Hymenoptera Tenthredinoidea

Subfamily *Selandriinae*

Key to the

Genera of the World

By René Malaise, D. sc.

Specific or generic names are given to groups of living or fossil beings with certain characters in common. To separate a particular group from other ones a description is given to it, and for practical reasons and to avoid repeating this description every time, we refer to a name answering this particular description. By a common agreement the names should be binominal, latinazed, and not published before the year 1758 (Linnaeus, Systema Naturae, Ed. X); the first of the names is the generic name and the second the specific one. The same group may have different names, and it has been decided that the oldest of the names answering to a description by which the group may be recognized shall be used, and the names given later be regarded as synonyms. The original specimen (or specimens) from which the description is made and that answers the description is called the type (or types). The type may be destroyed or lost, but the name is still valid as long as the description had been published in a then commonly accessible scientific work or journal. A name with only a type-specimen is not valid without a published description or picture. The value of types lies in the possibility they offer when studied of bringing out further complementary characters not mentioned in the original description. A specimen may be accepted as type even with minor contradictions referable to poor lenses, skill, or a *lapsus calami*. Not only the specific name but also the generic name must be binominal, viz. it must have been connected with a name of a described species at some time. If a generic name was originally described without a species, then it becomes valid only from that date when it becomes connected with a name of a described species. A valid generic name once used in, for instance, zoology may be used in botany, but never again in zoology.

The first entomologist to subdivide the *Hymenoptera Phytophaga* or *Symphyta* into families, subfamilies (sections), tribus, and subtribus was C. G. Thomson (Hymenoptera Scandinaviae, Tom. I, Lund 1871), one of the best entomologists who ever existed. This system of his was adopted and further developed by F. W. Konow (Deutsch. Ent. Zeitschr. 1890, pp. 225—255), whose classification in its main features is still used in this paper. The group-

ing together of different categories varies somewhat among different authors, and most Anglo-American ones have elevated lower groups to family rank. Classifications proposed by Fabricius, Ashmead, and Macgillivray have been abandoned by later authors.

A system with high merits and based on the shape of the head capsule, mesosternum, and the male genitalia has been proposed by H. H. Ross (Illinois Biolog. Monogr., XIV, Urbana 1937) and probably comes nearer the true relationship between the groups and genera than any other system. In the present author's opinion, it is hardly possible to make a practical key based on relation, but for groups of higher order than genera. The present key is purely artificial, and its main purpose is to make it possible for the students of saw-flies to place the insects in their taxonomically proper genera. If related genera mostly are placed together, they may also be widely separated in the interest of simplicity in use of the key. The work on this key was started already in 1931, and it could have been published two years later. The publication was postponed year after year as new genera were included. On several occasions the existing system had to be partly broken up and rearranged as new characters were introduced. A study of type species unveiled sometimes misunderstandings made in some cases by a succession of authors and caused occasionally old synonyms to be reestablished. The key was thus perpetually tested and it is hoped it will in its present shape be useful to future students of saw-flies. In the author's terminology the difference between a genus and a subgenus is that the latter merge gradually into each other, but the former are separable by distinct characters. It is sometimes very hard to define if a given character is distinct or not. In genera with many species a subdivision may be desirable, but not always possible to undertake. Students ought always to remember the purpose of a subdivision of a group into genera is to facilitate the determination of the insects. To create a new generic name with the main purpose to immortalize once own name as an author is quite commonly done in entomology, but cannot be approved of. It must be regarded as most desirable, when describing new species or genera, if their taxonomical place in the system should be made more easily understandable by later students by placing them in a key together with their relatives. To introduce hypothetical characters in a key, as done by Ashmead 1898 is on the other hand quite condemnable. In this key the name of the type species is given in brackets after the generic description. The synonym names of the genus is also given in brackets after the generic names. When the name of the author of a species is given in brackets, then this species was originally connected with another generic name.

The brevier numbers in the text of the key refer to the plates at the end. If these numbers are printed in italicfaced breviers (*0*), they refer to drawings made from the genus in question; otherwise (0) they illustrate only the actual character mentioned.

Most of the illustrations were drawn by the present author and taken from his earlier papers, but 20 are borrowed from papers by Benson (5, 9), Ross (147, 148, 150, 152, 153, 154, 156, 158, 159), and Takeuchi (75, 84, 85, 87, 99, 135, 137, 138, 140).

1. The hind coxae lengthened (protracted) and the end of the hind femora thus reaching to and beyond the apex of abdomen. Clypeus truncate, if not stated differently.[122, 123, 129, 131] Antennae with 9 joints [93, 96, 97] (if multi-jointed, comp. nr. 10). 2
— Hind coxae normal, the hind coxae not reaching the apex of abdomen. 7
2. Hind wings with 2 closed middle cells.[4, 6] The hind metatarsus twice as long as the following tarsal joints combined, "dilated and hollowed on the outer side. Head scarcely developed behind the eyes,[144] the front and vertex forming one peace without a suture, frontal area obsolate."[126] (*S. purpureifrons* Cameron). Assam. Genus *Sunoxa* Cameron 1899.
— Hind wings without closed middle cells,[7, 98] or with only one. 3
3. Hind wings with one closed middle cell.[142c, 149] 4
— Hind wings without closed middle cell. The hind metatarsus not groved along the outer side, but is longer, sometimes almost twice as long as the following tarsal joints combined.[159] Claws with basal lobe and the shorter subapical tooth placed somewhat lateral of the longer apical one.[34, 49] Postocellar area broader than it is long.[143] The hind orbits very short.[143] The antennal furrows,[131] malar space,[106] posterior seam of the head, and presterna wanting. Antennal organs present. (*A. formosanus* Enslin). Formosa, Burma, Annam, Sikkim, Java. Genus *Abeleses* Enslin 1911.
4. The hind metatarsus longer than the remaining tarsal joints combined, is flat and angularly refracted longitudinally producing a grove along the outer side. 5
— The hind metatarsus normal (subcylindric), as long as or longer than the following tarsal joints combined.[159] Claws with the shorter subapical tooth placed lateral of the apical one.[34] Antennal organ present, at least in the ♀. 6
5. The subapical tooth of the claws much longer than the apical one and placed basally of it.[33] Antennae as long as the entire body and filiform.[142B] Clypeus flat, shallowly emarginated with angular corners.[101] Head slightly dilated behind the small subparallel eyes.[139] (*M. crassitarsis* Takeuchi). Japan. Genus *Megabeleses* Takeuchi 1952.
— The subapical tooth of the claws subequally long with, and placed lateral of the apical one.[24] Antennae shorter than abdomen. Clypeus subtruncate. Head strongly narrowing and not carinated behind the eyes,[144] the inner margins of which are slightly converging downwards.[133] (*E. formosanus* Enslin). Formosa, Burma, Ceylon. Genus *Eusunoxa* Enslin 1911.
6. Claws with angular basal lobe.[34] Mesopleura without presterna. Antennae slenderly filiform.[142B] Malar space wanting or linear, shorter than half the diameter of an ocellus. (*Anisoneura stigmaticalis* Cameron). China, Formosa, Japan, Southern India. Genus *Beleses* Cameron 1877. (*Anisoneura* Cameron 1876 nec Guenée 1852, *Belesidea* Rohwer 1916).
— Claws without basal lobe.[24] Mesopleura with distinct presterna.[79] Antennae stout, incrassated in the middle.[97] Malar space as long as the diameter of an ocellus. (*Phyllotoma ? flavescens* Marlatt). Japan, Formosa. Genus *Nesotaxonus* Rohwer 1910.
7. Antennae with more or less than 9 joints. 8
— Antennae with 9 joints.[13, 97] 15
8. Antennae with 7 joints. Hind wings with 2 closed middle cells.[4, 11] Basalis and the 1st recurrent vein strongly convergent in the front wings.[4, 11, 148] 9
— Antennae with 10 or more joints. 10

9. Claws with a narrow rectangular basal lobe and in its vicinity with a subapical tooth mostly somewhat shorter, but sometimes even longer than the apical one.[23, 54, 62] In the front wings basalis strongly curved,[130] and joins medius in the same point as nervulus (is interstitial with it).[98] Malar space somewhat shorter than the diameter of an ocellus. Clypeus.[102, 103] The 2nd antennal joint (pedicellus) longer than the first one (scapus).[155] (*Melicerta ochroleucus* Stephens).
Central and North Europe, Ussuri, Kamchatka, Formosa, Burma, Java, Sumatra, Borneo. Genus *Heptamelus* Haliday 1855.
(*Melicerta* Stephens 1835, nec Schrank 1803, *Caenoneura* Thomson 1870).

— Claws simple.[41] Basalis almost straight and not interstitial with nervulus.[5] Malar space much longer than the diameter of an ocellus.[126] Pedicellus shorter than scapus.[97] (*P. runari* Conde).
Lettland. Genus *Pseudoheptamelus* Conde 1932.

10. Basalis subparallel with the 1st recurrent vein in the front wings, not or hardly convergent.[6, 14, 99] Anal cell with strongly oblique cross-vein.[7] Postocellar area not or only indistinctly limited. Claws without basal lobe.[36, 40] 11

— Basalis and the 1st recurrent vein strongly convergent.[4, 5] Antennae with 10—16 joints. 13

11. Antennae with 18—23 joints. 12

— Antennae with 10—11 joints, simple and distinctly incrassated towards the apex. Hind wings with 2 closed middle cells, and the anellan cell longly petiolate. The inner margins of the eyes strongly converging downwards.[129] Malar space much longer than the diameter of an ocellus.[124] Frontal area poorly defined. Clypeus truncate to roundly emarginated.[104] Mesopleura without presterna, but their upper triangular part separated by a very shallow furrow.[79] The hind metatarsus much shorter than the following tarsal joints combined. Claws mostly simple, rarely with a very minute subapical tooth.[41] (*Tenthredo spinarum* Fabricius).
Palaearctic, Ethiopian, Indo-Malayan. Genus *Athalia* Leach 1817.
(*Dentathalia* Benson 1931).

12. The middle antennal joints almost serrated, at least in the ♀, e.g. the joints prolonged into a short ramification below; the 5—7 last ones of the 23 antennal joints almost grown together and provided with antennal organs. The anal vein obliterated or interrupted shortly basally of the strongly oblique cross-vein; the anal cell appears accordingly to be petiolate.[149] Hind wings without closed middle cells. Malar space as long as half the diameter of an ocellus. The hind coxae enlarged. Claws elongated, the subapical tooth longer than the apical one.[33, 52] (*C. insolita* Konow).
Tonkin. Genus *Cladiucha* Konow 1902.

— Antennae with 18—22 joints, all without ramification; scapus and pedicellus subequal in length. Hind wings with 2 closed middle cells. Mesopleura with narrow but distinct presterna. Frontal area wanting. Anterior margin of clypeus rounded.[76] Malar space longer than half the diameter of an ocellus. Claws elongated, simple, or with a very minute subapical tooth.[41] (*H. annulitarsus* Cameron).
Patria? (Further India?). Genus *Hennedyia* Cameron 1891.
(*Hennedyella* Forsius 1935).

13. Anal cell with oblique cross-vein.[5] Hind wings without closed middle cells and the anellan cell open at the apex. Labrum and malar space very long, 3 to 4

times longer than the diameter of an ocellus. Clypeus truncate. Eyes strongly protruding. Mesopleura without presterna. Claws with a large triangular basal lobe and a shorter and more slender subapical tooth placed lateral and somewhat behind the longer apical one.[34] (*Tenthredo* [*Emphytus*] *ochropoda* Klug.) Palaearctic to N. Burma, Nearctic (introduced).

Genus *Heterarthrus* Stephens 1935.
(*Phyllotoma* Fallén 1829 nec Leach 1819, *Decatria* Stephens 1835, *Druida* Newman 1838, *Phlebatrophia* Macgillivray 1909).

— Anal cell without cross-vein. Clypeus truncate or faintly rounded anteriorly.[76] 14

14. Anal cell contracted in the middle.[9] Hind wings without closed middle cells, and the anellan cell open at the apex. Claws simple. (*P. judaica* Forsius).
Israel, Algeria, Tunis. Genus *Paraphyllotoma* Forsius 1930.

— Anal cell not contracted. Hind wings mostly with 2 closed middle cells.[15] (Except. *D. bensoni* Forsius 1931); the anellan cell closed and petiolate.[11] Claws with basal lobe and rather long subapical tooth.[62] Scutellar appendage half as long as scutellum and half as long as it is broad. (*D. morio* Konow).
Ethiopian. Genus *Dulophanes* Konow 1907.

15. Anal cell with or without cross-vein, but not contracted in the front wings.[6, 7, 10] 29

— Anal cell contracted in the middle.[9] 16

16. Hind wings with 2 closed middle cells.[15] In the front wings basalis and the 1st recurrent vein strongly convergent.[9] 17

— Hind wings without, or with only one closed middle cell, the discoidal one.[142c] Basalis and the 1st recurrent vein parallel or subparallel. 23

17. Both recurrent veins run into the 2nd cubital cell in the front wings. 22

— The 2nd and the 3rd cubital cells receiving each a recurrent vein. 18

13. Hind wings with closed anellan cells. 19

— A closed anellan cell wanting. Mesopleura with rather distinct presterna. Clypeus truncate. Claws simple. Scapus and pedicellus short, broader than they are long; the 3rd and 4th antennal joints subequal in length. (*Pelmatopus anemones* Hering).
Germany, Lettland, Finland. Genus *Endophytus* Hering 1934.
(*Neopelmatopus* Conde 1934).

19. Mesopleura with distinct presterna.[79, 90] Clypeus deeply roundly incised.[100, 103] 20

— Mesopleura without presterna. Clypeus truncate.[113, 123] Malar space quite linear. Claws long, and with a small straight subapical tooth near the middle.[41] Antennae slender; in the ♀ the 3rd and 4th joints subequal in length, pedicellus broader than it is long, in the ♂ the 3rd joint compressed and shorter than the 4th one. (*S. cupressi* Rohwer).
California. Genus *Susana* Rohwer 1932.

20. Claws with a subapical tooth almost as long as the apical one.[51, 128] The 2nd recurrent vein and the 2nd cubital cross-vein interstitial or almost so. Eyes elongated, their inner margins distinctly emarginated and converging downwards.[3] Malar space hardly as long as half the diameter of an ocellus. Antennae short and stout, hardly tapering towards the apex. (*Hemichroa phytophaga* Dyar=*Tenthredo obtusa* Klug).
Nearctic, Mexico. Genus *Craterocercus* Rohwer 1911.

— Claws with a small subapical tooth.[43, 127] Eyes short oboval, their inner margins straight, parallel, and not emarginated.[124] The 2nd recurrent vein not inter-

stitial. Pedicellus almost as long as scapus, but less thick; the 3rd antennal joint almost shorter than the 4th one. Clypeus.[100, 101] 21

21. Malar space longer than the diameter of an ocellus.[125] (*Tenthredo* [*Allantus*] *brevis* Klug).
Palaearctic, North Burma. Genus *Hoplocampa* Hartig 1837 (s.str.).

— Malar space linear.[106, 123] (*Macgillivraya oregonensis* Ashmead).
Nearctic. Genus *Macgillivrayella* Ashmead 1899.
(*Macgillivraya* Ashmead 1898 nec Forbes 1852).

22. Claws with a subapical tooth nearly as long as the apical one.[50, 51] Clypeus deeply, roundly incised.[100, 110] Antennal joints 3 and 4 subequal in length; pedicellus broader than it is long. Basalis and the intercostal cross-vein not interstitial (in the front wings). 23

— Claws simple. Clypeus faintly subemarginated.[102] Antennae slender, filiform,[142B] and the 3rd antennal joint shorter than the 4th one. Basalis and the intercostal cross-vein interstitial. (*Hoplocampa laricis* Marlatt).
New Hampshire in U.S.A. Genus *Marlattia* Ashmead 1898.

23. The inner margins of the long eyes distinctly emarginated and converging downwards.[3] Malar space hardly as long as half the diameter of an ocellus.[114] Antennae short and stout, hardly tapering towards the apex. 20

— The inner margins of the eyes parallel or with only a very faint indication of a subemargination.[12] Malar space longer than the diameter of an ocellus. Antennae longer than abdomen and gradually tapering towards the apex.[94] (*Tenthredo alni* Linneus).
Holarctic, Tonkin, Sikkim. Genus *Hemichroa* Stephens 1835.
(*Leptocerca* Hartig 1837, *Engages* Gistel 1848, *Varna* Ross 1937).

24. In the hind wings the anellan cell closed. In the front wings the anal cell contracted, mostly broadly,[9] but sometimes shortly 25

— Anellan cell not closed at the apex. Scapus and pedicellus broader than they are long. (*Tenthredo xylostei* Giraud).
Central and North Europe. Genus *Hoplocampoides* Enslin 1914.

25. The contraction of the anal cell mostly long, but sometimes punctiform and then rarely suggesting an extremely short, oblique cross-vein.[150] The 3rd cubital cell shorter than the 1st and 2nd ones combined. (If longer comp. nr. 156). The hind wings with one closed middle cell, in the ♂ rarely with marginal vein.[17] 26

— The anal cell of the front wings with a closed basal cell thus suggesting the subfamily *Blennocampinae* [145] (the basal cell there not completely closed as the perpendicularly bent anal vein is obliterate close to brachium [146]). The 3rd cubital cell distinctly longer than the two first ones combined. The inner margins of the eyes faintly S-curved and distinctly converging downwards. Malar space linear. Postocellar area as long as it is broad and strongly convexly elevated. Strongly shining insect. (*M. souza-lopesi* Malaise).
Southern Brazil. Genus *Metaneura* Malaise 1949.

26. Claws of at least the hind legs either tridentate or with acutely angular basal lobe.[59, 61] 27

— Claws without basal lobe, simple or with only an indistinct minute tooth near the base.[41] Antennae stout and short; scapus and pedicellus both almost broader then they are long. The hind tarsi slender, their middle joints longer than they are broad at the apex. Venation of front wing.[150] (*Selandria sodalis* Cresson).
Nearctic, Southern Brazil, (Chile?). Genus *Lycaota* Konow 1903.

27. Claws tridentate at the apex.[59] Head and thorax with long sparce hair. (From Chile). 95
— Claws not tridentate. 28
28. Claws without subapical tooth, but the hind ones appear almost like pincers owing to the acutely angular basal lobe.[25] The hind tarsi very stout, the single tarsal joints only as long as they are broad. (*Blennocampa typicella* Macgillivray = *Selandria spissipes* Cresson var. t.).
Nearctic. Genus *Blennogeneris* Macgillivray 1923. (*Lycaotella* Ross 1932).
— The subapical tooth of the claws placed lateral of the longer apical one.[34] Head strongly narrowing behind the eyes. Malar space as long as the diameter of an ocellus. (*S. boliviensis* Konow).
Bolivia, Chile, Peru. Genus *Synaptoneura* Konow 1908. (*Zarca* Brěthes 1919 nec Cameron).
29. In the front wings the anal cell without cross-vein.[10, 99, 152] 30
— Anal cell with cross-vein.[5, 6, 7, 11, 147, 151] 80
30. The upper triangular part of each mesopleurum separated from the rest of it by a more or less distinct horizontal shallow furrow; this furrow branching off almost perpendicularly from the sharp presternal furrow.[79] Short and stout insects. The hind orbits rounded and not carinated.[139] The outer margin of each mandible roundly curved, but less than at a right angle.[67] Malar space mostly longer than the diameter of an ocellus, but may be just a little shorter than so. Claws with a very short subapical tooth, but without basal lobe.[127] Venation.[152] (*Tenthredo serva* Fabricius).
Holarctic. Genus *Selandria* Leach 1817. (*Coryna* Lepeletier 1828 nec Bosc 1802, *Brachythops* Haliday in Curtis 1839, *Paraselandria* Ashmead 1898, *Selandridea* Rohwer 1911, *Pseudoselandria* Macgillivray 1914).
— Mesopleura without horizontal furrow; presterna present or wanting. 31
31. From South- or Central America. 32
— From other parts of the world. 51
32. Hind wings without marginal vein, but with 2 closed middle cells.[4, 6, 11] .. 33
— Hind wings with a marginal vein only between the radiellan and the mediellan veins.[16] (*C. rosigenu* Enderlein).
Ecuador. Genus *Cleistoplax* Enderlein 1919.
33. Mandibles with a subapical tooth or basal lobe.[66, 67, 68, 69] 36
— Mandibles simple.[65] Claws without basal lobe, the subapical tooth almost as long as the apical one and placed behind it apically of the middle.[51] Labrum strongly convex.[112] Pedicellus (2nd antennal joint) longer than it is broad at the apex; flagellum of the antennae long and gradually tapering towards the apex, more rarely very faintly incrassated in the middle. Head not carinated behind the eyes.[144] General direction of the inner margins of the eyes faintly converging downwards.[133] Presterna not convex and sometimes separated only by a very fine or even indistinct furrow.[89] 34
34. Clypeus truncate anteriorly, hardly or not at all deflexed. Anterior margin of labrum emarginated and strongly deflexed downwards.[113] (*L. plaumanni* Malaise).
Southern Brazil. Genus *labrina* Malaise 1942.
— The anterior margin of clypeus roundly protruding more or less broadly and seems mostly to be somewhat incrassated owing to a faint deflection down-

wards.[112] The basal cubital bend mostly incrassated and frequently with a short spurious stump directed basally.[141] 35

35. The anterior margin of labrum rounded.[112] (*A. calvescens* Enderlein).
Neotropical Region south of Panama. Genus *Adiaclema* Enderlein 1919.

