp. in laterodorsal view: A, *C. villosus*, n. sp.; B, *C. flaveolus* E.-Y.; C, *C. bachmaieri*, n. sp.; D, *C. formosanus* E.-Y.

Head in lateral view convex, dorsal line joining clypeal margin almost in a right angle. Clypeus in front of eyes as long as longitudinal diameter of eye. Temporal angle even with hind margin of eye. Surface smooth and shiny, basal punctures of hairs very fine. *Pronotum* uniformly convex, angles and lateral margin similar to those of *C. crinitus*, n. sp. Surface shiny, indistinctly shagreened laterally, almost entirely smooth in middle. *Elytra* much longer than combined breadth (38:28); lateral margins evenly arcuate; sutural profile in lateral view evenly arcuate from behind scutellum to apex. Surface shiny and smooth, basal punctures of hairs finer and less closely set than in *C. crinitus*, n. sp., distinct punctation appearing only at 2nd 1/3 of elytra. *Ventral surfaces* distinctly shagreened, pubescence similar to that of elytra. Horizontal plate of metasternum comparatively long in middle, 1/3 as long as lateral length. Transverse crest of metasternum more elevated. Metasternum and femoral plate more finely punctate than in *C. crinitus*, n. sp. Apex of anal sternite with indistinct patch of denser hairs, with microsculpture also stronger. *Antennae* short, 5th and 6th segments as long as broad, 7th broader, 8th much broader than long. Aedeagus broader, more abruptly pointed, free section behind apex of parameres shorter, length 0.33 mm, breadth 0.06 mm. Fused parameres 0.22 mm long and 0.07 mm broad with 2 pairs of fine setae at apex (FIG. 4 C, D). *Length* 1.25 mm stretched and 1.0 mm with head bent; breadth 0.73 mm.

Holotype ♂ (BUDAPEST), VIETNAM: Cuc-phong Bong, jungle, extracted from litter, 12-15.XII.1965, T. Pocs.

The name *tomentosus* refers to the long pubescence of the whole body.

***Clambus setosus* Endrödy-Younga, new species**

A common character of this and the following 5 species is the presence of long and erect setae on the head, pronotum and elytra, and the long and leaning ones on the ventral surfaces.

Comparatively large, broad and very convex, shiny reddish yellow. *Head* broad, clypeus moderately projected arcuate, hardly longer in front of eyes than longitudinal diameter of eye (9:8). Temporal angle rounded rectangular, situated just in front of hind margin of eyes. Surface smooth and shiny, punctation hardly visible. *Pronotum* convex, lateral margin flatly arcuate, surface shiny and smooth. *Elytra* as long as combined breadth, convex, evenly arcuate, both in dorsal and in lateral view (FIG. 2 C). *Ventral surfaces*. Horizontal plate of metasternum long in middle, about 1/2 as long as lateral length; plate deeply concave with a transverse line of distinct punctures behind middle. Transverse crest with a series of long, leaning setae. Femoral plates flat along length. Abdominal sternites with only few short hairs. Aedeagus very small, more transparent in middle, length 0.19 mm, breadth 0.05 mm. Fused parameres emarginate at apex, length 0.12 mm, breadth 0.06 mm (FIG. 4 E, F). *Length*: 1.15 mm stretched, 0.9 mm with head bent; breadth: 0.75 mm.

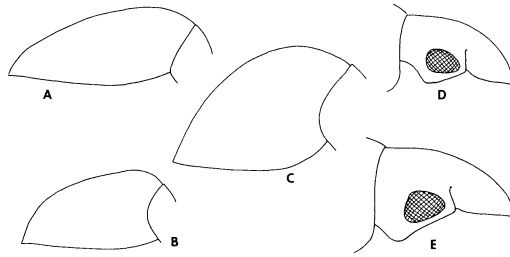


FIG. 2. Lateral view of elytra (A-C) and of head (D-E) of *Clambus* spp.: A, *C. crinitus*, n. sp.; B, *C. popei*, n. sp.; C, *C. setosus*, n. sp.; D, *C. crinitus*, n. sp.; E, *C. formosanus* E.-Y.

Holotype ♂ (BMNH), VIETNAM: Tonkin, A. de Cooman, B. M. 1940-13.

The name *setosus* refers to the long erect setae of the elytra.

***Clambus ceylonicus* Endrödy-Younga, new species**

Comparatively large for the group, reddish brown or reddish yellow. Dorsal surface with long erect setae, metasternum and femoral plates with long leaning setae. Horizontal plate of metasternum concave along length, without transverse line of punctures. Sutural profile unevenly arcuate in lateral view.

