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HYMENOPTERA OF  
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SYNOPTIC CATALOG

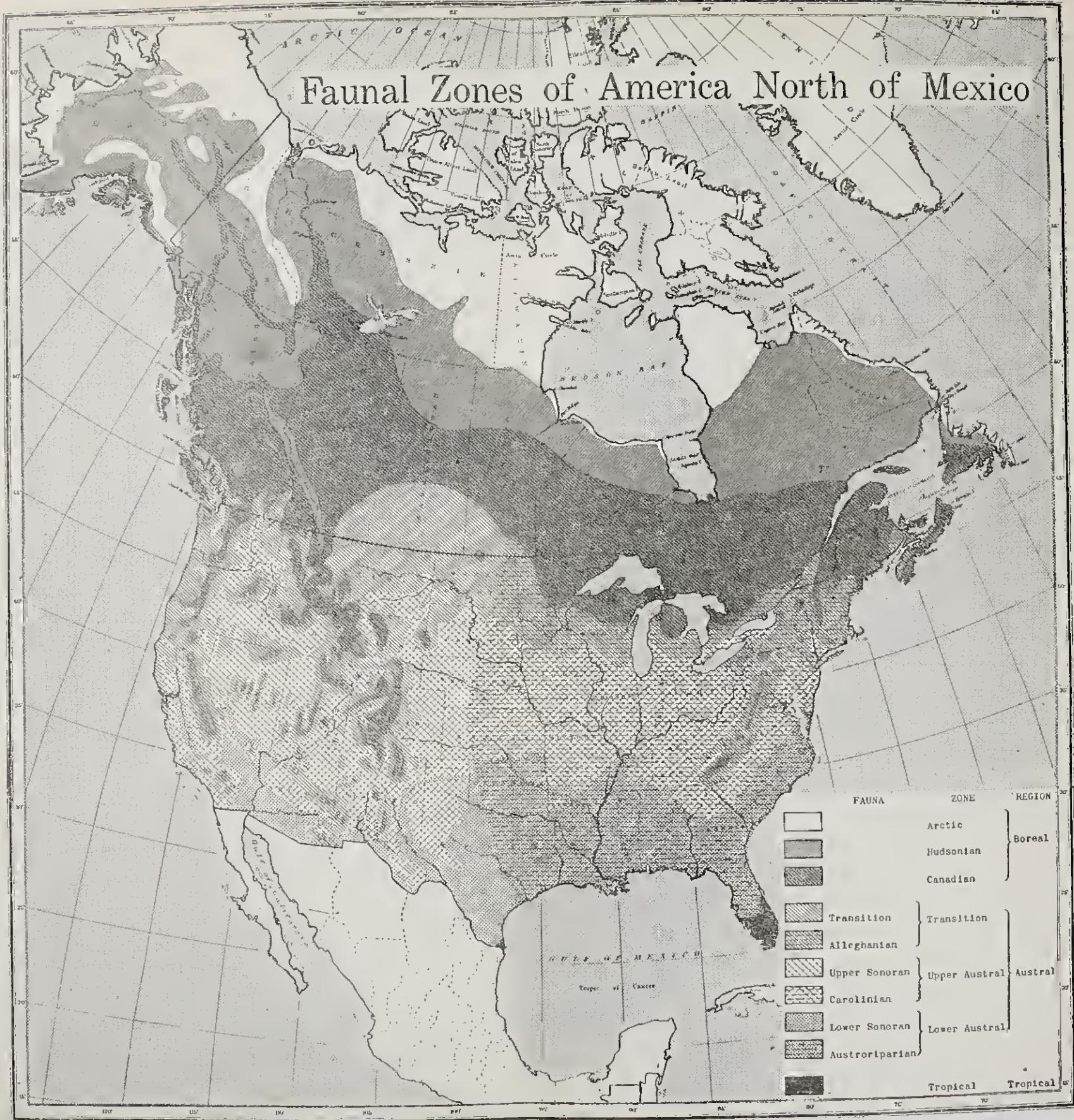
Prepared cooperatively by  
specialists on the various groups of Hymenoptera  
under the direction of  
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# Faunal Zones of America North of Mexico



# HYMENOPTERA OF AMERICA NORTH OF MEXICO—SYNOPTIC CATALOG

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## INTRODUCTION

As knowledge in any field grows, the tools that are to aid in making effective use of that knowledge and that are to stimulate further advances must be modernized. Among the most useful tools in the field of entomology are up-to-date catalogs of the various major groups of insects. They unlock the door to the vast store of published information pertaining to any particular species or form, and they clarify the relationships that species bear to one another. Such a modern catalog of the North American insects of the order Hymenoptera, which includes the sawflies, wood wasps, parasites of other insects that are used in biological control undertakings, bees, wasps, ants, gall wasps and related forms, has long been needed. The last regional catalog of this type was that by Cresson, published in 1887, although the North American species were included in the catalog of the known Hymenoptera of the world, by Dalla Torre, which was published in Germany in 10 volumes, between 1892 and 1902.

During the past 50 years several thousand new North American species have been described and named. Many more have been assigned to genera different from those in which they were originally described; numerous others have been found to be synonyms of previously described species; and still others have had to be renamed because of prior use of the same names for different species. Moreover, many species and genera, the names of which had been wrongly applied, have had to be redefined to correct misidentifications. New genera, too, have been established, and the classification not only of genera and species, but also of tribes, subfamilies, and families, has been appreciably altered. All this is the result of continued research which has grown increasingly critical and is continually adopting new approaches and applying new techniques.

The present contribution represents an attempt to bring together

that information in readily usable form. It had its inception in 1946 when three specialists in the Division of Insect Identification, U. S. Bureau of Entomology and Plant Quarantine, undertook to organize a cooperative effort in which participation by the foremost workers in the various groups of Hymenoptera was enlisted, and which had as its objective the preparation of a sound and authoritative synoptic catalog of the known insects belonging to this order that occur in America north of Mexico. At the outset it seemed doubtful that the efforts of more than 20 different and widely scattered taxonomists, all busily engaged with the work and problems of their respective positions, could be coordinated so as to insure completion of the projected catalog within a reasonable period. The cooperation on this undertaking, however, has been extraordinary; and when funds for publication became available, all individual contributions could be rather promptly completed and assembled and could be put into required form with a minimum of effort.

The specialists who participated in the development of this catalog and who are recorded as authors of the sections for which they were responsible are the following: W. G. Bodenstein, G. E. Bohart, R. M. Bohart, B. D. Burks, Howard E. Evans, Paul D. Hurd, Karl V. Krombein, E. Gorton Linsley, William R. M. Mason, C. D. Michener, W. W. Middlekauff, C. F. W. Muesebeck and Luella M. Walkley (joint contributions), W. D. Murray, Oswald Peck, D. T. Ries, Hugo G. Rodek, H. H. Ross, H. A. Scullen, M. R. Smith, L. J. Stannard, Henry K. and Marjorie Townes, and L. H. Weld. In addition invaluable assistance was given by a number of other specialists in Hymenoptera, notably A. B. Gahan and P. H. Timberlake.

## ARRANGEMENT SUPERSPECIFIC CLASSIFICATION

An attempt has been made to record all the forms, with their synonyms, described from, or known to occur in, the political divisions of the United States, Canada, Alaska, and Greenland. The arrangement is systematic for subgenera and higher groups in so far as our present knowledge and the limitations of a linear arrangement permit. The generic and subgeneric concepts represented in this arrangement rest upon what are believed to be correct genotype designations. In each instance the genotype is cited together with the authority for the selection. Where genotype designations have been found to be invalid under the International Rules of Zoological Nomenclature, new genotype designations, believed to be valid, are given in the catalog. Generic synonymy is included under the generic headings except where subgenera are recognized, in which cases such synonymy is given under the subgeneric names, and references to revisional papers are listed under the appropriate generic, tribal, subfamily, or family headings.