— Labrum incised in the middle with broadly rounded lateral teeth.[113] (*Stromboceros tarsalis* Konow).
Southern Brazil. Genus *Clemina* Malaise 1942.

36. Head distinctly carinated behind the eyes.[83, 143] Clypeus mostly transversally convex medially and the acutely edged anterior margin distinctly emarginated, mostly somewhat angularly.[115] Pedicellus longer than it is broad. Mandibles roundly bent, more or less close to a right angle and with a large subapical tooth or lobe near the base.[69] Claws compact, shorter than the slender apical tooth which is much longer than the basal lobe.[44, 48] Basalis and the 1st recurrent vein distinctly converging.[10] The anellan cell in the hind wings mostly sessile.[15] Presterna strongly convex and separated from the rest of the mesopleura by deep furrows.[90] 37

— The hind orbits never carinated behind.[139, 144] 38

37. The subapical tooth of the claws replaced by a triangular basal lobe.[44] (*Stromboceros albilabris* Konow).
Bolivia, Ecuador, Columbia, Costa Rica, Mexico. Genus *Goniocerus* Malaise 1942.

— Claws with an erect subapical tooth before the basal lobe.[45, 48] (*Stromboceros* [*Eustromboceros*] *leucostomus* Rohwer).
Mexico, Costa Rica, Bolivia, Argentina.
Genus *Prostromboceros* Rohwer 1912.
(*Peterseniana* Jörgensen 1913).

38. Mandibles roundly bent at almost a right angle and with a large subapical tooth or lobe near the base.[69, 122] The hind metatarsus mostly longer than the following tarsal joints combined.[159] Basalis and the first-recurrent vein almost parallel.[141] 39

— Mandibles roundly bent, but less than at a right angle.[67] Clypeus subconvex, more rarely transversally (horizontally) refracted or convex; the anterior margin truncate or subemarginate.[104] 42

39. Clypeus transversally (horizontally) convex; the anterior margin acutely edged and emarginated.[109] Presterna mostly strongly convex and separated from the mesopleura by deep furrows.[79] Pedicellus at least twice as long as it is broad at the apex; antennae long and slender. Anellan cell in the hind wings petiolate.[4, 7] Cubitus only slightly bent at the base and without spurious stump in the front wings. 40

— Clypeus not transversally convex, its anterior margin incised but not edged.[111] Presterna hardly or not at all convex, and separated from the mesopleura by very fine furrows.[89] Pedicellus as long as or only little longer than it is broad; flagellum somewhat incrassated in the middle. Claws without basal lobe, the subapical tooth almost as long as the apical one and placed behind it apically of the middle.[51] The cubital bend mostly with a short spurious stump directed basally.[141] In the hind wings the anellan cell sessile.[6, 15] 41

40. Claws short with indistinct basal lobe and the subapical tooth mostly longer than the apical one.[47] Flagellum of the antennae without whitish markings. Mandibles.[69] (*Stromboceros trigemmis* Konow).
South Brazil, Paraguay, Bolivia, Amazonas.
Genus *Plaumanniana* Malaise 1942.

— Claws short with a rather acute basal lobe, the apical and the subapical teeth mostly subequal in length.[46] Flagellum frequently partly white. (*Stromboceros* [*Stromboceridea*] *pilosus* Rohwer).
Central Amercia, Peru. Genus *Strombocerídea* Rohwer 1911. (*Caribia* Malaise 1942).

41. Clypeus very deeply and broadly, semicircularly incised and with protruding lateral teeth [110] apical half of labrum concavely depressed, the basal half with a convexity shaped as a crescent. The subapical tooth of the claws longer than the apical one.[52] Malar space shorter than half the diameter of an ocellus. The pale markings not lilac-coloured. (*Stromboceros opiparus* Konow).
South Brazil. Genus *Arcoclypea* Malaise 1942.

— Clypeus only shallowly incised without protruding lateral teeth.[111] Labrum convex. The subapical tooth of the claws somewhat shorter than the apical one.[86] Malar space as long as, or longer than half the diameter of an ocellus. The pale markings lilac-coloured, but may turn entirely sordid whitish. (*L. carinifrons* Malaise).
Central and South America. Genus *Liliacina* Malaise 1942.

42. Pedicellus almost disk-like,[96] at least twice as broad as it is long; flagellum of the antennae extremly stout, almost uniformly thick, not compressed, and the middle joints only twice as long as they are broad. Claws without basal lobe, with a long and slender apical tooth and a minute subapical one just basally of the middle.[53] Presterna rather indistinctly separated from the mesopleura by a very fine and almost furrow-like seam.[89] Clypeus flat, the anterior margin truncate. Malar space shorter than half the diameter of an ocellus. Cubitus and the 1st recurrent vein converging. (*Stromboceros melanopterus* Rohwer).
Mexico, Arizona. Genus *Eustromboceros* Rohwer 1911.

— Pedicellus rarely shorter, but mostly longer than it is broad; flagellum slender, the middle joints more than three times as long as they are thick.[93] 43

43. The distance between the eyes below longer than one eye, as 4 : 3; the inner margins of the small eyes straight and hardly converging.[142A] Malar space as long as pedicellus, this latter conical and about as long as it is broad at the apex, or faintly shorter; flagellum stoutly filiform. Clypeus subconvex, the anterior margin rather narrowly, quatercircularly incised. Head narrowing behind the eyes and covered by long and dens hair. The very poorly defined frontal area on the same level (tangent) with the eyes. Presterna distinctly separated, subconvex. Claws without basal lobe, but with a long subapical tooth.[51] Cubitus angularly bend at the base; the 3rd cubital cell one third longer on cubitus than on radius. (*T. nigrita* Strand).
Ecuador. Genus *Tioloma* Strand 1910.

— Distance between the eyes below shorter, or subequal to the length of an eye. 44

44. Clypeus with a rugose, roundly elevated, and rather sharp transversal carina running close to the faintly emarginated anterior margin; base of clypeus rather flat and less rugose.[107] Malar space as long as the diameter of an ocellus. The inner margins of the eyes extremely faintly S-shaped, parallel in the middle. Mesopleural episterna appears as if triangularly incised by addition of the broadly triangular and completely fused presterna; the lower margin of these presterna entering the anterior margin of the mesopleura at an angle of about 60°.[88] Claws without basal lobe, the subapical tooth almost longer than the apical one.[64] The hind basitarsus longer than the following tarsal joints combined. Antennae longer than abdomen; flagellum gradually tapering

towards both ends; the 3rd and 4th joints subequal in length; all flagellar joints except the last one at the apex with a minute, acute tooth on the under side; pedicellus longer than broad, as long as the main part of scapus. Cubitus angulate at the base; the 3rd cubital cell subequal in length to the 1st and 2nd combined, and the 3rd cubital cross-vein straight. The anellan cell sessile. (*Waldheimia orbignyana* Brullé).
Bolivia. Genus *Brulléana* Malaise 1954.

— Clypeus subconvex.[104] 45

45. Claws rather short, with one subapical tooth and a basal lobe, the latter mostly rather difficult to see.[54] Presternal furrows indistinctly separating the broadly triangular presterna.[89] 46

— Claws without basal lobe. 47

46. Malar space linear. The inner margins of the eyes strongly converging downwards. (*I. pusilla* Malaise).
Costa Rica. Genus *Inea* Malaise 1942.

— Malar space as long as the diameter of an ocellus. The inner margins of the eyes very faintly converging downwards, almost subparallel.[125] (*Anapeptamena nitida* Strand).
Ecuador (2840 m). Genus *Neoanapeptamena* Strand 1910.

47. Claws slender, simple, or with an erect subapical tooth much shorter than the apical one and removed from it.[53] 48

— Claws cleft, the subapical tooth may be just a little longer or shorter than the apical one.[51] 50

48. Mesopleura seem very broadly and deeply triangularly incised anteriorly because the large, equilateral, triangular presterna completely fused together with the mesopleura without separating furrow on the surface; subcutaneously the separating limit visible if the colour is pale.[88] The subapical tooth of the mandibles removed from the apex.[68] Basalis and the 1st recurrent vein converging. Anellan cell mostly sessile. (*R. amazonica* Forsius).
Amazonas, Bolivia, S. Brazil, Ecuador, Paraguay, Peru.
Genus *Romaniola* Forsius 1925.

— Presterna of a normally elongated triangular form and rather indistinctly separated;[89] mesopleura accordingly normal. Flagellum mostly tapering from the middle, rarely filiform. Frontal area with rather distinct ridges. Malar space linear in the ♂. 49

49. The subapical tooth of the mandibles removed from the long and slender apical one into the basal half of the mandible.[66] Head very strongly narrowing behind the eyes.[144] (*Stromboceros absonus* Konow).
Bolivia, Ecuador, South Brazil. Genus *Bolivius* Malaise 1942.

— The subapical tooth of the mandibles placed near to the apex.[67] Head only very faintly narrowing behind the eyes. (*Stromboceros farctus* Konow).
Ecuador, Peru, Boliva, South Brazil. Genus *Andeana* Malaise 1942.

50. Labrum triangularly pointed with straight sides.[138] Malar space longer than the diameter of an ocellus. Inner margins of the eyes straight and parallel.[124] Clypeus hardly subconvex, the anterior margin truncate.[123] Antennae gradually tapering, as long as thorax and abdomen combined. The subapical tooth of the claws longer than the apical one.[52] Presterna distinctly convex and separated from the mesopleura by deep furrows.[90] The 3rd cubital cell rectangular, longer than the 1st and 2nd combined. (*Stromboceros nigripennis* Konow).
Ecuador. Genus *Belea* Malaise 1942.

— The sides of labrum roundly curved.[104, 123] Mandibles.[67] Malar space hardly as long as half the diameter of an ocellus in the ♀, linear in the ♂. Antennae shorter than the body proper, mostly as long as the abdome. The inner margins of the eyes more or less distinctly converging downwards.[131] The subapical tooth of the claws shorter than the apical one.[128] Presterna rarely somewhat convex, mostly only visible as separated by a fine seam.[89] The 3rd cubital cell mostly shorter than the two basal ones combined. Clypeus variable, the anterior margin truncate or roundly protruding.[76] (*D. albisignata* Enderlein).
South Brazil, Peru. Genus *Dochmioglene* Enderlein 1919.

51. The very apex of the mandibles with 2 or 3 almost equally long teeth placed more or less lateral of each other; base of mandibles without distinct tooth or lobe.[135] 52

— The very apex of the mandibles simple, basally of it there may be one or more subapical teeth or basal lobes.[65, 68, 105] 56

52. Apex of mandibles split into two subequally long teeth lateral of each other. Pedicellus broader than it is long, and likewise is the abruptly incrassated main part of scapus; flagellum short and stoutly filiform, the 3rd antennal joint mostly subequal in length or shorter than the 4th one. Presterna very sharply limited.[79, 90] The cubital vein sharply bent at the extreme base. Sawsheath tridentate in dorsal view, the median tooth mostly very short, almost indistinct.[77, 116, 119, 120] 55

— Mandibles tridentate at the apex, not strongly bent.[135] Presterna wanting, if not stated differently. The anterior margin of clypeus shallowly emarginated.[102] Claws long and slender, simple if not stated differently. The hind basitarsus shorter than the following tarsal joints combined.[158] The 3rd antennal joint distinctly longer than the 4th one; scapus longer than pedicellus. Malar space about as long as the diameter of an ocellus. Nervellus meets the long petiole of the anellan cell almost perpendicularly.[4] 53

53. The scutellar appendage not differentiated or very narrow. In the front wings the short anal cross-vein situated at the very middle of the cell.[140, 147] Labrum narrow and triangular.[138] Antennae filiform, slightly serrated. Short and robust insects. 54

— Scutellar appendage as long as scutellum. Cross-vein of the anal cell long, oblique, and placed distinctly apically of the middle.[75] Front wings distinctly longer than the total length of the slender body. Labrum narrow with broadly rounded apex. Antennae slender, filiform, longer than head and thorax combined. Claws with a minute subapical tooth near the base. Postocellar area convex, broader than it is long, and with a median furrow anteriorly. (*R. longipennis* Takeuchi).
Japan. Genus *Rocalia* Takeuchi 1952.

54. Anal cell with a very short perpendicular cross-vein.[147] Antennae stout; pedicellus about as long as it is wide. (*Selandria nova* Norton).
Nearctic. Genus *Adelesta* Ross 1937.

— Anal cell with an oblique cross-vein.[140] Antennae slender; pedicellus longer than it is wide. Mouth-parts (maxillo-labial complex) produced into an elongated proboscis.[138] Propodeum (1st tergite) deeply and broadly emarginated so that the middle portion becomes very short, almost linear; the cutaneous blotch accordingly large. (*N. mirabilis* Takeuchi).
Japan. Genus *Nipponorhynchus* Takeuchi 1941.

55. The anterior margin of clypeus narrowly, roundly incised in the middle.[100] Presterna extremely narrow, almost linear. The large subapical tooth of the claws sometimes as long as the apical one.[51] Abdomen subcylindric, twice as long as thorax or longer. The broadly flattened lateral lobes of the saw-sheath almost ear-sharped.[74] (*Tenthredo cingulata* Fabricius).
Holarctic. Genus *Strongylogaster* Dahlbom 1835.

— Clypeus truncate or faintly angularly emarginated.[136] Presterna of distinct width. Claws simple or with a minute subapical tooth.[41] Abdomen normal. The lateral lobes of the saw-sheath long or short in dorsal view, but not ear-shaped.[119, 120] (*T. contigua* Konow).
Palearctic, Burma. Genus *Thrinax* Konow 1885.

56. The outer (lateral) margin of each mandible roundly bent at an almost right angle.[69, 122] Head carinated behind the eyes, at least below if not stated differently.[83, 143] Claws without basal lobe.[33, 37] Cubital vein strongly bent at its extreme base. In the hind wings, nervellus reachs the apex of the anellan cell;[6, 99] this cell accordingly not petiolate. Presterna separated from the mesopleura by deep furrows.[90] 57

— Mandibles roundly bent, but much less than at a right angle.[67, 68, 123] 62

57. The basal lobe of the mandibles large, but with only one acute tooth or corner.[122] Head not prolonged behind the eyes, the postocellar area accordingly broader than it is long, or it is subquadrate.[139] The apical tooth of the claws strong, and mostly longer than the subapical one.[24, 37] The bend of the cubital vein at its extreme base is rounded and without spurious stump.[130, 140] Antennal organs wanting. 58

— The large basal lobe of the mandibles with 2 or 3 acute teeth.[121] The upper orbita or temples prolonged; the postocellar area longer than it is broad. The subapical tooth of the claws much longer than the more slender apical one and is placed apically of the middle.[33] Cubital vein angularly broken at the extreme base and there with a spurious stump.[141] Scutellar appendage reduced to a narrow bordure. The anterior margin of clypeus emarginated.[121] Malar space linear. (*I. versicolor* Malaise).
Assam (Garo Hills), Burma (Shan Hills). Genus *Iconia* Malaise 1944.

58. Clypeus with a faint indication of a horizontal cross-ridge; the anterior margin angularly emarginated and acutely edged.[109] Frontal area distinct, but poorly limited. Mostly medium sized insects, 8—10 mm long. 59

— Clypeus subconvexly bent from side to side; the anterior margin truncate and not acute.[122] Antennae filiform; pedicellus twice as long as it is broad, almost as long as scapus. Frontal area indistinct. Basalis and the 1st recurrent vein strongly converging.[10] Claws.[37] Small insects, 5 mm long. (*A. albipes* Konow).
Assam (Khasi Hills), Burma-Yünnan frontier.
Genus *Anapeptamena* Konow 1898.

59. Pedicellus broader than it is long; scapus rounded, with strongly constricted base. The subapical tooth of the claws subequally long with the apical one and placed close to and somewhat lateral of it, most pronounced in the ♂.[24] Basalis curved and strongly convergent with the 1st recurrent vein.[9] The hind orbits carinated only near the mandibular base. (*D. sino-birmana* Malaise).
Burma-Yünnan frontier. Genus *Duplunguis* Malaise 1944.

— Pedicellus distinctly, mostly one half longer than it is broad.[93] The subapical tooth of the claws placed behind the apical one, removed from, and mostly distinctly shorter than it.[38, 41] Basalis meets subcosta removed from the base

of cubitus a distance subequal with the length of the 1st cubital cross-vein.[75, 140] 60

60. The subapical tooth of the claws only little shorter than the apical one.[38] The hind orbits carinated from below half way up. Basalis almost straight, and subparallel with the 1st recurrent vein.[99] Insects of meduim size. 61

— The subapical tooth of the claws extremely short, almost wanting.[41] The hind orbits not carinated. Basalis faintly curved and distinctly converging with the 1st recurrent vein.[10] The hind metatarsus shorter than the remaining tarsal joints combined. Malar space almost as long as the diameter of an ocellus. In the ♂, the filiform antennae appear sparsely serrated below owing to a haired tooth at the apex of the 4 last joints;[94] the 3rd and 4th joints subequal in length. Small insects. (*C. nana* Malaise).
Burma-Yünnan frontier. Genus *Concavicornia* Malaise 1944.

61. The hind metatarsus distinctly longer than the following tarsal joints combined. In the ♂ only, the flagellar antennal joints at the apex with projecting tufts of hair directed medially and suggesting teeth.[93, 94, 95] (*Stromboceros sikkimensis* Malaise).
Sikkim, Java, Burma-Yünnan frontier. Genus *Denticornia* Malaise 1944.

— Flagellar joints without projecting tufts of hair. The hind metatarsus subequal in length with the following tarsal joints combined.[159] (*E. birmana* Malaise).
Burma-Yünnan frontier, Formosa. Genus *Edenticornia* Malaise 1944.

62. Claws either with basal lobe or the subapical tooth shorter than the apical one and placed straight behind it.[19, 39] 63

— Claws without basal lobe and the subapical tooth larger than the apical one and placed somewhat lateral of it.[32] Clypeus subconvex, the anterior margin of it and of labrum truncate or subemarginate.[104] Head strongly narrowing behind the eyes and carinated.[143] The inner margins of the eyes faintly converging downwards. Malar space of distinct length. Antennae faintly incrassated towards the middle; pedicellus distinctly longer than it is broad at the apex. Presterna distinct. The hind metatarsus only little longer than the following tarsal joints combined.[159] Body and wings elongate. Cubitus bent at the extreme apex and there with a distinct spurious stump.[141] (*Stromboceridea jacobsoni* Forsius).
Sumatra. Genus *Euforsius* Malaise 1944.