Head broad, hardly longer in front of eyes than longitudinal diameter of eye, moderately convex in lateral view. Temporal angle of head rounded and situated close to middle of eyes. Surface indistinctly shagreened and set with long, semierect setae. *Pronotum* convex, front angle slightly obtuse angular (ca 110°), hind angle broadly arcuate, lateral margin straight in front. Surface with indistinct shagreen laterally, or entirely smooth. *Elytra* as long as combined breadth, very convex, lateral margins evenly rounded in dorsal view. Sutural profile in lateral view strongly arcuate at scutellum and at last 1/3 of its length, flattened inbetween. Apex sharp, almost rectangular. Surface shiny at disc, indistinctly shagreened laterally and at apex. Few setae (ca 30-35 per elytron) long and erect, curved backwards, yellow. *Ventral surfaces* shiny, with long, leaning setae on horizontal plate of metasternum and femoral plates, and with much shorter ones on abdominal sternites. Apex of anal sternite with tuft of fine hairs. Horizontal plate of metasternum fairly long in middle, hardly less than 1/2 as long as lateral length (6:14), surface with deep transverse depression along entire breadth. *Antennae* short, 7th segment shorter than 6th or 8th segments; 8th hardly longer, 6th much longer than broad. *Aedeagus* 0.25 mm long and 0.03 mm broad, lanceolate at apex. Fused parameres 0.15 mm long, bifid at apex, with 1 pair of setae (FIG. 4 G, H.). Some of the specimens have very weakly sclerotized and consequently deformed aedeagi. *Length* 1.0-1.1 mm stretched and 0.81-0.88 mm with head bent; breadth 0.66-0.7 mm.

Holotype ♂, allotype ♀ and 23 paratypes (GENEVA): SRI LANKA: Kandy, 700 m, 14.II.1970, Mussard, Besuchet, Löbl; 1 paratype: same but Mahaweli Ganga, 11.2 km from Kandy, 450 m, 10.II.1970 (GENEVA).

The new species is named after the locality of its collection.

***Clambus biroi* Endrödy-Younga**

Clambus biroi E.-Y., 1959, Opusc. Ent. 24: 92-93; 1965, Ann. Hist. Nat. Mus. Hung. 57: 262-63 (fig. aedeagus).

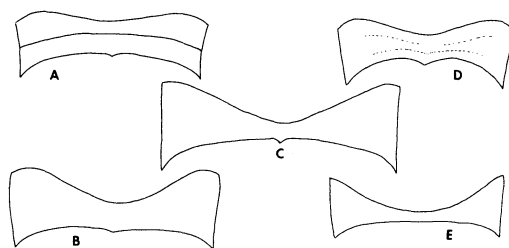


FIG. 3. Horizontal, distal plate of metasternum of *Clambus* spp. in ventral view: A, *C. olympiae*, n. sp.; B, *C. rotundus* E.-Y.; C, *C. formosanus* E.-Y.; D, *C. popei*, n. sp.; E, *C. bachmaieri*, n. sp.

This species of New Guinea belongs to the group with long setae at clypeus, elytra and ventral surfaces. Closely related to *C. ceylonicus*, n. sp. The strongly obtuse-angular front angle of pronotum distinguishes it from the other species of the group. Other specific characters are the slightly concave, horizontal plate of metasternum without a transverse depression, the fairly evenly arcuate sutural profile of elytra in lateral view, and the small, flame-shaped, pointed penis (FIG. 5 A, B).

Known only from the collections of L. Biro from New Guinea (BUDAPEST).

***Clambus novaguineensis* Endrödy-Younga**

Clambus novaguineensis E.-Y., 1959, Opusc. Ent. 24: 93; 1965, Ann. Hist. Nat. Mus. Hung. 57: 263 (fig. aedeagus).

The species belongs to the smaller ones of the group with long setae on dorsal surface and metasternum. It is separated from *C. rotundus* E.-Y. by the convex horizontal plate of metasternum, by the less evenly arcuate sutural profile of elytra in lateral view and by the form of aedeagus (FIG. 5 C, D).

DISTRIBUTION. New Guinea.

***Clambus olympiae* Endrödy-Younga, new species**

Small, very convex with comparatively short and broad elytra. Setae of elytra extremely long. Unicolored light reddish brown.

Head broad, clypeus hardly longer in front of eyes than longitudinal diameter of eye (6.5:7.5). Longitudinally convex in lateral view, dorsal line joining clypeal margin almost in a rectangle. Temporal angle obtuse-angular, rounded, situated behind middle of eyes. Surface shiny with only very indistinct shagreen, setae of clypeus very long. *Pronotum* convex, front angle rounded, almost rectangular, hind angle hardly more rounded, lateral margin slightly arcuate. Surface shiny, only laterally slightly shagreened; with 2 pairs of long setae. *Elytra* convex and broad, only a little longer than the combined breadth. Lateral margins in dorsal view flatly but evenly arcuate; sutural profile in lateral view domed arcuate, only slightly flattened in middle. Surface shiny, hardly with any marks of a shagreen. Setae very long, though not more numerous than with other species of the group (30-35 setae per elytron). *Ventral surfaces*. Horizontal plate of metasternum long, distinctly longer in middle than 1/2 of lateral length, hind margin almost straight, slightly arcuate emarginate at sides (FIG. 3 A), whole surface strongly