## TRIVIAL NAMES

Within the genera and subgenera the arrangement of species is alphabetical. Where subspecies are recognized the subspecific names are placed in alphabetical order under the species to which they belong; and varieties are listed under the species in which they occur except that varieties of subspecies are placed under the particular subspecies in

which they were described. In each case the specific, or other trivial, name is followed by an indication of the known distribution, and by brief statements showing hosts or prey or preferred habitats, where such information is available and significant. Much of the information on synonymy, distribution, hosts or prey preferences and habitats has hitherto been unpublished. The type localities are recorded for those forms that are known only from the localities where the type specimens were obtained. Otherwise the distribution is usually shown by states and provinces, or by the use of the faunal zones.

## MAP OF FAUNAL ZONES

The map of faunal zones (frontispiece) is an adaptation by Arthur D. Cushman of the U. S. Biological Survey's Fourth Provisional Zone Map of North America, 1910, by C. Hart Merriam, Vernon Bailey, E. W. Nelson, and E. A. Preble. The only changes, other than those occasioned by the use of symbols instead of colors for the various zones, have been the addition of a small area of Tropical Zone at the extreme southern tip of Texas and a rezoning of Alaska on advice received from R. I. Sailer. It should be emphasized that with so great a reduction as used in the reproduction of this map, it has been necessary to represent narrow extensions and certain small isolated areas of some of the zones as more extensive than they actually are.

## ABBREVIATIONS AND SYMBOLS

The abbreviations and arrangement of titles of journals used in this work are essentially those recommended in United States Department Agriculture Miscellaneous Publication 377, 1939. Certain other abbreviations and symbols used in the catalog are explained as follows:

(!) = *lapsus* or misspelling of a scientific name.

"♂" = ♀ or "♀" = ♂ = incorrect sex determination.

♂ (♀ misdet.) or ♀ (♂ misdet.) = only one of sexes described belongs to the species catalogued.

emend. = emendation.

n. comb. = new combination; used after a specific or infraspecific heading to indicate a new generic assignment.

n. name = new name; used after a specific or infraspecific heading to indicate a new substitute name for a homonym; used after bibliographic citation to indicate a substitute name proposed earlier for a homonym.

n. status = new status; used where a form is here accorded a rank different from that which it had previously.

n. syn. = new synonymy; used after generic or specific bibliographic citations to indicate a new synonym.

preeoc. = preoccupied; used after a generic or specific citation to indicate a homonym.

The faunal zones and their divisions are also abbreviated wherever used. The abbreviations are explained as follows:

Bor. = Boreal

Canad. = Canadian

Huds. = Hudsonian

Transit. = Transition

Austr. = Austral  
 U. Austr. = Upper Austral  
 L. Austr. = Lower Austral  
 Austrorip. = Austroriparian  
 Carol. = Carolinian  
 Sonor. = Sonoran

## SCOPE

This catalog has been prepared with much care and it is thought to include all essential material published through 1949. It must be recognized, however, that in the field of taxonomy no contribution can long remain up-to-date. New forms are continually being discovered, and further research is constantly necessitating adjustments in concepts and in classifications. Within such unavoidable limitations it is hoped the catalog will be useful in many different entomological activities, and that it will stimulate young workers possessing an aptitude for taxonomy to take up the study of the fascinating and economically important insects that make up the order Hymenoptera.

## Order HYMENOPTERA

General: Schröder, 1925. Handb. d. Ent. 3: 712-825, figs. 593-705.—Handlirsch and Meixner, 1933. In Krumbach, Handb. d. Zool., v. 4, Insecta 2, pp. 895-1036.—Comstock, 1940. An Introduction to Entomology, pp. 884-1007.—Essig, 1942. College Entomology, pp. 619-727.—Imms, 1948. A General Textbook of Entomology, ed. 7, pp. 544-615.

Taxonomy: Cresson, 1887. Amer. Ent. Soc. Trans., Sup. Vol., pp. 1-350 (key to No. Amer. families, genera and catalog of spp.).—Dalla Torre, 1892-1902. Cat. Hym., 10 vols. (world spp.).—Viereck, *et al.*, 1917 (1916). Conn. State Geol. and Nat. Hist. Survey Bul. 22: 1-824, 10 pls., 15 text figs. (keys to Conn. spp.).—Brues and Melander, 1932. Harvard Univ., Mus. Compar. Zool. Bul. 73: 471-526, figs. 887-971 (keys to families, adults, and larvae).

Morphology: Snodgrass, 1911. U. S. Natl. Mus. Proc. 39: 37-91, 16 pls., 19 text figs. (thorax).—Rohwer and Gahan, 1916. Ent. Soc. Wash. Proc. 18: 20-76, 3 pls. (wing venation).—Comstock, 1918. The Wings of Insects, pp. 362-381, pl. 10, text figs. 380-405.—Snodgrass, 1935. Principles of Insect Morphology, 667 pp., 319 figs.—Ross, 1936. Ent. Soc. Amer. Ann. 29: 99-111, 2 pls. (wing venation).—Snodgrass, 1941. Smithson. Inst. Misc. Collect. 99 (14): 1-86, 33 pls., 6 text figs. (male genitalia).

Biology: Bishoff, 1927. Biologie der Hymenopteren, 598 pp., 224 figs.—Wheeler, 1923. Social Life Among the Insects, 375 pp., 113 figs.—Wheeler, 1928. Social Insects, 378 pp., 79 figs.—Clausen, 1940. Entomophagous Insects, 688 pp., 257 figs.

## Suborder SYMPHYTA (=CHALASTOGASTRA)<sup>1</sup>

Revisions: Norton, 1867-1869. Amer. Ent. Soc. Trans. 1: 31-84, 193-280; 2: 211-242, 321-368.—Ashmead, 1898. Canad. Ent. 30: 141-145, 177-183, 205-213, 225-232, 249-257, 281-287, 305-316.—Rohwer, 1911. Ent. Soc. Wash. Proc. 13: 215-224.—MacGillivray, 1916. Conn. State Geol. and Nat. Hist. Survey Bul. 22: 25-175.—Ross, 1937. Ill. Biol. Monog. 15 (2): 1-173.

Catalog: Konow, 1905. In Wytsman, Gen. Ins., fasc. 27, pp. 1-27; fasc. 28, pp. 1-14; fasc. 29, pp. 1-176.

The suborder Symphyta comprises the sawflies and horntails. The

<sup>1</sup> By Herbert H. Ross, Ill. Nat. Hist. Survey, Urbana, Ill.; except the Siricoidea, the Pamphiliidae, and the genus *Periclista*, for which D. T. Ries, Woodrow W. Middlekauf, and L. J. Stannard, respectively, are responsible.

## Superfamily CHALCIDOIDEA<sup>16 17</sup>

The geographical records and host data have been compiled almost entirely from the literature and therefore must include many undetected errors. With few exceptions the host names have been checked by specialists in the Division of Insect Identification, Bureau of Entomology and Plant Quarantine, and to these men I owe much. Biology: Gahan, 1922. Ent. Soc. Wash. Proc. 24: 33-58 (phytophagy).—Essig, 1926.

Ins. of West. No. Amer., pp. 813-851.—Sweetman, 1936. Biol. Control of Ins., pp. 141-166.—Clausen, 1940. Entomophagous Insects, pp. 98-238.—Thompson, 1943. Cat. of Parasites and Predators.—Fulmek, 1946. Zentbl. Gesamtgeb. Ent. 1: 97-106 (hyperparasitism).

Morphology: Parker, 1924. Soc. Ent. France Ann. 93: 261-379 (larvae).—Ishii, 1932. Imp. Agr. Sta. Japan Bul. 3: 161-202 (adult).—Vance and Smith, 1933. Ent. Soc. Amer. Ann. 26: 86 (larval head).—Hanna, 1935. Soc. Ent. d'Égypte Bul. 19: 326-364 (adult).—Burks, 1940. U. S. Natl. Mus. Proc. 88: 239-240.—Bucher, 1948. Canad. Jour. Res. 26D: 230-281 (adult).