63. Claws both with basal lobe and a large subapical tooth that is mostly longer than the apical one and placed more or less lateral of it.[21] 64

— Claws either without basal lobe, or the subapical tooth, if present at all, is much shorter than the apical one.[30] 65

64. The basal lobe of the mandibles with 2 distinct teeth.[121] Presterna separated from the mesopleura only subcutaneously. The subapical tooth of the claws almost straight behind the apical one.[19] The cross-vein of the radial cell distally concavely bent.[147, 149] The straight basal and the 1st recurrent veins distinctly converging. In the hind wings the discoidellan (2nd) middle cell considerably (one half) longer than the cubitellan (1st) middle cell.[130] Frontal area depressed, not reaching a level between the eyes. The anterior margin of clypeus shallowly incised. (*Stromboceros pictipennis* Konow).
Western Borneo. Genus *Bornea* Malaise 1944.

— The basal lobe of the mandibles with only one acute tooth.[69] Presterna separated by a distinct furrow. The subapical tooth of the claws mostly placed

distinctly lateral behind the apical one.[20, 21, 22] Antennal flagellum subincrassated in the middle; pedicellus longer or shorter than it is broad at the apex. Basalis and the 1st recurrent vein almost parallel. The radial cross-vein distal convexely curved.[10] The discoidellan (2nd) middle cell not, or only inconsiderably longer than the cubitellan (1st) one. Frontal area, at least above the antennal base, elevated above a tangent touching both eyes. Clypeus truncate or shallowly emarginated. Sinus sexualis sometimes present.[78] (*N. metallicus* Rohwer).

Peninsular- and Further India, Insulinde, the Philippines, South China, Formosa. Genus *Neostromboceros* Rohwer 1912. (*Stypoza* Enderlein 1919).

65. Claws with a large, triangular basal lobe;[27] a subapical tooth wanting or invisible except under a high magnifying power (more than 10—20 times).[29] Presterna sharply separated.[79] The anterior margin of clypeus broadly, roundly emarginated and with angular lateral teeth.[101] Head strongly narrowing behind the eyes.[83] 66

— Claws with a subapical tooth, but without basal lobe, or this latter is indistinct and far removed from the subapical tooth, which is mostly only little shorter than the apical one and removed from it.[23, 39, 40] 69

66. Basalis strongly bent and also strongly converging with the 1st recurrent vein.[148] Claws without visible subapical tooth even at an enlarging magnitude of 100; the large basal lobe undivided.[27] Frontal area completely surrounded by extremely acute carinas;[83] the face angularly refracted downwards along the lower of these carinas and the cross-carinas from the area to each eye. Clypeus subconvex. The inner margins of the eyes subparallel.[124] The hind metatarsus as long as the following tarsal joints combined.[159] The anellan cell sessile. (*A. shanibia* Malaise).

Japan, Burma, Formosa. Genus *Abusarbia* Malaise 1944.

— Basalis not or hardly bent and is subparallel with the 1st recurrent vein.[99] The basal lobe of the claws with a narrow, but not specially deep incission near its acute corner, visible only in a microscope.[28] Face not refracted, but more or less evenly subconvex.[125] The hind metatarsus shorter than the following tarsal joints combined.[158] The inner margins of the eyes distinctly converging downwards, especially below.[129] 67

67. The subapical tooth of the mandibles placed laterally of and very closely to the apical one.[133] The antennal flagellum evenly and stoutly filiform, short. Clypeus flat.[102] Frontal area convex, indistinctly limited.[131] Nervellus attains the apex of the sessile anellan cell. Claws.[28] (*Strongylogaster konowi* Jakowlew). European Russia and Ussuri.

Genus *Alphostromboceros* Kuznezow-Ugamski 1928.

— The subapical tooth of the mandibles removed from the apical one.[66, 68] Antennae long and slender.[93] 68

68. In the hind wings the 1st cubitellan cross-vein originates from the radiellan vein, as a consequence the 1st closed middle cell is surpressed basally by the radiellan cell itself;[4] the anellan cell petiolate.[4] The frontal area surrounded by rather sharply elevated ridges. Clypeus convex. Antennae faintly incrassated before the apex. Claws.[29] (*Tenthredo delicatula* Fallén).

Palaearctic. Genus *Stomboceriná* Malaise 1942. (*Stromboceros* Konow 1885 nec Gemminger & Harold 1871).

— The 1st cubitellan cross-vein originates from subcostella, the 1st closed middle cell accordingly reaching further basally than the radiellan cell;[99] the anellan cell sessile.[99] Frontal area unsharply outlined. Clypeus rather flat. Antennae of uniform thickness, hardly as long as head and thorax combined. (*Stromboceros filicis* Malaise).
Siberia (Ussuri), Sachalin, Corea, Japan.
Genus *Parastromboceros* Takeuchi 1941.

69. In addition to the long subapical tooth the claws also with an acutely angled basal lobe that sometimes may be hard to observe.[23] 70
— Claws without basal lobe, if one is faintly indicated, then it is only rounded at the apex.[39] Presterna, and mostly also a frontal area at least indicated. .. 71

70. Mesopleura without presterna. Frontal area not limited. The basal vein strongly curved and strongly converging with the 1st recurrent vein.[148] Clypeus convex, its anterior margin mostly truncate.[123] Antennal flagellum filiform;[142B] pedicellus twice as long as it is broad at the apex and almost as long as the main part of scapus, but is more slender. The anellan cell petiolate. The basal lobe of the mandibles without infundibular pit (comp. nr. 71). (*Paraselandria imitatrix* Ashmead).
Peninsular and Further India, Ceylon, Indonesia, Formosa, the Philippines, Japan, Corea. Genus *Nesoselandria* Rohwer 1910.
(*Neobusarbia* Takeuchi 1928, *Anapeptamena* auct. nec Konow).
— Mesopleura with distinctly separated presterna.[79] Frontal area oval in outline and completely surrounded by very acute ridges. The hind orbits more or less distinctly carinated.[143] The basal vein almost straight and very faintly converging with the 1st recurrent vein. The anellan cell sessile. Clypeus horizontally convexly bent, its anterior margin faintly subemarginated.[115] Flagellum very faintly incrassated, almost stoutly filiform; pedicellus almost as long as the main part of scapus and one half longer than it is broad at the apex. The basal lobe of the mandibles with an only shallow minute pit, that may be entirely wanting. (*Stromboceros sinensis* Forsius).
China (Kiangsu), Japan. Genus *Kulia* Malaise 1944.

71. The basal lobe of the mandibles with a deep, infundibuliform pit.[82] The anellan cell sessile.[15] The basal vein hardly or only faintly curved. Both the apical and the subapical tooth of the claws slender.[39] Flagellum mostly short, and more or less stoutly filiform. 72
— Mandibles without a deep pit. Presterna convex, mostly separated from the mesopleura by deep furrows.[90] 75

72. Head distinctly carinated behind the eyes.[83, 143] Frontal area distinct. The inner margins of the eyes distinctly converging downwards.[133] Presterna convex, separated from the mesopleura by deep and mostly sharp furrows.[90] The hind metatarsus much shorter than the following tarsal joints combined.[158] The basal vein hardly bent and mostly subparallel with the 1st recurrent vein.[140] 73
— The hind orbits very short, almost wanting, and carinated only at the extreme base.[144] Malar space linear.[123] 74

73. The outer side of the mandibles roundly bent, distinctly less than at a right angle.[123] Claws with slender subapical tooth.[39] (*Emphytus coronatus* Klug).
Holarctic, Indomalayan. Genus *Aneugmenus* Hartig 1837.
(*Colposelandria* Enslin 1912, *Polyselandria* Macgillivray 1914, *Selandropha* Zirngieble 1956).

— Mandibles bent at an almost right angle.[121] Claws simple. (*Selandria fürstenbergensis* Konow).
Central Europe, Finland, Sweden. Genus *Atoposelandria* Enslin 1913.

74. The hind metatarsus as long as, or longer than the following tarsal joints combined.[159] Claws short, the subapical tooth seems to originate from the slope of an indistinct basal lobe.[30] The inner margins of the eyes faintly S-curved, and almost parallel in the middle.[133] Presterna mostly separated from the mesopleura only by fine and very indistinct furrows. Basalis and the 1st recurrent vein rather strongly convergent.[10] Clypeus and labrum flattened, the anterior margin of the former roundly emarginated,[102] the latter rounded and rather acute, not deflexed.[109] Each mesopleurum with a pale spot. (*N. javana* Enslin).
Java, Sumatra, Tonkin, Formosa, New Guinea (Central mountains).
Genus *Neothrinax* Enslin 1912.

— The hind metatarsus much shorter than the following tarsal joints combined.[158] Claws longish; the subapical tooth somewhat basally of the middle.[40] The inner margins of the eyes almost straight and rather strongly converging downwards.[129] The presternal furrows distinct, but not deep. Basalis and the 1st recurrent vein subparallel. The anterior margin of clypeus acute and almost truncate; that of labrum deflexed downwards and seems accordingly incrassated. (*Stromboceros atratus* Enslin).
Formosa. Genus *Pseudostromboceros* Takeuchi 1941.
(*Formosibia* Malaise 1944).

75. Antennal flagellum long and slender, almost filiform,[142B] or somewhat incrassated in the middle.[97] Malar space of distinct length. Pedicellus twice as long as it is broad at the apex. The lateral supra-antennal pits connected with the antennal sockets with more or less distinct furrows.[126] 76

— Flagellum short, inconsiderably longer than head and thorax combined;[93] if longer, then they are compressed and strongly incrassated towards the middle. Pedicellus one half longer than it is broad at the apex, if not differently stated. The lateral supra-antennal pits completely separated from the antennal sockets. 78

76. The inner margins of the eyes straight and quite parallel.[124] Frontal area surrounded by carinas acute as the edge of a knife,[83] and similar cross-ridges extending laterally from it almost to each eye; the face angularly refracted from these cross-ridges. Basalis strongly converging with the 1st recurrent vein.[10] Anellan cell petiolate. The 3rd antennal joint subequal in length with, or somewhat shorter than the 4th one. The supra-antennal pits poorly developed owing to the cross-ridges and the wanting supra-antennal tubercles. Scapus pale, and likewise a spot on each mesopleurum. Claws.[36] (*B. viridipes* Cameron).
Assam, Burma, Formosa. Genus *Busarbia* Cameron 1899.
(*Anapeptamena* Rohwer and Takeuchi nec Konow).

— The inner margins of the eyes distinctly converging downwards. Face not refracted and acute cross-ridges wanting; the frontal area without surrounding ridges, or the ridges are not acute.[129] 77

77. The anterior margin of clypeus roundly incised.[103] Labrum concavely depressed towards the apex.[110] Frontal area sharply limited. The supra-antennal pit very large and deep, and the carina shaped tubercles lateral of it fused together with the frontal ridges.[125] The hind orbits sharply carinated up to the posto-

cellar area.[143] Basalis and the 1st recurrent vein subparallel. Anellan cell petiolate. Flagellum somewhat incrassated in the middle. (*Stromboceros koebele* Rohwer).
Japan, Sachalin. Genus *Arbusia* Malaise 1944.

— Clypeus truncate or faintly subemarginated.[121] Frontal area U-shaped in outline, as a raised flat area, distinctly defined, but not by ridges.[133] The middle supra-antennal pit very shallow and indistinct, laterally not defined by tubercles; the lateral pits connected with the antennal sockets by shallow and indistinct antennal furrows. The hind orbits carinated only below. Flagellum filiform.[142B] The anellan cell either sessile or shortly petiolate.[134] Small insects. (*A. birmanica* Malaise).
Burma-Yünnan frontier. Genus *Apeptamena* Malaise 1944.

78. The lateral supra-antennal pits subequal in size with the ocelli. 79

— The lateral supra-antennal pits extremely minute, almost wanting. The antennal sockets above with distinct, but very short and gradually disappearing antennal furrows.[126] Face above the antennae evenly convex to the hind margin of the head;[126] frontal area not defined. The middle supra-antennal pit deep and punctiform. The lateral postocellar furrows fine and curved.[144] The inner margins of the eyes almost straight and faintly converging downwards.[131] Malar space linear. Front wings with 4 cubital cells. (*C. shanensis* Malaise).
Burmese Southern Shan States. Genus *Claguea* Malaise 1944.

79. Flagellum short and filiform, hardly tapering towards the apex. Anellan cell petiolate. The inner margins of the eyes distinctly converging downwards even in the middle. Frontal area rather distinct in outline. Mandibles not strongly bent. Small stout, shining insects. (*Tenthredo* [*Allantus*] *cinereipes* Klug).
Palaearctic. Genus *Melisandra* Benson 1939. (*Birka* Malaise 1944).

— Antennae longer by one fifth than head and thorax combined, compressed, and strongly tapering towards the apex. The faintly S-curved inner margins of the eyes parallel in the middle. Frontal area not or only indistinctly limited. At least scutellum punctured. The basal bend of cubitus mostly with a short spurious stump.[141] Anellan cell sessile. Claws.[31] (*Stromboceros phaleratus* Konow).
Burma, China. Genus *Bocerus* Malaise 1944.

80. Antennae very stout, the joints 4—8 triangularly protruding beneath, and the antennae seems accordingly plumply serrated beneath.[154] In the front wings, the 3rd cubital cell very long and the anal cross-vein almost punctiform; the hind wings may have one or two closed middle cells. Claws simple. The hind metatarsus much shorter than the following tarsal joints combined.[158] Strongly metallic blue insects. (*S. roepkei* Enslin).
Java, Sumatra. Genus *Salatigia* Enslin 1911.

— Antennae not strikingly serrated beneath. 81

81. Basalis and the 1st recurrent vein parallel or subparallel.[6, 98] 92

— Basalis and the 1st recurrent vein strongly convergent.[4, 7] The hind wings with one or two closed middle cells;[15] in the ♂ frequently with marginal vein.[16, 17] 82

82. The subapical tooth or the basal lobe of the claws shorter than the apical tooth.[35, 62, 70] 83

— The subapical tooth of the claws at least as long as the apical one or the claws are simple.[19, 21, 41, 51, 52] Mesopleura with distinctly separated presterna.[90] 144

83. Claws without subapical tooth, but the protruding basal lobe may be mistaken for one.[25, 44] Mandibles subsymmetric, each of them tridentate.[108] 86
— The subapical tooth at the middle of the claws, thus removed from the base.[70] 84
84. Malar space linear.[106, 131] 88
— Malar space about as long as the diameter of an ocellus.[12] Body very slender. The extreme base of cubitus roundly bent. The hind wings with 2 closed middle cells and sessile anellan cell.[6] Presterna distinct. Antennae long and gradually tapering towards the apex, distinctly compressed; the 3rd joint shorter than the 4th one; pedicellus broader than it is long. Frontal area surrounded by abruptly raised carinas.[129] 85
85. Front wings with 4 cubital cells. Scutellum with isolated, deep punctures on the hind apex laterally. (*C. albooralis* Malaise).
Burma-Yünnan frontier at 2000 m Genus *Canonarea* Malaise 1947.
— Front wings with only 3 cubital cells, the 1st cubital cross-vein wanting. Scutellum impunctate. (*T. compressicornis* Malaise).
Burma-Yünnan frontier. Genus *Trearea* Malaise 1947.
86. Narrow but distinct presterna separated from the mesopleura. Pedicellus longer than scapus.[155] Malar space linear. In the front wings the 2nd recurrent vein straight,[148] in the hind wings the anellan cell sessile and one or two closed middle cells may occur or be entirely wanting in the same species; in the ♂, the hind wings sometimes with marginal vein. (*C. sebetia* O. Costa= *Tenthredo* [*Allantus*] *cinxia* Klug).
Cosmopolite (from Europe), Burma, China, Japan.
Genus *Caliroa* O. Costa 1859.
(*Eriocampoides* Konow 1890, *Periclistoptera* Ashmead 1898).
— Presterna wanting. Pedicellus shorter than scapus. Malar space almost as long as the diameter of an ocellus.[108] Clypeus truncate. The 2nd recurrent vein S-curved.[149] The anellan cell petiolate. 87
87. Claws with a subapical tooth.[43] Head narrowing behind the eyes.[143] The hind wings with one closed middle cell and the radiellan cell with a faint indication of an appendiculate cell at the apex.[8] (*Selandria rosae* Harris=*Tenthredo aethiops* Fabricius).
Holarctic. Genus *Endelomyia* Ashmead 1898.
— Claws with a large triangular basal lobe.[35] Head somewhat enlarged behind the eyes.[139] The hind wings without closed middle cell, and the radiellan cell acute at the apex.[7] (*A. carbonaria* Malaise).
Tonkin. Genus *Arla* Malaise 1957.
88. Basalis joins subcosta a distance from the origin of cubitus that is shorter than the length of nervulus;[14] if subequal in length, then the insect is metallic blue. 89
— Basalis removed from the origin of cubitus about as far as the length of nervulus, is strongly curved, and strongly converging with the 1st recurrent vein;[4] the cross-vein of the anal cell joins brachium at an angle of 60°—70°. The hind wings with 2 closed middle cells. The general direction of the inner margins of the eyes distinctly converging downwards. The hind orbits not carinated.[139] Frontal area not defined although convexely elevated.[142A] Clypeus truncate. The 3rd antennal joint almost twice as long as the 4th one. Claws with a large subapical tooth.[62] (*B. albipes* Malaise).
Burma, Assam. Genus *Birmindia* Malaise 1947.

89. Elongate, 8—9 mm long insects. The inner margins of the eyes almost straight, extremely faintly converging downwards.[125] The cross-vein of the anal cell not strongly oblique, joins the brachium at an angle of about 70°. The hind wings with 2 closed middle cells in both sexes. Antennae with antennal organs; scapus distinctly longer and broader than pedicellus; the 3rd antennal joint longer than the 4th one. Clypeus emarginated anteriorly.[102] (*Rohweria flavipennis* Malaise).
Mexico. Genus *Rohwerina* new name.
(*Rohweria* Malaise 1935 nec Fouts 1925).

— Plump insects, 3—6 mm long. The general direction of the inner margins of the eyes parallel in their upper part. Asiatic or Indo-Malayan insects. 90

90. Pedicellus as long as or longer than scapus. The anterior margin of clypeus roundly incised.[103] Claws [26, 45] 91

— Pedicellus distinctly shorter than scapus. Clypeus roundly truncate.[76] The inner margins of the eyes parallel above, converging towards the mouthparts below. The cross-vein of the anal cell joins brachium at an angle of about 60°. Colour without metallic lustre. (*P. athalioides* Konow).
Siberia, Manchuria, Japan. Genus *Poppia* Konow 1904.

91. The hind orbits distinctly carinated.[143] The inner margins of the eyes almost parallel.[124] The anal cell with almost perpendicular cross-vein; the hind wings with 2 closed middle cells.[11] Frontal area distinct in outline. Colour without metallic lustre. Claws.[45] (*B. himalaiensis* Rohwer).
The Himalayas, Sumatra, Java, Formosa, Vladivostok.
Genus *Busarbidea* Rohwer 1915.
(*Canoniades* Forsius 1929).

— The hind orbits carinated only below; on the other hand, just along the hind margins of the eyes a furrow composed of connected punctures; the inner margins of the eyes very faintly converging downwards.[131] The cross-vein of the anal cell joins brachium at an angle of about 40°. In the ♂, the hind wings with marginal vein.[17] Frontal area not defined.[126] Distinctly metallic blue insects. Claws.[26] (*N. metallica* Rohwer).
Java, Sumatra. Genus *Neopoppia* Rohwer 1912.
(*Pseudopoppia* Forsius 1925).

