Fauna and ecology of the Brentidae of Vietnam and adjacent territories of South China, Laos, and Thailand (Coleoptera, Curculionoidea)

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123 species are recorded from the area under examination; 2 genera and 5 species, all from Vietnam, are described as new: *Vietobrentus napolovi* gen. et sp. n., *Ipsopisthius hirtus* gen. et sp. n., *Paraclidorrhinus vietnamicus* sp. n., *Ecnomobrentus bidens* sp. n., *Calabresia sapaensis* sp. n. A redescription is given for *Prophthalmus brevis* Power. Observations on habitats, host plants and period of activity are included for many species.

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INTRODUCTION

The Brentid fauna of Indochina as well as that of many other groups of insects of the tropical forests of SE Asia has still not been adequately studied. Kleine (1941) listed 73 species of Brentidae from this region. In succeding years the number of species of Brentidae described amounted to 90 (Damoiseau, 1961-1989). The list presented herein totals 123 species of Brentidae, including 2 new genera and 5 new species.

Collections of the author in North Vietnam in September 1961 – March 1964 cover nearly the entire area of this part of country. To these have been added collections from some areas of Laos made by the author in October 1984 and January-March 1986. Though all the beetles were collected during geological expeditions, without using special methods, the total number of specimens of Brentidae collected, belonging to 78 species, amounted to 1500.

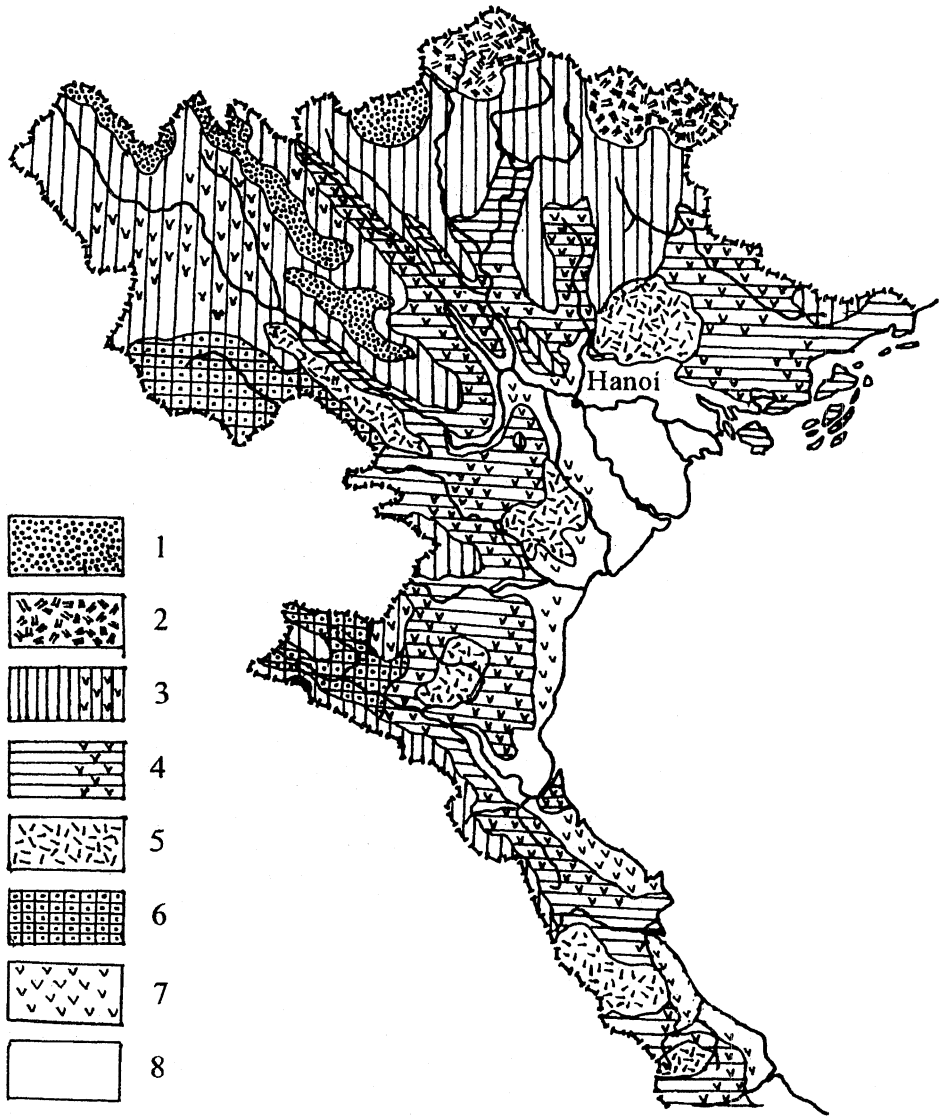
The Soviet-Chinese expeditions to Yunnan (South China) in 1955-1957 brought more than 1000 specimens of Brentidae. They are indexed (SE) in the subsequent text. Later, in 1982-1998, the scientists of the Zoological Institute and the Evolutionary Morphology and Animal Ecology Institute, Russian Academy of Sciences, collected 600 more specimens of Brentidae in Vietnam. Over 200 specimens were collected in South and North Vietnam by zoologist A. Napolov, Riga (Latvia). This publication uses material collected by A. Napolov during baseline biological surveys in the protected areas of northern Vietnam: a collaborative venture between the Society for Environmental Exploration, London and the Institute of Ecology and Biological Resources, Hanoi through the SEE Vietnam Forest Research Project.

Also examined in these studies were 228 specimens of Brentidae from the Museum of Basel (Switzerland) collected by Czech and German scientists. Among this material, some species previously unknown from the study area were identified.

The results of examination of all the above material are presented in the list below.

The List gives the following data: (1) name of the species with author and year; (2) collecting localities, the initials or full names of collectors; (3) number of specimens collected; (4) distribution of the species given in the literature, mainly in catalogues; (5) symbols (letters) designating habitats examined (see Map); (6) altitude of collecting areas; (7) month of collection; (8) other ecological data.

The names of collectors are abbreviated as follows: Russia: S.A. Belokobylskij (S.B.), I. Boguslavski (I.B.), I.S. Darevski (I.D.), A.V. Gorochov (A.G.), E.P. Izokh (E.I.), O.N. Kabakov (O.K.), B.A. Korotyaev (B.K.), L.N. Medvedev (L.M.), N.L. Orlov (N.O.), V.A.



Map. Biotopes of North Vietnam (see explanation in the text). Areas marked with "v" are occupied by secondary savannah replacing the natural biotopes.

Trjapitzin (V.T.), I.V. Vasiliev (I.V.); Latvia: A. Napolov (A.N.); Czech Republic: J. Horak (J.H.), D. Kral (D.K.), V. Kuban (V.K.), P. Pacholatka (P.P.), J. Strnad (J.S.); Germany: C. Naumann(C.N.).

Of the 125 species of Brentidae included in the list (some of them identified with doubt or only to generic level), 94 (marked with *) have been found within the study area for the first time, 2 genera and 5 species are described as new. The type specimens of these new species are kept in the Zoological Institute, St.Petersburg. The scale bars under the figures equal 1 mm. If two bars are given, the longer refers to the figures of genitalia.

The biotopes of North Vietnam are as follows (see Map).

1 – Mountain subalpine biotopes (MSB), h = 1800-3140 m. Forests of *Rhododendron, Podocarpus, Cunninghamia, Fokienia, Acer, Tilia, Alnus nepalensis, Betula, Salix* and other trees; tree-fern; *Hedera nepalensis, Cyatheus.* Subalpine grassfields: *Lilium, Artemisia, Achillea, Sclerium, Pteridium, Lycopodium,* and *Equisetum.*

2 – Mountain limestone plateau (MLP), h = 1200-2500 m. There may be sparse forests of *Pinus*, *Keteleeria*, *Cupressus*, *Magnolia*, *Ficus*; palm: *Cariota bacsonensis*; *Cycas*; *Smilax*, *Clausena*.

3 – Montane tropical forests (MTF), h = 900-2000 m, on silicate soils. Trees: *Castanopsis*, *Passania*, *Quercus*, *Carpinus*, *Cinnamomum*, *Magnolia*, *Pinus*, *Aralia*, *Ficus*; *Cyatheus*; lianas: *Vitis*, *Smilax*; palms: *Caryota*, *Pinanga*; *Musa wilsoni*. Secondary mountain savannah (MS). Bushes: *Rubus*, *Alnus nepalensis*, *Melastoma*; grasses: *Thysonaloena*, *Solanum*, *Ischemum*, *Paspalum*, *Centelia*, *Artemisia*, *Achillea*.

4 – Biotopes of rain forests (evergreen) (RTF), h = 10-900 m, on silicate soils. Forests of large trees: *Dipterocarpus*, *Hopea*, *Vatica*, *Lagerstroemia*, *Terminalia*, *Erythrophleum*, *Ficus* and many other trees; palms: *Areca*, *Arenga*, *Livistona*, *Rhapis*; lianas: *Dioscorea*, *Bauhinia*, *Calamus*; bamboos: *Dendrocalamus* and many other species; epiphytes; *Musa coccinea*, *Pandanus*, *Laportea*, *Allocasia*. Secondary tropical forests (SF). Trees: *Rhus*, *Randia*, *Litzea*, *Trema*, *Melia*, *Citrus decumana*, *Baccaurea*; many species of bamboos. Secondary savannah (S). Grasses: *Imperata*, *Saccharum spontanum*, *Mimosa pudica*, *Vernonia*; bushes: *Eupatorium*, *Melastoma*; palms: *Fenix*; trees: *Liquidambar*, *Trema*, *Mallotus*.

5 – Biotopes of tropical forests on limestones (karst plateaus and karst valleys) (LTF), h = 10-900 m. Trees: *Parapentace tonkinensis*, *Dipterocarpus*, *Burretiodendron*, *Garcinia*, *Ficus*, *Saraca dives*, *Dillenia* and many other species; palms: *Cariota*, *Arenga*; *Pandanus*; *Cordyline*; *Cupressus*; *Vitis*; lianas: *Hodgsonia*, *Potos*, bamboo-liana; grasses: *Aglonaema*, *Allocasia*, *Amorphocephalus*, *Zinziber* and other species.

6 – Biotopes of semiarid semideciduous tropical forests (DTF), h = 200-1200 m. Trees: *Dipterocarpus*, *Altingia*, *Pentace*, *Shorea*, *Terminalia*, *Careya*, *Pinus*; bushes: *Vitis*, *Solanum*, *Eupatorium*; palms: *Arenga*, *Fenix*, *Areca*; many species of bamboos; grasses: *Alpinia*, *Zinziber*, *Scleria*, *Coralia*, *Phrinium*.

7 – Biotopes of secondary savannah (S), h = 10-800 m, with plantations of trees: *Pinus*, *Eucalyptus*, *Casuarina*; bushes: *Rhodomyrtus*, *Baeckea* and other Myrtaceae; palms: *Phaenix hanceana*; *Pandanus*; grasses: *Imperata*, *Paspalum*, *Fimbristylus*. Biotopes of sea shore and rocks.

8 – Biotopes of cultural landscape (A), h = 1-200 m. Paddy fields; plantations of citruses, coffee trees, bananas, coco palms; orchards; pastures and roadside plants of banana, pine-apple, *Lantana indica*, *Clerodendron*, *Datura* and other species.

For China, included in the list are also: subtropical forests (STF), montain pine forests (MPF), alpine biotopes of alpine meadows and nival zone (M).

All Brentidae, with the exception of the deviating species *Cylas formicarius*, are inhabitants of various types of tropical forests. They are most abundant in relatively recent cutting areas and fire-sites. For primeval forests, Brentidae are uncommon, occurring occasionally on windfallen and dead trees and tree stumps. Some species are likely to occur in canopy of tropical forests where a specific fauna may exist, but collecting them is very difficult if at all possible.

The most widespread in North Vietnam are low-mountain monsoon rain tropical forests, with predominance of evergreen trees and bushes, as well as their derivatives, since by now the forests in the plains have been cut down completely.

Among the remaining forests, two types can be distinguished: forests on silicate soils and those on limestone, including forests of karst valleys.

The most common to the first type of forests (RTF) are *Calodromus mellyi*, *Cyphagogus tabacicola*, *C. eichhorni*, *Eusebus trifasciatus*, most species of *Cerobates*, *Microtrachelisus apertus*, *M. tabaci*, *Hoplopisthius trichimerus*, *Hipomiolispa compressa*, *Schizotrachelus intermedius*, *Paussobrentus bakeri*. In the upper-level rain tropical forests, *Ceocephalus articulatus* can also be encountered.

The rain tropical forests growing on limestone karst plateaus and in the gorges cutting through the plateaus (LTF) are characterized by a somewhat different fauna of *Cyphagogus confidens*, *Eterozemus deformis*, *E. pubens*, *Stereodermus infidus*, *Cerobates canaliculatus*, *Microtrachelisus bhamoides*, *Higonius cilo*, *Parapisthius gracilis*, *Carcinopisthius oberthuri*, *Ipsopisthius hirtus*, *Trachelisus politus*, *Ectocemus cinnamomi*, *Ischnomerus longicornis*, while many species typical of rain tropical forests on silicate soils are also present here: *Cyphagogus planifrons*, *C. westwoodi*, *Jonthocerus* (both species), a number of *Cerobates*, *Higonius crux*, *H. poweri*, *Baryrhynchus dehiscens*, and *B. speciosissimus*.