Taxonomy: Howard, 1886. Ent. Amer. 1: 197-199, 215-219; 2: 33-38, 97-101 (keys).—Cresson, 1887. Amer. Ent. Soc. Trans., Sup. Vol., pp. 64-80, 233-246 (cat., keys).—Dalla Torre, 1898. Cat. Hym., v. 5, pp. 1-431.—Ashmead, 1904. Carnegie Mus., Mem. 1: 1-393 (keys, genotypes).—Viereck, 1917 (1916). Conn. State Geol. and Nat. Hist. Survey Bul. 22: 443-528 (keys).—Gahan and Fagan, 1923. U. S. Natl. Mus. Bul. 124: 1-173 (genotypes, original generic references).—Essig, 1926. Ins. of West. No. Amer., pp. 813-851.—Mani, 1938. Cat. Indian Ins., pt. 23 (key).—Essig, 1942. College Entomology, pp. 649-662 (key).—Ceballos, 1942-43. Tribus Himen. España, pp. 164-218 (keys, figs.).—Kloet and Hincks, 1945. Check List Brit. Ins., 283-305.

## Family MYMARIDAE

The members of this subfamily are internal parasites in the eggs of other insects, particularly of Homoptera.

Revision: Girault, 1929. No. Amer. Hym. Mymaridae, pp. 6-27 (keys).

Taxonomy: Kryger, 1950. Ent. Meddel. 26: 1-97 (Europe, Keys).

## Subfamily GONATOCERINAE

### Genus OOCTONUS Haliday

*Ooctonus* Haliday, 1833. Ent. Mag. 1: 269, 343.

Type: *Ooctonus insignis* Haliday. Desig. by Westwood, 1840.

*Sphecomicrus* Haliday, 1846. In Walker, Ann. Mag. Nat. Hist. 18: errata; also p. 50.

Type: *Ooctonus insignis* Haliday. Present desig.

Revision: Whittaker, 1931. Ent. Soc. Wash. Proc. 33: 189-192.

*americanus* Girault. D. C.

*Ooctonus americanus* Girault, 1916. Ent. News 26: 67. ♀.

*aphrophorae* Milliron. Wis. Host: *Aphrophora saratogensis* (Fitch).

*Ooctonus aphrophorae* Milliron, 1947. Ent. Soc. Amer. Ann. 40: 217. ♂ ♀.

*auripes* Whittaker. B. C.

*Ooctonus auripes* Whittaker, 1931. Ent. Soc. Wash. Proc. 33: 190. ♀.

*canadensis* Whittaker. B. C.

*Ooctonus canadensis* Whittaker, 1931. Ent. Soc. Wash. Proc. 33: 191. ♀.

<sup>16</sup> By O. Peck, Canada Department of Agriculture, Ottawa, Canada.

<sup>17</sup> The chalcidoid portion of this catalog has been prepared in its present form through the assistance of A. B. Gahan, who has suggested not only the taxonomic sequence but also largely the new synonymy and specific transfers. I am heavily indebted to Mr. Gahan for these generous contributions from his great fund of knowledge of this group. To my colleague G. S. Walley thanks are due for help in many nomenclatorial problems.

**fuscipes** Whittaker. Conn., B. C.

*Oocononus fuscipes* Whittaker, 1931. Ent. Soc. Wash. Proc. 33: 189. ♀.

**occidentalis** Whittaker. B. C.

*Oocononus occidentalis* Whittaker, 1931. Ent. Soc. Wash. Proc. 33: 191. ♀.

**quadricarinatus** Girault. N. Y. Host: *Pityogenes hopkinsi* Swaine.

*Oocononus quadricarinatus* Girault, 1916. Ent. Soc. Amer. Ann. 9: 301. ♂.

**silvensis** Girault. D. C.

*Oocononus silvensis* Girault, 1916. Ent. News 27: 70. ♀.

#### Genus COSMOCOMOIDEA Howard

**Cosmocomoidea** Howard, 1908. Ent. Soc. Wash. Proc. 10: 68.

Type: *Cosmocomoidea morrilli* Howard. Monob.

Revision: Girault, 1929. No. Amer. Hym. Mymaridae, p. 21 (*Oocononus*, in part).

**morrilli** Howard. Fla. Hosts: Cicadellid eggs on sugar cane.

*Cosmocomoidea morrilli* Howard, 1908. Ent. Soc. Wash. Proc. 10: 69. ♂ ♀.

Taxonomy: Girault, 1917. Entomologist 50: 36.

#### Genus CAMPTOPTERA Foerster

**Camptoptera** Foerster, 1856. Hym. Stud., v. 2, pp. 116, 119, 144.

Type: *Camptoptera papaveris* Foerster. Monob.

**Pterooclysis** Förster, 1856. Hym. Stud., v. 2, p. 144. N. name.

**Macrocamptoptera** Girault, 1910. N. Y. Ent. Soc. Jour. 18: 239.

Type: *Camptoptera metotarsa* Girault. Monob.

Revision: Girault, 1929. No. Amer. Hym. Mymaridae, p. 20 (*Macrocamptoptera*), 22.

**brunnea** Dozier. Del.

*Camptoptera brunnea* Dozier, 1933. Ent. Soc. Wash. Proc. 35: 97. ♀.

**metotarsa** Girault. Va.

*Camptoptera metotarsa* Girault, 1905. Psyche 12: 91. ♀.

Taxonomy: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 238-240, ♀.

**pulla** Girault. Del., Ill., Calif. Hosts: *Hercothrips fasciatus* (Perg.); ?*Aleyrodes* sp.; *Polychrosis viteana* (Clem.).

*Camptoptera pulla* Girault, 1909. Ent. Soc. Amer. Ann. 2: 27. ♀.

Taxonomy: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 236-238, ♂ ♀.

#### Genus GONATOCERUS Nees

**Gonatocerus** Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 192.

Type: *Gonatocerus longicornis* Nees. Monob.

**Lymaenon** Haliday, 1846. In Walker, Ann. Mag. Nat. Hist. 18: 49, 50.

Type: *Lymaenon acuminatus* Haliday. Desig. by Gahan and Fagan, 1923.

**Gonatoceroides** Girault, 1913. Entomologist 46: 255.

Type: *Gonatoceroides australica* Girault. Monob.

**Agonatocerus** Girault, 1913. Canad. Ent. 45: 276.

Type: *Agonatocerus humboldti* Girault. Monob.

Revisions: Girault, 1911. Amer. Ent. Soc. Trans. 37: 254-277.—Girault, 1929. No. Amer. Hym. Mymaridae, pp. 22-27.

**americanus** Brues. Wis.

*Conatocerus americanus* Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 109. ♀.

**anthonomi** Girault. Ill., Ga., Tex., N. Mex. Host: ?*Tachypterellus quadrigibbus* (Say).

*Gonatocerus anthonomi* Girault, 1905. Ent. News 16: 288. ♂ ♀.

*Gonatocerus texanus* Girault, 1911. Amer. Ent. Soc. Trans. 37: 270. ♀.

*Gonatocerus websteri* Girault, 1911. Amer. Ent. Soc. Trans. 37: 324.

**ashmeadi** Girault. No. Amer.

*Conatocerus dolichocerus* var. *ashmeadi* Girault, 1916. Ent. News 27: 8. ♂ ♀.

**aureus** Girault. Ill.

*Conatocerus aureus* Girault, 1911. Amer. Ent. Soc. Trans. 37: 263. ♀.