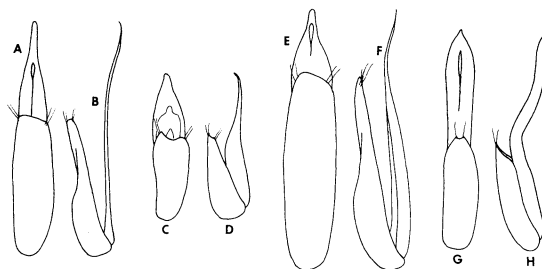


FIG. 4. Aedeagus of *Clambus* spp. (A, C, E, G in ventral view, B, D, F, H in lateral view): A-B, *C. crinitus*, n. sp.; C-D, *C. setosus*, n. sp.; E-F, *C. tomentosus*, n. sp.; G-H, *C. ceylonicus*, n. sp.

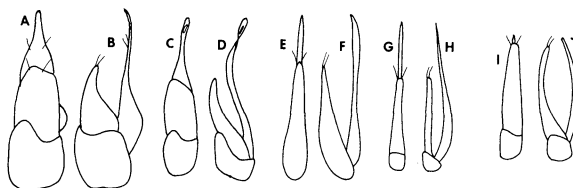


FIG. 5. Aedeagus of *Clambus* spp. (A, C, E, G, I in ventral view, B, D, F, H, J in lateral view): A-B, *C. biroii* E.-Y.; C-D, *C. novaguineensis* E.-Y.; E-F, *C. olympiae*, n. sp.; G-H, *C. popei*, n. sp.; I-J, *C. rotundus* E.-Y.

shagreened, dull, middle with a deep V-shaped transverse depression. Transverse crest with dense set of long leaning setae. Femoral plate shiny, without microsculpture, setae shorter than at metasternum, but still much longer than those of abdominal sternites. Abdominal sternites shiny, with only basal punctures of setae. Apex of anal sternite with fine tuft of hairs. *Aedeagus* resembles that of *C. popei*, n. sp., very small, 0.18 mm long and 0.02 mm broad, spike-shaped. Fused parameres 0.14 mm long, spike-shaped, slightly bulbous at base (FIG. 5 E, F). *Length* 0.92 mm stretched and 0.68 mm with head bent; breadth 0.54 mm.

Holotype ♂ (BMNH), SOLOMON ISLANDS: Guadalcanal, 23.V.1963, forest litter, 5589, P. J. M. Greenslade.

This publication was prepared during the 20th Olympic Games at Munich. The new species is named in memory of this event.

***Clambus popei* Endrödy-Younga, new species**

Very small, comparatively elongate with semiparallel elytra at basal 1/2. Long middle section of sutural profile of elytra flattened in lateral view. Setae of elytra about as long as distance between their insertions. Discs of pronotum and elytra variously darkened, otherwise reddish brown.

Head broad, clypeus shorter in front of eyes than longitudinal diameter of eye (4:6.5). Temporal angle obtuse-angular, rounded and situated behind middle of eyes. Head moderately convex along length, dorsal line in lateral view joining clypeal margin in an acute angle (ca 45°). Surface shiny, indistinctly shagreened, with long setae in

front of antennal fossa. *Pronotum* convex, proximal angle distinctly obtuse-angular, rounded, distal angle acute-angular but very broadly rounded. Lateral margin slightly arcuate, almost straight. Surface shiny, as in head with hardly visible indistinct shagreen and with 2 pairs of long setae. *Elytra* longer than combined breadth (45:40), lateral margins in dorsal view straight behind shoulders, slightly converging, from behind middle, arcuate towards apex. Sutural profile in lateral view flattened in middle, more arcuate at scutellum and bent vertically to apex (FIG. 2 B). Surface usually more strongly shagreened than pronotum. Setae (probably not more than 20 per elytron) as long as or shorter than distance between their insertions, setae mostly erect. *Ventral surfaces*. Horizontal plate of metasternum distinctly shorter in middle than 1/2 of lateral length (4.5:13). Hind margin of plate produced in middle in a very flat triangle, emarginate at both sides (FIG. 3 D); concave along length, resulting in a transverse depression not reaching lateral quarters of plate. Surface distinctly shagreened laterally, more shiny in middle. Transverse crest with long, leaning setae. Femoral plate shiny with fine basal punctures of leaning setae. Abdominal sternites shiny, with a fine tuft of hairs at apex of anal sternite. *Aedeagus* very thin, spike-shaped, finely pointed, slightly bulbous at basal 1/3, length 0.18 mm, breadth 0.09 mm apically from the basal bulb. Fused parameres 0.12 mm long, also narrow spike-shaped but less pointed, with 2 fine hairs at apex (FIG. 5 G, H). *Length* 0.85 mm stretched and 0.62 mm with head bent; breadth 0.48 mm.