Common to the biotopes of semideciduous tropical forests (DTF) are *Paraclidorrhinus vietnamicus*, *Pseudocyphagonus squamifer*, *Mesoderus guttatus*, *Ecnomobrentus afrosimulans*, *E. bidens*, *Araiorrhinus beesoni*, *Schizotrachelus cavus*, *Epicononeus femoralis*, *Ectocemus contractus*, *Leptamorphocephalus laborator*, and *Paramorphocephalus binotatus*.

Mountain tropical forests (MTF) and small woods in subalpine biotopes (MSB) and limestone plateaus (MLP) are characterized by a quite diversified fauna of Brentidae including *Cyphagogus confertulus*, *C. longulus*, *C. obconiceps*, *Callipareius* (*Metacidotes*) *projectus*, *Miolispoides sculpturatus*, *Hipomiolispa tonkinensis*, *Schizotrachelus fascinatus*, *Paraprophthalmus applicatus*, *Prophthalmus delesserti*, *P. longirostris*, *Baryrrhynchus poweri*, *B. merocephalus*, *Synorychodes glaber*, and *Heterorhynchus ornatus*.

Derivative tropical forests and groups of trees in savannah (SF, SM, S) are also inhabited by characteristic species of Brentidae: *Vietobrentus napolovi*, *Schizotrachelus birmanicus*, *Anepsiotes schenklingi*.

Some species, particularly the abundant ones, are not restricted to particular biotopes or forest types. These species can be found in cutting areas and fire-sites, sometimes in savannah and orchards all over the area studied. Among these are *Cerobates sexsulcatus*, *Trachelisus bisulcatus*, *Hormocerus reticulatus*, *Prophthalmus wichmanni*, *Orychodes planicollis*.

Analysis of the fauna shows that predominant are species with trans-Indo-Malayan ranges (India to Indochina with Malacca, Indonesia and Philippines) extending in some areas to Australia and Polynesia. Ten or eleven species have southern Indo-Malayan ranges, their northern boundaries lying within South and Central Vietnam. A number of species percolate in the mountains of North Vietnam from the Himalayas. Among these are *Cyphagogus confertulus*, *Eterozemus deformis*, *Allaeometrus breviceps*, *Araiorrhynus beesoni*, *Trachelisus dividuus*, *Baryrrhynchus merocephalus*.

Nine species are endemic to Vietnam: *Callipareius* (*Coomania*) *projectus*, *Miolispoides sculpturatus*, *Hipomiolipsa tonkinensis*, *Schizotrachelus vitalisi*, as well as all the 5 new species (supposed endemics).

LIST OF SPECIES

Subfamily CALODROMINAE

Calodromus Guérin, 1866

C. mellyi Guérin, 1837. **China.** *Yunnan*: Tsinpin env., Mensi (SE). **N Vietnam.** *Bacthai*: NE Thainguyen (O.K.); *Hatuyen*: Nahang (A.N.); *Sonla*: Songma (V.T.); *Hanamninh*: Cucphuong (A.O.). **C. Vietnam.** *Thanhhoa*: Langchanh (O.K.), Bathuoc (B.K.), Benen N. P. (A.N.); *Nghetinh*: SW Quychau, N Cuarao (O.K.); *Binhtrithien*: NW Donghoi (O.K.); *Gialai Kontum*: Buonluoi, Tramlap (A.G., N.O.). **S Vietnam.** *Songbe*: Bugiamap (A.N.); *Dongnai*: Cattien (A.N.); env. Hochiminh (S.E.). **Laos.** *Khammouan*: Boneng (O.K.). 25 ♂, 18 ♀. – E India to Philippines. – LTF, DTF, STF, S, 10-600 m, I-XII. – The males occupy the entrances to the burrows of ambrosia beetles (Platypodidae), most often in the thin trunks of *Liquidambar* or *Ficus*, and sit there with their extraordinarily elongate hind tarsi exposed and scissors-like moving, thereby dispersing pheromones to attract females.

***C. ?simplex** Heller, 1916. **N Vietnam.** *Hatuyen*: W Bacquang (O.K.), 1 ♂, 14.VII.1963. – Sumatra, Malacca. – SF, 500 m, VII.

Cyphagogus Parry, 1849

***C. confertulus** Kleine, 1925 (= *fragosus* Kleine, syn. Damoiseau, 1989). **China.** *Yunnan*: Binbyan env. (SE). **N Vietnam.** *Vinhphu*: Tamdao (O.K.). **C. Vietnam.** *Nghetinh*: NW Cuarao (O.K.); *Gialai Kontum*: Buonluoi (A.G.). 5 ♂, 4 ♀. – Assam, Burma, Andaman Is. – MTF, 600-1200 m, VII-X, found on pile of *Castanopsis* logs.

C. planifrons Kirsch, 1875. **China.** *Yunnan*: Cheli, Binbyan env. (SE). **N Vietnam.** *Bacthai*: NE Thainguyen (O.K.). **C Vietnam.** *Thanhhoa*: SW Baithuong (Thuongsuan) (O.K.), Ngoclac (B.K.). 3 ♂, 7 ♀. – India, Assam, Malacca, Indonesia, Philippines. – RTF, LTF, 10-500 m, I-X, found on pile of logs of Dipterocarpaceae.

C. longulus Senna, 1898. **N Vietnam.** *Hoanglienson*: Sapa (O.K.), 1 ♂, 5.VIII.1962. – Tonkin, Malacca, India, Indonesia, Andaman Is, Philippines. – MTF, 1600 m, VIII, found on stumps of Fagaceae.

C. westwoodi Parry, 1848. **N Vietnam.** *Bacthai*: NO Thainguyen (O.K.); *Vinhphu*: Tamdao (V.K.); *Hasonbinh*: Dabac, Tulu (S.B.). **C Vietnam.** *Gialai Kontum*: Buonluoi (A.G.). **Thailand.** *Thanon*: Thong Chai (D.K., V.K.). 3 ♂, 4 ♀. – Ceylon, India, Bangladesh, S Vietnam, Malacca, Indonesia, Philippines. – RTF, LTF, MTF, 200-1000 m, V-XII, found on fallen *Terminalia* and *Vatica* trees at the entrance to burrows of *Crossotarsus* (Platypodidae).

***C. confidens** Kleine, 1925. **C Vietnam.** *Binhtrithien*: NW Donghoi, Raote (O.K.), 1 ♂, 23.III. 1963. – Malacca. – LTF, 400 m, III, found on dead Dipterocarpaceae trees.

***C. tabacicola** Senna, 1898. **C Vietnam.** *Thanhhoa*: SE Thuongsuan (O.K.), Benen N.P. (A.N.); *Nghetinh*: SE Quychau (O.K.). 2 ♂, 1 ♀. – India, Bangladesh, Andaman Is, Malacca, Indonesia, Philippines. – RTF, S, 10-400 m, I-VIII, found under the bark of dead trees (*Artocarpus*).

***C. obconiceps** Senna, 1902. **N Vietnam.** *Vinhphu*: Tamdao (V.K.), 1 ♂, 17-21.V.1990. – Assam, Malacca, Indonesia. – MTF, 900-1000 m, V.

***C. ?rubidus** Damoiseau, 1989. **C Vietnam.** *Thanhhoa*: Benen N.P. (A.N.), 9-12.VIII.1997, 1 ♂, 1 ♀. – Burma. – S, 10-100 m, VIII.

***C. eichhorni** Kirsch, 1875. **C Vietnam.** *Thanhhoa*: SE Thuongsuan (O.K.); *Nghetinh*: SW Quychau (O.K.); SW Cuarao (O.K.). **Thailand**. Chiang Dao (V.K.). 2 ♂, 2 ♀. – Assam, Malacca, Indonesia, Philippines. – RTF, MTF, SF, 300-1000 m, I-VII, found on fallen trees: *Shorea*, *Vatica*, *Bambax*.

C. ?nodosus Damoiseau, 1964. **Laos.** N of Vientian, Namngum reservoir (O.K.), 1 ♂, 1 ♀. – Laos, Tonkin. – MTF, 1000 m, III, on the bark of dead trees.

Vietobrentus gen. n.

V. napolovi sp. n. **C Vietnam.** *Thanhhoa*: Benen N.P. (A.N.), 9-30.VIII.1997, 1 ♂. – S, 10-100 m, VIII.

Callipareius Senna, 1892

C. (Metacidotes) projectus Damoiseau, 1982. **N Vietnam.** *Hoanglienson*: Sapa (O.K.), 2.VIII.1962, 1 ♂. –

Tonkin. – MTF, 1600 m, VIII, found in clearings on stumps.

C. (Callipareius) feae Senna, 1892. **China.** *Yunnan*: Tsinpin env. (SE), 19.V.1956. **N Vietnam**. *Hoanglienson*: Sapa (N.O.), 25.IV-9.V.1999. 2 ♂ 1 ♀. – Burma. – MTF, 2000-2500 m, V.

Paraclidorrhinus Senna, 1902

P. vietnamicus sp. n. **S Vietnam.** *Songbe*: Bugiamap (A.N.), 20.V.1995, 1 ♂. – DTF, 200-300 m, V.

Opisthenoxys Kleine, 1921

O. famulus Kleine, 1925. **N Vietnam.** *Hatuyen*: N Hagiang (O.K.), 8.VII.1963, 1 ♂. – India, Tonkin, Malacca. – MTF, 1100 m, VII, at light.

Pseudocyphagonus Desbrochers des Loges, 1890

P. squamifer Desbr., 1890. **S Vietnam.** *Songbe*: Bugiamap (A.N.). **Laos**. Vientian (O.K.); *Attopeu*: W Ban May (O.K.). 12 ♂, 11 ♀. – Assam, Andaman Is, Malacca, Indonesia, Philippines. – DTF, ST, 200-300 m, II-V, found on fallen trees (*Terminalia*, *Vatica*).

Trasycephalus Kleine, 1916

T. guttatus Kleine, 1916. **S Vietnam.** *Dongnai*: Cattien (A.N.), 2-5.IV.1995, 1 ♂, 1 ♀. – Timor, Java, Singapur, Tonkin. – DTF, 200-300 m, IV, at light.

***T. latecostatus** Kleine, 1916. **C Vietnam.** *Thanhhoa*: Benen N.P. (A.N.), 8-30.VIII.1997, 1 ♂. – Taiwan. – S, 1-100 m, VIII.

Autometrus Kleine, 1922

***A. punctulatus** Kleine, 1922. **N Vietnam.** Laocai (O.K.), 22.V.1963, 1 ♂. – Singapur. – A, 400 m, at light.

Eterozemus Senna, 1902.

E. deformis Kleine, 1925. **N Vietnam.** *Bacthai*: NE Thainguyen (O.K.), 15.XII.1962, 1 ♂. – Assam, Tonkin. – LTF, 300 m, XII, found under the bark of dead *Ficus* trees.

E. pubens Senna, 1892. **N Vietnam.** *Bacthai*: NE Thainguyen (O.K.), 9.V.1963, 1 ♂. – Burma, Malacca, Java, Taiwan, Philippines. – LTF, 300 m, V, found on a stump.

Allaeometrus Senna, 1902

A. breviceps Senna, 1902. **N Vietnam.** *Hatuyen*: Sonduong (O.K.). **C Vietnam.** *Nghetinh*: Kimcuong (O.K.). 1 ♂, 1 ♀. – India, Burma, Assam, Indochina, Indonesia, Taiwan, Australia. – RTF, 200-500 m, III-IV, found on dead trees (*Shorea*, *Dipterocarpus*?).

Ecnomobrentus Damoiseau, 1965

E. afrosimulans Damoiseau, 1965. **C Vietnam.** *Gialai Kontum*: Buonluoi (A.G.), 24.IV.1995, 1 ♂. – Tonkin: Hoabinh; Java. – DTF, 600-800 m, IV, found on dead trees (Dipterocarpaceae).

E. bidens sp. n. **S Vietnam.** *Dongnai*: Cattien (A.N.), 2-6.IV.1994; *Songbe*: Bugiamap (A.N.), 20.V.1995. 2 ♂, 1 ♀. – DTF, 100-300 m, IV-V.

Palaeoparagogus Damoiseau, 1979

***P. ?dentatus** Damoiseau, 1979. **C Vietnam.** *Gialai Kontum*: Buonluoi (A.G.), 5.V.1995, 1 ♂. – Java. – MTF, 800 m, V.

Microsebus Kolbe, 1892

M. trifasciatus (Kleine, 1916) (*Isomorphus*). **China.** *Yunnan*: Cheli (SE). **N Vietnam.** *Hatuyen*: NW Hagiang (O.K.), Nahang (A.N.); *Sonla*: Thuanchau (O.K.). **C Vietnam.** *Nghetinh*: SW Quychau (O.K.). 11 ♂, 8 ♀. – Ceylon, India, Indochina. – RTF, SF, S, 100-1000 m, I-X, under the bark of dead trees (*Ficus*, *Citrus*).

***M. globithorax** Damoiseau, 1979. **N Vietnam.** *Hatuyen*: Nahang (A.N.), 1 ♂, 27.V.1996. – Malaysia, Sarawak, Kapit. – RTF, 100-300 m, V.

Mesoderes Senna, 1898

M. maculatus Senna, 1898. **S Vietnam.** *Songbe*: Bugiamap (A.N.); *Dongnai*: Cattien (A.N.). 1 ♂, 1 ♀. – DTF, 100-300 m, V-VI.