92. The hind wings with one or two closed middle cells.[15, 142C] 132

— The hind wings without closed middle cells.[7] 93

93. Claws tridentate [59, 84] (one apical and two subapical teeth close together) and, in addition, sometimes a broad basal lobe. Malar space linear or wanting. 94

— Claws with or without subapical tooth, but not tridentate.[22, 31, 41] 97

94. All claws tridentate without basal lobe.[59, 84] 95

— Only the claws of the hind legs tridentate and only in the ♂,[84] in the ♀ all,[85] and in the ♂ the claws of the 4 anterior legs with acute-angeled basal lobe and in addition a subapical tooth behind the longer apical one. In the ♂, the hind wings with [17] or without marginal vein and without closed middle cell.[7] The 3rd antennal joint distinctly longer than the 4th one; pedicellus as long as, or almost longer than scapus. Clypeus truncate. 131

95. The hind wings with marginal vein in the ♂;[17] the ♀ either unknown or with closed middle cell. Head and thorax with long, sparce, and bushy hair. The hind metatarsus much shorter than the following tarsal joints combined.[158] The 3rd antennal joint longer than the 4th one. 96

— The hind wings neither with marginal vein nor with closed middle cells.[7]

Head and thorax without strikingly long hair. The 3rd antennal joint more or less distinctly shorter than the 4th one; pedicellus twice as long as it is broad at the apex; antennae with antennal organs. Stigma of the front wings very narrow and gradually drawn out into an acute apex. The hind metatarsus almost longer than the following tarsal joints combined and somewhat flattened. (*A. decora* Konow).

Southern Brazil, Peru. Genus *Acidiophora* Konow 1899.

96. Clypeus truncate. The inner margins of the eyes subparallel.[124] Mandibles long and slender. Pedicellus longer than scapus. Scutellum with some separate large punctures. ♀ unknown. (*T. reedi* Rohwer).

Chile. Genus *Trichotaxonus* Rohwer 1910.

— Anterior margin of clypeus triangularly incised in the middle. The inner margins of the eyes converging downwards. Antennae short and stout. Presterna wanting. The postocellar area strongly convex. Scutellum impunctate. Mandibles subsymmetric, not specially slender, and the basal lobe with two blunt teeth. 155

97. The hind wings without marginal vein.[15] 100

— The hind wings with marginal vein in the ♂.[17] In the front wings the anal cell with strongly oblique cross-vein.[7] Presterna wanting. 98

98. In the hind wings of the ♂ a small triangular middle cell comes into existence between the marginal vein, the mediellan vein, and nervellus; it is removed from the petiolate anellan cell. In the front wings the cross-vein of the anal cell is very long, strongly oblique, and placed distal of the middle.[5, 14] Postscutellum very large, only twice as large as it is long in both sexes. From Chile. 161

— No small triangular middle cell separated by nervellus and the marginal vein. 99

99. The anterior margin of clypeus extremely deeply and broadly, semi-circularly incised;[12, 105] clypeus sometimes much shorter in the middle than the length of its lateral teeth.[110] The long cross-vein of the anal cell placed apically of the middle.[14] The hind orbits long. Malar space of distinct length. 140

— Clypeus almost truncate, in the middle with an hardly discernible triangular incision.[136] The cross-vein of the anal cell extremely short and placed basally of the middle.[147] The hind orbits very short and strongly narrowing backwards.[144] Malar space linear. Claws without basal lobe, the subapical tooth as long as the apical one and placed behind it.[64] Antennae faintly incrassated in the middle; pedicellus longer than it is broad and almost as long as scapus. (*Ch. xantha* Benson).

Australia (N.S.W.). Genus *Cheilophleps* Benson 1938.

100. The basal vein joins subcosta removed from the origin of cubitus a distance subequal to the length of the 1st existing cubital cross-vein.[4] The cross-vein of the anal cell not strongly oblique.[11] Mandibles asymmetric, the left one with a broad basal lobe, the right one sickel-shaped.[12, 72, 126, 160] 101

— The basal vein joins subcosta at, or close to the origin of cubitus.[134] 103

101. The front wings with only 3 cubital cells (the 1st cubital cross-vein wanting).[98, 132, 151] Body long and slender. Antennae long and slender, faintly incrassated before the apex; pedicellus longer than it is broad at the apex. The outer margin of the mandibles bent at a right angle;[69] the right mandible quite simple.[12] The distance between the blunt lateral teeth of clypeus at least twice as long as the depth of the incision.[103, 106] 102

— Front wings with 4 cubital cells. Body plump. Pedicellus much broader than it is long.[96] The outer margin of the mandibles roundly bent, but less than a right angle; the right mandible with a small distinct basal tooth. The distance between the long, pricker-shaped lateral teeth of clypeus only on half longer than the depth of the incision. The stout antennae as long as head and thorax combined and gradually tapering towards the apex. Claws with a minute subapical tooth near the apex. (*Dinax jakowleffi* Konow).
Siberia. Genus *Adamas* Malaise 1945.
(*Dinax* Konow 1897 nec Gistl 1848).

102. Abdomen more or less strongly constricted at the 2nd tergite. Mesopleura strongly and coarsely punctured. The subapical tooth of the claws shorter than the apical one.[62] The apex of the front wings mostly strikingly infuscated around the cubital vein and the entire insect mimicrying a small vespidae both in appearance and behavior. (*A. klugii* Burmeister).
North- and Further India, Indonesia, South China, Formosa, The Pilippines.
Genus *Athlophorus* Burmeister 1847.
(*Emphytoides* Konow 1898).

— Abdomen not constricted, but extremely slender. Head and thorax impunctate. The subapical tooth of the claws much longer than the apical one.[21] Wings not infuscated. (*Athlophorus formosanus* Enslin).
Formosa, Burma. Genus *Hemathlophorus* Malaise 1945.

103. In the hind wings nervellus perpendicular to the mediellan vein and mostly also to the petiole of the always petiolate anellan cell.[4, 11] Claws with a subapical tooth, but without distinct basal lobe.[40, 45] 104

— Nervellus oblique to both the brachiellan and to the mediellan veins.[98, 130] Insects with elongate body. 107

104. Malar space almost twice as long as the diameter of an ocellus.[125] The abdominal tergites with whitish, cutaneous, paired spots.[153] The subapical tooth of the claws minute, almost inconspicuous.[41] The 3rd cubital cell one half longer than the 2nd one. (*Strongylogaster multicolour* Norton).
Holarctic. Genus *Parataxonus* Macgillivray 1908.
(*Leucempria* Enslin 1913).

— Malar space as long as the diameter of an ocellus or shorter.[133] The abdominal tergites without paired cutaneous spots. If 4 cubital cells are present, the 3rd one is almost shorter then the 2nd one. Antennae stout, hardly longer than head and thorax combined; flagellum subincrassated towards the middle. 105

105. The front wings with 4 cubital cells. In the hind wings, nervellus straight and almost perpendicular also to the mediellan vein.[4] The hind orbits carinated only near the mandibular basis. 106

— The front wings with only 3 cubital cells, e.g. the 1st cubital cross-vein wanting. The acute anterior margin of clypeus truncate in the middle, and with acutely angled lateral teeth.[133] Head faintly carinated behind almost up to the postocellar area. Antennae stout, as long as abdomen, with antennal organs. Nervellus curved, oblique towards the anellan petiole, but almost perpendicular to the mediellan vein.[134, 140] Sturdy insects. Claws.[42] (*O. albinigripes* Malaise).
Burmese Southern Shan States, Burma-Yünnan frontier.
Genus *Ocla* Malaise 1957.

106. Eyes normally protruding, semicircular in outline when seen from above. Head narrowing behind the eyes. Claws with a rather long subapical tooth and

in addition with a hidden basal lobe, distinct only after preparation.[54] Antennal flagellum distinctly compressed. Clypeus very deeply, semicircularly incised with long, acute lateral teeth.[96] Mandibles subsymmetric. (*M. rufithorax* Malaise).

The Himalayas, Assam, Burma. Genus *Mallachiella* Malaise 1934. (*Malachiella* Malaise 1934) Err.typ.

— Eyes hardly protruding, less then semicircular in dorsal view. Head strongly enlarged behind the eyes, almost trapezoid in dorsal view. Claws with a small triangular subapical tooth and no basal lobe.[87] Antennae not compressed. Clypeus quartercircularly incised and with blunt lateral teeth. (*H. simini* Malaise).

Turkestan (Semiretche). Genus *Heptapotamius* Malaise 1935.

107. Front wings with 4 cubital cells.[75] 108

— Front wings with only 3 cubital cells; the 1st cubital cross-vein wanting.[4, 98] Clypeus roundly incised.[100] 111

108. The apical half of antennae very strongly compressed.[13] 109

— Antennae not specially compressed.[93, 97] 119

109. The 3rd antennal joint distinctly shorter than the 4th one. Both ♂ and ♀. .. 110

— Only ♂ (in the ♀ the hind wings with 2 closed middle cells). The 3rd and 4th antennal joints subequal in length.[13] Scutellum bluntly pyramidally elevated. Mesopleura very coarsely punctured. Pedicellus longer than it is broad at the apex. The subapical tooth of the claws shorter than the apical one.[18, 86] 140

110. The subapical tooth of the claws much longer than the apical one.[21] Head and mesopleura not, or only indistinctly punctured. Pedicellus much longer than it is broad at the apex. 127

— The subapical tooth of the claws shorter, but mostly broader, rarely also longer than the apical one.[62] Pedicellus as long as it is broad at the apex. Face below the antennae and mesopleura densely punctured, opaque. The left mandible with a distinct subapical tooth close to the apex and in addition with a large basal lobe.[160] 129

111. The hind orbits distinctly carinated at least below.[143] In the front wings the anal cross-vein mostly more oblique than 80° (exception *Tritobrachia*). .. 112

— The hind orbits not carinated. Head narrowing behind the eyes.[144] Mandibles subsymmetric, and each one with a subapical tooth near the apex.[80] Clypeus with a faint indication of a dorso-ventral blunt ridge along the middle, the acute anterior margin with 3 indistinct and very blunt teeth. The anal cross-vein not very oblique, about 80° to 85°. Claws.[63] (*H. sinobirmanus* Malaise).

Burma-Yünnan frontier. Genus *Hemiphytus* Malaise 1947.

112. Mandibles asymmetric, the right one simple and sickel-shaped, the left one with a large and broad subapical tooth near the base.[12, 72, 81] Clypeus, if not stated differently, with an horizontal cross-elevation separated from the supraclypeal area by a furrow or depression.[107, 109] Head not enlarged behind the eyes. 114

— Mandibles subsymmetric, not strongly bent.[125] Clypeus not horizontally refracted by a cross-elevation.[104, 111, 113] 113

113. Head subparallel close behind the eyes, then roundly narrowing;[139] head and thorax impunctate, shining. Each mandible with only one subapical tooth.[67] The subapical tooth of the claws shorter than the apical one.[40, 42] Antennae not strikingly incrassated. 105

— Head very strongly dilated behind the eyes; especially face, and mesopleura densely and coarsely punctured, opaque. Mandibles with 2 distinct subapical teeth.[115] Claws with a small basal lobe, which is indistinct on the 4 hind feet; the apical and subapical teeth subequal in length.[64, 92] Antennae strongly incrassated towards the middle. The postocellar area with a broad and rather deep longitudinal middle furrow. Clypeus quarter-circularly emarginated,[72] convex, and a supra-clypeal furrow entirely wanting. The hind metatarsus shorter then the following tarsal joints combined. (*Allantus kolthoffi* Forsius).
China (Kiang-su). Genus *Kjellia* Malaise 1947.

114. The anellan cell sessile.[15] Malar space a little shorter than the diameter of an ocellus.[129] 115

— The anellan cell petiolate, the petiole of distinct length, but sometimes very short, almost punctiform.[7, 134] 116

115. The 2nd cubital cell more than twice as long as it is broad at the apex and almost longer than the 1st one.[132] Scutellum acutely elevated, punctured, opaque. Mesopleura very coarsely punctured. The 4th antennal joint longer than the 3rd or the 5th one. The apical and subapical teeth of the claws subequal in length.[62] (*M. alboterminalis* Malaise).
Burma (Chin Hills, 2000 m). Genus *Mimathlophorus* Malaise 1947.

— The 2nd cubital cell only little longer than the extremely long 2nd cubital cross-vein, and the 1st cubital cell more than twice as long as the 2nd one. Scutellum subconvex, like the mesopleura impunctate and strongly shining. The 3rd, 4th, and 5th antennal joints subequal in length. The subapical tooth of the claws distinctly longer than the apical one.[21] Very slender insects. (*L. tricolor* Malaise).
Burma-Yünnan frontier, 2000 m. Genus *Linomorpha* Malaise 1947.

116. The subapical tooth of the claws much longer and broader than the apical one.[20, 52] The cross-vein of the anal cell joins brachium at an angle of about 60°.[134] 118

— Claws with a basal lobe hard to see, and a subapical tooth shorter than the apical one.[23, 26] The 3rd antennal joint longer than the 4th one; flagellum tapering towards the apex. Clypeus neither inflated, nor is the acute anterior margin deeply incised, but approximately quarter-circularly emarginated.[72] The supra-clypeal furrow broad, shallow, and rather indistinct. 117

117. Antennae longer than abdomen. Nervulus joins medius at the basal fifth of the discoidal cell. On wings late in autumn. (*Emphytus abdominalis* Lepeletier).
Europe, China, Ussuri, Japan. Genus *Apethymus* Benson 1939.

— Antennae shorter than abdomen. Nervulus joins medius basally of the middle of the dicoidal cell.[151] On wings in summer time. (*Tenthredo* [*Dolerus*] *cinctus* Linnaeus).
Holarctic, China, Formosa, North Borneo(?).
Genus *Emphytus* Klug 1815. (S. strictus).
(*Allantus* Rohwer 1911 nec Panzer 1805*).

---

* Rohwer's proposition (Ent. News XXII, p. 218, 1911) that the generic name *Emphytus* Klug 1813 should be replaced by *Allantus* Panzer 1801 nec Jurine 1807, because *Tenthredo togata* should be the type of *Allantus*, has caused much confusion, especially as such authors as Enslin and Takeuchi were induced to trust and follow him. According to the Rules of Zoological Nomenclature, Article 30, II, e, the following species are excluded from consideration in determining the types of genera. The "Rules" reads:
1. Species which were species inquirendae from the standpoint of the author of the generic name at the time of its publication.

Two subgenera may be distinguished:

A/ Nervulus and basalis interstitial or almost so.[98] (*Tenthredo togatus* Panzer). Holartic. Subgenus *Synemphytus* Malaise 1945. (*Allantus* Enslin 1913 and Takeuchi 1952 nec Panzer 1805).

B/ Nervulus joins medius exactly in the middle of the discoidal cell or just apically of the middle. Claws.[26] (*Emphytus coloradensis* Weldon). Holarctic. Subgenus *Protemphytus* Rohwer 1909. (*Emphytina* Rohwer 1911, *Simplemphytus* Macgillivray 1914).

118. Clypeus very deeply and broadly, semi-circularly incised with acute lateral teeth.[12] Antennae shorter than abdomen, strongly and gradually tapering towards the apex, the 3rd and 4th joints subequal in length.[93] The hind orbits about as long as the maximal width of an eye. The postocellar area longer than it is broad.[83] Malar space fully as long as the diameter of an ocellus. The hind metatarsus as long as the following tarsal joints combined. Claws with basal lobe.[20] (*T. fulvus* Malaise). Southern China. Genus *Taxonemphytus* Malaise 1947.

— Clypeus as if strongly inflated, its anterior margin only quarter-circularly incised.[81] Antennae long and slender, not compressed, faintly incrassated towards the apex, and with antennal organs; the 3rd joint shorter than the 4th one, as 3 : 5. The hind orbits very short, only one third as long as the maximal width of an eye. The postocellar area broader than it is long. Malar space a little shorter than the diameter of an ocellus. The hind metatarsus little longer than the following tarsal joints combined. Claws without basal lobe.[52] Mandibles asymmetric. (*T. tenuicornis* Enderlein). Sumatra, W. Java, Singapoor. Genus *Tritobrachia* Enderlein 1919.

119. Claws with a broad basal lobe.[20, 44, 61] 120

— Claws without basal lobe.[127] 121

120. Claws not only with a basal lobe, but also with a subapical and an apical tooth.[20] The cross-vein of the anal cell strongly oblique [7] (exception the genus *Darjilingia*), and its angle with brachium not more obtuse than 30°.[14] 125

— Claws without subapical tooth, only with an apical one and the basal lobe.[25] The left mandible with a long, slender, and isolated basal tooth.[114] 158

121. Claws simple, without subapical tooth.[41] Malar space as long as, or longer than pedicellus. Mandibles subsymmetric, each of them short, broad, slightly roundly bent, and with a distinct basal tooth.[124] Antennae long, filiform, and the 3rd and 4th joints subequal in length.[142B] The hind orbits faintly carinated, but only below. Head and thorax impunctate and shining. Frontal area roundly elevated, flat above. The cross-vein of the anal cell faintly oblique, almost perpendicular. Small insects of 4—6 mm length. (*Taxonus nigritarsis* Cameron). The Himalayas (Simla), Burma-Yünnan frontier. Genus *Ungulia* Malaise 1961.

— Claws with a subapical tooth.[127] Antennae not filiform. 122

122. Mandibles asymmetric and bent at an almost right angle, the right one simple,

---

2. Species which the author of the genus doubtfully referred to it.

Panzer referred in 1801 only doubtfully *Tenthredo togata* Fabricius to the generic name *Allantus* Jurine, but accepted it positively in 1805 for *Tenthredo lateralis* Fabricius. (Comp. facsimile reproduced by Malaise in Opuscula Ent., Suppl. IV, p. 77, Lund 1945.

The statement of Neave (Nomenclator Zool., London 1939) that Leach 1817 should be the author of the name *Emphytus* instead of Klug 1815 is erroneous. (Malaise, Arkiv f. Zool., 39 A, nr. 8, p. 22, 1947).

the left one with a large subapical tooth.[12] Antennae stout, distinctly compressed towards the apex; pedicellus conical, more or less distinctly longer than it is broad at the apex. Mesopleura impunctate and without presterna. 124

— Both mandibles with subapical tooth, subsymmetric, and only slightly roundly bent.[125] Clypeus roundly or angularly emarginated anteriorly, sometimes with a minute middle tooth; its lateral teeth at least as broad as their own length, and they are shorter than the length of clypeus in the middle. Nervellus joins always the long petiole of the anellan cell. The subapical tooth of the claws quite minute.[127] The hind orbits more or less distinctly carinated.[143] 123

123. Pedicellus much longer than it is broad at the apex, at 3 : 2. Malar space about as long as the diameter of an ocellus. The cross-vein of the anal cell placed in the apical third of the cell, and joins brachium at an angle of about 60° in Palaearctic species, and about 45° in nearctic ones. (*A. fulvipes* A. Costa = *Tenthredo glabrata* Fallén).

Holarctic. Genus *Ametastegia* A. Costa 1882.

(*Aphilodyctium* Ashmead 1898, *Aomodyctium* (Ashmead) Rohwer 1911, *Unitaxonus* Macgillivray 1921).

— Pedicellus hardly as long as it is broad at the apex, about as long as the malar space. The cross-vein of the anal cell placed in the apical fourth of the cell, is not strongly oblique, and joins brachium at an angle of about 80°.[11] (*O. pallidipes* Malaise).

The Burmese Shan States and the Burma-Yünnan frontier, 1500—2000 m.

Genus *Oralia* Malaise 1961.

124. Clypeus almost inflated, its anterior margin deeply semi-circularly to roundly rectangularly incised and its slender lateral teeth subequal in length to clypeus itself between them.[126] The hind orbits about as long as the width of an eye, they are not, or only indistinctly carinated behind.[139] The subapical tooth of the claws almost as long as the apical one.[128] Nervellus joins the petiole of the anellan cell.[4, 7] The cross-vein of the anal cell oblique, and joins brachium at an angle of about 45°.[14] The 3rd antennal joint hardly longer than the 4th one. (*C. sino-birmana* Malaise).

Burma-Yünnan frontier and the Burmese Southern Shan States.

Genus *Clypea* Malaise 1961.

— Clypeus near the base with a bluntly elevated horizontal cross-ridge (as in *Emphytus*); the anterior margin of clypeus shallowly roundly emarginated.[109] The hind orbits sharply carinated, and they are longer than half the width of an eye. The subapical tooth of the claws much shorter than the apical one.[57] The radiellan cell of the hind wings petiolate at the apex; the anellan cell sessile, and nervellus joins the anellan cell itself.[132] The 3rd antennal joint almost shorter than the 4th one. (*E. apicimacula* Malaise).