MATERIAL EXAMINED. 2 ♂♂ and 11 further specimens. Holotype and 12 paratypes, British Museum.

Holotype ♂ and 1 paratype (BMNH), SOLOMON ISLANDS: Guadalcanal, Mt Austen, 7.VIII.1962, forest litter, 11185, P. J. M. Greenslade (B.M. 1966-477). Further paratypes (BMNH): all with the same locality, collector and B.M. number: 1, 1.VII.1963, 6920; 2, 9.VII.1963, 8077; 1, 22.VII.1963, 11278; 3, 2.VIII.1963, 11209; 1, 7.VIII.1963, 11185; 1, 24.VIII.1963, 19323; 1, 15.IX.1963, 11238; 2, 29.XI.1963, 11031.

The new species is named in honor of Mr R. D. Pope, the well known coleopterist of the British Museum.

***Clambus rotundus* Endrödy-Younga**

Clambus rotundus E.-Y., 1959, Opusc. Ent. 24: 94;

Clambus rotundatus E.-Y., 1965, Ann. Nat. Hist. Mus. Hung. 58: 263 (fig. aedeagus).
(*lapsus calami*)

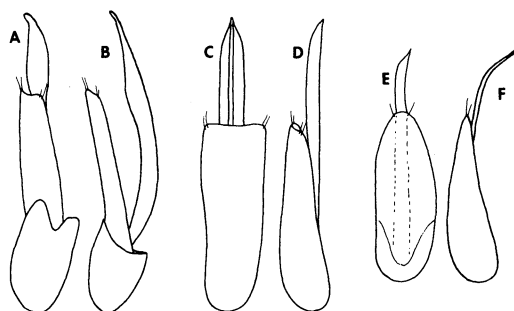


FIG. 6. Aedeagus of *Clambus* spp. (A, C, E ventral view, B, D, F lateral view): A-B, *C. villosus*, n. sp.; C-D, *C. nipponicus* E.-Y.; E-F, *C. bachmaieri*, n. sp.

A small species of the group with long setae. Very regularly rounded both in dorsal and in lateral view. Horizontal plate of metasternum flat behind the transverse crest and behind a fine furrow at the base of the crest.

Head broad, clypeus about as long in front of eyes as longitudinal diameter of eye. Temporal angle obtuse-angular, rounded and situated behind middle of eyes. Surface shiny with long setae at clypeus. *Pronotum*. Front angle only a little less rounded than the broadly rounded hind angle. Lateral margin almost straight in middle. Surface shiny, only with marks of an indistinct shagreen, and with 2 pairs of long setae. *Elytra* somewhat longer than combined breadth (60:55). Lateral margins evenly arcuate in dorsal view, broadest behind shoulder. Sutural profile in lateral view evenly arcuate, without any flattened section. Surface shiny, setae about as long as distance between their insertions; setae erect, but distinctly directed backwards. *Ventral surfaces*. Horizontal plate of metasternum short in middle, hardly more than 1/3 as long as lateral length (5:14); posterior margin truncate (FIG. 3 B). Transverse crest strongly elevated, plate flat behind crest. Surface shiny in middle, finely shagreened laterally. Femoral plate shiny with indistinct shagreen laterally. Apex of anal sternite with a fine tuft of hairs. *Aedeagus* 0.14 mm long, very thin, hardly longer than long, narrow plate of fused parameres (FIG. 5 I, J). *Length* 0.85 mm stretched, breadth 0.48 mm.

MATERIAL EXAMINED. PAPUA NEW GUINEA: New Guinea (NE): 2 (holotype ♂, paratype ♀), Erima, Astrolabe Bay, Biro (BUDAPEST).

DISTRIBUTION. New Guinea.

***Clambus octobris* Endrödy-Younga**

Clambus octobris E.-Y., 1959, Opusc. Ent. 24: 94-95.

One of the largest species of the genus known with only very fine pubescence. Lateral margins of elytra in dorsal view and sutural profile in lateral view evenly arcuate. Clypeus densely pubescent, but the rest of the dorsal surface scarcely pubescent. The hairs of head are not much longer than those of the rest of the surface. Length 1.6 mm.

DISTRIBUTION. Hawaiian Islands.

The only specimen (holotype — BMNH) was not dissected, consequently the aedeagus is not known. The species can be compared with the distinctly smaller Oriental *C. formosanus* E.-Y. With the latter, however, the temporal angle of head is situated behind eyes, and the head is more convex in lateral view.