Stereodermus Lacordaire, 1866

***S. infidus** Senna, 1893 (Figs 12, 13). **N Vietnam.** *Bacthai*: NE Thainguyen (O.K.); *Vinhphu*: Tamdao (A.N.). **C Vietnam.** *Nghetinh*: SW Quychau (O.K.). 36 ♂ ♀. – Sumatra, Nias I., Batu I. – LTF, RTF, MTF, 200-1000 m, I-XII, under rotten bark of dead trees: *Ficus*, Dipterocarpaceae, Fagaceae.

Jonthocerus Lacordaire, 1866, gen. bon.

Damoisseau (1963) considered this taxon as a subgenus of *Cerobates* Schoenherr, but we consider it a separate genus, the beetles being different both in morphology and mode of life: *Jonthocerus* and their larvae live in thin duing twigs of young trees while *Cerobates* occur under rotten bark of various types of dead trees.

J. carinensis Senna, 1892 (= *caesus* Kleine, 1944). **China.** *Yunnan*: Lumlin, Santaysan, SW Mansi, 30 km SW Tsinpin, Ganlamba (SE). **N Vietnam.** *Bacthai*: NE Thainguyen (O.K.); *Hoanglienson*: Jenbai (J.V.); *Hasonbinh*: Dabak. Tulu, Maison (S.B.). **C Vietnam.** *Nghetinh*: SW Quychau (O.K.); *Gialai Kontum*: Buonluoi (A.G.). **Laos.** *Khammouan*: Boneng (O.K.). 22 ♂, 18 ♀. – India, Tonkin, Burma, Malacca. – LTF, RTF, MTF, SF, 100-1600 m, IV-XII, found on thin twigs of bushes (*Rubus*) and young trees (*Trema*, *Liquidambar* and Fagaceae).

J. laticostatus Kleine, 1919 (= *asiaticus* Kleine, 1919; *angustifrons* Kleine, 1922). **China.** *Yunnan*: Tsinpin, Ganlanba, Cheli, Santaysan, SW Mansi (SE). **N Vietnam.** *Hatuyen*: Nahang (A.N.); *Vinhphu*: Tamdao, Daochu (O.K.); *Hasonbinh*: Dabak, Tulu (S.B.). **C Viet-**

nam. *Thanhhoa*: Bathuoc (B.K.), Langchanh (O.K.); *Nghetinh*: SW Quychau, NO Concuong, Kimcuong (O.K.). **Thailand.** *Ihanon*: Thong Chai, Chiang Dao, Palong (V.K.). 16 ♂, 21 ♀. – Sumatra, Java, Philippines, Tonkin, Taiwan. – RTF, LTF, SF, 100-1000 m, I-X, found on bushes and suckers of *Trema* stumps.

Cerobates Schoenherr, 1840

C. sexsulcatus Motschulsky, 1858. **China.** *Yunnan*: Tsinpin, Ganlanba, Cheli, SW Mansi, Lumlin (SE). **N Vietnam.** *Hatuyen*: Tuyenquang, Sonduong (O.K.), Nahang (A.N.); *Laichau*: Dienbienphu; *Hoanglienson*: Dongpao W Binhlu, Tule N Ngialo; *Vinhphu*: Tamdao; *Bacthai*: NE Thainguyen; *Caolang*: Bacson; *Hasonbinh*: Suoirut (O.K.), Hoabinh (V.K.); *Hanamninh*: Cucphuong (J.O.). **C Vietnam.** *Thanhhoa*: SW Baithuong (Tuongsuan) (O.K.), Bathuoc (B.K.), Benen N.P. (A.N.); *Nghetinh*: NW Quychau, SW Quychau, Concuong, Cuarao (O.K.); *Binhtrithien*: SW Donghoi (O.K.). **Laos.** *Khammouan*: Boneng (O.K.). **Thailand.** Soppong Pai, Chiang Dao (P.P.). 350 ♂ ♀. – Ceylon to Australia. – RTF, LTF, MTF, SF, S, A, 10-1000 m, I-XII, found under the rotten bark of dead trees of *Ficus*, *Liquidambar*, *Terminalia*, *Trema*, *Artocarpus* and other genera.

C. tristriatus (Fabricius, 1801). **N Vietnam.** *Hatuyen*: Sonduong (O.K.), Hahang (A.N.); *Bacthai*: NE Thaiguyen; *Vinhphu*: W Tamdao; *Laichau*: Dienbienphu (O.K.). **C Vietnam.** *Thanhhoa*: Langchanh, SW Baithuong (Tuongsuan) (O.K.), Bathuoc (B.K.); *Nghetinh*: SW Quychau, NO Cuarao (O.K.). **Thailand.** Chiang Dao, Palong (V.K.). 60 ♂ ♀. – Ceylon to Australia. – RTF, LTF, SF, A, 10-800 m, I-XII, found under the rotten bark of dead trees of various species.

C. laevipennis Senna, 1885 (= *aequalis* Kleine, 1922). **N Vietnam.** *Hoanglienson*: Dongpao W Binhlu (O.K.); *Hatuyen*: Nahang (A.N.). **C Vietnam.** *Thanhhoa*: Langchanh, W Baithuong (Tuongsuan) (O.K.); *Nghetinh*: SW Quychau, NO Cuarao; *Darlac*: Methuot (L.M.). **S Vietnam.** *Songbe*: Bugiamap; *Dongnai*: Cattien (A.N.), Vungtau (V.K.). **Thailand.** *Thanon*: Thong Chai, Chiang Dao (V.K.). 50 ♂ ♀. – Ceylon to Fiji Is. – RTF, DTF, SF, 10-800 m, I-XII, found under the rotten bark of dead trees of various species.

C. canaliculatus Motschulsky, 1858. **China.** *Yunnan*: Ganlanba, Szemao (SE). **N Vietnam.** *Caolang*: Bacson; *Bacthai*: NE Thainguyen; *Hatuyen*: Sonduong; *Vinhphu*: Tamdao (O.K., S.B.). **C Vietnam.** *Nghetinh*: NW Quychau (O.K.); *Gialai Kontum*: Tramlap (N.O.). 75 ♂ ♀. – India, Indochina, Malacca, Indonesia, Taiwan. – LTF, RTF, SF, 10-1000 m, I-XII, found under the rotten bark of dead trees of *Ficus* and other genera.

C. angustipennis Senna, 1884 (= *adustus* Senna, 1884). **N Vietnam.** *Hatuyen*: Sonduong; *Bacthai*: NE Thainguyen. **C Vietnam.** *Thanhhoa*: SW Baithuong (Thuongsuan), Langchanh (O.K.), Bathuoc (B.K.); *Nghetinh*: NO Cuarao (O.K.). **Thailand.** Chiang Dao (V.K.). 48 ♂ ♀. – Ceylon to Fiji Is. – RTF, LTF, SF, A, 10-800 m, IX-II, found under the rotten bark (*Ficus*, *Artocarpus*).

C. sumatranus Senna, 1893. **N Vietnam.** *Hatuyen*: Sonduong; *Bacthai*: NE Thainguyen (O.K.); *Hasonbinh*: Hoabinh (V.K.), Dabac, Tulu (S.B.); *Vinhphu*: Tamdao (A.N.). **C Vietnam.** *Thanhhoa*: SW Baithuong (Thuongsuan) (O.K.), Bathuoc (B.K.); *Nghetinh*: NW Quychau (O.K.); *Gialai Kontum*: Buonluoi (J.D.). **Thailand.** Chiang Dao (V.K.). 50 ♂ ♀. – Ceylon to Timor. – RTF, LTF, SF, A, 10-900 m. I-XII, found under rotten bark (*Ficus*, *Artocarpus* and other genera of trees).

C. fossulatus Motschulsky, 1858. **N Vietnam.** *Hatuyen*: Nahang (A.N.); *Hasonbinh*: Dabac, Tulu (S.B.). **C Vietnam.** *Thanhhoa*: Langchanh; *Nghetinh*: SW Quychau (O.K.). 3 ♂, 3 ♀. – India, Malacca. – RTF, SF. 10-400 m, II-X, found under rotten bark of dead trees.

***C. formosanus** Schonfeld, 1911. **S Vietnam.** *Songbe*: Bugiamap (A.N.), 1 ♂. – Taiwan. – DTF, 100-200 m, V.

Araiorrhinus Senna, 1893

***A. beesoni** Kleine, 1925. **N Vietnam.** *Hatuyen*: Sonduong (O.K.). **S Vietnam.** *Songbe*: Bugiamap (A.N.). 1 ♂, 1 ♀. – Burma. – DTF, SF, 100-300 m, V, under bark of dead trees.

***A. sondaicus** Senna, 1893. **N Vietnam.** *Vinhphu*: Tamdao (A.N.), 1 ♂, 30.VII.1998. – Sumatra. – MTF, 900 m, VII.

Microtrachelisus Senna, 1893

M. apertus Kleine, 1925. **China.** *Yunnan*: env. Tzinpin (SE). **N Vietnam.** *Hatuyen*: Sonduong; *Bacthai*: NE Thainguyen (O.K.). **C Vietnam.** *Thanhhoa*: Bathuoc (B.K.). **Thailand.** Chiang Dao, Palong (V.K.). 26 ♂ ♀. – Assam, Tonkin, Indonesia. – RTF, LTF, SF, 200-1000 m, I-V, under bark of dead trees (*Ficus*, *Terminalia*, *Sterculia*).

M. tabaci Senna, 1893. **C Vietnam.** *Nghetinh*: NW and SW Quychau (O.K.). **S Vietnam.** *Dongnai*: Cattien (A.N.). 2 ♂, 2 ♀. – Burma, Tonkin, Malacca, Indonesia, Philippines, New Guinea. – RTF, DTF, 10-400 m, I-VII, under bark of dead trees (Dipterocarpaceae).

***M. beneficus** Kleine, 1925. **S Vietnam.** *Songbe*: Bugiamap (A.N.), 1 ♂. – India, Assam, Borneo. – DTF, 100-200 m, V.

***M. ?bhamoensis** Senna, 1892. **N Vietnam.** *Bacthai*: NE Thainguyen (O.K.). **S Vietnam.** *Songbe*: Bugiamap (A.N.). 2 ♂. – Burma, New Guinea. – LTF, DTF, 100-400 m, V, under bark of dead trees.

***M. cylindricornis** Power, 1880. **China.** *Yunnan*: Ganlanba, SW Tzinpinh (SE). **N Vietnam.** *Hoanglienson*: Sapa; *Hatuyen*: Sonduong (O.K.); *Hasonbinh*: Dabac, Tulu (S.B.). 30 ♂ ♀. – Burma, Sumatra. – RTF, MTF, 200-1600 m, II-X, found under bark of dead trees.

Higonius Lewis, 1883

H. poweri Lewis, 1883. **N Vietnam.** *Hatuyen*: Sonduong; *Bacthai*: NE Thainguyen (O.K.); *Hasonbinh*: Dabac, Tulu (S.B.). **C Vietnam.** *Thanhhoa*: Baithuong (Thuongsuan), Langchanh, Bathuoc (B.K.); *Nghetinh*: SW Quychau (O.K.). **Thailand.** Chiem Dao (V.K.). 24 ♂ ♀. – Burma, Malacca, Indonesia, Tonkin, Ceylon. – RTF, LTF, SF, 100-500 m, I-XII, found under bark of dead trees of *Ficus* and *Terminalia* in borer burrows.

H. crux Olliff, 1883. **N Vietnam.** *Caolang*: Bacson; *Bacthai*: NE Thainguyen (O.K.), N Thainguyen (L.M.);

Hatuyen: Sonduong (O.K.). **C Vietnam.** *Nghetinh*: SW Quychau (O.K.). 4 ♂, 3 ♀. – Ceylon to Molluccan Is. – RTF, LTF, SF, 200-500 m, IX-XII, I-II, found under bark of dead trees.

***H. cilo** Lewis, 1883. **N Vietnam.** *Bacthai*: NE Thainguyen (O.K.), 1 ♂, 1 ♀, 15.IX.1961, 20.I.1964. – Assam, Bengalia, Philippines, Taiwan, Japan. – LTF, 300-400 m, I, IX, found under bark of dead trees (*Terminalia*).

Parapisthius Damoiseau, 1987

P. gracilis Damoiseau, 1987. **N Vietnam.** *Bacthai*: NE Thainguyen (O.K.). **S Vietnam.** *Dongnai*: Cattien (A.N.). 2 ♂, 1 ♀. – N Vietnam. – LTF, DTF, 100-400 m, III-IV, found on dead twigs of *Mallotus*.

Hoplopisthius Senna, 1892

H. trichimerus Senna, 1892. **China.** *Yunnan*: Siamonyan (SE). **N Vietnam.** *Hatuyen*: Nahang (A.N.); *Laichau*: Dongpao W Binhlu; *Bacthai*: NE Thainguyen; *Caolang*: Bacson (O.K.); *Vinhphu*: Tamdao (A.G., A.N.). **C Vietnam.** *Thanhhoa*: Benen N.P. (A.N.); *Nghetinh*: SW Quychau (O.K.). **S Vietnam.** *Dongnai*: Cattien (A.N.), 10 ♂, 13 ♀. – Assam, Burma, Tonkin, Malacca, Indonesia, Philippines. – RTF, LTF, MTF, DTF, SF, 10-900 m, I-V, found under bark of dry trees (Dipterocarpaceae).