Burmese Southern Shan States, 1500 m.

Genus *Emphystegia* Malaise 1961.

125. The front wings with 4 cubital cells, and the 2nd of these receives both recurrent veins in the ♀; in the ♂, the 2nd cubital cross-vein interstitial with the 2nd recurrent vein. Postscutellum large, but still transvers although only twice as broad as it is long. Clypeus roundly, angularly incised anteriorly.[156] Malar space linear, but of distinct length. Antennae almost filiform, longer than abdomen. Claws.[61] From Chile. 158

— The 2nd and 3rd cubital cells receive each one recurrent vein. Flagellum of antennae more or less distinctly incrassated towards the middle. 126

126. The subapical tooth of the claws shorter than the apical one, rarely subequal in length.[34] 128

— The subapical tooth of the claws much longer and broader than the apical one; the basal lobe very large.[21] 127

127. Antennae not longer than head and thorax combined, with antennal organs, and flagellum not compressed, but incrassated towards the middle. Malar space quite linear. Clypeus very shallowly and broadly emarginated, almost truncate.[101] (*N. africana* Enslin=*Netroceros calo* Konow).
The Ethiopian region. Genus *Neacidiophora* Enslin 1911. (*Netrocerina* Enderlein 1919).

— Antennae longer than abdomen, uniformly thick, flagellum distinctly compressed and without antennal organs, the 3rd and 4th antennal joints subequal in length.[13] Malar space longer than half the diameter of an ocellus. Clypeus semi-circularly incised, and with acutely angled lateral teeth.[12] The cross-vein of the anal cell joins brachium at an angle of about 60°. Mesopleura shining without distinct punctures. The hind metatarsus distinctly compressed, and subequal in length to the following tarsal joints combined. The hind wings never with closed middle cell. (*Taxonus gribodoi* Konow).
The Himalayas, Assam, Burma, Formosa? Genus *Darjilingia* Malaise 1934.

128. Clypeus very broadly and deeply incised.[142, 160] The basal lobe of the claws almost imperceptible.[23, 63] Head sharply carinated behind.[143] Frontal area distinct. Orbits behind the middle of the eyes almost as long as half the length of an eye. 129

— Clypeus truncate or angularly roundly protruding. The basal lobe of the claws very large.[34] Frontal area not limited.[131] Malar space linear. Head not carinated behind; the orbits behind the middle of each eye very short, only one eighth of the length of an eye. 130

129. Antennae slender, as long as the abdomen, at the most faintly compressed. Claws.[23, 62] Malar space of distinct length. (*Taxonus rufocinctus* Norton).
North America, Japan, China, Formosa, Burma.
Genus *Parasiobla* Ashmead 1898. (*Polytaxonus* Macgillivray 1908).

— Antennae as long as the entire insect, the 4th and following joints very strongly compressed and flattened.[13] Malar space one half longer than the diameter of an ocellus. (*I. apicicornis* Malaise).
The Himalayas. Genus *Indostegia* Malaise 1934.

130. In the front wings the anal cell complete and closed, the anal vein accordingly not interrupted. The anterior margin of clypeus truncate or roundly protruding.[76, 131] The 3rd cubital cell longer on cubitus than on radius, both corners acute-angled. 131

— The posterior margin of the anal cell partly obliterate, and this cell appears accordingly to be petiolate as in the subfamily *Blennocampinae,* but the anal vein with a free, backwards directed stump.[149] The antennal furrows sharp. The anterior margin of clypeus truncate or almost truncate. Malar space entirely wanting. Antennae short and stout; pedicellus much longer than it is broad at the apex. (*A. thoracica* Rohwer).
Peninsular India. Genus *Allantopsis* Rohwer 1913.

131. Pedicellus almost longer than scapus and one half longer than it is broad at the apex; antennae almost uniformly thick, and subequal in length with the

abdomen. The claws of the hind legs tri-dentate in the ♂ only.[84, 85] (Compare nr. 94). (*H. nigriceps* Takeuchi).
Japan, Burma, The Himalayas (Simla).

Genus *Hemibeleses* Takeuchi 1929.

— Pedicellus only half as long as scapus and its length and width subequal; antennae short, strongly incrassated towards the middle. Saw-sheath long and acute in dorsal view, broad in lateral view.[73] Farce.[131] (*F. varipes* Takeuchi). Formosa, Assam, Burmese Shan States.

Genus *Formosempria* Takeuchi 1929.

132. The hind wings with only one closed middle cell.[142c] 151
— The hind wings with 2 closed middle cells.[15] 133
133. The cross-vein of the anal cell not very oblique, it joins brachium at an angle of 90° to 60°.[11, 98] Elongate insects. (If scutellum pyramidally elevated and with an acute longitudinal carina, compare nr. 139 *Xenapatidia*). 144
— The cross-vein of the anal cell strongly oblique, it joins brachium at an angle of 45° to 20°.[7] Labrum flat. 134
134. Elongate insects. Mandibles asymmetric, the left one with larger subapical tooth or teeth than the right one.[12] The middle lobe of mesonotum normal, convex, and with a longitudinal median furrow. The postocellar area longer than it is broad.[83] Head strikingly prolonged behind the eyes. Venation as in Taxonus.[14] 136
— Very strout insects. Mandibles subsymmetric, almost without subapical teeth.[137] 135
135. The anterior margin of clypeus deeply roundly incised.[96] Malar space as long as, or only little longer than half the diameter of an ocellus. Claws with a basal lobe, and the subapical tooth only little shorter than the apical one.[62] The posterior half of the mesonotal middle lobe depressed into a broad triangle with quite flat, impunctate bottom, and the ordinary sharp longitudinal middle furrow transferred into an acutely edged carina. (*Tenthredo ovata* Linnaeus).
Holarctic. Genus *Eriocampa* Hartig 1837.
(*Brachyocampa* Zirngiebl 1956).
— Clypeus truncate. Malar space as long as the diameter of an ocellus. Claws without basal lobe and only a minute subapical tooth.[87] Mesonotal middle lobe normal, subconvex, and with a dividing longitudinal middle furrow. (*E. subtruncata* Takeuchi).
Japan. Genus *Eriocampopsis* Takeuchi 1952.
136. The left mandible with a long, acute, and quite isolated basal tooth, which is separated by a narrow incision to the very base.[114] The emargination of clypeus rather shallow, 4 to 6 times broader than the length of its blunt lateral teeth, if not stated differently. Antennae stout, faintly incrassated towards the middle. Malar space linear or entirely wanting. The inner margins of the large eyes very faintly converging downwards,[125] if not stated differently. Claws with a large basal lobe.[25, 34] 137
— The triangular to broadly rounded basal tooth of the left mandible separated only by a fold-shaped furrow, sometimes by a rather deep incision.[12, 69] The anterior margin of clypeus very deeply and broadly, almost rectangularly roundly incised, and the distance between its rather long lateral teeth hardly twice as long as the length of these teeth.[126] Malar space at least as long as half the diameter of an ocellus. The inner margins of the eyes almost subparallel.[124] 140

137. The subapical tooth of the claws placed somewhat lateral of the apical one.[34] The anal cell not constricted before the base. Scutellum subconvex, not pyramidally elevated. 138

— Claws without a subapical tooth.[25] 139

138. The 1st abdominal tergite (propodeum) without medial longitudinal seam because the membraneous posterior incision (blotch) reaches to the very basal limit of the segment. (*Xenapates affinis* Forsius).
Portugese East Africa, Peninsular- and Further India, China.
Genus *Neoxenapates* Forsius 1934.

— Propodeum with a longitudinal middle seam of distinct length. Clypeus extremely deeply, semicircularly incised, the lateral teeth much longer than clypeus in the middle.[105] The inner margins of the eyes rather distinctly converging downwards. (*Monophadnus bengalensis* Cameron).
North India, Burma. Genus *Allantidea* Rohwer 1912.

139. The hind orbits not carinated.[139] Scutellum convex, but not pyramidally elevated. Propodeum (1st tergite) of abdomen without longitudinal middle seam because the membraneous posterior incision (blotch) reaches to the base of the segment. The base of the anal cell variable, either with or without a constriction at the base of the cell. (*Dineura africana* Cameron).
Ethiopian. Genus *Xenapates* Kirby 1882.
(*Anataxates* Benson 1939).

— The hind orbits carinated below. Scutellum pyramidally elevated with an acute, longitudinal carina. The blotch of propodeum reaching only half-way to the base of the segment and there continued by a middle seam. The anal vein of the front wings distinctly curved near the base, and the anal cell accordingly constricted there.[6] (*X. tricolor* Malaise).
Tenasserim, Burmese Southern Shan States.
Genus *Xenapatidea* Malaise 1957.

140. Pedicellus orbicular in outline, as broad as, or broader than it is long.[96] Mesopleura coarsely punctured. Mandibles bi-dentate.[109] The hind metatarsus distinctly longer than the following tarsal joints combined. (*Allantus pinguis* Norton).
Nearctic. Genus *Dimorphopteryx* Ashmead 1898.

— Pedicellus longer than it is broad.[13] 141

141. Antennae slender, much longer than head and thorax combined, the 4 or 5 apical joints strongly compressed,[13] the 3rd and 4th ones mostly subequal in length. The hind metatarsus longer than the following tarsal joints combined. Claws.[18] (*Taxonus tricoloricornis* Konow).
Peninsular- and Further India. Genus *Indotaxonus* Malaise 1957.

— The flagellar joints more or less cylindric in outline, and if faintly compressed they are much less than twice as broad as they are thick. 142

142. The hind metatarsus distinctly longer than the following tarsal joints combined. 143

— The hind metatarsus subequal in length with the following tarsal joints combined.[159] Antennae only as long as head and thorax combined. (*Tenthredo* [*Allantus*] *nitida* Klug=*Tenthredo agrorum* Fallén).
Palaearctic, (Nearctic?). Genus *Taxonus* Hartig 1837.

143. Malar space shorter than the diameter of an ocellus. (*Strongylogaster aprilis* Say).
Nearctic. Genus *Strongylogasteroidea* Ashmead 1898.

— Malar space as long as the diameter of an ocellus. (*Strongylogaster pallipes* Say). Nearctic. Genus *Hypotaxonus* Ashmead 1898.

144. Claws simple or with a very minute subapical tooth.[41] (If longer, comp. nr. 150.[51]) Malar space longer than the diameter of an ocellus.[124, 125] 149

— Claws different.[25, 64] Malar space as long as, or shorter than half the diameter of an ocellus.[122] (Exception *Rhopographus*). The cross-vein of the anal cell almost perpendicular.[11] 145

145. Scutellum pyramidal with acute longitudinal middle carina. The hind orbits carinated below. 139

— Scutellum subconvex. 146

146. The 4th antennal joint longer than the 3rd one; flagellum filiform. Frontal area surrounded by sharply elevated, but not acute, narrow carinas.[129] ... 147

— The 3rd antennal joint longer than the 4th one. Claws with only one subapical tooth.[40, 64] The front wings with 4 cubital cells. Presterna distinct.[90] Slender, but not filiform insects. 148

147. Claws with a subapical tooth somewhat shorter than the apical one, and in addition there is an almost filiform 2nd subapical tooth further basally.[71] Saw-sheath.[74, 116, 117, 118] Extremely slender, almost filiform insects. (*C. inopinus* Konow).
Java, Sumatra, Further India. Genus *Canonias* Konow 1901.

— Claws with only one subapical tooth.[37] Insects of ordinary shape. The postocellar area and the temples strongly elevated along the posterior part of the head.[129] Basalis distinctly curved, but its general direction subparallel to the 1st recurrent vein.[130] Mesopleura with distinct presterna.[90] (*B. verticalis* Malaise).
Burma at the Yünnan frontier, 2000 m. Genus *Busarbina* Malaise 1961.

148. Antennae filiform. Abdomen not constricted near the base and of ordinary length. 91

— Antennae short and stout; flagellum incrassated towards the middle and somewhat compressed.[97] Abdomen extremely long, faintly constricted near its base, and incrassated before the apex. Basalis and the 1st recurrent vein subparallel. Malar space as long as the diameter of an ocellus, or faintly longer. Clypeus deeply, triangularly to roundly incised. Saw-sheath.[77] Claws long, the subapical tooth placed rather far behind the somewhat shorter apical one.[64] (*Rhoptroceros procinctus* Konow).
Malakka, Sumatra, Java, Formosa. Genus *Rhopographus* Konow 1899.
(*Rhoptroceros* Konow 1898 nec Ratzeburg 1846, *Jacobsoniella* Forsius 1929 nec Melichar 1914).

149. The longer of the apical spurs of the front tibiae bi-dentate and flattened. The 1st tergite (propodeum) divided by a longitudinal middle seam, but not deeply roundly incised, and without a large cutaneous blotch. 150

— Both apical spurs of the front tibiae thorn-like, not bi-dentate. Propodeum deeply roundly incised with a large whitish blotch. (*P. excectus* Conde= *Strongylogaster sharpi* Cameron).
Lettland, Scotland, Finland. Genus *Pseudohemitaxonus* Conde 1932.

150. Frontal area indistinct in outline, coarsely punctured. In the front wings, nervulus joins medius about the middle of the discoidal cell. Claws with a rather large subapical tooth.[51] Presterna indistinct. (*Tenthredo filicis* Klug).
Palaearctic. Genus *Pseudotaxonus* A. Costa 1894.
(*Polystichophagus* Ashmead 1898).

— Frontal area distinct. In the front wings, nervulus joins medius apically of the middle of the discoidal cell. Claws either without a subapical tooth, or it is extremely minute.[41] Presterna present. (*Taxonus dubitatus* Norton). Holarctic. Genus *Hemitaxonus* Ashmead 1898. (*Cockerellonis* and *Epitaxonus* Macgillivray 1908, *Sahlbergia* Forsius 1910, *Prototaxonus* Rohwer 1910, *Eriocampidea* (Ashmead) Rohwer 1911).

151. In the hind wings, the apex of the radiellan cell truncate, and with a large appendiculate cell; the radiellan cell itself is only 5 to 6 times as long as this appendiculate cell.[149] The front wings with 4 cubital cells, and the 3rd of these is longer than the two first ones combined; the cross-vein of the anal cell is more oblique than 45°. Head prolonged behind the ocelli. Frontal area not, or hardly limited. 152

— An appendiculate cell of the hind wings is either wanting, or it is quite minute, so that the radiellan cell is about 20 times longer then this appendiculate one, and the radiellan cell is not truncate at the apex. 153

152. The anal vein of the anal cell interrupted somewhat basally of the cross-vein,[149] and the cell accordingly appears almost petiolate as in the subfamily *Blennocampinae*,[146] but there the basal part of the vein is bent towards brachium and no remnant of the anal vein is directed basally. Malar space mostly shorter than half the diameter of an ocellus. Claws with a subapical tooth and a very large basal lobe.[34] (*A. solocicornis* Enderlein = *Monophadnus pilosus* Konow).
Further India, Sumatra, Java, Borneo, the Philippines. Genus *Ateloza* Enderlein 1919.

— The anal cell closed. Malar space quite linear. Claws with 3 acute teeth and in addition a blunt basal lobe. (*N. rufiventris* Konow).
Ethiopian. Genus *Netroceros* Konow 1896.

153. The anal cell constricted in the middle by an oblique, extremely short, almost punctiform cross-vein.[150] The front wings with 4 cubital cells. Malar space long, and the eyes removed from the base of the mandibles. Claws with only an indistinct subapical tooth, or they are simple.[41] Body oboval. 24

— The anal cell with long, oblique cross-vein;[7] if short, then the malar space wanting.[131] 154

154. Malar space longer than half the diameter of an ocellus. Presterna wanting. 163

— Malar space shorter than half the diameter of an ocellus.[12] The posterior part of the head mostly somewhat prolonged. The front wings with 4 cubital cells. 155

155. Claws not 3-dentate.[40, 47, 55, 56, 61] 156

— Claws tridentate without basal lobe.[59] Head and thorax with long, sparce, week, but erect bushy hair. The not acute anterior margin of the almost flat clypeus triangularly incised in the middle.[156] Antennae rather stout, as long as head and thorax combined. The postocellar area strongly convex. Presterna wanting. The front wings with 4 cubital cells, the 2nd and 3rd of these receive each a recurrent vein. The hind metatarsus shorter than the following tarsal joints combined. Saw-sheath.[58] (*Netroceros solox* Enderlein).
Chile. Genus *Kuscheliа* Malaise 1949.

156. Claws with a basal lobe.[34, 44, 49, 55, 56] 157

— Claws gradually merging into the base without a basal lobe; the subapical tooth short, straight, and placed half-way from the very long and slender apical tooth.[70] Malar space liner, or entirely wanting. Very stout insects without

metallic lustre. Head strongly narrowing and also prolonged behind the eyes. Antennae short and stout, but not compressed; pedicellus conical and as long as scapus. Presterna wanting. The hind metatarsus much shorter than the following tarsal joints combined.[158] (*M. malayana* Forsius).

Malaya, Java. Genus *Malaisea* Forsius 1933.

157. Claws without a subapical tooth and only with the acutely angled basal lobe in addition to the apical tooth.[25] Clypeus convex and very short in the middle, because its anterior margin is extremely broadly and deeply incised so that only two acute teeth remain lateral of the incision.[114] The left mandible with a long and slender basal tooth.[114] Antennae shorter than abdomen, incrassated towards the middle; scapus and pedicellus much longer than they are broad. Presterna distinct, but very narrow. The hind metatarsus hardly longer than the following tarsal joints combined.[159] Malar space quite linear. (*T. pentagonica* Malaise).

Japan. Genus *Takeuchiella* Malaise 1935.

— Claws with a subapical tooth in addition to the apical one and a basal lobe.[34, 49, 56, 61] 158

158. The mostly large basal lobe of the claws sharply separated by a deep incission from the apical and the subapical teeth, that are placed lateral of each other if not stated differently[34] Clypeus not deeply incised in the middle.[136] Head and thorax coarsely punctured. 159

— The basal lobe of the claws either blunt and very small,[49, 55] or the lobe suggests a 3rd tooth.[55, 61] Clypeus deeply, semi-circularly incised anteriorly.[105] Mandibles asymmetric, the right one with one, the link one with two subapical teeth.[106] Head and thorax impunctate and shining. The hind metatarsus as long as the following tarsal joints combined.[159] Antennae rather long and almost filiform; antennal organs present. In the front wings basalis joins subcosta just before the origin of cubitus. The hind wings with marginal vein in the ♂, and a small triangular closed cell is always separated by this marginal vein. From South America. 161

159. Basalis meets subcosta close to the base of cubitus.[98] Malar space linear or entirely wanting. The hind metatarsus mostly longer than the following tarsal joints combined. Head narrowing behind the eyes. 160

— Basalis joins subcosta a distance from the origin of cubitus that is nearly as long as the length of the 1st cubital cross-vein.[14] Malar space nearly as long as half the diameter of an ocellus. Clypeus truncate or faintly subemarginated.[136] The hind metatarsus very slender, not compressed, and somewhat shorter than the following tarsal joints combined. Antennae short, without antennal organs; pedicellus as long as it is broad at the apex. Claws with a basal lobe much shorter than the subequally long apical and subapical teeth.[92] (*Macrophya excavata* Norton).

Nearctic. Genus *Pseudosiobla* Ashmead 1898.

160. Clypeus with 3 protruding, triangular teeth, the middle of these much longer and larger than the lateral ones. Antennae strongly incrassated towards the middle; pedicellus twice as long as it is broad at the apex and only little shorter than scapus. Claws.[34] (*Siobla rufo-balteata* Cameron).

Tenasserim in Further India, W. Java. Genus *Tala* Malaise 1935.