***Clambus villosus* Endrödy-Younga, new species**

A medium sized, dark brown species, somewhat comparable with the Palearctic *C. nigrellus* Reitter. Pubescence of clypeus as that of ventral surface consists of long, distinct semierect hairs, the rest of the dorsal surface in contrast is apparently bare, with only very short, and fine, dark hairs.

Head convex, eye large. Temporal angle rounded, somewhat obtuse-angular, situated behind middle of eyes (FIG. 1 A). Surface smooth and shiny only near eyes; indistinctly shagreened. *Pronotum* convex, front angle slightly more than 90°, moderately rounded, hind angle about 90°, but broadly rounded; lateral margin straight or almost straight. Surface shiny but indistinctly shagreened. *Elytra* longer than combined breadth (62:53), lateral margins in dorsal view very evenly arcuate; sutural profile in lateral view evenly and moderately arcuate. Microsculpture of surface similar to that of pronotum. *Ventral surfaces*. Horizontal plate of metasternum moderately long in middle, ca 1/3 as long as lateral length. Hind margin slightly emarginate both sides of flat median, triangular projection. Surface indistinctly shagreened, pubescence evenly distributed, fairly long. Femoral plates more shiny, pubescence similar. Abdominal sternites shiny, but with distinct transverse shagreen, pubescence shorter. Anal sternite with

distinct tuft of hairs. *Antennae* comparatively long, both 7th and 8th segments longer than broad (in both sexes). *Aedeagus* asymmetrical, as usual with the *minutus* group of the genus; cylindrical basally, flattened apically; length 0.3 mm, breadth at the broadest spot 0.03 mm. Fused parameres asymmetrical, at apex asymmetrically emarginate with a seta at each apex; length 0.21 mm (FIG. 6 A, B). *Length* 1.1 mm stretched and 0.82 mm with head bent, breadth 0.6 mm.

Holotype ♂ and allotype ♀ (GENEVA), SRI LANKA: Mataweli Ganga, 7 mi. (11 km) from Kandy, 450 m, 10.II.1970, No. 57 B, Mussard, Besuchet, Löbl; 1 ♀ paratype, Alut Oya, 3.II.1970, No. 43, Mussard, Besuchet, Löbl.

Clambus nigrellus Reitter as a closely related Palearctic species of the *minutus* group differs in the following characters: larger, 1.25–1.45 mm; lateral margin of pronotum arcuate, front angle more rounded. Horizontal plate of metasternum larger, longer laterally and though more deeply emarginate at transverse crest not shorter in middle (8:19) than with *C. villosus*, n. sp. Mesosternum and front plate of metasternum much less vertical. Pubescence of dorsal surface including pronotum and elytra very short but visible (hardly visible with *C. villosus*, n. sp.), pubescence of ventral surface in contrast finer than with the new species.

***Clambus nipponicus* Endrödy-Younga**

Clambus nipponicus E.-Y., 1960, Acta Zool. Acad. Sci. Hung. 6: 275–76.

A medium sized species of the eastern Palearctic. Temporal angle of head situated behind eyes. Pubescence also at clypeus very short and dense. Horizontal plate of metasternum comparatively long in middle, about 1/3 as long as lateral length. With this combination of characters no species of the Oriental Region is similar. *Aedeagus*: FIG. 6 C, D. *Length* 1.1 mm.

DISTRIBUTION. Japan.

***Clambus flaveolus* Endrödy-Younga**

Clambus flaveolus E.-Y., 1965, Ann. Hist. Nat. Mus. Hung. 57: 261–62.

Small, reddish brown. Pubescence of clypeus dense, very short and erect, but hardly visible on the rest of dorsal surface.

Head broad, dorsal line in lateral view joining clypeal margin at about 70°. Temporal angle pronounced, slightly acute-angular, narrowly rounded at apex and situated close to hind margin of eyes (FIG. 1 B). Surface shiny, only with fine basal punctures of hairs. *Pronotum* convex, front angle obtuse angular, strongly rounded, hind angle broadly arcuate, lateral margin arcuate. Surface shiny, indistinctly shagreened in middle and with fine basal punctures of very fine hairs. *Elytra* longer than combined breadth (21:19), sutural profile in lateral view moderately and evenly arcuate from base to apex; lateral margins in dorsal view evenly arcuate. Surface shiny with very indistinct shagreen and with fine basal punctures of hardly visible hairs. *Ventral surfaces*. Pubescence short, not longer than at clypeus, anal sternite without a tuft of hairs. Horizontal plate of metasternum very short in middle, only 1/7 as long as lateral length. Transverse crest moderately elevated, slightly dilated in middle. Surface of metasternum and femoral plates shiny with indistinct shagreen, abdominal sternites with transverse shagreen. *Aedeagus* narrow with lateral margins parallel and with short, symmetrical triangular apex; flattened in lateral view, though somewhat thicker at base; length 0.19 mm, breadth 0.01 mm. Fused parameres symmetrical, broadest at middle, apex emarginate and set with 2 pairs of long fine setae; length 0.15 mm, breadth 0.03 mm (FIG. 7 A, B). *Length* 0.55 mm with head bent, and about 0.65 mm stretched; breadth 0.43 mm.