Carcinopisthius Kolbe, 1892

C. oberthuri (Senna, 1892) (= *maculatus* Senna, 1902). **N Vietnam.** *Hoanglienson*: Sapa (J.S.); *Bacthai*: NE Thainguyen (O.K.), 25 km N Thainguyen (B.K.); *Hatuyen*: Nahang (A.N.); *Caolang*: Bacson (O.K.). **C Vietnam.** *Thanhhoa*: Benen N.P. (A.N.); *Nghetinh*: SW Quychau (O.K.). 10 ♂, 12 ♀. – Bengalia, Assam, Burma, Malacca, New Guinea, Key Is., Taiwan, Philippines. – RTF, LTF, MTF, SF, S, 10-1600 m, I-XII, found on dead trees (*Ficus*, Dipterocarpaceae, etc.).

Ipsopisthius gen. n.

I. hirtus sp. n. **N Vietnam.** *Bacthai*: NO Thainguyen (O.K.), 17.XII.1962, 1 ♀. – LTF, 300 m, on bark of lianes (? *Hodgsonia*).

Subfamily CEOCEPHALINAE

Trachelizus Schoenherr, 1840

T. bisulcatus (Fabricius, 1801). **China**: *Yunnan*; **Vietnam**; **Laos**; **Thailand.** 500 ♂ ♀. – India to Solomon Is. – RTF, LTF, DTF, MTF, SF, S, A, 10-2000 m, I-XII. The species occurs in various types of forests and in cutting areas accumulating under the bark of dead trees of various species in groups of 10 to 12 beetles per sq. decimetre, often in combination with other species of Brentidae (*Cerobates*, *Higonius*), Carabidae (*Catascopus*, *Miscelis*), Staphylinidae (*Leptochirus*, *Priochirus*, *Epiestus*), Tenebrionidae (*Catapiesthus*, *Doliema*) and representatives of other families of Coleoptera, Dermaptera and their larvae.

***T. politus** Senna, 1892. **N Vietnam.** *Bacthai*: NE Thainguyen (O.K.), 20.IX.1962, 1 ♀. **C Vietnam.** *Thanhhoa*: Bathuoc (B.K.), 26.I.1989, 1 ♀. – Bengalia, Malacca, Cambodia, Borneo. – LTF, SF, 100-300 m, I, IX, under bark of dead trees.

***T. dividuus** Kleine, 1925. **N Vietnam.** *Hoanglienson*: Sapa (O.K.), 7.VIII.1962, 1 ♂. – Assam. – MTF, 1600-1800 m, VIII, under bark of evergeen *Quercus*.

***T. laevigatus** Senna, 1898. **N Vietnam.** *Vinhphu*: Tamdao (O.K.), 2.IX.1962, 1 ♀. – Burma, Malacca, Indonesia. – MTF, 900-1000 m, IX, in a stack of logs of *Castanopsis* and *Passania*.

Miolispoides Senna, 1894

M. sculpturatus Calabresi, 1921. **N Vietnam.** *Hoanglienson*: Sapa (O.K.); *Vinhphu*: Tamdao (O.K., P.P., A.G.). 3 ♂, 2 ♀. – Indochina. – MTF, 1000-1800 m, V-VI, found in clearings, on dead branches of *Castanopsis*.

Hypomiolispa Kleine, 1918

H. compressa Kleine, 1918. **N Vietnam.** *Hatuyen*: Sonduong (O.K.); *Bacthai*: NE Thainguyen (O.K.); *Hasonbinh*: Hoabinh (I.B.). **C Vietnam.** *Nghetinh*: SW Quychau, NE Concuong, NE Cuarao (O.K.), 9 ♂, 8 ♀. – India, Tonkin, Malacca, Indonesia, Moluccas. – RTF, LTF, SF, 100-600 m, I-X, found under bark of dry trees (*Trema*, *Liquidambar*, etc.).

***H. nitida** Kleine, 1918. **N Vietnam.** *Hasonbinh*: Suoirut (O.K.), 10.X.1962, 1 ♂. – Assam, Sumatra. – SF, 300-400, X, on dead trees.

H. tonkinensis Kleine, 1933. **N Vietnam.** *Yunnan*: Tsinpin (SE). **N Vietnam.** *Hoanglienson*: Sapa, Fansipan Mt. W Sapa (O.K.). 21 ♂, 18 ♀. – Tonkin. – MTF, MSB, 1800-2400 m, V-VIII, 7.VIII.1962, beetles swarming around the stump of evergreen *Quercus* observed.

Tulotus Senna, 1894

T. maculipennis Senna, 1894. **N Vietnam.** *Hoanglienson*: Sapa (A.N.), 1 ♂. – Burma, Assam, "East India". – MTF, 1250 m, VI.

Sennaiella Alonso-Zarazaga et al., 1999

***S. comparabilis** Kleine, 1923. **C Vietnam.** *Thanhhoa*: Benen N.P. (A.N.), 9-30.VIII.1997, 2 ♂, 1 ♀. **Thailand.** *Thanon Thong Chai*: Palong (V.K.), 1 ♂, 1 ♀. – Malacca, Borneo. – S, DTF, 10-600 m, V, VIII.

Schizotrachelus Lacordaire, 1866 (= *Opisthenoplus* Kleine, 1922)

***Sch. birmanicus** Senna, 1872. **C Vietnam.** *Thanhhoa*: Benen N.P. (A.N.), 9-10.VI.1997, 2 ♂, 1 ♀. – Burma. – S, 10-100 m, VI.

***Sch. cameratus** Lacordaire, 1866. **C Vietnam.** *Gialai Kontum*: Kabang distr., Tramlap (N.O.), 6.VII.1996, 1 ♀. – Andaman Is, Malacca, Siam, Indonesia. – SF, 800 m, VII.

Sch. cavus (Walker, 1859). **S Vietnam.** *Songbe*: Bugiamap (A.N.). **Thailand.** Chiang Dao (B.K.), 3 ♂, 2 ♀. – Ceylon, India, Indochina, Indonesia, Philippines. – DTF, 100-400 m, V-VI.

***Sch. consanguineus** Senna, 1892. **S Vietnam.** *Songbe*: Bugiamap (A.N.), 20.V.1995, 1 ♀. – Burma. – DTF, 100-300 m, V.

***Sch. carinensis** Senna, 1892. **C Vietnam.** *Thanhhoa*: Bathuoc (B.K.); *Gialai Kontum*: Buonluoi (A.G.), Kabang Distr., Tramlap (N.O.). 2 ♂, 5 ♀. – Burma, Malacca. – DTF, SF, 200-800 m, I-XI.

***Sch. fascinatus** Kleine, 1922. **N Vietnam.** *Hoanglienson*: Sapa (O.K.), 4.VI.1963, 11.VIII.1962, 1 ♂, 1 ♀. – India, Sumatra, Philippines, Taiwan. – MTF, 1600-1800 m, VI-VIII, found under bark of dead trees (*Castanopsis*).

Sch. intermedius Senna, 1892. **C Vietnam.** *Thanhhoa*: SW Baithuong (Thuongsuan) (O.K.), Benen N.P. (A.N.); *Gialai Kontum*: Buonluoi (A.G.), Kabang Distr., Tramlap (N.O.). **Laos.** *Khammouan*: Boneng; *Attopeu*: Sesu riv. (O.K.). 3 ♂, 6 ♀. – India, Indochina, Indonesia. – RTF, DTF, SF, S, 10-800 m, II-XII, found under bark of dead trees (Dipterocarpaceae, *Ficus*).

Sch. vitalisi Calabresi, 1921. **N Vietnam.** *Vinhphu*: Tamdao (J.H.), 6-10.V.1990, 2 ♂. – Tonkin. – MTF, 900-1000 m, V.

Hormocerus Schoenherr, 1826

H. reticulatus (Fabricius, 1801). **China.** *Yunnan*: Cheli, Tsinpin (SE). **N Vietnam.** *Hatuyen*: NE Tuyenquang, Sonduong; *Laichau*: Dongpao W Binhlu, Dienbienphu; *Hoanglienson*: Laocay; *Caolang*: Bacson; *Bacthai*: NE Thainguyen; *Vinhphu*: Tamdao, SW Tamdao, Daochu; *Sonla*: Thuanchau; *Quangninh*: Hoanhbo; *Hasonbinh*: Suoirut (O.K.). **C Vietnam.** *Thanhhoa*: Langchanh (O.K.), Bathuoc (B.K.); *Nghetinh*: NW Quychau, SW Quychau, Cuarao, Concuong; *Binhtrithien*: NW Donghoi (O.K.); *Gialai Kontum*: Buonluoi (I.D.). **Laos.** *Khammouan*: Boneng (O.K.). **Thailand.** *Chiang Dao*: Konchanaburi (V.K.). 130 ♂, 100 ♀. – Ceylon to Polynesia. – RTF, LTF, DTF, SF, 10-1100 m, I-XII. This species inhabits various types of tropical forests, occuring mostly on fallen and burned trees. Aggregations of beetles occur under thick bark in rotten cambium with specific odour of beer, in association with Passalidae (*Leptaulax*), Carabidae (*Morion*, *Morionidius*) and other Brentidae (*Baryrrhynchus miles*, *B. dehiscens*, *Parorychodes cereus*, *Caenorychodes planicollis*). Females of *H. reticulatus* were found crawling over the surface of the bark of *Ficus* stumps and putting their rostrum into the burrows of Platypodidae and Ipidae, apparently to eat their larvae.

Peraprophthalmus Kleine, 1923

***P. applicatus** Kleine, 1923. **N Vietnam.** *Vinhphu*: Tamdao (O.K.). **C Vietnam.** *Nghetinh*: SW Cuarao (O.K.), 24.IV.1962, 12.VI.1963, 2 ♂. – India, Burma. – MTF, 600-900 m, IV-VI, on notched trunk of *Ficus*.

Subfamily BRENTINAE

Agriorrhynchus Power, 1878

***A. borrei** Power, 1878. **N Vietnam.** *Hoanglienson*: Dongpao W Binhlu (O.K.). **Thailand.** Chiang Dao (V.K.), 12.V.1963, 17-24.V.1991, 2 ♀. – Assam, Thailand, Malacca, Indonesia. – MTF, 1000-1100 m, V, found on dead trees.

A. quadrituberculatus Senna, 1892. **N Vietnam.** *Hasonbinh*: SO Suoirut (O.K.), 25.X.1962, 1 ♂, 1 ♀. – India, Burma, S Vietnam. – RTF, 300-400 m, X, found on dead trees.

A. ? venustus Kleine, 1938. **C Vietnam.** *Gialai Kontum*: Buonluoi (A.G.), 14.XII.1988, 1 ♀. – Thailand. – DTF, 600 m, XII.

Eupsalomorphus Kleine, 1926

***E. decorus** Kleine, 1926. **C Vietnam.** *Gialai Kontum*: Tramlap (N.O.), IV.1996, 1 ♂. – Malacca, Sumatra. – DTF, 600 m, IV.

Prophthalmus Lacordaire, 1866

P. potens Lacordaire, 1866. **China.** *Yunnan*: Daveisan (SE). **N Vietnam.** *Hoanglienson*: Sapa, Fansipan mnt. (O.K., N.O.). 5 ♂, 7 ♀. – "East India", Cambodia. – MTF, 1100-2400 m, V-VIII, under bark of dead trees of *Castanopsis*.

***P. longirostris** (Gyllenhal, 1833). **N Vietnam.** *Vinhphu*: Tamdao (O.K.). **C Vietnam.** *Gialai Kontum*: Buonluoi, Tramlap (A.G., N.O.). 14 ♂, 10 ♀. – China, Malacca, Indonesia, Celebes, Philippines. – MTF, DTF, SF, 600-1000 m, IV-XI, on fallen trees of *Castanopsis*, *Pasannia*.

P. wichmanni Kleine, 1916. **China.** *Yunnan*: Siaomonian, Tsinpinh (SE). **N Vietnam.** *Hatuyen*: N Hagiang, Sonduong, NO Tuyenquang; *Laichau*: Dongpao W Binhlu; *Bacthai*: NE Thainguyen; *Hoanglienson*: Tule N Ngialo (O.K.); *Hasonbinh*: Dabak, Tulu (S.B.). **C Vietnam.** *Thanhhoa*: SW Baithuong (Thuongsuan) (O.K.), Bathuoc (B.K.); *Nghetinh*: SW Quychau, NO Concuong, NO Cuarao (O.K.); *Gialai Kontum*: Tramlap (N.O.). 43 ♂, 49 ♀. – Sikkim, Indochina, Taiwan. – RTF, LTF, DTF, SF, 10-1500 m, I-XII, found on dead trees (*Ficus*, *Terminalia*, Dipterocarpaceae, *Trema*, *Citrus* and other trees).

P. ?brevis Power, 1878. **C Vietnam.** *Gialai Kontum*: Tramlap (N.O.), VI-VIII, 1 ♂. – Malacca, Sumatra, Tonkin. – DTF, 600-800 m, VI-VII.