- brunneus** Girault. Ill. Host: ?*Aphis pomi* (Deg.).  
*Gonatocerus brunneus* Girault, 1911. Amer. Ent. Soc. Trans. 37: 261. ♂.  
 ♀.
- Gonatocerus maevius* Girault, 1911. Amer. Ent. Soc. Trans. 37: 272. ♀.
- californicus** Girault. Calif.  
*Gonatocerus californicus* Girault, 1911. Amer. Ent. Soc. Trans. 37: 271. ♀.
- capitatus** Gahan. Utah, Ariz., Calif. Host: *Circulifer tenellus* (Baker).  
*Gonatocerus (!) capitatus* Gahan, 1932. Ent. Soc. Amer. Ann. 25: 754. ♂.  
 ♀.
- dolichocerus** Ashmead. Ill., Ga., Fla. Host: *Ceresa bubalus* (F.).  
*Gonatocerus dolichocerus* Ashmead, 1887. Canad. Ent. 19: 192. ♀.
- fasciatus** Girault. D. C., Va., Ill.  
*Gonatocerus fasciatus* Girault, 1911. Amer. Ent. Soc. Trans. 37: 265. ♀.
- illinoiensis** Girault. Ill.  
*Gonatocerus illinoiensis* Girault, 1917. Psyche 24: 91. ♀.
- koebeli** Perkins. Hosts: *Draeculacephala minor* (Wlkr.); *D. mollipes* (Say).  
*Gonatoceus (!) koebeli* Perkins, 1912. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 10: 22. ♂ ♀.
- latipennis** Girault. ?Canada.  
*Gonatocerus latipennis* Girault, 1911. Amer. Ent. Soc. Trans. 37: 268. ♂.
- maga** Girault. Ill.  
*Gonatocerus maga* Girault, 1911. Amer. Ent. Soc. Trans. 37: 267. ♀.
- marylandicus** Girault, emend. Md.  
*Gonatocerus marylandicus* Girault, (1916) 1917. Insecutor Inscitiae Mensstruus 4: 115. ♀.
- maximus** Girault. Ill.  
*Gonatocerus maximus* Girault, 1911. Amer. Ent. Soc. Trans. 37: 264. ♀.
- mexicanus** Perkins. Fla., Ariz. Hosts: *Draeculacephala mollipes* (Say).  
*Gonatocerus mexicanus* Perkins, 1912. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 10: 21. ♂ ♀.
- Gonatocerus eximius* Gahan, 1913. U. S. Natl. Mus. Proc. 46: 441. ♀.
- Gonatocerus gibsoni* Crawford, 1915. U. S. Natl. Mus. Proc. 48: 586. ♂ ♀.  
 Biology: Gibson, 1915. U. S. Dept. Agr. Bul. 254: 14.
- nigritarsis** Ashmead. Fla.  
*Gonatocerus nigritarsis* Ashmead, 1887. Canad. Ent. 19: 192. ♀.
- novifasciatus** Girault. Tenn.  
*Gonatocerus novifasciatus* Girault, 1911. Amer. Ent. Soc. Trans. 37: 266. ♀.
- Taxonomy: Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 112.
- ornatus** Gahan. Ariz. Host: *Stictocephala festina* (Say).  
*Gonatocerus ornatus* Gahan, 1918. Ent. Soc. Wash. Proc. 20: 23. ♂ ♀.
- ovicenatus** Leonard and Crosby. N. Y. Hosts: *Idiocerus scurra* Germ., Cicadellid eggs in sugar cane.  
*Gonatocerus ovicenatus* Leonard and Crosby, 1915. Jour. Econ. Ent. 8: 545. ♂ ♀.
- partifuscipennis** Girault. Md.  
*Gonatocerus partifuscipennis* Girault, 1916. Canad. Ent. 48: 102. ♀.
- pygmaeus** Girault. Miss.  
*Gonatocerus pygmaeus* Girault, 1911. Amer. Ent. Soc. Trans. 37: 269. ♀.
- rivalis** Girault. Va., Ill., Kans.  
*Gonatocerus rivalis* Girault, 1911. Amer. Ent. Soc. Trans. 37: 257. ♂ ♀.
- tenuipennis** Girault. Ill.  
*Gonatocerus brunneus* var. *tenuipennis* Girault, 1911. Amer. Ent. Soc. Trans. 37: 263. ♀.
- titillatus** Girault. Utah.  
*Gonatocerus titillatus* Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 87. ♀.

**utahensis** Girault. Utah. Host: ?Cicadellid eggs in *Elymus*.

**Gonatocerus utahensis** Girault, 1917. U. S. Natl. Mus. Proc. 53: 446. ♀.

### Genus ALAPTUS Haliday

**Alaptus** Haliday, 1840. In Westwood, Introd. Mod. Classif. Ins., v. 2, p. 79.  
Type: *A'aptus minimus* Haliday. Monob.

**Metalalaptus** Malenotti, 1917. Redia 12: 339.

Type: *Metalaptus torquatus* Malenotti. Monob.

Revision: Girault, 1929. No. Amer. Hym. Mymaridae, pp. 9-10.

**caecilii** Girault. Maine, Fla., Ill., Calif., ?Mass. Hosts: *Caecilius aurantiacus* (Hag.); *C. manteri* Som.; ?*Ectopsocus californicus* (Banks); *Psocus*; Psocid; ?*Trialeurodes fernaldi* (Morrill).

**Alaptus caecilii** Girault, 1908. Ent. Soc. Amer. Ann. 1: 189. ♂ ♀.  
Taxonomy: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 241-243.

**eriococci** Girault. Calif. Hosts: Psocid; *Aonidiella aurantii* (Mask.); *Eriococcus araucariae* Mask.

**Alaptus eriococci** Girault, 1908. Ent. Soc. Amer. Ann. 1: 191. ♂ ♀.

**globosicornis** Girault. Fla. Hosts: *Liposcelis divinatorius* (Müll.); Psocid; ?*Lepidosaphes beckii* (Newm.).

**Alaptus globosicornis** Girault, 1908. Ent. Soc. Amer. Ann. 1: 188. ♀.  
Taxonomy: Girault, 1911. Arch. f. Naturgesch. 77 (1) sup. 2: 132.

**iceriae** Riley. Ill., Calif. Hosts: *Aspidiotus camelliae* Sign.; ♂ pupa of *Icerya*; *I. purchasi* Mask.

**Alaptus iceryae** Riley, 1889. U. S. Dept. Agr. Rpt. for 1888, p. 86.  
Taxonomy: Girault, 1908. Ent. Soc. Amer. Ann. 1: 186. ♂ ♀.—Girault, 1910. N. Y. Ent. Soc. Jour. 18: 240-243. ♂ ♀.

**intonsipennis** Girault. Ill.

**Alaptus intonsipennis** Girault, 1910. N. Y. Ent. Soc. Jour. 18: 244. ♀.

**psocidivorus** Gahan. Calif. Hosts: ?*Ectopsocus californicus* Banks; psocid eggs on *Heteromeles*.

**Alaptus psocidivorus** Gahan, 1927. Pan-Pacific Ent. 3: 180. ♂ ♀.  
Biology: Spruyt, 1927. Pan-Pacific Ent. 3: 182-184. ♂ ♀.

**torquatus** (Malenotti). La. Host: ?*Pseudaonidia duplex* (Ckll.).

**Metalalaptus torquatus** Malenotti, 1917. Redia 12: 339. ♂ ♀.  
Taxonomy: Cressman, Bliss, Kessels, and Dumestre, 1935. Jour. Agr. Res. 50: 282.

### Genus DICOPUS Enock

**Dicopus** Enock, 1909. Ent. Soc. London Trans., p. 455.

Type: *Dicopus minutissima* Enock. Monob.  
Revision: Girault, 1929. No. Amer. Hym. Mymaridae, pp. 10-11.