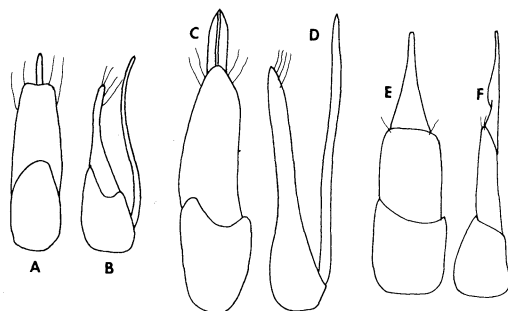


FIG. 7. Aedeagus of *Clambus* spp. (A, C, E ventral view, B, D, F lateral view): A-B, *C. flaveolus* E.-Y.; C-D, *C. topali*, n. sp.; E-F, *C. pumilus* Motsch.

MATERIAL EXAMINED. BURMA: 2 ♂♂, 3 ♀♀, Tenasserim (BUDAPEST).

DISTRIBUTION. Burma: Tenasserim.

Clambus topali Endrödy-Younga, new species

Very closely related to *C. flaveolus* E.-Y.; the differences in the external characters are not very marked. Aedeagus, however, much larger and distinctly different. The characters different from the above species are as follows.

Head less convex, dorsal line in lateral view joining clypeal margin at about 50°. Temporal angle situated at about hind 1/3 of eyes. Lateral margin of pronotum more flatly arcuate. *Aedeagus* larger and broader with a light, transparent, longitudinal central line; length 0.25 mm, breadth 0.02 mm. Fused parameres somewhat asymmetrical, converging towards apex, apex narrowly rounded, both sides with a pair of long setae; length 0.19 mm, Breadth 0.05 mm (FIG. 7 C, D). *Length* 0.75-0.79 mm stretched and 0.66 mm with head bent; breadth 0.5 mm.

Holotype ♂ and allotype ♀ (BUDAPEST), VIETNAM: Mai Lam, NE of Hanoi, 12-14.IV. 1966, sifted litter, No. 28, Gy. Topal; 1 paratype, Hanoi, hotel, 40 m, 29.X.1963, on light, T. Pocs; 1 paratype, same, 30.X.1963.

The new species is named in honor of Dr Gy. Topal, mammalogist of the Natural History Museum at Budapest.

Clambus bachmaieri Endrödy-Younga, new species

Small, dark brown, very shiny with short and fine pubescence. Hairs evenly and sparsely distributed on dorsal surface, except clypeus where pubescence is denser consisting of slightly longer hairs. Pubescence of ventral surfaces denser, with hairs longer than those of elytra. Temporal angle of head behind eyes. Metasternum short in middle.

Head convex, dorsal line in lateral view joining the clypeal margin almost at 90°. Temporal angle very large, diagonally measured broader than 1/2 of the diameter of eye (4:6). Temporal angle slightly acute-angular, apex finely indented marking the proximal end of collar fossa (see *C. pubescens* Redtb. of the Palearctic Region); distal tip of temporal angle distinctly behind the hind margin of eyes. Temporal margin diverging distally from lateral margin of eye (FIG. 1 C). Surface shiny, indistinctly shagreened, pubescence in front of antennal fossa fine and short but quite visible, erect, distally from this line, as in pronotum and elytra, being shorter, more spaced, hardly visible. *Pronotum* convex, front angle obtuse-angular, almost as rounded as hind angle, lateral margin hardly

marked between angles. Surface shiny, with shagreen hardly visible and short semierect hairs. *Elytra* longer than combined breadth (53:49), lateral margins in dorsal view evenly and moderately arcuate. Sutural profile in lateral view strongly arcuate at basal 1/2, turning without a break in a flatter arc towards apex. Surface shiny with indistinct shagreen, and with similar hairs as pronotum. *Ventral surfaces*. Horizontal plate of metasternum short in middle, 1/4 as long as the lateral length. Transverse crest moderately elevated, regularly formed (FIG. 3 E). Surface of metasternum and femoral plate shiny with indistinct shagreen and hardly visible hairs, similar to those of elytra. Abdominal sternites smooth without shagreen, pubescence similar to that of metasternum, anal sternite without a tuft of hairs. *Antennae* short, segments 5 and 6 only a little longer than broad, 7th roundish, 8th distinctly longer than broad. Club broad, 1st segment as long as broad, dilated apically, last segment (10th) somewhat broader than long. *Aedeagus* narrow, 0.22 mm long, apical 1/4 arcuate upwards and tip apparently twisted sideways. Fused parameres 0.19 mm long and 0.06 mm broad, only slightly asymmetrical (FIG. 6 E, F). *Length* 1.0 mm stretched and 0.73 mm with head bent; breadth 0.54 mm.