Baryrrhynchus Lacordaire, 1866

B. miles (Boheman, 1845). **China.** *Yunnan*: W Yunpin, O. Baosan, Mansi, Yaunan, Sentaisan, Tsinpin, Binbyan, Siaomonian, Cheli, Dudugan (SE). **N Vietnam.** *Hatuyen*: N Hagiang; *Hoanglienson*: Sapa; *Laichau*: Dongpao W Binhlu, Laichau, Dienbienphu; *Bacthai*: NE Thainguyen (O.K.); *Hasonbinh*: Dabak, Tulu (S.B.). **C Vietnam.** *Thanhhoa*: Baithuong (Thuongsuan), Camthui (O.K.), Bathuoc (B.K.); *Nghetinh*: upp. Chu River (E.I.), NW Quychau, SW Quychau, Sen (Fuqui), NO Concuong, W Muongsen; *Binhtrithien*: SW Donghoi (O.K.); *Gialai Kontum*: Tramlap (N.O.). **Laos.** *Khammouan*: Boneng (O.K.). 200 ♂ ♀. – India, Ceylon, Burma, Indochina, China (north to Shanghai), Malacca, Java. Borneo, Taiwan. – RTF, MTF, LTF, SF, 10-2000 m, I-XII. On dead trees of various species. In clearing and at fire-sites in the forest near Muongsen, 7.X.1962

swarming of males and females (ca. 200 individuals) was observed.

***B. dehiscens** (Gyllenhal, 1833). **China.** *Yunnan*: Cheli (SE). **N Vietnam.** *Hatuyen*: N Hagiang, NO Tuyenquang, Sonduong; *Hoanglienson*; Laocai, Sapa, Tule N Ngialo; *Caolang*: Bacson, Caobang; *Bacthai*: NE Thainguyen; *Vinhphu*: Tamdao; *Laichau*: Dienbienphu; *Hasonbinh*: Suoirut (O.K.). **C Vietnam.** *Thanhhoa*: Langchanh, Bathuoc (B.K.); *Nghetinh*: NW Quychau, SW Quychau, Sen (Phuqui) (O.K.); *Gialai Kontum*: Buonluoi, Tramlap (A.G., N.O.). 42 ♂, 54 ♀. – Assam, Malacca, Indonesia, Celebes. – TRF, LTF, DTF, SF, 100-1800 m, I-XII, on dead trees of various species.

B. poweri Roelofs, 1879. **China.** *Yunnan*: Cheli, W Yunpin, Mansi (SE). **N Vietnam.** *Vinhphu*: Tamdao (O.K., I.B., V.K., P.P.). **C Vietnam.** *Gialai Kontum*: Tramlap (N.O.). 18 ♂, 16 ♀. – Japan, S China, Tonkin, Taiwan. – MTF, DTF, SF, 600-1600 m, V-IX, on a stack of logs (*Passania* and *Pinus*).

B. merocephalus Kleine, 1916. **China.** *Yunnan*: Binbyan env. (SE). **N Vietnam.** *Hoanglienson*: Sapa, W Sapa (O.K.). 23 ♂, 20 ♀. – Assam, Indochina. – MTF, 1600-2000 m, VI-VIII, on dead trees (*Quercus*, *Passania*).

B. speciosissimus Kleine, 1916. **China.** *Yunnan*: Tsinpin env.; *Sichuan*: Omeishan Mnt. (SE). **N Vietnam.** *Hatuyen*: NW Hagiang; *Hoanglienson*: Sapa; *Bacthai*: NE Thainguyen (O.K.); *Vinhphu*: Tamdao; *Quangninh*: Hoanhbo (O.K., V.K.). **C Vietnam.** *Nghetinh*: N Cuarao, Kimcuong (O.K.); *Gialai Kontum*: Tramlap (N.O.). **S Vietnam.** *Songbe*: Bugiamap (A.N.). 7 ♂, 18 ♀. – India, Vietnam, Cambodia. – RTF, LTF, MTF, SF, 100-1300 m, III-VIII, found on dead trees of Dipterocarpaceae.

B. andamanicus Power, 1879. **N Vietnam.** *Hoanglienson*: Sapa (O.K., V.K.). **C Vietnam.** *Thanhhoa*: Langchanh (O.K.). 2 ♂, 1 ♀. – Andaman Is, Nicobar Is, Assam, Tonkin. – MTF, SF, 200-1000 m, V-VIII, of dead trees of Fagaceae.

Orychodes Pascoe, 1862

O. planicollis (F. Walker, 1859) (= *indus* Kleine, 1875). **China.** *Yunnan*: Nantsihe riv., Phohai, W Baosanh (SE, V.K.). **N Vietnam.** *Hatuyen*: NW Hagiang, NE Tuyenquang, Sonduong (O.K.); *Hoanglienson*: Sapa, Fansipan Mt. W Sapa (O.K.); *Bacthai*: NE Thainguyen (O.K.); *Laichau*: Dongpao W Binhlu, Dienbienphu (O.K.); *Sonla*: Songma (A.G.); *Hanamninh*: Cucphuong (J.H.). **C Vietnam.** *Thanhhoa*: SW Baithuong (Thuongsuan), Langchanh (O.K.), Bathuoc (B.K.); *Nghetinh*: SW Quychau, SW Cuarao, W Muongsen (O.K.); *Gialai Kontum*: Buonluoi, Tramlap (I.D., N.O.). **Laos.** *Khammouan*: Boneng (O.K.). **Thailand.** Chiang Dao (V.K.). 200 ♂ ♀. – Ceylon, India, Andaman Is, Burma, S Vietnam, Taiwan. – RTF, DTF, MTF, LTF, SF, 100-2400 m, I-XII, under dry bark of various trees: *Ficus*, Dipterocarpaceae, *Bombax*, *Tremula*, Fagaceae, etc.

O. serrirostris (Fabricius, 1801). **C Vietnam.** *Binhtrithien*: SW Donghoi (O.K.), 1 ♂, 23.III.1963. – Indochina, Malacca, Indonesia, Philippines, Moluccan Is, Taiwan. – Found on the seashore, under rotten bark of dead trees.

Perorychodes Kleine, 1925

P. sp. China. *Yunnan*: Tsinhdun env. (SE). **N Vietnam.** *Hoanglienson*: Sapa (O.K.). 2 ♂, 1 ♀. – MTF, 1200-1800 m, III-VIII, under bark of dead trees.

P. sp. N Vietnam. *Vinhphu*: Tamdao (O.K.), 1 ♂, 1 ♀. – MTF, 900-1000 m, V-VIII.

Hemiorychodes Kleine, 1920

***H. dissonus** Kleine, 1925. **C Vietnam.** *Gialai Kontum*: Tramlap (N.O.), 2 ♂, 2 ♀. – Malacca. – MTF, 800-1200 m, VI-VII, found on stumps (Fagaceae).

H. cambodjensis Kleine, 1920. **N Vietnam.** *Vinhphu*: Tamdao (O.K.), 1 ♂, 2 ♀. – S China, S Vietnam. – MTF, 900-1000 m, VIII-XI, found on dead trees (Fagaceae).

H. modestus Kleine, 1920. **China.** *Yunnan*: Tenchun env., Tsindung (SE), 1 ♂, 1 ♀. – Cambodia, Sumatra. – MTF, 2400 m, V.

Synorychodes Kleine, 1921

***S. glaber** Kleine, 1936. **N Vietnam.** *Hoanglienson*: Sapa, Fansipan Mts. W Sapa; *Vinhphu*: Tamdao (O.K.). 5 ♂, 1 ♀. – Bengalia. – MTF, 1000-2400 m, V-VIII, on dead trees (Fagaceae and Tiliaceae).

Suborychodes Kleine, 1917

S. intermedius Kleine, 1917. **C Vietnam.** *Thanhhoa*: Benen N.P. (A.N.), Darlac, Methuot (L.M.). **S Vietnam.** *Dongnai*: Cattien (A.N.). 2 ♂, 5 ♀. – India, Assam, Malacca, Borneo, Sumatra. – DTF, 10-600 m, V-VIII, of dead trees (Dipterocarpaceae).

S. sp. N Vietnam. *Vinhphu*: Tamdao (A.G.), 1 ♂, 20.V.1995.

Perorychodes Kleine, 1920

***P. cereus** Kleine, 1925. **China.** *Yunnan*: Nanhtsiche riv. (SE). **N Vietnam.** *Sonla*: Songma (A.G.). **C Vietnam.** *Nghetinh*: Quychau (O.K.); *Gialai Kontum*: Buonluoi (I.D.), Tramlap (N.O.). 28 ♂, 33 ♀. – Assam. – LTF, RTF, DTF, SF, 300-800 m, V-VIII, on dry bark of dead trees (Dipterocarpaceae).

Calabresia Alonso-Zarazaga et al., 1999

C. sapaensis sp. n. **N Vietnam.** *Hoanglienson*: Sapa (O.K.), 1 ♂, 12.VIII.1962. – MTF, 2000 m, VIII, on dead trees (Fagaceae).

C. sp. N Vietnam. *Vinhphu*: Tamdao (O.K., A.N.), 1 ♂, 1 ♀. – MTF, 900-1000 m, VII, on dead trees (Fagaceae).

Heteroblysmia Kleine, 1917

H. sp. N Vietnam. *Vinhphu*: Tamdao (A.N.), 1 ♂, 1 ♀. – MTF, 900-1000 m, VII, of dead trees (Fagaceae).

?Desgodinsia Senna, 1894

D.? sp. C Vietnam. *Gialai Kontum*: Buonluoi (A.G.), Honong (L.M.). 1 ♂, 1 ♀. – DTF, 600-800 m, III-VI, of dead trees.

Ectocemus Pascoe, 1862

E. cinnamomi (Herbst, 1783). **N Vietnam.** *Bacthai*: NE Thainguyen (O.K.). **C Vietnam.** *Gialai Kontum*: Buonluoi (A.G.). 2 ♂, 2 ♀. – Ceylon to Celebes. – LTF, DTF, 300-800 m, IV-VII, of dead trees (*Terminalia*).

E. contractus Kleine, 1925. **Thailand.** Chiang Dao (V.K.), 1 ♂. – Cambodia. – DTF, 600 m, V.

Epicoenoneus Senna, 1892

***E. femoralis** Senna, 1892. **C Vietnam.** *Gialai Kontum*: Buonluoi (A.G.), 1 ♂, 1 ♀, 3.XI.1993. – Burma, Indonesia. – DTF, 600-800 m, XI.

Heterorhynchus Calabresi, 1921

H. ornatus Calabresi, 1921. **N Vietnam.** *Hatuyen*: W Bacquang (O.K.); *Vinhphu*: Tamdao (L.M.). 1 ♂, 1 ♀. – Tonkin, Borneo. – MTF, 500-1000 m, VI-VII, on the bark of trees (Fagaceae).

Anepsiotes Kleine, 1917

***A. schenklingi** Kleine, 1917. **China.** *Yunnan*: Damonlun (SE). **N Vietnam.** *Hatuyen*: Sonduong (O.K.); *Quangninh*: Hoanhbo (O.K.), Dongho Is. (I.D.). 4 ♂, 1 ♀. – Ceylon. – SF, 100-300 m, III-VI, on dead trees (*Trema*, *Liquidambar*).

Eutrachelus Berthold, 1827

E. sp. N Vietnam. *Caolang*: Langson env. (Pham Binh Quen), 1 ♂. – Collection of the Hanoi University.

Paussobrenthus Gestro, 1919

***P. bakeri** Gestro, 1919. **N Vietnam.** *Bacthai*: Phuluong, Dongluong (V.T.), 1 ♂. – Singapore. – RTF, 200-300 m, IV, in nest of *Apis cerana*.

Hemicordus Kleine, 1922

H. sp. N Vietnam. *Hoanglienson*: Sapa (D.K.), 1 ♂. – MTF, 1800 m, 11-15.V.1990.

Leptamorphocephalus Kleine, 1918

***L. sumatranus** (Senna, 1894). **C Vietnam.** *Gialai Kontum*: Tramlap (N.O.), 1 ♀. – Andaman Is, Malacca, Indonesia. – DTF, 800 m, VI-VII.

***L. laborator** Kleine, 1918. **C Vietnam.** *Gialai Kontum*: Buonluoi, Honong (L.M., A.G.), 2 ♂, 2 ♀. – Malacca, Sumatra, Taiwan. – DTF, 800 m, VI-XI.

Paramorphocephalus Kleine, 1920

P. monstratus Kleine, 1933. **C Vietnam.** *Gialai Kontum*: Buonluoi (I.D.), 1 ♀, 20.VI.1983. – Thailand. – DTF, 800 m, VI.

P. binotatus Calabresi, 1922. **S Vietnam.** *Songbe*: Bugiamap; *Dongnai*: Cattien (A.N.). 3 ♂, 7 ♀. – S Vietnam. – DTF, 100-300 m, IV-V.

Ischnomerus Labram & Imhoff, 1838

***I. longicornis** Pascoe, 1887. **China.** *Yunnan*: 30 km SW Tsinpin (SE). **N Vietnam.** *Vinhphu*: Tamdao (O.K., A.N.); *Hasonbinh*: Kyson (S.B.). **C Vietnam.** *Gialai Kontum*: Tramlap (N.O.). 15 ♂, 18 ♀. – India, Andaman Is, Malacca, Indonesia. – MTF, LTF, DTF, 200-1000 m, V-X, on dead trees (Fagaceae).

Ceocephalus Guérin-Méneville, 1833

***C. articulatus** Senna, 1909. **N Vietnam.** *Vinhphu*: Tamdao (O.K., L.M.). **C Vietnam.** *Nghetinh*: NE Concuong (O.K.). 2 ♂, 1 ♀. – Malacca, Borneo. – RTF, MTF, 300-1000 m, IV-V, on dead branches of *Passania*.

***C. compendarius** Kleine, 1925. **China.** *Yunnan*: 30 km SW Tsinpin (SE). **N Vietnam.** *Laichau*: Dongpao W Binhlu (O.K.). 11 ♂, 11 ♀. – India, Malacca. – MTF, 1000-1100 m, V, on the bark of trees (Fagaceae).