— The anterior margin of clypeus truncate. Antennae very long and slender. The hind coxae longer than normal and the end of femora reaching to or beyond the apex of abdomen. Asiatic insects mostly with metallic lustre. 3

161. The front wings with 4 cubital cells, and the 2nd of these mostly receiving both recurrent veins in the ♀ only; the 2nd cubital cross-vein and the 2nd recurrent vein are mostly interstitial in the ♂, and the hind wings then also with marginal vein.[16] Postscutellum extremely enlarged and it is only twice as broad as it is long. The anterior margin of clypeus roundly angularly incised.[156] Malar space linear, but of a distinct length. Antennae almost filiform, longer than abdomen. Saw-sheath.[60] (*A. varinervis* Konow).
Chile. ..... Genus *Antholcus* Konow 1904.

— The 2nd and the 3rd cubital cells each receiving a recurrent vein. Postscutellum normal, many times broader than it is long. 162

162. Clypeus extremely deeply and broadly, semi-circularly incised almost to the base, and appear in the middle linear; in this incision the membranaceous base of labrum plainly visible; labrum itself several times broader than it is long, and its anterior margin strongly deflexed downwards and appears subemarginate or truncate. Mandibles asymmetric, the left one with two free-standing, thorn-like subapical teeth.[105]
a/ The hind wings with one closed middle cell in the ♀. Claws.[56] (*P. collariatus* Konow).
Brazil, Columbia, Amazonas (from Peru to Surinam and Para).
Genus *Probleta* Konow 1908 (1/3).
b/ The hind wings without closed middle cell in the ♀ (constant?). Claws.[55] (*E. bicoloratus* Malaise).
Brazil. Subgenus *Epiprobleta* Malaise 1949.

— Clypeus only quartercircularly incised, and this incision reaching to half the length of clypeus, which covers the base of the bluntly pointed, subequally long and broad labrum.[106] Mandibles asymmetric, the subapical teeth neither free-standing nor thorn-like. The basal lobe of the claws well developed, but not acute.[49] (*P. fulvoniger* Malaise).
Brazil. Genus *Protoprobleta* Malaise 1949.

163. Scapus shorter than pedicellus. The front wings with 3 cubital cells. Frontal area indistinct in outline. The subapical tooth of the claws almost as long as the apical one.[23, 46] (*Tenthredo* [*Emphytus*] *lepidus* Klug).
Europe. Genus *Harpiphorus* Hartig 1837.
(*Asticta* Newman 1838).

— Scapus longer than pedicellus. 164

164. The hind metatarsus as long as, or longer than the following tarsal joints combined.[159] Clypeus extremely broadly roundly or subrectangularly incised with long and narrow lateral teeth (compare the genus *Taxonus* Hartig).[12] Rather elongated insects. 173

— The hind metatarsus distinctly shorter than the following tarsal joints combined.[158] In the hind wings the anellan cell petiolate, and the petiole distinctly perpendicular to nervellus, if not stated differently.[4] 165

165. Abdomen above with pairy, membranaceous, whitish spots on at least the middle tergites.[153] Pedicellus not longer than it is broad. Clypeus broadly emarginated anteriorly. The postocellar area always broader than it is long.[142F, G] The hind orbits carinated. The 1st cubital cross-vein sometimes obliterated.

Scutellum as broad as, or broader than it is long. (*Dolerus pallimacula* Lepeletier=*Tenthredo liturata* Gmelin).
Holarctic. Genus *Empria* Lepeletier 1828.
(*Poecilostoma* Dahlbom 1835, *Prosecris* Gistel 1848, *Poecilosoma* Thomson 1871, *Poesilostomidea* Ashmead 1898, *Tetratneura* Ashmead 1898, *Triempria* Enslin 1914).

— Abdomen without pairy whitish spots above. 166

166. The 3rd antennal joint twice as long as any of the subequally long following joints. Malar space shorter than pedicellus. (*Ph. atrum* Macgillivray).
Nearctic. Genus *Phrontosoma* Macgillivray 1908.

— The 3rd antennal joint not twice as long as the 4th one; mostly shorter than the 4th and 5th combined. (Compare also nr. 168). 167

167. In the hind legs, the tibia much longer than the entire tarsus, as about 3 : 2.[158] Antennae short and stout; pedicellus hardly longer than it is broad at the apex. Claws with a somewhat shorter subapical tooth quite close to the apex.[157] Mandibles subsymmetric, each with a subapical tooth. The hind orbits not carinated. Clypeus.[156] (*Tenthredo abdominalis* Fabricius).
Holarctic. Genus *Monostegia* O. Costa 1859.

— The hind tibia and tarsus about subequal in length, if not differently stated, but then the antennae are very long. The subapical tooth not quite close to the apex of the claws.[127] Malar space longer than the diameter of an ocellus, if not stated differently.[142A] 168

168. Antennae short and stout, hardly longer than thorax, the 3rd joint as long as the 4th and 5th joints combined. Clypeus.[103] Mandibles subsymmetric, each one with a large subapical tooth rather close to the apex.[133] In the hind wings nervellus straight and perpendicular both to the brachiellan and to the mediellan veins. (*Poesilostoma inferentia* Norton).
Holarctic. Genus *Monsoma* Macgillivray 1908.
(*Monosoma* Viereck 1910).

— Antennae longer than abdomen, the 3rd joint much shorter than the combined 4th and 5th ones, sometimes subequal to, or even shorter than the 4th one alone. Mesopleura without presterna. The inner margins of the eyes subparallel; the eyes shorter than the distance between them.[142A] 169

169. Clypeus deeply, roundly incised anteriorly with broad, blunt, or rounded lateral teeth.[103] The hind orbits mostly angularly carinated near the mandibular base. Scapus and pedicellus much broader than the thickness of flagellum. 170

— Clypeus with distinctly sculptured surface, its acute anterior margin nearly truncate or very faintly, almost angularly emarginated.[136] The hind orbits rounded without any traces of carination. The anal cross-vein strongly oblique, its general direction with an angle of about 40°. In the hind wings, nervellus not perpendicular to the petiole of the anellan cell. Claws without basal lobe, and the subapical tooth only little shorter than the apical one.[50] Mandibles asymmetric, the right one with a not large subapical tooth near the middle, the left one with a very minute subapical tooth at the apical fourth.[136] (*E. obsoletus* Malaise).
Japan, Burma. Genus *Empronus* Malaise 1935.

170. Mandibles subsymmetric with a more or less blunt subapical tooth.[142] Claws

without basal lobe, the shorter subapical tooth mostly removed half way from the apex, and directed more or less perpendicularly to the main trend of the claw. Antennae long and slender, filiform; scapus and pedicellus distinctly longer then they are broad at the apex; the 4th antennal joint considerably longer than the 3rd one. — General colour pale yellow below, black above; the black with rich pale markings, and the yellow with black ones; the mostly black mesopleura with a pale horizontal band. Not rare on law ferns. (*F. longiserra* Malaise).
Burma above an altitude of 1500 m. Genus *Ferna* Malaise 1961.

— Mandibles asymmetric, the right one with a large and broad subapical tooth, the left one with an extremely small subapical tooth near the apex.[123, 136] 171

171. Pedicellus much broader than it is long, scapus only just distinctly so.[96] Clypeus.[103] Mandibles.[123] Claws without basal lobe, the subapical tooth shorter than the apical one, neither of them perpendicular to the main direction of the claw.[50] Nervellus perpendicular to the petiole of the anellan cell. (*Poecilosoma nigriceps* Cameron).
The Himalayas (Simla, Sikkim). Genus *Monostegidia* Rohwer 1915.

— Both pedicellus and scapus distinctly longer than they are broad at the apex. The subapical tooth of the claws as long as and somewhat stronger than the apical one, both almost perpendicular to the main direction of the claw.[91, 92] Nervulus joins not the anellan petiole perpendicularly. 172

172. Claws with a broad basal lobe.[92] Scutellum very faintly subconvex, not reaching a level touching all three mesonotal lobes. Tibia and tarsus subequal in length in the hind legs. The lateral furrows of the postocellar area not reaching the posterior side of the head; the posterior seam of the same area indistinct. (*K. maculiscuta* Malaise).
Burma at 2000 m. Genus *Kambaitia* Malaise 1961.

— Claws without basal lobe.[91] Scutellum subconvexly elevated, reaching a level touching all three mesonotal lobes. Tibia distinctly longer than tarsus in the hind legs, almost as 5 : 4. The subparallel lateral furrows of the postocellar area reaching the brim of the head, and there communicating with the distinct seams of the same area on the back of the head. (*K. fulvipicta* Malaise).
Burma (Kambaiti at 2000 m). Genus *Kambaitina* Malaise 1961.

173. The front wings with 4 cubital cells, and nervulus joins medius in the middle of, or behind the middle of the discoidal cell.[75, 130] 129

— Nervulus joins medius basally of the middle of the discoidal cell, near to basalis.[132, 134] 174

174. Front wings with 4 cubital cells. Antennae whitish in the middle, black towards base and apex. Claws with a broad basal lobe, and the apical and the subapical teeth subequal in length.[20] (*A. incisa* Cameron).
Japan, China, Formosa. Genus *Allomorpha* Cameron 1876.

— The 1st cubital cross-vein wanting in the front wings.[132, 134] 175

175. Claws with distinct, acute basal lobe, and the subapical tooth as long as, or longer than the apical one.[20, 62] Antennae strongly compressed already from the 3rd joint on. The right mandible simple without subapical tooth. (*Harpiphorus varianus* Norton).
Nearctic. Genus *Macremphytus* Macgillivray 1908.

— Claws without distinct basal lobe, and the subapical tooth only half as long as the apical one.[50] Antennae compressed only towards the apex.[13] The right mandible with a distinct protruding basal tooth.[126] (*Macremphytus deutziae* Takeuchi).
Japan, Sachalin, Ussuri, China, Formosa.
Genus *Asiemphytus* Malaise 1947.

Index

Synonym names are printed in italic

Explanations of Terms

The explanation of the terms used is given in the accompanying illustrations, and further explanations will be given in the text or in connection with the keys when considered necessary.

Fig. 1. Sketch of thorax, base of the abdomen, and leg in a *Tenthredo*. A) Thorax in dorsal view. B) Thorax in lateral view. C) Leg.

a. Pronotum.
a_2. Lower corner of pronotum.
b. Praescutum or mesonotal middle lobe.
c. Tegulae.
d. Mesonotal lateral lobes.
e. Scutellum.
f. Cenchris.
g. Scutellar appendage.
h. Postscutellum.
i. Propodeum or 1st tergite. (Not divided along the middle at all in the genera *Peüs, Jermakia,* and *Propodea*; with a longitudinal carina in *Tenthredopsis,* etc.).
m. Coxa. — t. Trochanter. —
u. Femur. — v. Tibia.
j. The membranous "blotch".
k. Propleura.
l. Parapterum.
m_1, m_2, m_3 } Coxae.
n. Mesopleura, or more correctly mesopleural episterna.
o. Mesopleural epimaera.
p. Mesosternum.
q. Metapleura, or metapleural epimaera.
r. Metasterna, or metapleural episterna.
s_2, s_3 } 2nd and 3rd abdominal tergites.
x_1—x_5. Tarsus. — x_1. Metatarsus.
y. Claws.

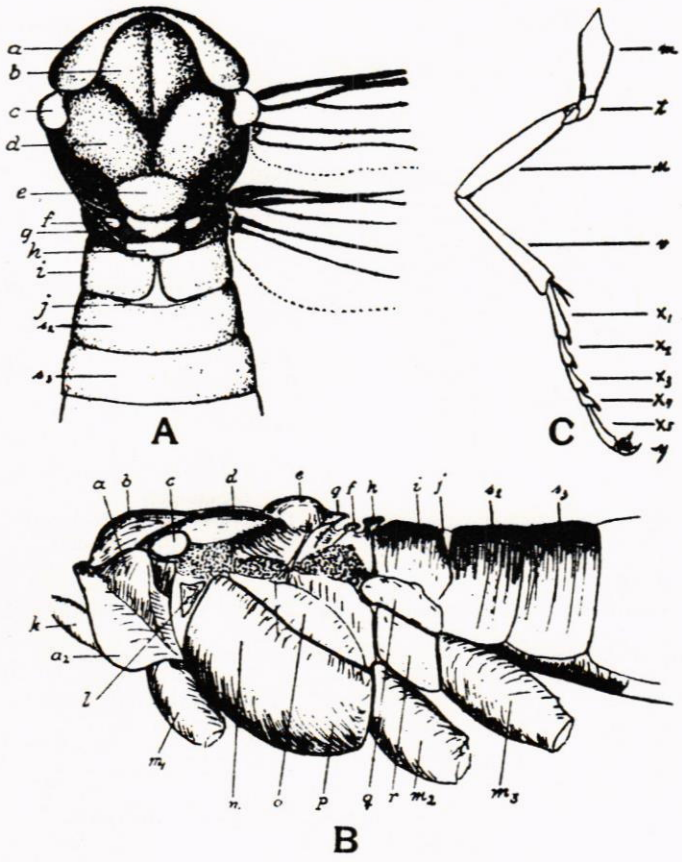

a
b
c
d
e
f
g
h
i
j
A
C
B

Fig. 2. Front and hind wings of a *Selandriinae*. Letters stand for the cells and figures for the veins.

The front wing.	The hind wing.
1. Costa.	1. Costella.
2. Subcosta.	2. Subcostella.
3. Medius.	3. Mediella.
4. Brachius (or submedius).	4. Brachiella.
5. Analis.	5. Anella.
	6. Axillus.
7. Radius.	7. Radiella.
8. Cubitus.	8. Cubitella.
9. The intercostal cross-vein.	
10. The radial cross-vein.	
11. 1st cubital cross-vein.	11. 1st cubitellan cross-vein
12. 2nd cubital cross-vein.	12. 2nd cubitellan cross-vein.
13. 3rd cubital cross-vein.	
14. Basalis.	14. Basella.
15. 1st recurrent vein.	15. Recurrentella.
16. 2nd recurrent vein.	
17. Nervulus.	17. Nervellus.
18. The anal cross-vein.	
A. The anal cell.	A. The anellan or lanceolate cell.
B. The brachial cell.	B. The brachiellan cell.
C_1. The 1st cubital cell.	C_1. The cubitellan middle cell.
C_2. The 2nd cubital cell.	C_2. The 2nd cubitellan cell.
C_3. The 3rd cubital cell.	
C_4. The 4th cubital cell.	
D_1. The 1st discoidal cell or the discoidal cell.	D_1. The discoidellan middle cell.
D_2. The 2nd discoidal cell.	D_2. The 2nd discoidellan cell.
D_3. The 3rd discoidal cell.	
I. The intercostal cell.	I. The intercostellan cell.
M. The median cell.	M. The mediellan cell.
P. The posterior cell.	P. The postellan cell.
R_1. The 1st radial cell.	R. The radiellan cell.
R_2. The 1st radial cell.	
S. The submedian cell.	S. The submediellan cell.
St. Stigma.	

If either or both of veins 12 and 15 in the hind wings is wanting, that wing is said to have only one or no closed middle cell. If the anellan cell, as in Fig. 2 receives nervellus near the apex, the anellan cell is said to be sessile, but if nervellus joins the brachiellan vein behind the apex of the anellan cell, this cell is petiolate.

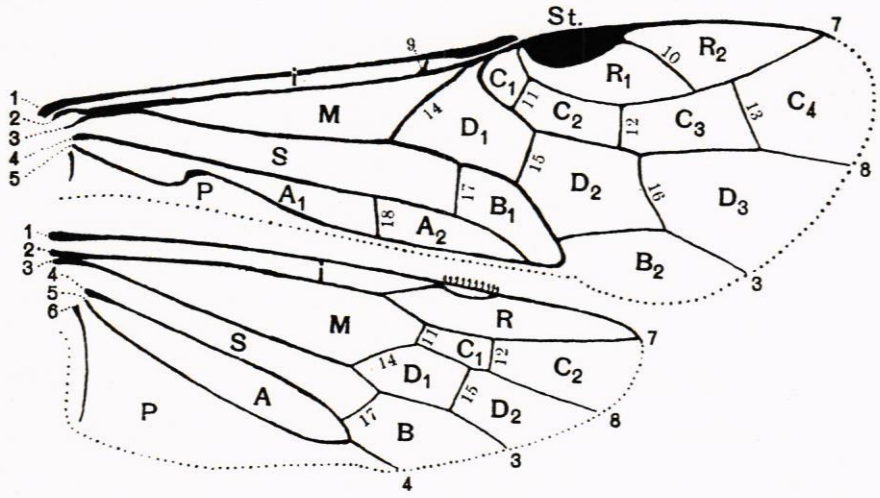
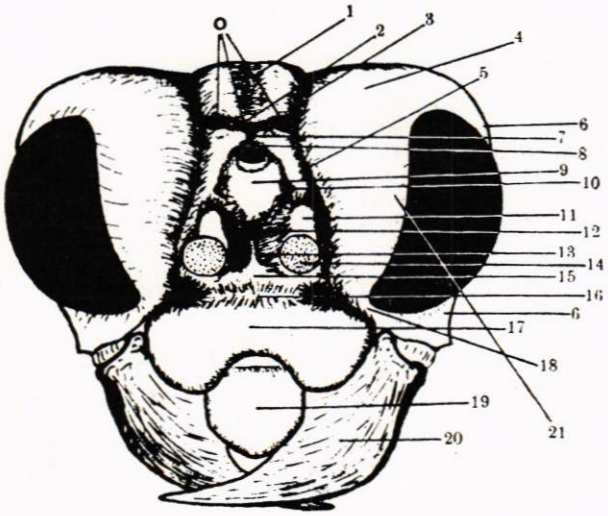

St.
9
10
7
R2
R1
C1
11
C2
12
C3
13
C4
1
2
3
4
5
M
14
D1
15
D2
16
D3
S
P
A1
17
B1
18
A2
8
B2
3
1
2
3
4
5
6
M
R
7
S
11
C1
12
C2
14
D1
A
15
D2
P
17
B
8
3
4

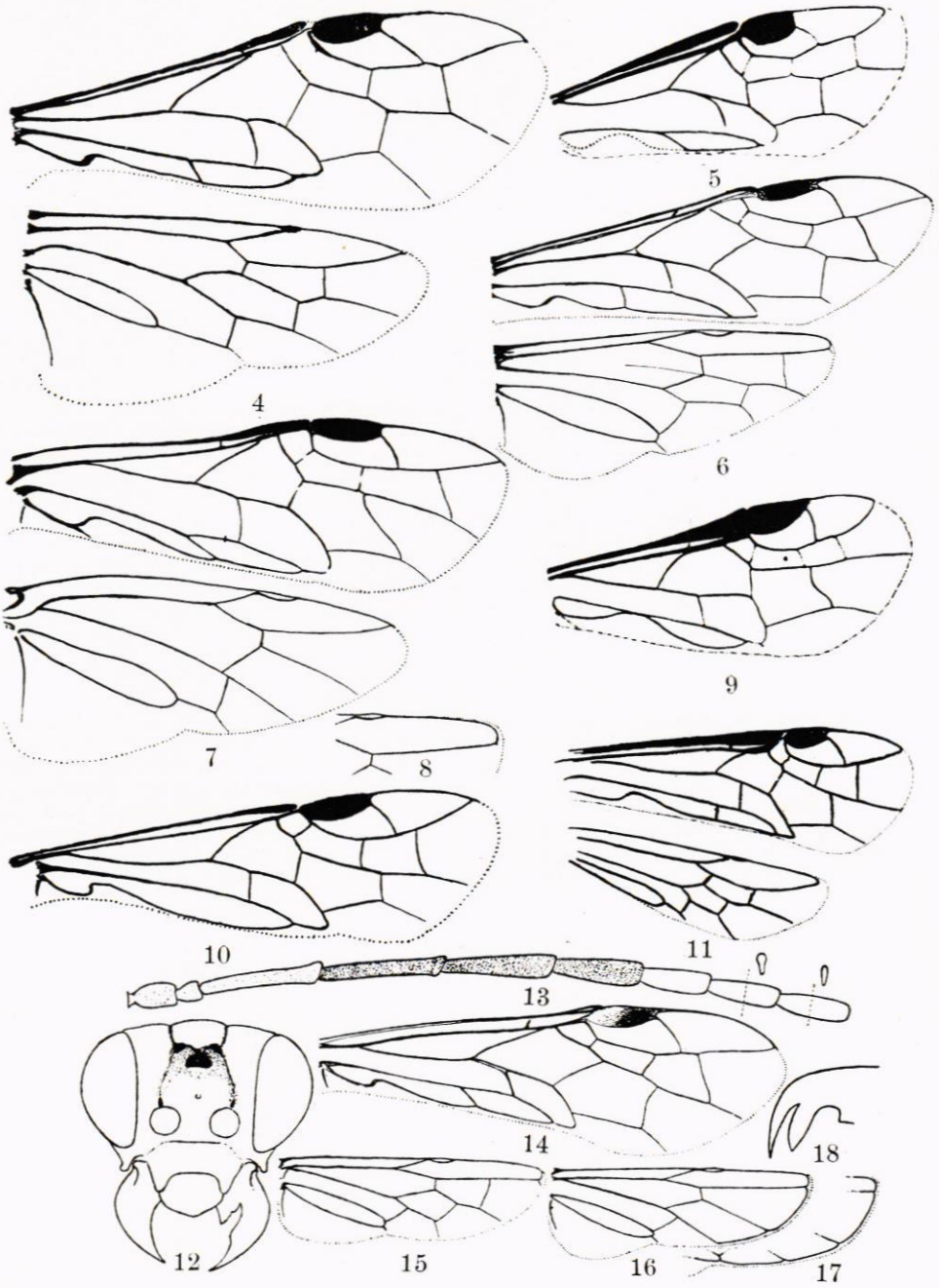
Fig. 3. Sketch of the head of a *Tenthredo* in frontal view. (The inner margins of the eyes somewhat emarginate and strongly converging downwards. Clypeus roundly incised with rounded lateral teeth).