Holotype ♂ (BUDAPEST), VIETNAM: Hanoi, 4-10.XI.1963, A. Manninger; allotype ♀, baie d'Ha-long, Hong-gai, hotel, 0-10 m, 5.IX.1963, on light, T. Pocs; 1 paratype, Tuong linh, nr Phu ly, 24-28.V.1966, on light, No. 565, Gy. Topal.

The new species is named in honor of Dr F. Bachmaier, the well-known chalcidologist and my kind host in Munich in 1972.

Clambus flavescens Endrödy-Younga

Clambus flavescens E.-Y., 1959, Opusc. Ent. 24: 101-02.

The description of this species was based on 2 female specimens and therefore lacks a description of the aedeagus. It appears similar to *C. flaveolus* E.-Y. Pubescence of ventral surface is more apparent and the basal punctures of hairs at femoral plates are stronger. The position of this species will require further material and study.

DISTRIBUTION. Java, Batavia.

Clambus pumilus Motschulsky

Clambus pumilus Motsch., 1863, Bull. Mosc. 36(2): 480. — Endrödy-Younga, 1965, Ann. Hist. Nat. Mus. Hung. 57: 261 (fig. aedeagus). (Lectotype designated.)

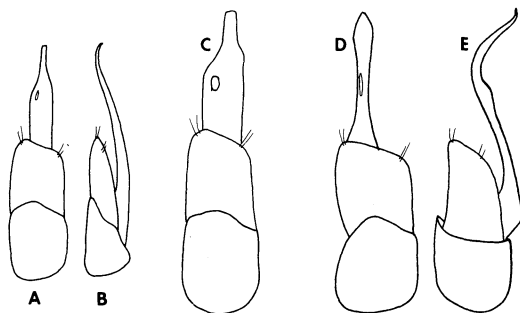


FIG. 8. Aedeagus of subspecies of *Clambus formosanus* E.-Y. (A, C, D ventral view, B, E lateral view): A-B, *C. f. formosanus* E.-Y.; C, *C. f. japonicus* E.-Y.; D-E, *C. f. indicus*, n. sp.

Small, shiny reddish brown, with general short and fine pubescence. Temporal angle of head even with hind margin of eyes. Hind margin of metasternum with a line of fine punctures. *Head* with well-developed temporal angles situated at hind margin of eyes. Surface shiny, pubescence in front of antennal fossa denser than at pronotum and elytra, but similarly short and fine. *Pronotum* convex with distinct angles and with lateral margin almost straight between angles. Front angle obtuse-angular at about 130° , hind angle about 90° , but much more broadly rounded. Surface smooth and shiny set with sparse, fine hairs. *Elytra* about as long as combined breadth. Surface with pubescence similar to that of pronotum. *Ventral surfaces*. Horizontal plate of metasternum very short in middle, plate $14 \times$ as broad as medial length. Hind margin of metasternum finely punctuate in a single line and not fitting to femoral plate along a sharp and fine suture (see the Palearctic *C. minutus* Sturm). Femoral plate at basal $1/3$ shiny and bare, indistinctly shagreened and finely pubescent behind. Abdominal sternites transversely shagreened and finely pubescent. *Aedeagus* 0.25 mm long and 0.02 mm broad at apex of fused parameres (FIG. 7 E, F). *Length* 0.9 mm.

MATERIAL EXAMINED. SRI LANKA (Ceylon): 1 (lectotype ♂), coll. Motschulsky (MOSCOW).

DISTRIBUTION. Sri Lanka.

The only specimen studied was the ♂ lectotype. Further specimens were not found. The characters of the aedeagus indicate a distinct species in the vicinity of *C. bachmaieri*, n. sp. and *C. flaveolus* E.-Y.

***Clambus formosanus* Endrödy-Younga**

Clambus formosanus E.-Y., 1959, Opusc. Ent. **24**: 103; 1960, Acta Zool. Acad. Sci. Hung. **6**: 273-74.

The species appear as 3 different subspecies from Japan through Formosa to Vietnam and India. The 3 forms are identical in external characters, and the description under the nominal subspecies applies equally to all of them; however, they are consistently different in the form of the aedeagus. Two of the subspecies, *C. f. formosanus* and *C. f. japonicus*, are rather closely related because of the similarity of the aedeagi, while the 3rd, *C. f. indicus*, n. subsp., differs distinctly. Though the forms of the aedeagus and parameres are strikingly different in the last, they can be derived from those of the other subspecies. Such characters are the asymmetrical, more or less lateral, position of the aperture of the ductus ejaculatorius on the ventral surface, the trend of asymmetry and vertical curvature, and the structure of the fused parameres.