C. sphacelatus Pascoe, 1887. **N Vietnam.** *Vinhphu*: Phutho (O.K.), 1 ♀, 15.VI.1962. – India, Burma, Andaman Is, Nicobar Is, Thailand, Tonkin. – SF, 100 m, VI, on dead trees.

***C. ?forcipatus** Westwood, 1848. **N Vietnam.** *Vinhphu*: Tamdao (A.N.), 1 ♀. – Assam, Malacca, Indonesia. – MTF, 900-1000 m, VIII.

***C. ?furcillatus** (Gyllenhal, 1833). **C Vietnam.** *Gialai Kontum*: Honong (L.M.), 1 ♀, 21.VI.1983. – Malacca, Indonesia, Philippines. – DTF, 800 m, VI.

C. silvanus Senna, 1902. **Malaysia.** Frasers Hill (C.N.), 1 ♂, 20.X.1970. – Sumatra, Burneo.

Subfamily CYLADINAE

Cylas Latreille, 1804

C. formicarius (Fabricius, 1798). **N Vietnam.** Hanoi; *Hasonbinh*: Laocai; *Hatuyen*: Sonduong; *Bacthai*: NE Thainguyen; *Quangninh*: Hoanhbo (O.K.). **C Vietnam.** Thanhhoa; *Nghetinh*: SW Quychau, Sen (Phuqui), NE Cuarao (O.K.); *Binhtrithien*: SW Donghoi, Myduc; *Gialai Kontum*: Buonluoi (O.K., A.G.). **Laos.** Vientian; *Attopeu*: Sesu River (O.K.). 100 ♂ ♀. – SE Asia to China, Taiwan and S Japan. – S, A, 10-800 m, I-XII, paddy fields, under decaying rice straw, flying at light.

DESCRIPTIONS OF NEW TAXA

Vietobrentus gen. n.

Type species: Vietobrentus napolovi sp. n.

Description. Very close to *Cyphagogus* Parry and *Chelorrhinus* Kleine, but differs from them in the following characters: head very large, as long as prothorax; mandibles large and directed forward (Fig. 2); rostrum flat, with a brush of thick hairs below prolonged over the underside of the head; antennae inserted on the latero-ventral surface of rostrum; 1st segment cylindrical, 2nd asymmetrical, 3rd-7th slightly transverse, 8-10th segments strongly transverse

and compressed, terminal segment sligthly longer than wide and nearly as long as two preceding segments combined. Shape of prothorax with thoracic cone similar to that in the *Cyphagogus bipunctatus* Senna group. Elytra 1.2 times as long as pronotum; 2nd interval present only in basal third; 3rd-5th intervals broad and completely developed; lateral striae and intervals almost effaced. Femora and tibiae similar to those in the *C. bipunctatus* group, but tarsi very narrow, 1st segment of hind tarsus as long as 2nd and 3rd segments combined. The new genus can be distinguished from related genera with the following key.

Key to the genera of the *Cyphagogus* group

1(4). Mandibles directed more or less downward; elytral striae and intervals completely developed.
2(3). Anterior margin of rostrum truncate, without deep emargination; tarsi stout ..... **Cyphagogus** Parry
3(2). Anterior margin of rostrum in male with deep, round emargination, in female with semicircular excavation; tarsi slender ..... **Chelorrhinus** Kleine
4(1). Mandibles directed forward; 3rd-5th elytral intervals completely developed, lateral striae and intervals almost effaced; tarsi slender ..... **Vietobrentus** gen. n.

Vietobrentus napolovi sp. n.
(Fig. 1)

Holotype. ♂, **Vietnam**, *Thanhhoa Prov.*, Benen Natn. Park, 50 m, 9-30.VIII.1997, A. Napolov leg.

Description. Male. Reddish testaceous, shining; mandibles, antennae, two antemedial stripes of pronotum, humeral callus and spot in the middle of each elytron brownish black; head and pronotum semitransparent. Upperside of head glabrous; antennae and legs with appressed short hairs; elytra covered with erect hairs, longer than pronotum.

Length 4.2 mm.

Ipsopisthius gen. n.

Type species: Ipsopisthius hirtus sp. n.

Description. Female. Head transverse; rostrum twice as long as head, tapering to the abruptly truncated apex; eyes hemispherical, large; temples short, wedge-shaped, velvety. Upper surface of head flat and divided by longitidunal sulcus, with lateral velvety carinae prolonged on metarostrum and with dorso-lateral angles subconically produced backwards. Underside of head and metarostrum with longitudinal groove and small teeth below scrobes. Basal segment of antennae oval, 2nd and 3rd conical, 4th transverse; upper surface of these segments velvety, lower surface covered with long hairs (the rest segments missing).

Pronotum flat, with deep median sulcus; anterior part of prothorax almost square in cross-section; sides with longitidunal microreticulation. Prosternum with fovea and furrow on prosternal process.

Elytra 2.16 times as long as prothorax, subcylindrical; apical declivity depressed; apex weakly notched, with short, shining caudal process bent downwards and narrowly rounded on the tip. Surface of elytra with ten shining cariniform intervals divided by fine striae; 2nd interval well developed subapically, near apical declivity; 5th and 6th intervals merged near base, 7th shortened anteriorly. Third, fifth, and seventh intervals with large punctures, bearing alternating long and short erect hairs. Apical declivity of elytra covered with small tubercles and short erect hairs. Metasternum and basal segments of venter with depression for reception of middle and hind femora, smooth and longitudinally depressed. Femora stout, of normal size; apex of fore tibia with two teeth and hooked spur; middle and hind tibiae slender; tarsi subequal in length to tibiae.

Comparison. The genus is placed with some doubt in the tribe Hoplopisthiini Senna & Calabresi, 1919. It differs from all genera of this tribe in the uniformly convex elytral intervals and body form (see description).

Ipsopisthius hirtus sp. n.
(Figs 14, 15)

Holotype. ♀, **N Vietnam**, *Bacthai Prov.*, 50 km NE of Thainguyen, 300 m, 17.XII.1962, O. Kabakov leg. The specimen was found in a karst valley with rain tropical forest, under rotten bark of fallen tree *Terminalia* in association with Platypodidae and Staphylinidae (*Tharacophilus verrucifer* Geoffr. ?).

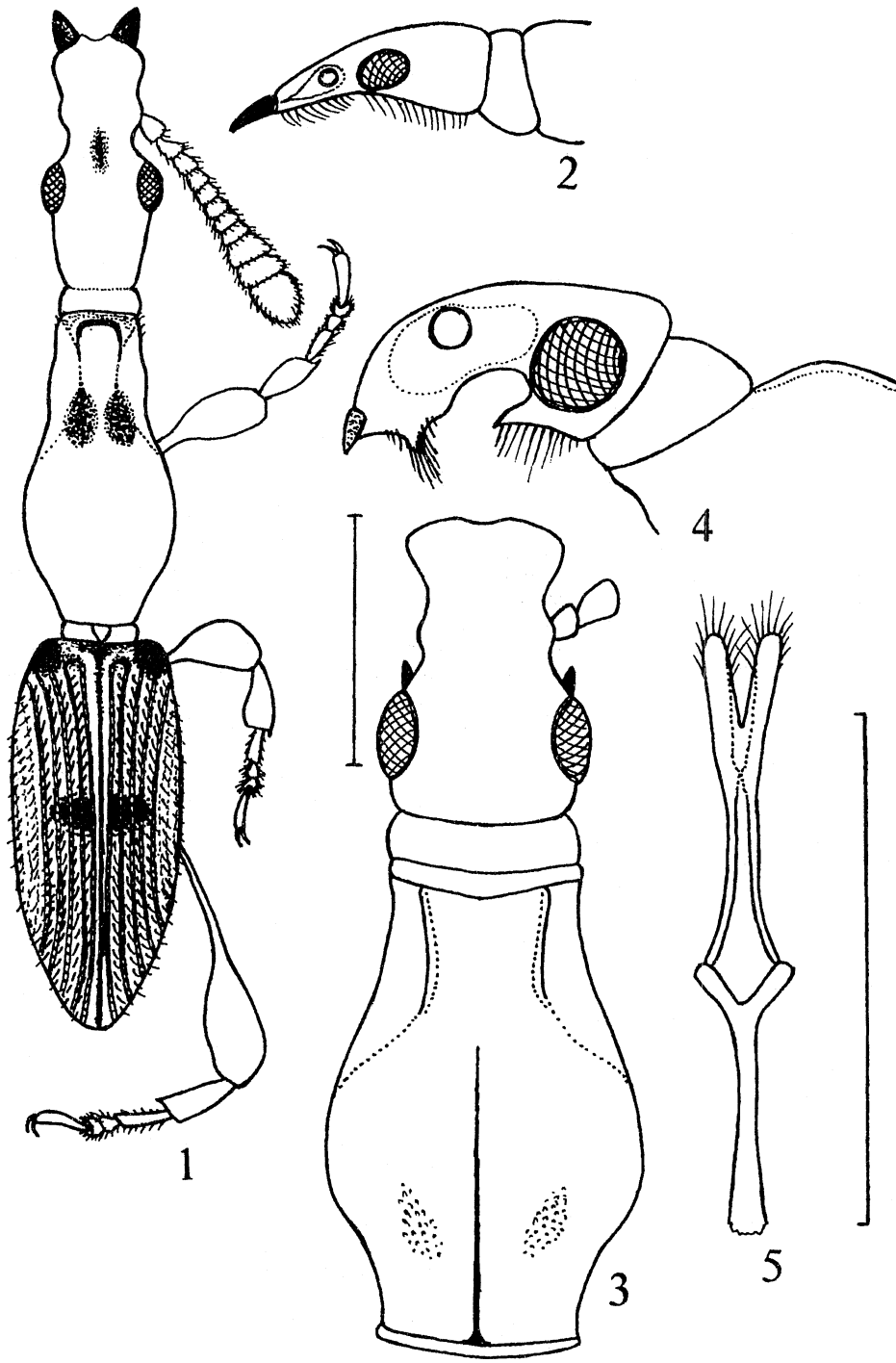
Description. Reddish brown; caudal process dark brown, smooth; sides of head, prothorax, metasternum and elytral epipleura almost mat, microshagreened.

Length 4.6 mm.

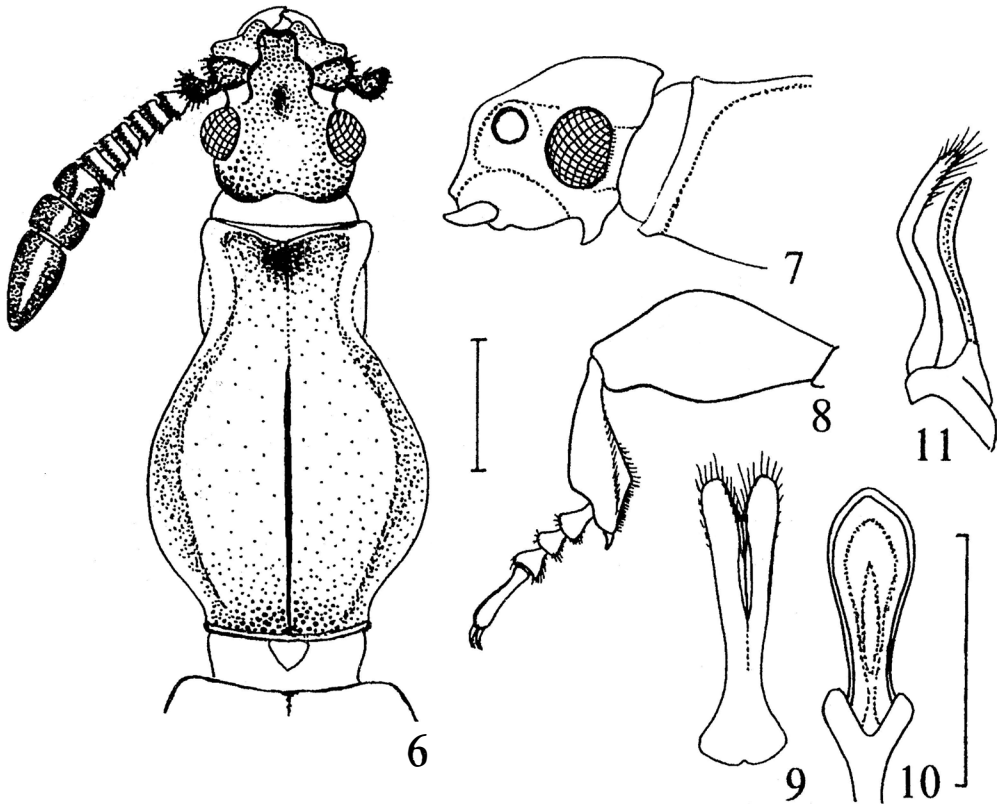
Paraclidorrhinus vietnamicus sp. n.

Holotype. ♂, **S Vietnam**, *Songbe Prov.*, Fuochoa env., Bugiamap, 20.V.1995, A. Napolov leg.

Description. Reddish brown; apex of rostrum, apex and base of prothorax, middle longitudinal patches on 2nd and 3rd intervals of elytra dark brown; antennae, base of femora and knees blackish.



Figs 1, 2. *Vietobrentus napolovi* gen. et sp. n.: **1**, holotype (female), dorsal view; **2**, head, lateral view. **Figs 3-5.** *Ecnomobrentus bidens* sp. n., holotype (male): **3**, head and prothorax, dorsal view; **4**, head, lateral view; **5**, aedeagus, dorsal view.