5. *Antennal furrow*(s). (Continues the lateral furrows of the postocellar area from laterally of the ocelli to the clypeus).
14. *Antennal socket*(s). (With removed antennae).
8. *Circumocellar furrow.* (Surrounding the middle ocellus, angular in the upper part).
17. *Clypeus.*
Crest. (Horizontal ridges perpendicularly from the frontal ridges to the inner margins of the eyes thus interrupting the antennal furrows. [In *Selandriinae* and *Blennocampinae*]).
Face. Part of the head in front. (Between the eyes, the clypeus, and the two upper ocelli).
9. *Frontal area.*
10. *Frontal ridges.* (Surrounding the frontal area, at least laterally).
6. *Hind orbita.* (Behind the eyes from the temples to the base of the mandibles; mostly carinate behind, the carina finally disappearing below).
8. *Inner orbita.*
7. *Interocellar furrow.* (A short longitudinal furrow perpendicular to the postocellar furrow, angularly forked anteriorly, and there merging into the circumocellar furrow).
19. *Labrum.*
3. *Lateral furrow*(s) of the postocellar area.
Lateral pits. The antennal furrows in *Selandriinae* and *Blennocampinae* reduced to single or double pits lateral to and somewhat above the supra-antennal pit; mostly as large as that pit.
18. *Malar space.* (The sometimes quite linear strip between the eyes and the clypeus or the base of the mandibles).
20. *Mandible*(s).
13. *Middle fovea* or *furrow.* (The longitudinal middle ridge marked in the fig. 39 mostly wanting).
Mouth-parts. The combined 17, 19, 20, and the palpi.
0. *Ocelli.*
6. *Orbita*(hind).
21. *Orbita*(inner).
1. *Postocellar area.*
2. *Postocellar furrow.* (A sometimes curved or angular furrow behind the ocelli).
Sincipite (sinciput) = 1+4.
12. *Supra-antennal pit.*
11. *Supra-antennal tubercle*(s).
15. *Supra-clypeal area.*
16. *Supra-clypeal furrow,* laterally with the *supra-clypeal pits.*
4. *Temple*(s).


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
6
17
18
19
20
21

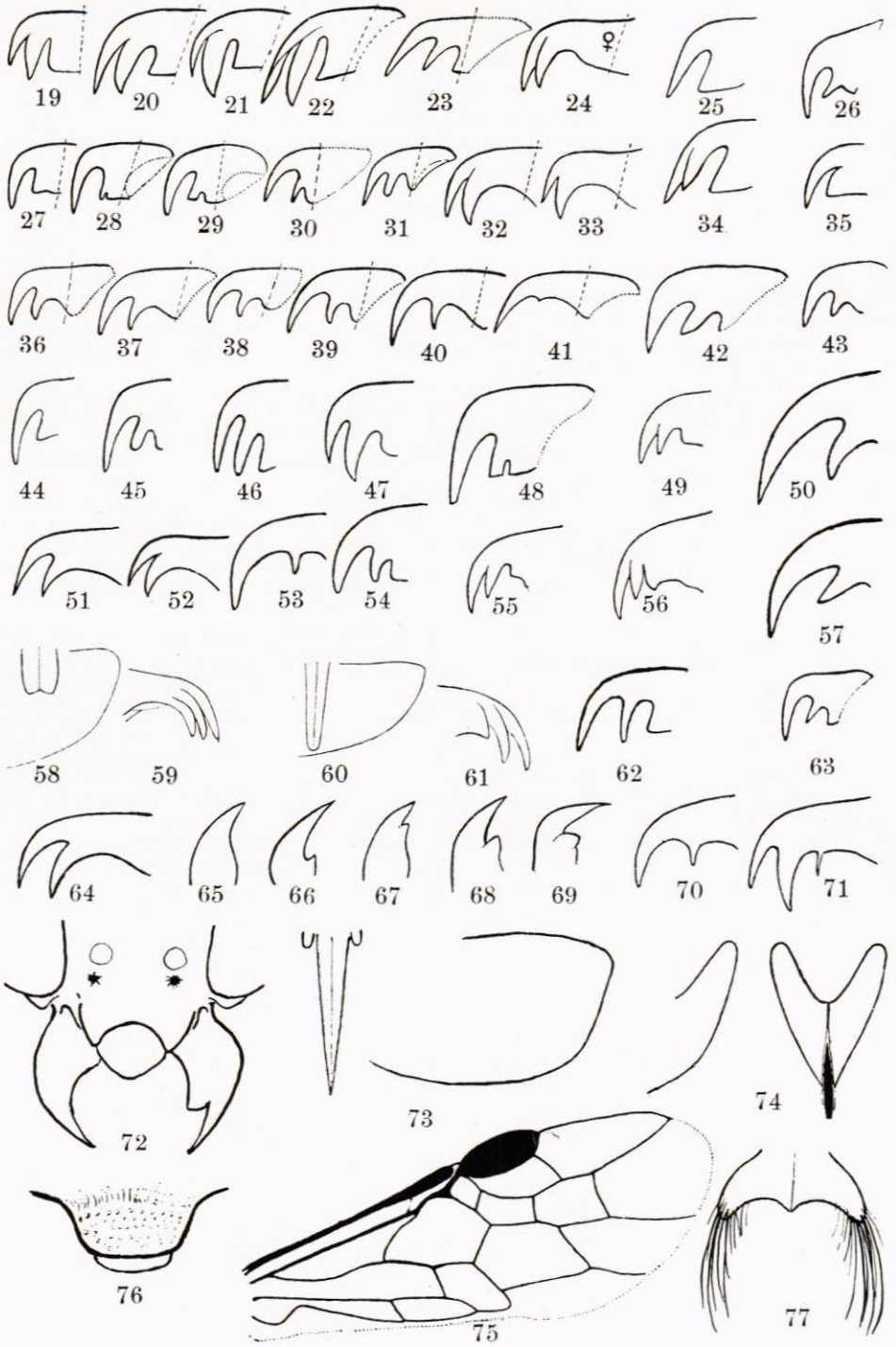
Figs. 4—18.

4. Front and hind wings of *Birmindia albipes* Malaise.
5. Front wing of *Heterarthrus* sp.
6. Front and hind wings of *Xenapatidea tricolor* Malaise.
7. Front and hind wings of *Arla carbonaria* Malaise.
8. The radiellan cell (hind wing) of *Endelomyia aethiops* Fabricius.
9. Front wing of *Hoplocampa* sp.
10. Front wing of *Busarbia formosana* (Rohwer).
11. Front and hind wings of *Busarbidia ussuriensis* (Malaise).
12. *Indotaxonus tricoloricornis* (Konow); Head in frontal view.
13. Antenna (with cross-section of the 8th and 9th joints).
14. Front wing (♂ or ♀) of *Indotaxonus tricoloricornis* (Konow).
15. Hind wing of ♀.
16. Hind wing of ♂ with incomplete marginal vein.
17. Complete marginal vein in ♂ of *Indotaxonus unicolor* Malaise.
18. Claw of *Indotaxonus*.


4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

Figs. 19—77.

Claws of: 19. *Bornea pictipennis* (Konow), 20. *Neostromboceros dentiserra* Malaise, 21. *N. coxalis* (Smith), 22. *N. chalybeus* (Konow), 23. *Nesoselandria birmana* Malaise, 24. *Duplunguis sino-birmanica* Malaise, 25. *Xenapatidea* sp., 26. *Protemphytus birmanus* Malaise, 27. *Abusarbia japonica* (Malaise), 28. *Alphostromboceros konowi* (Kuznezof-Ugamski), 29. *Strombocerina delicatula* (Fallén), 30. *Neothrinax javana* Enslin, 31. *Bocerus phaleratus* (Konow), 32. *Euforsius jacobsoni* (Forsius), 33. *Iconia versicolor* Malaise, 34. *Neoxenapates* sp., 35. *Arla carbonaria* Malaise, 36. *Busarbia viridipes* Cameron, 37. *Anapeptamena albipes* Konow, 38. *Denticornia subtilis* (Benson), 39. *Aneugmenus verticinus* Malaise, 40. *Pseudostromboceros atratus* (Enslin), 41. *Concavicornia nana* Malaise, 42. *Ocla albinigripes* Malaise, 43. *Endelomyia aethiops* (Fabricius), 44. *Goniocerus albilabris* (Konow), 45. *Prostromboceros leucostomus* (Rohwer), 46. *Strombocerídea picticornis* (Cameron), 47. *Plaumanniana trigemmis* (Konow), 48. *Prostromboceros niveana* (Jörgensen), 49. *Protoprobleta fulvoniger* Malaise, 50. *Monostegidia nigriceps* (Cameron) and *Empronus obsoletus* Malaise, 51. *Adiaclema maculipennis* (Cameron), 52. *Belea nigripennis* (Konow), 53. *Romaniola* sp., 54. *Inea pusilla* Malaise, 55. *Epiprobleta bicoloratus* Malaise, 56. *Probleta langei* Konow, 57. *Emphystegia* sp. 58. Saw-sheath, and 59. claw of *Kuschelia solox* (Enderlein). 60. Saw-sheath, and 61. claw of *Antholcus varinervis* Konow. 62. Claws of: *Birmindia albipes* Malaise, 63. *Hemiphytus sinobirmanus* Malaise, 64. *Rhopographus procinctus* (Konow). Left mandible of: 65. *Adiaclema pilicornis* (Cameron), 66. *Bolivius absonus* (Konow), 67. *Dochmioglene soleatus* (Konow), 68. *Romaniola* sp., 69. *Plaumanniana aemulus* (Konow). Claws of: 70. *Trearia* and *Canonaria* sp., 71. *Canonias inopinus* Konow. 72. Underface of *Emphytus cinctus* (Linnaeus). 73. Saw-sheath in dorsal and lateral view of *Formosempria shanensis* Malaise. 74. Saw-sheath of *Canonias inopinus* Konow in lateral view and from behind. 75. Front wing of *Rocalia longipennis* Takeuchi. 76. Clypeus and labrum of *Dulophanes flavipes* Enslin (The anterior margin of clypeus subtruncate or roundly protruding). 77. Saw-sheath in dorsal view of *Rhopographus procinctus* (Konow).


♀
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77

Figs. 78—97.

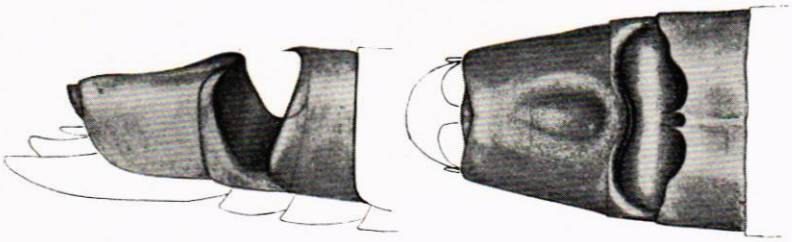
78. Apex of abdomen in the males of certain species of the genus *Neostromboceros* Rohwer.
79. Mesopleura in the genus *Selandria* Leach with the upper part separated by a shallow horizontal furrow. Presterna distinct and separated by a deep and sharp furrow perpendicular to the horizontal one.
80. Mouth-parts of *Hemiphytus sinobirmanus* Malaise. The acute anterior margin of clypeus in the middle subtruncate or faintly triangularly protruding. Supra-clypeal furrow wanting. Malar space extremely long. Mandibles subsymmetric.
81. Mouth-parts of *Tritobrachia tenuicornis* Enderlein. Clypeus inflated. Mandibles asymmetric. Malar space short.
82. The right mandible in a *Neothrinax* Enslin. Its basal lobe with an infundibuliform pit.
83. Head of *Busarbia viridipes* Cameron in dorsal view. Head narrowing and carinated behind the eyes. The flat frontal area surrounded by extremely acute carinas and similar cross-ridges extending to each eye. The under-face refracted from these latter carinas downwards at an almost right angle. The postocellar area subquadrate in outline.

Claws of: 84. *Hemibeleses nigriceps* Takeuchi ♂, 85. *Hemibeleses nigriceps* ♀, 86. *Liliacina carinifrons* Malaise, 87. *Eriocampopsis subtruncata* Takeuchi.

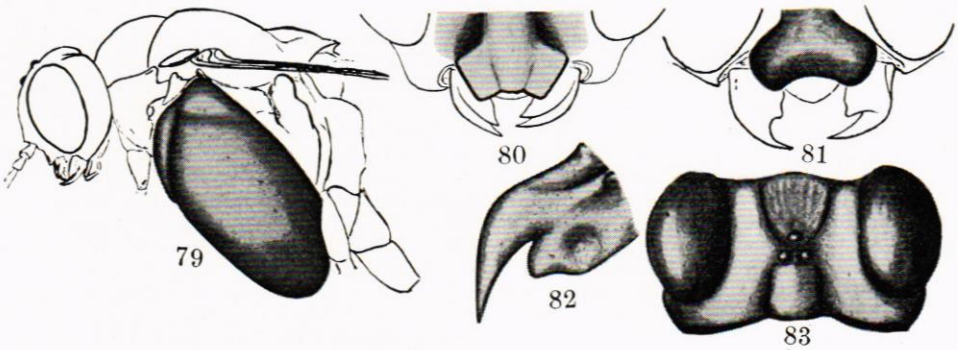
88. Mesopleura with broadly triangular presterna separated by a subcutaneous seam visible only if the color is light.
89. Mesopleura with presterna separated by a fine and shallow furrow.
90. Mesopleura with presterna separated by a deep furrow.

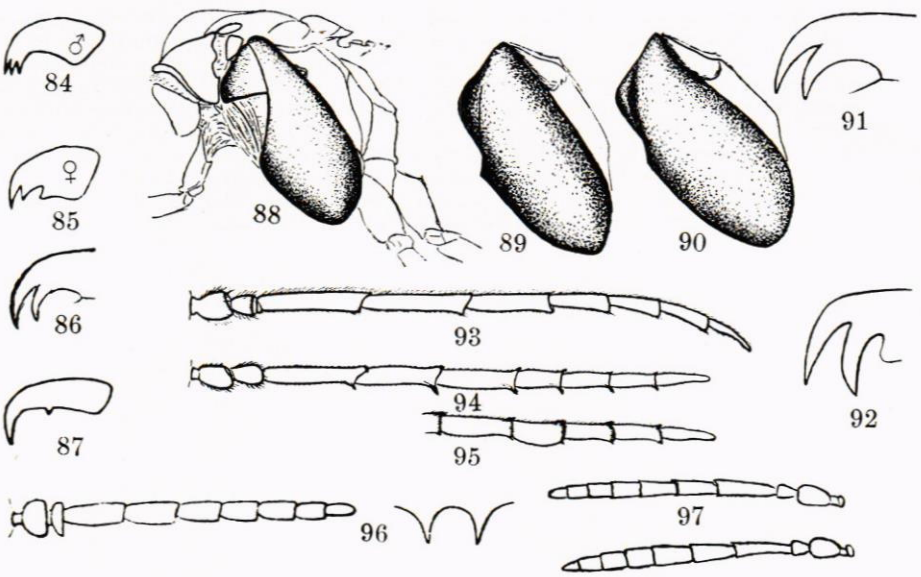
Claws of: 91. *Kambaitina*, and 92. *Kambaitia*.

93. Antenna of *Denticornia brunneicornis* Malaise (♀ in lateral view).
94. Antenna of *Denticornia sikkimensis* (Malaise) (♂ in dorsal view).
95. Apical half of the previous antenna in lateral view.
96. Antenna and clypeus of *Adamas jakowleffi* (Konow). The 1st and 2nd antennal joints (scapus and pedicellus) are broader than they are long, the latter almost disk-like.
97. Antenna of *Rhopographus formosanus* Malaise and *Rh. procinctus* (Konow).



78



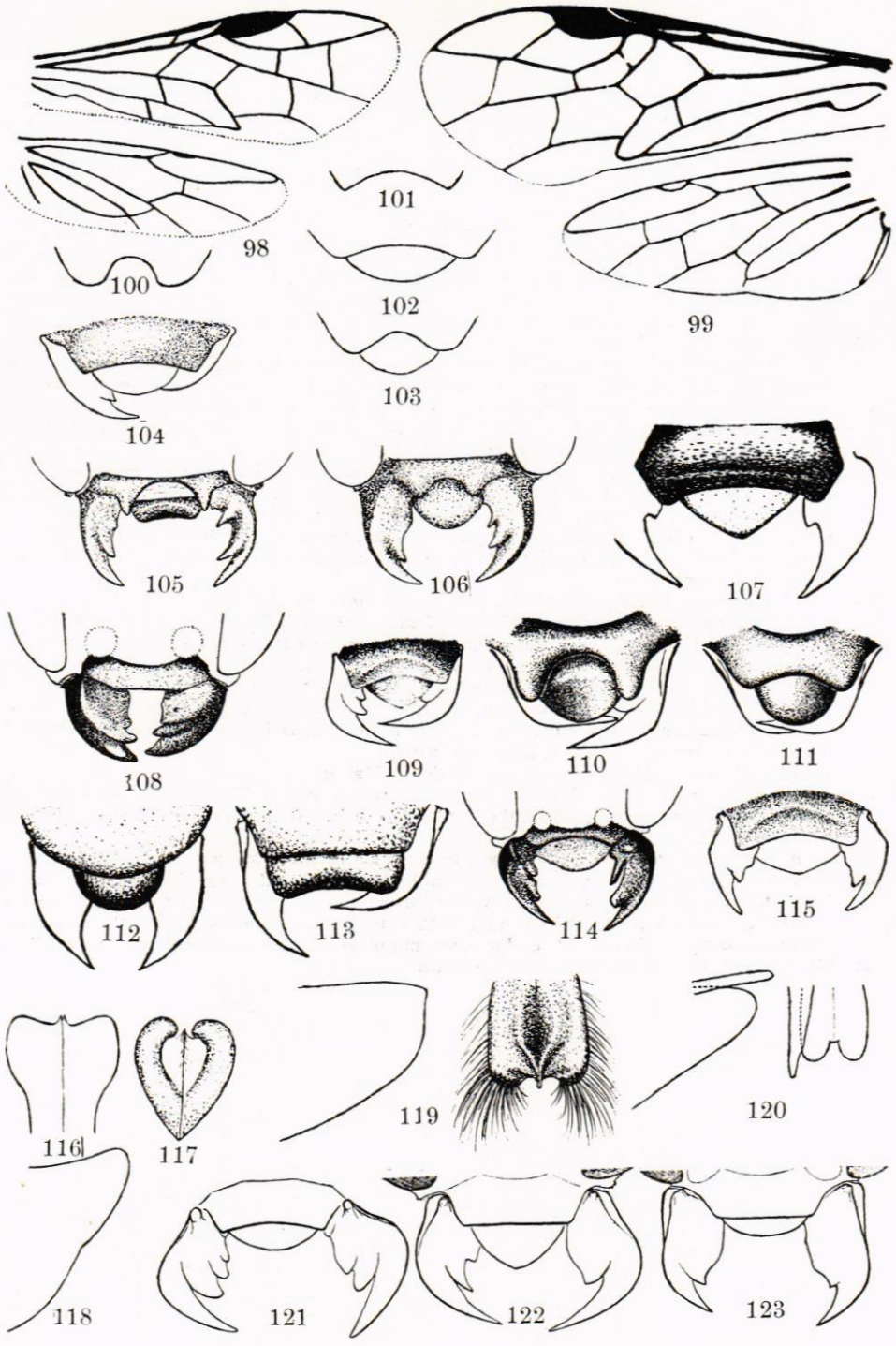


Figs. 98—123.