***Clambus formosanus formosanus* Endrödy-Younga**

Clambus formosanus E.-Y., 1959, Opusc. Ent. **24**: 103.

Clambus formosanus formosanus E.-Y., 1960, Acta Zool. Acad. Sci. Hung. **6**: 273-74.

Medium sized, dark coffee brown or dark reddish brown. Pubescence in front of antennal fossa and of ventral surfaces short but distinct; pubescence of vertex, pronotum and elytra hardly visible, fine and short. Temporal angle of head located behind eyes. Metasternum very short in middle.

Head convex, dorsal line in lateral view strongly but not quite evenly arcuate, with proximal section falling almost vertically on clypeal margin (FIG. 2 E). Temporal angle pointed, rectangular, situated well behind eyes. Temporal margin finely arcuate in front of angle for a short distance (FIG. 1 D). Surface shiny with fine basal punctures of hairs, without or with extremely fine, indistinct shagreen. *Pronotum* convex, front angle slightly

obtuse-angular, lateral margin finely arcuate, hind angle broadly arcuate. Surface smooth and shiny, only sometimes with marks of an indistinct shagreen. *Elytra* very convex, hardly longer than combined breadth (72:68). Lateral margins in dorsal view and sutural profile in lateral view evenly arcuate. Surface shiny with indistinct shagreen. *Ventral surfaces*. Horizontal plate of metasternum extremely short in middle, only 1/6 as long as lateral length (FIG. 3 C). Transverse crest moderately elevated, dilated along median 1/2. Surface indistinctly shagreened as in elytra but much longer, about as pubescent as in clypeus. Abdominal sternites finely, transversely shagreened, somewhat shorter than metasternum, pubescent. Anal sternite with an accumulation of fine hairs at apex. *Aedeagus* 0.3 mm long of which basal 1/2 is occupied by basal plate and fused parameres. Breadth 0.04 mm at apex of parameres, lateral margins parallel, at about apical 1/4 forms a laterally shifted, narrow appendix with parallel sides and rounded apex. Lateral view showing distinct curvature at apical 1/4. Oval aperture of ductus ejaculatorius at apical 1/4 of ventral surface, shifted laterally from middle line. Fused parameres slightly contracted towards apex, apex asymmetrically emarginate with a pair of long hairs at each angle. Basal plate well developed, embracing base of aedeagus (FIG. 8 A, B). *Length* 1.1-1.3 mm stretched and 0.87-0.94 mm with head bent; breadth 0.68-0.75 mm.

MATERIAL EXAMINED. VIETNAM: Coc phong, Nin binh, sifted from mushrooms, 3-10.V.1966, No. 260, Gy. Topal.

DISTRIBUTION. Taiwan (Kosempo—type locality), Vietnam.

***Clambus formosanus japonicus* Endrödy-Younga**

Clambus formosanus japonicus E.-Y., 1960, Acta Zool. Acad. Sci. Hung. 6: 274-75.

Aedeagus longer and broader than in *C. f. formosanus*, appendixes shorter and broader with truncate apex. Length 0.4 mm and breadth 0.05 mm at apex of parameres. Fused parameres asymmetrically truncate at apex (FIG. 8 C).

DISTRIBUTION. Japan (Nagasaki, Yokohama, Hiogo).

***Clambus formosanus indicus* Endrödy-Younga, new subspecies**

Aedeagus long and narrow, apical 1/4 sharply bent upwards (off from parameres); broad at base, apparently symmetrically contracted behind middle, apex lanceolate. Aperture of ductus ejaculatorius situated laterally indicating asymmetry. Fused parameres short and broad, thick, apparently hollow. Ventral surface of aedeagus longitudinally impressed in middle. Apex flatly and asymmetrically rounded, here with a pair of long hairs at each side. Basal plate embracing the basis of aedeagus, deeply emarginate. Aedeagus 0.42 mm long, including 0.19 mm free section.

Aedeagus broadest at basal 1/3, with breadth 0.06 mm, and narrowest near apex, with breadth 0.02 mm. Fused parameres 0.1 mm broad (FIG. 8 D, E).

Holotype ♂, **allotype** ♀ and 146 paratypes (BMNH), INDIA: Haldwani Distr, Kumaon, H. G. Champion.

Acknowledgments: I wish to express my sincere gratitude to the colleagues who supplied me with material for this revision: Mr R.D. Pope and Miss C.M.F. von Hayek (British Museum, London); Dr Z. Kaszab (Natural History Museum, Budapest); Dr C. Besuchet (Natural History Museum, Geneva); Dr L. Hoberlandt (National Museum, Praha).

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