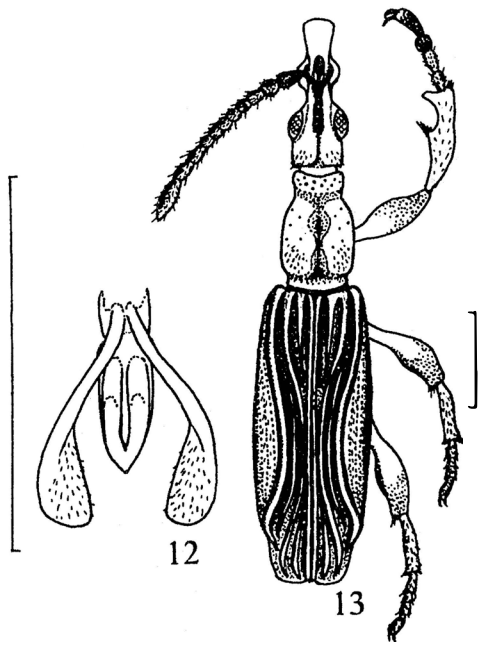
Figs 6-11. *Paraclidorrhinus vietnamicus* sp. n., holotype (male): **6**, head and prothorax, dorsal view; 7, head, lateral view; **8**, fore tibia; **9**, paramere, dorsal view; **10**, penis, ventral view; **11**, aedeagus, lateral view.

Head (Figs 6, 7) wider than long, sharply separated from neck; vertex and frons convex, glossy; median area with sparse and fine punctures; lateral surface with dense, large, setigerous punctures; temples very short and smooth. Eyes large, convex, with straight hind margin; their diameter 4 times length of temples. Rostrum short; metarostrum and mesorostrum narrower than head; prorostrum declivous and widening apically, its apical margin with two prominences and deep glossy fovea between them. Antennal scrobes on dorsal surface very large; mesorostrum narrower than frons between eyes. Surface of metarostrum with a deep fovea and large dense punctures extending forward to the apical margin of rostrum. Underside of head with a very large and deep cavity restricted laterally by strong sharp teeth (Fig. 7). Mandibles strong, wedge-shaped. Antennae robust; 1st segment subconical; 2nd asymmetrical, half as long as 1st; 3rd conical, equal to 2nd; 4-8th transverse; 9th and 10th strongly compressed, transverse; terminal segment as long as two preceding segments combined. Surface of 1st-8th segments shining, with sparse, large, setigerous punctures; distal three segments covered with very dense small punctures and dense short hairs, with a glossy axial (longitudunal) relief line.

Prothorax (Fig. 6) 1.5 times as long as wide, compressed on each side before coxae, strongly enlarged in basal half; central area finely punctate, with fine longitudinal sulcus in posterior half; sides of pronotum bounded by a stripe with dense, large, setigerous punctures.

Elytra 1.85 times as long as, and slightly narrower than prothorax, broadest at the middle, regularly narrowed and rounded apically. Intervals broader than striae; odd intervals slightly broader than even ones, each with a row of setigerous punctures. Sutural interval raised in the scutellar area and in apical third, 3rd and 5th intervals merging and costate on declivity.

Femora strongly compressed dorsally at base; hind femur longer, but not reaching apex



Figs 12, 13. *Stereodermus infidus* Senna: **12**, male, dorsal view; **13**, aedeagus, dorsal view.

of elytra. Fore tibia (Fig. 8) triangularly expanded on inner side before apical third; inner apical angle with beak-like, long tooth and sharp triangular process pointed ventrally at apex. Middle and hind tibiae stout, with two sharp processes pointed at apex. Tarsi longer than tibiae; hind metatarsus longer than two succeding segments combined.

Prosternal process narrow; pronotum with antebasal triangular fovea. Mesosternum smooth and sparsely punctured. Metasternum and 1st and 2nd segments of venter with broad longitudinal sulcus and irregular punctures, 2nd to 5th segments densely punctate.

Male genitalia as in Figs 9-11. Female unknown.

Length, including rostrum, 12.2 mm.

Comparison. The new species is the largest in the genus. It differs from *P. modiglianii* Senna in the coloration; and from *P. rondoni* Damoiseau, in the presence of median sulcus on pronotum, coloration of elytra and other characters.

Ecnomobrentus bidens sp. n.

Holotype. ♂, **S Vietnam**, *Dongnai Prov.*, Cattien, 2-6.IV.1994, A. Napolov leg.

Paratypes. 1 ♂, same data as holotype; 1 ♀, *Songbe Prov.*, Bugiamap, 20.V.1995, A. Napolov leg.

Description. Holotype, male. Reddish brown; mouthparts, apex of rostrum, sides of mesorostrum, teeth below eyes, patch in the middle of elytra, base and tip of hind femora blackish; anterior margin and carinae of pronotum black.

Head (Fig. 3) transverse, sharply separated from neck by nearly straight depression. Rostrum a little longer than head; antennae inserted on its lateral surface, under sligthly enlarged mesorostrum; prorostrum apically strongly widening, as wide as frons between eyes, with almost straight anterior margin and rounded sides. Eyes large; temples very narrow, by one-fifth shorter than diameter of eye. Underside of head and metarostrum with deep transverse cavity restricted in front by a transverse projection, and posteriorly, by a pair of large teeth below eyes directed anterolaterally (Fig. 4). Antennae with 1st segment subcylindrical, 2nd asymmetrical, 3rd conical, 4-8th slightly transverse, 9th and 10th compressed and tranverse, wider than 4-8th segments; 11th as long as the two preceding segments combined.

Prothorax pyriform, strongly compressed laterally before coxa, with apical weak, broad, flat and laterally carinate cone; disc of pronotum almost impunctate, on each side with a group of close whitish scales; median sulcus very fine and discernible in posterior half.

Elytra 1.75 times as long as prothorax; broadest in the middle and conjointly rounded apically. First and second striae merging in the middle; 2nd interval present in anterior fifth and on apical declivity up to apical margin; 5th and 6th striae merged on humeral callus; 3rd, 5th, and 6th intervals broader than the neighbouring ones and with rows of large punctures and erect whitish scales. Prosternum with a pair of diverging anteriorly carinae merging at the prosternal process, and with longitudinal fovea near basal margin. Metasternum with a large excavation, which is strongly expanded before hind coxae and densely and finely punctate and covered with short hairs anteriorly. First ventrite basally with a weak longitudinal groove and a patch of large setigerous punctures; terminal segments of venter densely covered with small punctures and short hairs.

Fore femur stout, middle one short and clavate, hind one very long and clavate, extending well beyond apex of elytra, pubescent on ventral margin of the narrow basal part. Fore tibia expanded inward before apical

third, with triangular brush of hairs; apex of tibia with claw-like spur. Middle tibia short. Hind tibia twice as long as middle tibia. Hind tarsus longer and thicker than middle one, metatarsus 1.5 times longer than 2nd and 3rd segments combined; apical segment very long, nearly as long as metatarsus.

Male genitalia as in Fig. 5.

Female. Underside of head without cavity and teeth, with a pair of short carinae below eyes; metasternum and venter without longitudinal excavation or groove.

Length 7.0-7.5 mm.

Key to species of *Ecnomobrentus*

1(4). Pronotum with median sulcus in posterior half.
2(3). Antennae short, not reaching fore coxae; inner edge of hind tibia with long perpendicular tooth (male unknown). Burma .... **E. uncus** Damoisseau
3(2). Antennae long, extending beyond fore coxae; inner edge of hind tibia without teeth ..... **E. bidens** sp. n.
4(1). Pronotum without median sulcus; underside of head in male with two teeth. Laos ..... **E. afrosimulans** Damoiseau

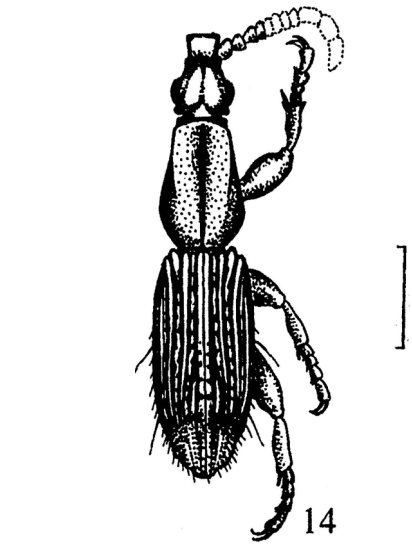
Calabresia sapaensis sp. n.

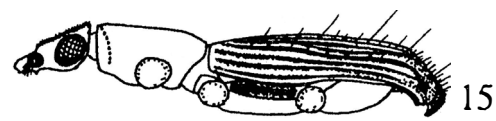
(Fig. 16)

Holotype. ♂, **N Vietnam**, *Hoanglienson Prov.*, Sapa, 2000 m, 12.VIII.1962, O. Kabakov leg.

Description. Holotype, male. Dark reddish brown; prothorax mat; elytra and underside glossy, almost hairless, except for small hairs on middle of metasternum and short hairs on sides of 3rd-5th ventrites. Elytra with convex, yellowish orange patches: basal on 2nd, 3rd and 5th intervals; the antemedial patches forming directed obliquely forward band of long patches on each 4th, 6th and 8th intervals and a short patch on 5th; postmedial patches forming a transverse band of short patches on 3rd-6th and a longer patch on 7th intervals; subapical patches longer on 3rd and 9th intervals and short on 4th.

Head subconical, broader than long, broadly emarginate posteriorly; vertex with two prominences; temples swelling ear-like making up two-thirds of the diameter of eye. Eyes large, nearly round; their diameter greater than width of frons between eyes. Metarostrum shorter than prorostrum, subcylindrical and noticeably tapering forward, with a smooth excavation in the middle, bearing a row of tubercles and single tooth at either side. Mesorostrum with semicircular projections on sides. Prorostrum subquadrate in cross-section, weakly expanded anteriorly, with small semicircular notch on the



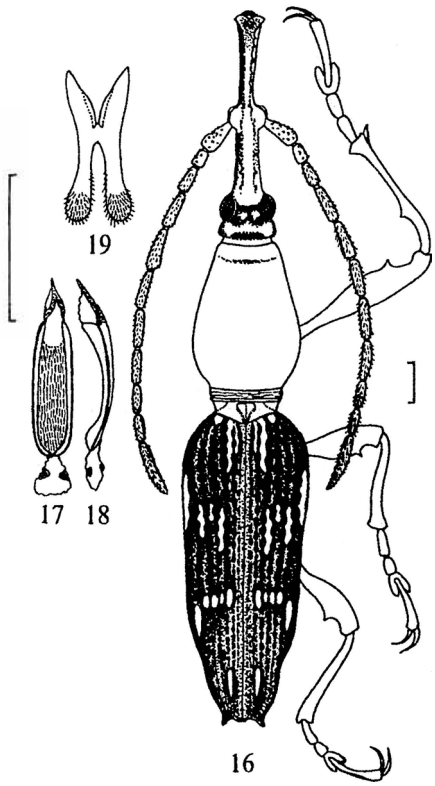


Figs 14, 15. *Ipsopisthius hirtus* gen. et sp. n.: **14**, holotype (female), dorsal view; **15**, same, lateral view.

tip and upwards-directed teeth on each side. Upper surface of prorostrum with a smooth depression in basal half and small tuberculate area in distal half, restricted on each side by subregular rows of 5-6 teeth. Sides of metarostrum with numerous umbilicate punctures; underside of head with numerous conical tubercles; underside of prorostrum with three lines of minute tubercles. Antennae long, reaching to basal third of elytra; basal segment conical and covered with small tubercles, as long as 2nd and 3rd segments combined; 4-7th segments as long as 1st, 8-10th segments slightly shorter, last segment nearly as long as 9th and 10th combined.

Prothorax oviform, longer than wide (5 : 4); base of pronotum with deep constriction and double ring, coarsely rugose; surface mat, smooth.

Elytra clearly shorter than head and pronotum combined, convex, with prominent humeral calli; smooth, shiny, with lateroapical angles triangularly pointed. Surface with 7 rows of very large, pit-like punctures; intervals between them undulating. In apical third, punctures decrease, intervals straigthen; sutural interval flat, separated from 2nd interval by a



Figs 16-19. *Calabresia sapaensis* sp. n.: **16**, holotype (male), dorsal view; **17**, penis, ventral view; **18**, penis, lateral view; **19**, paramere, dorsal view.

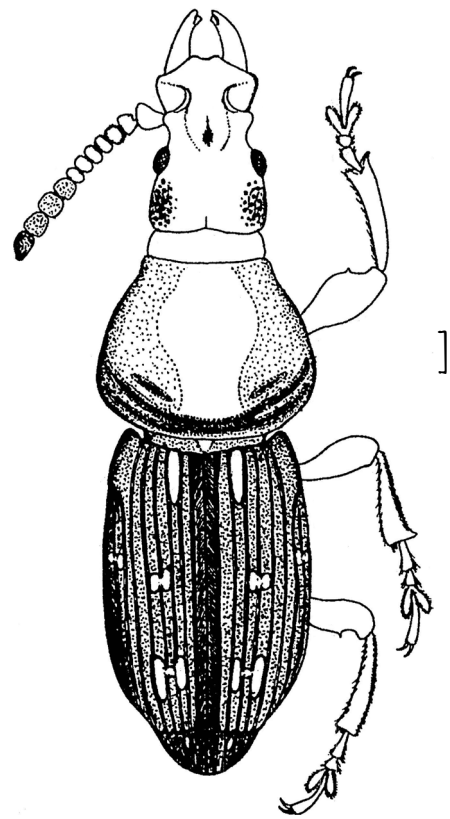


Fig. 20. *Prophthalmus brevis* Power, male, dorsal view.

row of small punctures. Mesosternum with sparse, large punctures. Metasternum smooth, with small punctures and short hairs in the middle, deeply foveate before posterior margin. Metepisterna with deep, glossy longitudinal groove bounded by a row of very short hairs. Abdomen shining; two basal ventrites shallowly depressed longitudinally in the middle; 3rd to 5th ventrites with dense setae on each side; last ventrite shallowly depressed and coarsely punctate.