Front and hind wings of: 98. *Emphytus togatus* (Panzer), and 99. *Parastromboceros filicis* (Malaise).

Anterior margin of clypeus in: 100. *Hoplocampa sino-birmana* Malaise. (Deeply roundly incised with rounded lateral teeth), 101. *Hoplocampa formosana* Malaise. (Roundly emarginated with angular lateral teeth), 102. *Heptamelus marginatus* Malaise. (Roundly emarginated with blunt lateral teeth), 103. *Heptamelus ochroleucus* (Stephens). (Deeply, roundly, somewhat triangularly incised with blunt lateral teeth).

Mouth-parts of: 104. *Inea pucilla* Malaise. (The anterior margin of the subconvex clypeus faintly subemarginated), 105. *Probleta langei* Konow. (The semicircular incision of clypeus reaching almost to the base making the membraneous base of labrum visible. Mandibles asymmetric. Malar space linear or wanting), 106. *Protoprobleta fulvoniger* Malaise. (Clypeus less deeply incised and labrum rounded anteriorly), 107. *Brulléana orbignyana* (Brullé). (Clypeus with a transversal [horizontal] carina, triangularly pointed labrum, and subsymmetric mandibles), 108. *Arla carbonaria* Malaise. (Clypeus subtruncate, mandibles subsymmetric, malar space of distinct length, and the straight inner margins of the eyes faintly converging downwards), 109. *Plaumanniana trigemmis* (Konow). (Clypeus with a transverse convexity subparallel with the emarginated and acutely edged anterior margin. Mandibles bent almost at a right angle), 110. *Arcoclypea opiparus* (Konow). (Clypeus semicircularly incised. Labrum concavely depressed anteriorly), 111. *Liliacina carinifrons* Malaise, 112. *Adiaclema nigripectus* (Enderlein). (The anterior margin of clypeus and of labrum rounded. Mandibles simple), 113. *Labrina plaumanni* Malaise. (Clypeus truncate; the strongly deflexed anterior margin of labrum appear emarginated. Mandibles simple), 114. *Xenapatidea tricolor* Malaise. (The left mandible with an isolated basal tooth. Clypeus emarginated), 115. *Prostromboceros niveana* (Jörgensen). (Clypeus as in 109, but mandibles not so strongly bent), Saw-sheath of *Canonias assamensis* Rohwer: 116. in dorsal view, 117. from behind, and 118. in lateral view. Saw-sheaths in lateral and dorsal view of: 119. *Thrinax birmana* Malaise, 120. *Thrinax sino-birmana* Malaise. Mouth-parts of: 121. *Iconia versicolor* Malaise, 122. *Anapeptamena albipes* Konow, and 123. *Nesoselandria birmana* Malaise.

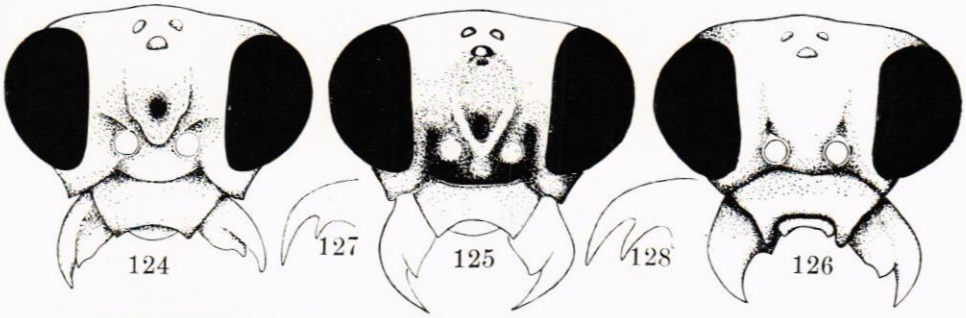

98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123

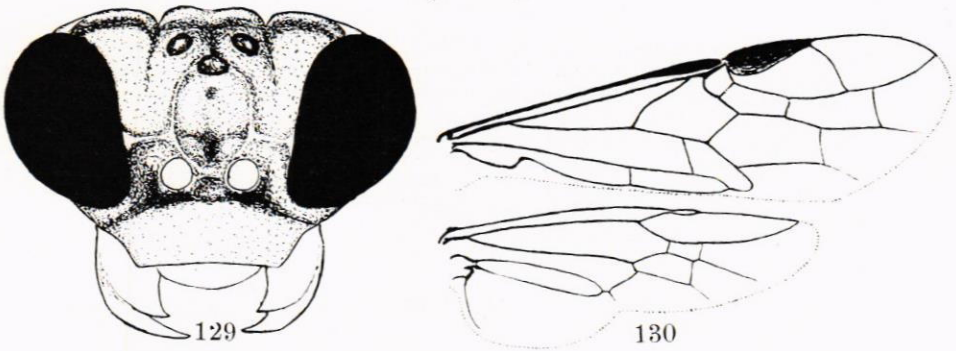
Figs. 124—134.

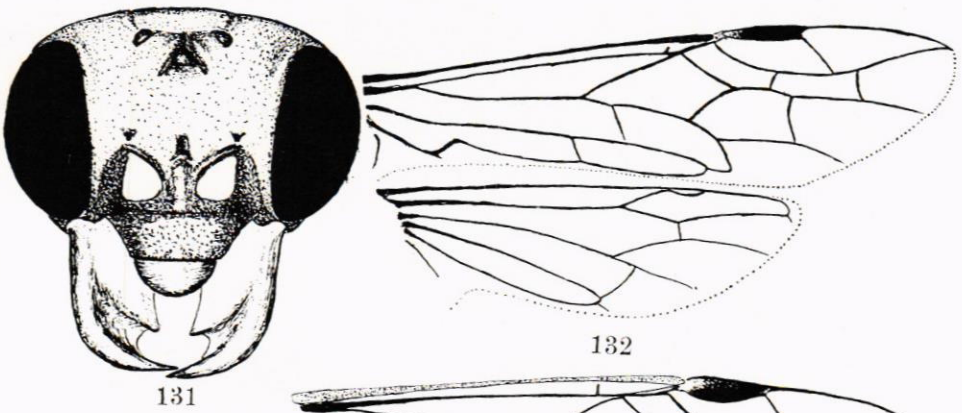
124. *Ungulia fasciativentris* Malaise. Face in frontal view. (Clypeus subconvex with roundly emarginated margin; mandibles roundly, not strongly bent, asymmetric; malar space much longer than the diameter of an ocellus; inner margins of the eyes almost parallel; frontal area distinct only below; the middle supra-antennal pit large and deep).
125. *Oralia pallidipes* Malaise. (Clypeus roundly incised with acute lateral teeth; mandibles subsymmetric, their outer margin bent almost at a right angle; malar space longer than the diameter of an ocellus; inner margins of the eyes very faintly converging downwards; frontal area surrounded by low, but distinct ridges to the middle ocellus, romboidal in outline and enclosing the large middle supra-antennal pit). (Postocellar area omitted in 124, 125, and 126).
126. *Clypea shanica* Malaise. (Clypeus swelled up [not flat], the anterior margin deeply, roundly, subsquarely incised; mandibles asymmetric, the left one with a broad and large, the right one with a small, acute basal lobe; malar space long; frontal area only roundly elevated without carinas; the middle supra-antennal pit wanting, and the lateral ones small, but distinct; the inner margins of the eyes very faintly converging downwards).

Claws of: 127. *Oralia pallidipes* Malaise, 128. *Clypea shanica* Malaise.

129. Head in frontal view of *Busarbina verticalis* Malaise. (Clypeus truncate; mandibles subsymmetric; malar space long; inner margins of the eyes straight and rather strongly converging; frontal area oval in outline and surrounded by abruptly elevated, but not acute carinas and similar carinas extending to the eyes; underface refracted downwards from these carinas; the middle supra-antennal pit large; the posterior margin of the head above elevated into a rounded carina interrupted by the extremely deep lateral furrows of the postocellar area).
130. Front and hind wings of *Busarbina verticalis* Malaise.
131. *Formosempria shanensis* Malaise. Head in frontal view. (The frontal area and the antennal furrows entirely obsolate; malar space linear; clypeus truncate; mandibles subsymmetric.
132. *Mimathlophorus alboterminalis* Malaise. Front and hind wings.
133. *Ocla albinigripes* Malaise. Head in frontal view. (Frontal area elevated, flat above, but without lateral ridges; the inner margins of the eyes converging downwards; clypeus flat, truncate in the middle and with acutely triangular lateral teeth; mandibles subsymmetric, faintly curved; malar space about as long as the diameter of an ocellus).
134. *Taxonemphytus fulvus* Malaise. Front and hind wings.


124
127
125
128
126

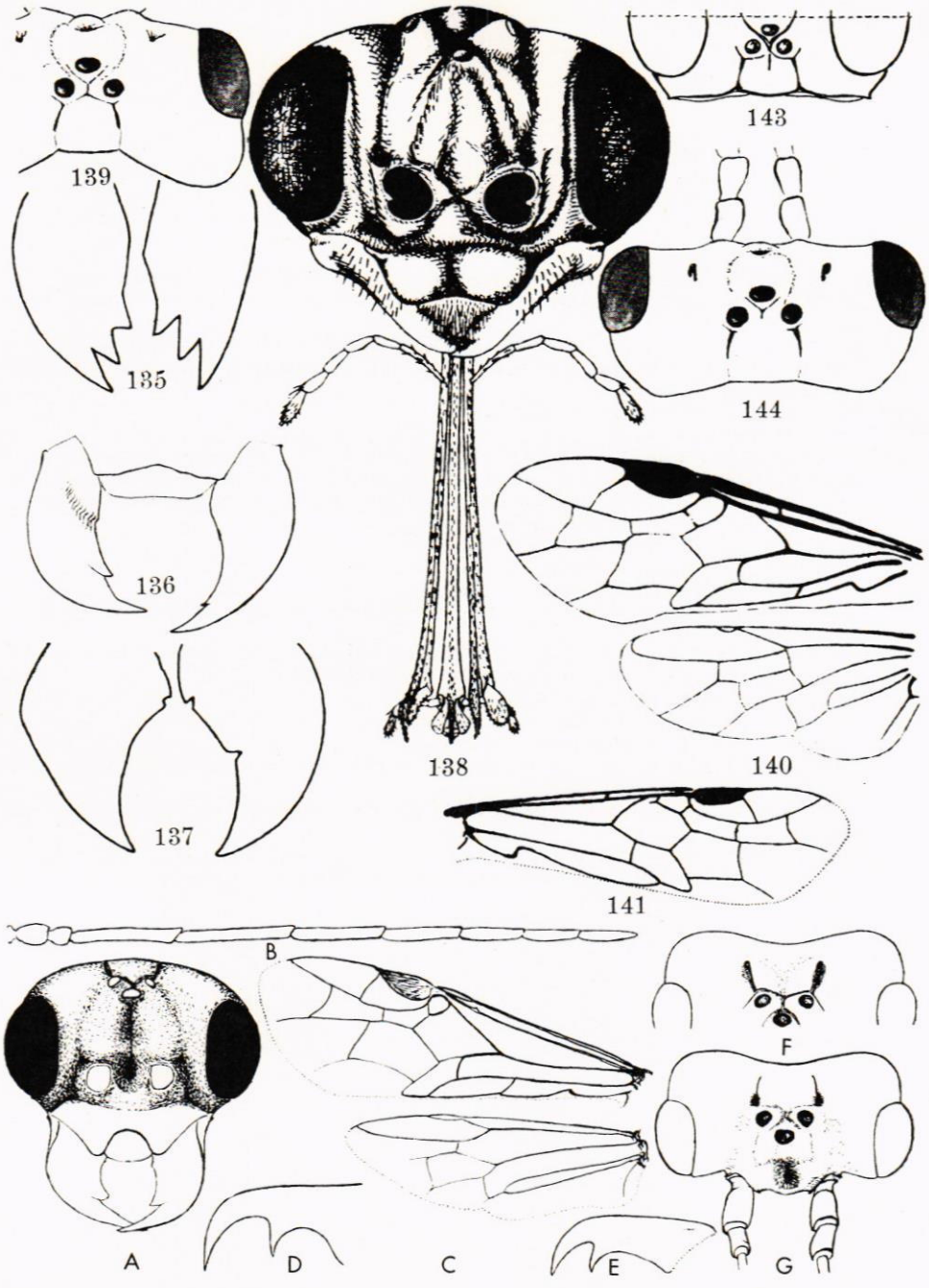

129
130


131
132


133
134

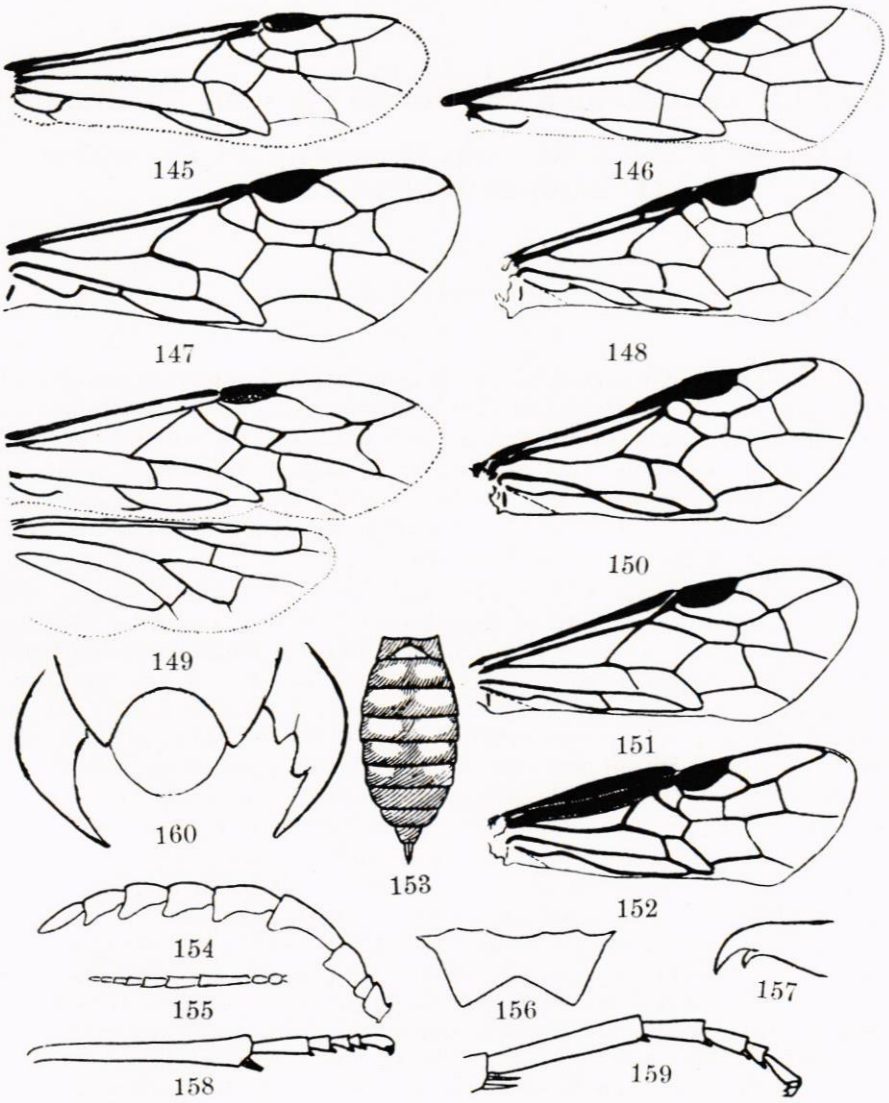
Figs. 135—144.

135. Mandibles of *Rocalia longipennis* Takeuchi.
136. Mouth-parts of *Empronus fulvus* Malaise. (Mandibles asymmetric, the left one with a minute subapical tooth near the apex; the anterior margin of clypeus faintly, angularly emarginated).
137. Subsymmetric mandibles of *Eriocampa mitsukurii* Takeuchi.
138. Head in frontal view of *Nipponorhynchus mirabilis* Takeuchi. (The mouth-parts are most remarkable with the long proboscis and the triangular labrum; the inner margins of the eyes almost parallel, subemarginated, and the distance between the eyes longer than the length of an eye).
139. The hind orbits rather prolonged backwards, rounded, not carinated behind, and not narrowing behind the eyes.
140. Front and hind wings of *Nipponorhynchus mirabilis* Takeuchi.
141. Front wings of *Iconia versicolor* Malaise. (The base of cubitus with a free stump directed basally).
142. The genus *Ferna* Malaise. A/ Head in frontal view, B/ Antenna, C/ Front and hind wings, D/ and E/ Claws, F/ and G/ Different shape of postocellar lateral furrows.
143. Head strongly narrowing behind the eyes with carinated hind orbits. The postocellar furrow distinct and the area broader than it is long.
144. Head strongly narrowing behind the eyes, but the hind orbits not carinated. The postocellar furrow wanting, but the interocellar furrow distinct and connected with the angularly forking circumocellar furrow.


139
135
136
137
138
143
144
140
141
A
B
C
D
E
F
G

Figs. 145—160.

145. Front wing of *Metaneura souza-lopesi* Malaise. (The anal cell is broadly contracted and this genus may erroneously be referred to the subfamily *Blennocampinae*. Compare nr. 146).
146. A *Blennocampinae*, *Amonophadnus* sp. The anal cell is not constricted because the anal vein becomes vitreous and obliterate before reaching brachius and is directed perpendicularly towards it.
147. Front wing of *Adelesta nova* (Norton).
148. Front wing of *Caliroa* sp.
149. Front and hind wings of *Ateloza pilosa* (Konow). (This venation suggests also a *Blennocampinae*. The same is valid for the genus *Allantopsis* Rohwer, and both genera will also be delt with among the *Blennocampinae*. The anellan cell with a large appendiculate cell at the apex).
150. Front wing of *Lycaota sodalis* (Cresson).
151. Front wing of *Emphytus cinctus* (Linnaeus).
152. Front wings of *Selandria vanduzeei* (Rohwer).
153. Abdomen of *Empria obscurata* (Cresson) to show the whitish, membranaceous spots on the basal tergites.
154. Antenna of *Ceratulus spectabilis* Macgillivray. Similar antennae occur in the genus *Salatigia* Enslin, but scapus and pedicellus are there different.
155. Antenna of *Caliroa limacina* (Retzius).
156. Clypeus of *Monostegia abdominalis* (Fabricius).
157. Claw of *Monostegia abdominalis* (Fabricius).
158. Tibia and tarsus with the metatarsus shorter than the following tarsal joints combined.
159. A tarsus with metatarsus as long as or longer than the following tarsal joints combined.
160. Mouth-parts of a *Parasiobla* sp. (from Burma). (Clypeus almost semi-circularely incised; the left mandible with two large subapical lobes, the right one simple or with a very minute basal tooth).


145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160