**halitus** Girault. Que. Host: ?*Choristoneura fumiferana* (Clem.).

**Dicopus halitus** Girault, 1911. Ent. News 22: 347. ♂.

### Subfamily MYMARINAE

### Genus ERYTHMELUS Enock

**Erythmelus** Enock, 1909. Ent. Soc. London Trans., p. 454.

Type: *E rythmelus grecchi* Enock. Monob.  
Revisions: Girault, 1929. No. Amer. Hym. Mymaridae, pp. 7-8.—Doutt, 1949. Pan-Pacific Ent. 25: 77-81 (Calif.).

**flandersi** Doutt. Calif.

**Erythmelus flandersi** Doutt, 1949. Pan-Pacific Ent. 25: 77. ♂ ♀.

**gracilipes** (Girault). N. Mex.

**Anaphes gracilipes** Girault, 1916. Ent. News 27: 7. ♀.

**gracilis** (Howard). N. J. to Ga.; Ill. Hosts: *Aspidiotus perniciosus* Comst.; *Lepidosaphes ulmi* (L.); *Carpocapsa pomonella* (L.).

**Anaphes gracilis** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 370. ♀.

**Anaphes cinctiventris** Girault, 1911. Amer. Ent. Soc. Trans. 37: 286. ♀. Biology: Johnson, 1900. U. S. Dept. Agr. Div. Ent. Bul. (n. s.) 26: 73-74.

**io** (Girault). Ill., Calif.

**Anagrus io** Girault, 1911. Amer. Ent. Soc. Trans. 37: 294. ♂.

**miridiphagus** Dozier. Calif.

**Erythmelus miridiphagus** Dozier, 1937. Puerto Rico Univ. Jour. Agr. 21: 133. ♀.

**picinus** (Girault). N. Mex.

**Anaphes picinus** Girault, 1916. Ent. News 27: 6. ♀.

**psallidis** Gahan. S. C., Miss., Ark., La., Tex., Ariz., Calif. Hosts: ?*Macrolophus separatus* (Uhl.); *Psallus seriatus* (Reut.); ?*Reuterescopus sulphureus* (Reut.).

**Erythmelus psallidis** Gahan, 1937. Ent. Soc. Wash. Proc. 39: 268. ♂ ♀. Biology: Ewing and Crawford, 1939. Jour. Econ. Ent. 32: 303-305.

### Genus PARALLELAPTERA Enock

**Parallelaptera** Enock, 1909. Ent. Soc. London Trans., p. 454.

Type: **Parallelaptera panis** Enock. Monob.

**Anthemiella** Girault, 1911. Ent. Soc. Wash. Proc. 13: 185.

Type: **Anthemiella rex** Girault. Monob.

Revision: Girault, 1929. No. Amer. Hym. Mymaridae, p. 8.

**rex** (Girault). Ill., Calif. Host: *Circulifer tenellus* (Baker).

**Anthemiella rex** Girault, 1911. Ent. Soc. Wash. Proc. 13: 185. ♀.

### Genus STETHYNIUM Enock

**Stethynium** Enock, 1909. Ent. Soc. London Trans., p. 452.

Type: **Stethynium triclavatum** Enock. Monob.

**annulatum** Doutt. Calif.

**Stethynium annulatum** Doutt, 1947. Pan-Pacific Ent. 23: 152. ♀.

**faunum** Girault. Ill.

**Stethynium faunum** Girault, 1911. Amer. Ent. Soc. Trans. 37: 298. ♂ ♀.

### Genus PATASSON Walker

**Patasson** Walker, 1846. Ann. Mag. Nat. Hist. 18, errata.

Type: **Panthus crassicornis** Haliday. Monob.

**Anaphoidea** Girault, 1909. N. Y. Ent. Soc. Jour. 17: 167.

Type: **Anaphoidea sordidata** Girault. Monob.

**Anaphoides** Enock, 1915. Hastings and East Sussex Nat. 2: 181 (no species).

Type: **Patasson crassicornis** (Haliday). Present desig.

Revisions: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 246-254.—Girault, 1929. No. Amer. Hym. Mymaridae, pp. 13-14 (*Anaphoidea*).

**calendrae** (Gahan), n. comb. N. J., Ind., Mo., Miss. Hosts: *Calendra callosa* (Oliv.); *C. costipennis* (Horn); *C. destructor* (Chitt.); *C. minima* (Hart.); *C. parvula* (Gyll.); *C. pertinax* (Oliv.).

**Anaphoidea calendrae** Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 32. ♂ ♀. Biology: Satterthwaite, 1931. N. Y. Ent. Soc. Jour. 39: 171.

**conotrachelii** (Girault), n. comb. Conn. to Ga. and Ky.; Minn., Okla., Tex., Utah. Hosts: *Conotrachelus nenuphar* (Herbst); *Craponius inaequalis* (Say); *Rhagoletis pomonella* (Walsh); *Sofus pilicornis* (Holmg.).

**Anaphes conotrachelii** Girault, 1905. Ent. News 16: 220. ♂ ♀.

**Anaphoidea luna** Girault, 1914. Ent. Soc. Wash. Proc. 16: 109. ♂ ♀.

Biology: Johnson and Girault, 1906. U. S. Dept. Agr., Bur. Ent., Cir. 73: 5-6.—

Brooks, 1910. W. Va. Agr. Expt. Sta. Bul. 126: 110.—Porter, 1928. U. S. Dept. Agr. Tech. Bul. 66: 29.—Dozier, Williams, and Butler, 1932. Del. Agr. Expt. Sta. Bul. 175: 38.

Taxonomy: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 247–254. ♂ ♀.

**pullicerura** (Girault), n. comb. Ill.

*Anaphoidea pullicerura* Girault, 1910. N. Y. Ent. Soc. Jour. 18: 252. ♂ ♀.

**sordidatus** (Girault), n. comb. N. J., Ill. Host: *Tyloderma foveolata* Say.

*Anaphoidea sordidata* Girault, 1909. N. Y. Ent. Soc. Jour. 17: 169. ♂ ♀.

### Genus ANAGRUS Haliday

**Anagrus** Haliday, 1833. Ent. Mag. 1: 346.

Type: *Ichneumon atomus* Linnaeus. Desig. by Westwood, 1840.

Revisions: Girault, 1911. Amer. Ent. Soc. Trans. 37: 289–298.—Girault, 1929. No. Amer. Hym. Mymaridae, pp. 8–9.

**armatus armatus** (Ashmead). Ont., N. Y. and Conn. to Md., Ill., Iowa, Fla., Colo., Oreg. Hosts: *Empoasca fabae* Harr.; *Typhlocyba pomaria* McAtee; *T. rosae* (L.); *Delphacodes* sp.; *Aphis pomi* Deg.; *Aspidiotus perniciosus* Comst.; ?*A. uvae* Comst.; *Aulacaspis rosae* (Bouché); *Lecanium corni* Bouché; gall of *Dasyneura serrulatae* O. S.

*Litus armatus* Ashmead, 1887. Canad. Ent. 19: 193. ♀.

*Eustochus xanthothorax* Ashmead, 1887. Canad. Ent. 19: 193. ♀.

*Anagrus columbi* Perkins, 1905. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 1 (6): 198. ♀.

*Anagrus spiritus* Girault, 1911. Ent. News 22: 207. ♂ ♀.

Biology: Childs, 1918. Oreg. Agr. Expt. Sta. Bul. 148: 27.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 277, 289. ♂ ♀.

**armatus nigriceps** Girault. Oreg. Host: *Typhlocyba rosae* (L.).

*Anagrus armatus* var. *nigriceps* Girault, 1915. Ent. Soc. Amer. Ann. 8: 276. ♀.

**armatus nigriventris** Girault. Ont. to Conn., S. C., and Ill.; N. Mex., Utah. Hosts: *Empoasca fabae* (Harr.); *Typhlocyba pomaria* McAtee; *Halticus bracteatus* (Say).

*Anagrus armatus* var. *nigriventris* Girault, 1911. Amer. Ent. Soc. Trans. 37: 291. ♀.