Fore leg very long; middle and hind legs much shorter; femora weakly clavate, with long subapical tooth; fore tibia on hind margin with triangular tooth-like process. Tarsi long, not shorter than tibiae; metatarsus clearly shorter than 2nd and 3rd segments combined. Male genitalia as in Figs 17-19.

Female unknown.

Total length 19.5 mm.

Comparison. This new species resembles *C. ceylonica* Calabresi, but is characterized by the much coarser punctation and different disposition of convex yellowish patches on the elytra.

Prophthalmus brevis Power
(Fig. 20)

Material. 1 ♂, **C Vietnam**: *Gialai Kontum Prov.*, Kabang Distr., Tramlap vill., VI-VII.1996, N.L. Orlov leg.

Description. Male. Body short and stout, chocolate-brown; apex of rostrum and anterior margin of pronotum blackish; head, disc of pronotum, legs and underside of body shining; elytra mat, velvety, dark brown with orange-yellow patches: three on 3rd, two on 4th, two on 5th and one on each of the 8th and 9th intervals (Fig. 20).

Head subconical, a little broader than long; eyes small, situated close to anterior margin of head; posterior margin of head truncate and finely excised in the middle. Length of temples 3 times diameter of eye; temples coarsely punctate and rugose. Metarostrum very short, with small median fovea; mesorostrum and base of prorostrum with large depression laterally separated by carinae from scrobes; prorostrum short and very broad in front, its apical margin with bilobate process in the middle;

mandibles large, with subapical tooth on lower margin. Antennae short, basal segment skittle-shaped, 2nd segment asymmetrical, 3rd subglobose, somewhat longer than broad, 4-7th broader than long, 8th subglobose, of equal length and breadth, 9-11th longer than broad; 8-11th segments covered with small punctures and very short hairs.

Prothorax broader than long, campaniform, largest near hind angles; subapical depression very small; antebasal transverse depression very strong and bifurcate laterally; a weak short groove present before the depression. Disc of pronotum shining, sides and basal margin with mat bloom, surface impunctate.

Elytra narrower than prothorax and 1.8 times as long as the latter; almost flat dorsally, with humeral calli prominent forward and formed by the merged 6th, 7th and 8th intervals. All intervals cariniform; 4-8th intervals not reaching apex of elytra; striae deep, with large punctures. Apex of elytra rounded, with fringe of short yellow hairs.

Prosternum between fore coxal cavities with carina perpendicular to the cavities. Mesosternum, middle of metasternum and abdomen impunctate; sides of metathorax shagreened, very sparsely punctate. Last sternites of abdomen longitudinally carinate, with fringe of yellow hairs along margins.

Femora not modified, with distal notches and small tooth; fore femur slightly longer than middle and hind femora, clearly clavate. Tibiae straight, slender, with fringe of short yellowish hairs.

Length (including rostrum) 16.0 mm, breadth 4.5 mm.

Female unknown.

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References

Alonso-Zarazaga, M.A. & Lyal, C.H.C. 1999. A World catalogue of families and genera of Curculionoidea (Insecta: Coleoptera) (Excepting Scolytidae and Platypodidae): 1-315. Barcelona.

Calabresi, E. 1921. Brenthidae (Coleoptera). *Faune Entomologique de l'Indochine Française*: 1-12. Saigon.

Damoiseau, R. 1961. Deuxième contribution à la connaissance des Brenthides (Coleoptera – Brenthidae). *Bull. Inst. roy. Sci. nat. Belg.*, **37**(37): 1-24.

Damoiseau, R. 1962. Nouveaux Brentidae (Coleoptera) du Musée de Gênes. *Ann. Mus. civ. Stor. nat. Genova*, **73**: 109-120.

Damoiseau, R. 1963a. Contribution à la connaissance des Brentidae (Coleoptera – Phytophagoidea), 9. – Nomenclature et systématique. *Bull. Ann. Soc. roy. Entomol. Belg.*, **99**: 189-204.

Damoiseau, R. 1963b. Contribution à la connaissance des Brentidae (Coleoptera – Phytophagoidea), 14. – Le groupe *Eterozemus* (première partie). *Bull. Inst. roy. Sci. nat. Belg.*, **39**(29): 1-44.

Damoiseau, R. 1964a. Contribution à la connaissance des Brentidae (Coleoptera – Phytophagoidea), 16. – Le groupe *Eterozemus* (deuxième partie). *Bull. Ann. Soc. roy. Entomol. Belg.*, **100**: 385-418.

Damoiseau, R. 1964b. Contribution à la connaissance des Brentidae (Coleoptera – Phytophagoidea), 18. – Genres *Calodromus* Guérin et *Cyphagogus* Parry: notes synonymiques et description d'espèces nouvelles. *Bull. Ann. Soc. roy. Entomol. Belg.*, **100**: 463-500.

Damoiseau, R. 1965a. Contribution à la connaissance des Brentidae (Coleoptera – Curculionoidea), 22. – Révision des Calodrominae palaeotropicaux et description d'espèces nouvelles (1). *Bull. Inst. roy. Sci. nat. Belg.*, **41**(34): 1-28.

Damoiseau, R. 1965b. Contribution à la connaissance des Brentidae (Coleoptera – Curculionoidea), 23. – Deux nouveaux Arrhenodini asiatiques. *Bull. Inst. roy. Sci. nat. Belg.*, **41**(36): 1-7.

Damoiseau, R. 1966a. Nouveaux Brentidae du Muséum Frey (Coleoptera – Phytophagoidea). *Entomol. Arb. Mus. Frey*, **17**: 7-24.

Damoiseau, R. 1966b. Brentidae (Col. Curculionoidea) récoltés par l'expedition danoise du Noona Dan aux Philippines et aux Iles Bismark et Solomon. *Entomol. Meddel.*, **34**: 421-455.

Damoiseau, R. 1966c. Nouveaux Brentidae de l'Ancien Monde (Coleoptera Curculionoidea). *Bull. Ann. Soc. roy. Entomol. Belg.*, **102**: 139-154.

Damoiseau, R. 1966d. Studies of brentids of southeast Asia (Coleoptera: Curculionoidea). *Pacific Insects*, **8**(2): 446-454.

Damoiseau, R. 1967a. Monographie des Coléoptères Brentidae du continent africain. *Ann. Mus. roy. Afr. centr., Sér. in 8°, Zool.*, **160**: 1-507.

Damoiseau, R. 1967b. Description de quelques nouvelles espèces de Brentidae palaeotropicaux (Coleoptera, Curculionoidea). *Bull. Inst. roy. Sci. nat. Belg.*, **43**(29): 1-20.

Damoiseau, R. 1971a. Coleoptera: Brentidae de Ceylon. *Entomol. Scand.*, **1**, Suppl. 1: 268-273.

Damoiseau, R. 1971b. Le genre *Calodromus* Guérin (Coleoptera, Brentidae). *Bull. Inst. roy. Sci. nat. Belg.*, **47**(22): 1-19.

Damoiseau, R. 1979a. Contribution à la systématique et corrections à la nomenclature des Calodrominae. 1. Tribu des Calodromini. *Bull. Inst. roy. Sci. nat. Belg. (Entomol.)*, **51**(3): 1-39.

Damoiseau, R. 1979b. Les Amorphocephalini (Coleoptera, Brentidae) – 1. *Amorphocephala*

Schoenherr et sa parentele. *Bull. Inst. roy. Sci. nat. Belg. (Entomol.)*, **51**(10): 1-35.

Damoiseau, R. 1980. Les Amorphocephalini (Coleoptera, Brentidae) – 1. *Cordus* Schoenherr et les genres voisins. *Bull. Inst. roy. Sci. nat. Belg. (Entomol.)*, **52**(21): 1-39.

Damoiseau, R. 1987. Contribution à la systematique et corrections à la nomenclature les Calodrominae (Coleoptera, Brentidae) – II. Tribus des Haplopisthini, Atopobrentini et Stereodermini. *Bull. Inst. roy. Sci. nat. Belg. (Entomol.)*, **57**: 31-91.

Damoiseau, R. 1989a. Contribution à la systématique et corrections à la nomenclature des Calodrominae (Coleoptera, Brentidae) – III. Tribus les Calodromini. *Bull. Inst. roy. Sci. nat. Belg. (Entomol.)*, **58**: 101-173.

Damoiseau, R. 1989b. Contribution a la systématique et corrections a la nomenclature des Brentinae et Ceocephalinae (Coleoptera, Brentidae). *Bull. Inst. roy. Sci. nat. Belg.*, **59**: 43-98.

Heller, K. 1910. Die Arten der Brenthiden Gattung *Calodromus*. *Not. Leyd. Mus.*, **23**: 177-182.

Kleine, R. 1916a. Die Gattung *Baryrrhynchus* und ihr Verwandtschaftskreis. *Entomol. Bla2tter*, **12**(6): 121-137; (7): 150-190.

Kleine, R. 1916b. Die Gattung *Prophthalmus* Lac. *Stett. entomol. Ztg*, **77**(1): 217-286.

Kleine, R. 1920. Die Gattung *Orychodes* Pascoe und ihr Verwandtschaftskreis. *Archiv Naturg.*, **86A**(9): 62-102.

Kleine, R. 1925. Neue Brenthiden. *Indian Forest Records*, **11**(4): 125-130.

Kleine, R. 1933. Biologische Mitteilungen über Brenthiden und Beschreibung neuer Gattungen und Arten. *Entomol. Rundschau*, **50**(23): 288-322.

Kleine, R. 1937. Neue Brenthiden und Lyciden aus Indien. *Indian Forest Records*, n. s., **2**(10): 203-206.

Kleine, R. 1937-1939. Bestimmungstabelle der Brenthidae. *Entomol. Nachrichtenblatt*, **11**(1): 17-29; (2): 91-103; (3): 107-122; (4): 147-162; **12**(1): 1-16; (2): 65-80; (3, 4): 129-144; **13**(1, 2): 17-40.

Kleine, R. 1938. Coleoptera Brenthidae. In: P. Wytsman (ed.). *Genera Insectorum*, **207**: 1-197.

Kleine, R. 1940. Klapperichs China-Ausbeute (Brenthidae und Lycidae). *Entomol. Blätter*, **36**: 90-91.

Kleine, R. 1941. Brenthiden aus Tonkin (Coleoptera). *Rev. franç. Entomol.*, **8**(3): 226-230.

Kleine, R. 1943. Neue Brenthiden aus dem Ungarischen Nationalmuseum. *Ann. hist.-nat. Mus. natl Hung., pars zool.*, **36**: 138-144.

Kleine, R. 1944. Neue Brenthiden des Pariser Museums (Coleoptera). *Rev. franç. Entomol.*, **10**(3/4): 149-158.

Kleine, R. 1951. Klapperichs China-Ausbeute. II. Teil (Lycidae und Brenthidae). *Entomol. Blätter*, **45/46**: 21-25.

Kolbe, H. 1892. Beiträge zur Kenntniss der Brenthiden, I-II. *Stett. entomol. Ztg*, **53**: 162-175.

Morimoto, K. 1976. On the Japanese species of the family Brentidae (Coleoptera). *Kontyû*, **44**(3): 267-282.

Morimoto, K. 1979. Description of two new species of the family Brentidae from Japan (Coleoptera). *Esakia*, **14**: 25-30.

Morimoto, K. 1982. On some Japanese Brentidae (Coleoptera). *Entomol. Rev. Japan*, **37**(1): 31-36.

Senna, A. 1892a. Viaggio di Leonardo Fea in Birmania e regioni vicine, XLV, Brentidi. *Ann. Mus. civ. Stor. nat. Genova* (2), **12**(= 32): 429-494.

Senna, A. 1892b. Contributions to the knowledge of the family Brenthidae. VIII. Enumeration of the species known as yet from Java. *Notes Leyden Mus.*, **14**: 161-186.

Senna, A. 1893a. Contribuzione allo studio dei brentidi. *Ann. Mus. civ. Stor. nat. Genova* (2), **13** (= 33): 256-285.

Senna, A. 1893b. Contribuzione allo studio dei brentidi. *Boll. Soc. entomol. Ital.*, **25**: 288-330.

Senna, A. 1894. Descriptions of some new Brenthidae. *Notes Leyden Mus.*, **16**: 213-216.

Senna, A. 1895. On the genus *Cerobates* and description of some new species. *Notes Leyden Mus.*, **17**: 209-224.

Senna, A. 1899. Aggiunte alla fauna brentidologica di Celebes. *Boll. Soc. entomol. Ital.*, **31**: 300-311.

Senna, A. & Calabresi, E. 1918. Contribuzione allo studio dei Brenthidi. *Boll. Soc. entomol. Ital.*, **50**: 63-77.

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