Biology: Ackerman, 1919. U. S. Dept. Agr. Bul. 805: 28.—Armstrong, 1936. Ent. Soc. Ontario Ann. Rpt. 66: 17–22, ♂ ♀.—Steiner, 1938. Conn. Pomol. Soc. Proc. 47: 23–25.

**delicatus** Dozier. Ill.

*Anagrus delicatus* Dozier, 1936. Hawaii. Ent. Soc. Proc. 9: 177. ♂ ♀.

**epos** Girault. Pa., Md., Va., Ill., N. Mex., Calif. Hosts: *Empoasca fabae* (Harr.); *Erythroneura plena* Beamer; *E. comes* (Say); *Typhlocyba pomaria* McAtee; *Aspidiotus perniciosus* Comst.; *Coleophora malivorella* Riley.

*Anagrus epos* Girault, 1911. Amer. Ent. Soc. Trans. 37: 292. ♂ ♀.

Biology: Ackerman, 1919. U. S. Dept. Agr. Bul. 805: 28.

**giraulti** Crawford. Idaho, Utah, Calif. Hosts: *Arilus cristatus* (L.); *Circulifer tenellus* (Baker); ?*Gnorimoschema operculella* (Zell.).

*Anagrus giraulti* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 259. ♂ ♀.

Biology: Stahl, 1920. Jour. Agr. Res. 20: 250.—Henderson, 1941. U. S. Dept. Agr. Cir. 593: 2–10.

**puella** Girault. Ill., Colo.

*Anagrus puella* Girault, 1911. Amer. Ent. Soc. Trans. 37: 293. ♂ ♀.

### Genus MYMAR Curtis

**Mymar** Curtis, 1832. Brit. Ent., v. 9, p. 411.

Type: *Ichneumon punctum* Shaw. Orig. desig.

**Anaphes** Haliday, 1833. Ent. Mag. 1: 269, 346.

Type: *Ichneumon punctum* Shaw. Desig. by Westwood, 1840.

Revisions: Girault, 1911. Amer. Ent. Soc. Trans. 37: 277–288 (*Anaphes* in part).—

Girault, 1929. No. Amer. Hym. Mymaridae, pp. 13–14 (*Anaphes* in part).

Gahan, 1949. Wash. Acad. Sci. Jour. 39: 204–205 (nomenc.).

*anomocerus* (Girault), n. comb. Tex., Ariz. Host: *Psallus seriatus* (Reut.).

*Anaphes iole anomocerus* Girault, 1929. No. Amer. Hym. Mymaridae, p. 13. Biology: Ewing and Crawford, 1939. Jour. Econ. Ent. 32: 303-305.

*behmani* (Girault), n. comb. U. S.

*Anaphes behmani* Girault, 1929. No. Amer. Hym. Mymaridae, p. 14.

*hercules* (Girault), n. comb. Ill.

*Anaphes hercules* Girault, 1911. Amer. Ent. Soc. Trans. 37: 285. ♀.

*iole* (Girault), n. comb. Ill. Host: *Hypera nigrirostris* (F.).

*Anaphes iole* Girault, 1911. Amer. Ent. Soc. Trans. 37: 284. ♀.

*nigrellus* (Girault), n. comb. Ill.

*Anaphes nigrellus* Girault, 1911. Amer. Ent. Soc. Trans. 37: 282. ♀.

*ovijentatus* (Crosby and Leonard), n. comb. N. Y., La., Calif. Hosts: *Lygus hesperus* Knight; *L. oblineatus* (Say).

*Anagrus ovijentatus* Crosby and Leonard, 1914. Canad. Ent. 46: 181. ♀.

Biology: Romney and Cassidy, 1945. Jour. Econ. Ent. 38: 497.

*pallipes* (Ashmead). Va., Fla. Host: *?Gnorimoschema operculella* (Zell.).

*Alaptus pallipes* Ashmead, 1887. Canad. Ent. 19: 193. ♀.

Taxonomy: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 243-244.—Girault, 1911. Amer. Ent. Soc. Trans. 37: 278-279. ♀.

*perdubius* (Girault), n. comb. Minn., S. C., Utah. Hosts: Cicadellid; *Halticus bracteatus* (Say).

*Anaphes perdubius* Girault, 1916. Ent. News 27: 6. ♀.

*pratensis* (Foerster), n. comb. Conn., Ill., Utah. Hosts: *Hypera postica* (Gyll.); *H. punctata* (F.).

*Anaphes pratensis* Foerster, 1847. Linnaea Ent. 2: 211. ♂ ♀.

Biology: Pack, 1930. Utah Agr. Expt. Sta. Bul. 216: 29-30.

Taxonomy: Girault, 1912. Canad. Ent. 44: 88.

*sinipennis* (Girault), n. comb. Ill.

*Anaphes sinipennis* Girault, 1911. Amer. Ent. Soc. Trans. 37: 280. ♀.

### Genus ACMOPOLYNEMA Ogloblin

*Acmoplynema* Ogloblin, 1946. Iowa State Col. Jour. Sci. 20: 286.

Type: *Stichothrix bifasciatipennis* Girault. Orig. desig.

*bifasciatipennis* *bifasciatipennis* (Girault). N. Y. and Mass. to N. C. and Pa.; Tex., Kans. Hosts: *Anaxiphia exigua* (Say); *Oecanthus nigricornis* Wlkr.; *O. nigricornis quadripunctatus* Beut.; *O. niveus* (Deg.).

*Stichothrix bifasciatipennis* Girault, 1908. Psyche 15: 115. ♀.

*Polynema oecanthi* Girault, 1911. Amer. Ent. Soc. Trans. 37: 317.

Biology: Brandhorst, 1943. Kans. Acad. Sci. Trans. 46: 169, 172.

Taxonomy: Girault, 1910. N. Y. Ent. Soc. Jour. 18: 254-258, ♂ ♀.

*bifasciatipennis varium* (Girault), n. comb. Kans. Hosts: *Oecanthus* eggs; Tephritid seed maggot from ironweed.

*Polynema bifasciatipenne* (!) var. *varium* Girault, 1917. Psyche 24: 92. ♂ ♀.

### Genus BARYPOLYNEMA Ogloblin

*Barypolynema* Ogloblin, 1946. Iowa State Col. Jour. Sci. 20: 282.

Type: *Barypolynema reticulatum* Oglblin. Orig. desig.

*aspidioti* (Girault). Tex. Host: *Psallus seriatus* (Reut.).

*Polynema aspidiota* Girault, 1911. Ent. News 22: 358. ♂.

Taxonomy: Girault, 1911. Ent. News 23: 298, ♂.

*saga* (Girault). D. C., Kans. Host: *Opsius stactogalus* Fieb.

*Anagrus saga* Girault, 1911. Amer. Ent. Soc. Trans. 37: 296. ♀.

Biology: Lawson, 1929. Ent. Soc. Amer. Ann. 22: 130.

### Genus POLYNEMA Haliday

*Polynema* Haliday, 1833. Ent. Mag. 1: 269, 347.

Type: *Ichneumon ovulorum* Linnaeus. Desig. by Westwood, 1840.

**Eutriche** Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 186.

Type: *Eutriche gracilis* Nees. Monob.

**Callitricha** Ágassiz, 1848. Nomenel. Zool. Index Univ., pp. 173, 439. Emend. Preocc.

**Cosmocoma** Foerster, 1856. Hym. Stud., v. 2, pp. 117, 120. N. name.

**Walkerella** Westwood, 1883. Ent. Soc. London, Trans. (2) 1: 32.

Type: *Walkerella temeraria* Westwood. Monob.

**Stephanodes** Enock, 1909. Ent. Soc. London, Trans., p. 457.

Type: *Stephanodes elegans* Enock. Monob.

Revisions: Girault, 1911. Amer. Ent. Soc. Trans. 37: 300-324.—Girault, 1929. No. Amer. Hym. Mymaridae, pp. 14-19.

**bimaculatipennis** Girault. Tex.

**Polynema bimaculatipenne** (!) Girault, 1911. Amer. Ent. Soc. Trans. 37: 304. ♀.

**caesariatipennis** Girault. D. C., Kans. Host: Tephritid seed maggot from iron-weed.

**Polynema caesariatipenne** (!) Girault, 1911. Amer. Ent. Soc. Trans. 37: 305. ♀.

**ciliatum** (Say), n. comb. Ind.

**Psilus ciliatus** Say, 1828. Contrib. Maclur. Lyc. Phila. 1: 80.

**consobrinus** Girault. Mich., Ohio, Ga., Ill., Iowa, Minn. Hosts: ?*Empoasca fabae* (Harr.); *Enchenopa binotata* (Say); *Anthonomus signatus* Say; ?*Tachypterellus quadrigibbus* (Say).

**Polynema consobrinus** Girault, 1911. Amer. Ent. Soc. Trans. 37: 308, 309. ♂ ♀.

Taxonomy: Girault, 1911. Ent. News 22: 467.

**enchenopae** Girault. Ill. Host: *Enchenopa binotata* (Say).

**Polynema enchenopae** Girault, 1911. N. Y. Ent. Soc. Jour. 19: 15. ♂ ♀.

**eutettixi** Girault. Idaho, Utah, Calif. Host: *Circulifer tenellus* (Baker).

**Polynema eutettixi** Girault, 1917. Deser. Stellarum Nov., p. 18. ♂ ♀.

**Polynema eutettixi** Stahl, 1920. Jour. Agr. Res. 20: 250. Emend.

Biology: Stahl, 1920. Jour. Agr. Res. 20: 250.

**florum** Girault. B. C.

**Polynema florum** Girault, 1929. No. Amer. Hym. Mymaridae, pp. 18, 28.

**graculus** Girault. Wis., Ill., Tex.

**Polynema graculus** Girault, 1911. Amer. Ent. Soc. Trans. 37: 308. ♂.

**howardii** (Ashmead). Calif., ?Colo. Host: *Ceresa bubalus* (F.).

**Cosmocoma elegans** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 371. ♂. Preocc.

**Cosmocoma Howardii** Ashmead, 1887. Canad. Ent. 19: 194. N. name.

**Cosmocoma Howardi** Dalla Torre, 1890. Wien. Ent. Ztg. 9: 97. N. name.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 300-302. ♂.

**imitatrix** Gahan. Ariz. Host: *Stictocephala festina* (Say).

**Polynema imitatrix** Gahan, 1918. Ent. Soc. Wash. Proc. 20: 24. ♂ ♀.

**longipes** (Ashmead). Del., Ohio, Ind., Ill., Tenn., Fla. Hosts: Probably *Aphis pomi* Deg.; *Harmolita* sp. ex *Elymus canadensis*.

**Ocootonus longipes** Ashmead, 1887. Canad. Ent. 19: 192. ♀.

**Polynema citripes** Girault, 1909. Psyche 16: 106.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 316, 324. ♀.

**maculipes** (Ashmead). Fla.

**Cosmocoma maculipes** Ashmead, 1887. Canad. Ent. 19: 194. ♂.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 306-308. ♀.

**marylandicum** Girault, emend. Md.

**Polynema marilandicum** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 2. ♀.

**mymaripennis** Dozier. Del.

**Polynema mymaripennis** Dozier, 1933. Ent. Soc. Wash. Proc. 35: 96. ♀.

**nativum** Girault. B. C.

**Polynema nativum** Girault, 1929. No. Amer. Hym. Mymaridae, pp. 19, 28.

**needhami** Ashmead. Ill. Hosts: *Lestes uncatus* Kirby; *L. unguiculatus* Hagen.  
*Polynema needhami* Ashmead, 1900. Ent. News 11: 616. ♂ ♀.

**picipes** Girault. N. Y., Ga. Host: *?Tachypterellus quadrigibbus* (Say).  
*Polynema picipes* Girault, 1905. Psyche 12: 91. ♀.

*Polynema piceipes* (!) Girault, 1911. N. Y. Ent. Soc. Jour. 19: 18, 22. Emend.  
 Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 313. ♀.

**pratensiphagum** Walley. Ont. Host: *Lygus oblineatus* (Say).

*Polynema pratensiphaga* (!) Walley, 1929. Canad. Ent. 61: 193. ♂ ♀.

**psecas** Girault. Ill.

(*Stephanodes*) *Polynema psecas* (Girault), 1911. Amer. Ent. Soc. Trans. 37: 319. ♂ ♀.

*Stephanodes psecas* Girault, 1912. N. Y. Ent. Soc. Jour. 20: 41. ♀.

**regina** Girault. B. C.

*Polynema regina* Girault, 1912. Ent. Soc. Wash. Proc. 14: 24. ♀.

**sibylla** Girault. Va., Ill., Wis.

*Polynema sibylla* Girault, 1911. Amer. Ent. Soc. Trans. 37: 311. ♂ ♀.

**striaticorne** Girault. N. S. to Va., Mo., Colo. and Minn.; Tex., Calif., Idaho, B. C. Hosts: *Ceresa borealis* (Fairm.); *C. bubalus* (F.); *C. taurina* (Fitch); *Stictocephala inermis* (F.); *Oncopsis sobrius* (Wlkr.); *Anuraphis bakeri* (Cowen); *?Gnorimoschema operculella* (Zell.); *?Dasyneura leguminicola* (Lint.); gall of *Rhabdophaga triticoidea* Walsh; *Aphelinus lapisigni* How.; *Pachyneuron siphonophorae* (Ashm.).

*Polynema striaticorne* Girault, 1911. N. Y. Ent. Soc. Jour. 19: 12. ♂ ♀.

*Polynema striaticorne* var. *boreum* Girault, 1916. Ent. News 27: 8. ♀.

Biology: Balduf, 1928. Ent. Soc. Amer. Ann. 21: 419-435. ♂ ♀.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 302, 308. ♂ ♀.

**zetes** Girault. D. C., Ill.

*Polynema zetes* Girault, 1911. Amer. Ent. Soc. Trans. 37: 314. ♀.

### Genus CARAPHRACTUS Haliday

*Caraphractus* Haliday, 1846. In Walker, Ann. Mag. Nat. Hist. 18: 49, 50, 52.

Type: *Caraphractus cinctus* Haliday. Monob.

**cinctus** Haliday. N. Y.; Europe. Host: *Notonecta* sp.

*Caraphractus cinctus* Haliday, 1846. In Walker, Ann. Mag. Nat. Hist. (1) 18: 52.

Biology and taxonomy: Matheson and Crosby, 1912. Ent. Soc. Amer. Ann. 5: 68-70.

### Genus NEOMYMAR Crawford

*Neomydar* Crawford, 1913. U. S. Natl. Mus. Proc. 46: 351.

Type: *Neomydar vierecki* Crawford. Monob.

Revision: Girault, 1929. No. Amer. Hym. Mymaridae, pp. 12-13.

**vierecki marylandi** Girault, emend. Md.

*Neomydar vierecki marilandica* Girault, 1917. Chalcidoidea Nova Marylandensis III, p. 2. ♀.

**vierecki vierecki** Crawford. Va.

*Neomydar vierecki* Crawford, 1913. U. S. Natl. Mus. Proc. 46: 351. ♀.

### Genus MYMARILLA Westwood

*Mymar* of American authors.

*Mymarilla* Westwood, 1878. Linn. Soc. London, Trans. Zool., (2) 1: 585.

Type: *Mymar wollastonii* Westwood. Monob.

*Oglobliniella* Soyka, 1946. Zentbl. Gesamtgeb. Ent. 1: 181. N. syn.

Type: (*Mymar*) *Oglobliniella pulchella* Curtis. Orig. desig.

Revisions: Girault, 1929. No. Amer. Hym. Mymaridae, p. 12.—Gahan, 1949. Wash. Acad. Sci. Jour. 39: 209 (nomenc.).

**cincinnati** (Girault), n. comb. Md.

*Mymar cincinnati* Girault, 1917. Psyche 24: 99. ♂.

**venusta** (Girault), n. comb. Pa.

*Myrm venustum* Girault, 1911. N. Y. Ent. Soc. Jour. 19: 94, 188. ♀.

#### Genus ARESCON Haliday

**Arescon** Haliday, 1846. In Walker, Ann. Mag. Nat. Hist. 18: 49, 50.  
Type: *Myrm dimidiatus* Curtis. Monob.

**Panthus** Haliday, 1846. In Walker, Ann. Mag. Nat. Hist. 18: 49, 50.  
Type: *Panthus flavorarius* Haliday. Type by elimination.

**Leimacis** Foerster, 1847. Linnaea Ent. 2: 208.

Type: *Leimacis rufula* Foerster. Monob.

**Limacis** Foerster, 1856. Hym. Stud., v. 2, p. 120. Emend.

**aspidioticola** (Ashmead). Fla. Hosts: *Lepidosaphes beckii* (Newm.); *L. gloverii* (Pack.).

**Aphelinus aspidioticola** Ashmead, 1879. Canad. Ent. 11: 159. ♀.

### Family TRICHOGRAMMATIDAE

The members of this family are primary internal parasites in the eggs of other insects.

Revisions: Girault, 1912. Wis. Nat. Hist. Soc. Bul. 10:81-100 (cat., keys).—Girault, 1914. Wis. Nat. Hist. Soc. Bul. 12: 55-71 (cat.).—Girault, 1918. No. Amer. Hym. Trichogrammatidae, pp. 1-11 (keys).

#### Genus TRICHOGRAMMA Westwood

**Trichogramma** Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 2: 444.

Type: *Trichogramma evanescens* Westwood. Monob.

**Calleptiles** Haliday, 1833. Ent. Mag. 1: 340.

Type: *Calleptiles latipennis* Haliday. Monob.

**Pentarthron** Packard, 1872 (1871). Rec. Amer. Ent., p. 8.

Type: *Trichogramma? minuta* Riley. Monob.

**Oophthora** Aurivillius, 1898 (1897). Ent. Tidskr. 18: 250.

Type: *Oophthora semiblidis* Aurivillius. Monob.

**Pentarthrum** Dalla Torre, 1898. Cat. Hym., v. 5, p. 3. Emend.

**Xanthoatomus** Ashmead, 1904. Carnegie Mus. Mem. 1: xi, 360.

Type: (*Xanthoatomus albipes* Ashmead)=*Trichogramma minutum* Riley. Monob.

**Trichogrammatoides** Girault, 1911. Amer. Ent. Soc. Trans. 37: 13.

Type: *Chaetosticha nana* Zehntner. Orig. desig.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, pp. 4-5.

**evanescens** Westwood. Minn., Oreg. Hosts: *Heliothis* sp.; *Malacosoma disstria* Hbn.; *Melissopus latiferreanus* (Wlsm.); *Sitotroga cerealella* (Oliv.).

**Trichogramma evanescens** Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 2: 444.

Biology: Gatenby, 1918. Quart. Jour. Microsc. Sci. 63: 161-174.—Thompson and Parker, 1928. U. S. Dept. Agr. Tech. Bul. 59: 17.—Hase, 1929. Internat. Corn Borer Invest. Sci. Rpt. 2: 85-89.—Salt, 1937. Roy. Soc. London, Proc. (Ser. B) 122: 57-75.—Salt, 1939 (1938). Parasitology 30: 511-522.—Salt, 1942 (1941). Biol. Rev. Cambridge Phil. Soc. 16: 242-248.

**minutum** Riley. Common throughout U. S. and Canada. Hosts: *Chrysopa oculata* Say; *C. oculata albicornis* Fitch; *Lepidosaphes ulmi* (L.); *Chalepus dorsalis* Thunb.; *Deloyala guttata* (Oliv.); *Metriona bicolor* (F.); *Odontota suturalis* Thunb.; *Papilio glaucus* L.; *Colias philodice eurytheme* Bdyl.; *Pieris rapae* (L.); *Danaus plexippus* (L.); *Oeneis macounii* Edw.; *Agraulis vanillae* L.; *Basilarchia archippus* (Cram.); *Nymphalis milberti* Godt.; *Polygonia interrogationis* (F.); *Vanessa atalanta* (L.); *Lycaena hanno* (Stoll); *Calopodes ethlius* (Stoll); *Erynnis lucilius* (Seud. and Burg.); *Urbanus proteus* (L.); *Ceratomia catalpae* (Bdyl.); *Protoparce quinquemaculata* (Haw.); *P. sexta* (Johan.); *Coloradia pandora* Blake; *Anisota senatoria* (A. and S.); *Celama sorghiella* (Riley); *Cisthene nexa* (Bdyl.); *Estigmene acrea* (Drury); *Hyphantria cunea* (Drury); *Alabama argillacea* (Hbn.); *Anomis erosa* (Hbn.);

*Anticarsia gemmatalis* (Hbn.); *Caenurgina erechtea* (Cram.); *Ceramica picta* (Harr.); *Heliothis armigera* (Hbn.); *Heterocampa guttivitta* (Wlkr.); *H. pseudotsugata* (McD.); *Laphyrgma frugiperda* (A. and S.); *Peridroma margaritosa* (Haw.); *Plathypena scabra* (F.); *Trichoplusia ni* (Hbn.); *Datana integerrima* Grote and Rob.; *Oligocentris lignicolor* (Wlkr.); *Nygma phaeorrhoea* (Donov.); *Olene plagiata pinicola* Dyar; *Stilpnobia salicis* (L.); *Alsophila pometaria* (Harr.); *Cnidocampa flavescens* (Wlkr.); *Acrobasis caryae* Grote; *A. juglandis* (LeB.); *Chilo forbesellus* Fern.; *C. plejadellus* Zinck.; *Corcyra cephalonica* Staint; *Diatraea cramboides* (Grote); *D. grandiosella* Dyar; *D. saccharalis* (F.); *D. zeacolella* Dyar; *Ephestia cautella* (Wlkr.); *E. kuhniella* Zell.; *Loxostege similalis* (Guen.); *Mineola vaccinii* (Riley); *Occidentalia comptulatalis* (Hulst.); *Phlyctaenia rubigalis* (Guen.); *P. tertialis* (Guen.); *Plodia interpunctella* (Hbn.); *Pyrausta ainsliei* Heinr.; *P. nubilalis* (Hbn.); *P. penitalis* (Grote); *Schoenobius melinellus dispersus* Rob.; *Ancylis comptana* (Froehl.); *Bactra lanceolana* (Hbn.); *Carposoma pomonella* (L.); *Grapholita molesta* (Busek); *Gretchenia bolliana* (Sling.); *Laspeyresia caryana* (Fitch); *Melissopus latiferreanus* (Wlsm.); *Polychrosis viteana* (Clem.); *Rhyacionia buoliana* (Schiff.); *R. frustrana* (Comst.); *Spilonota ocellana* (D. and S.); *Amelia ivana* (Fern.); *Archips rosaceana* (Harr.); *Argyrotaenia citrana* (Fern.); *A. mariana* (Fern.); *A. velutinana* (Wlkr.); *Choristoneura fumiferana* (Clem.); *Peronea variana* Fern.; *Platynota rostrana* (Wlkr.); *Gnorimoschema operculella* (Zell.); *Sitotroga cerealella* (Oliv.); *Sanninoidea exitiosa* (Say); *Coleophora malivorella* (Riley); *C. pruniella* Clem.; *C. salmani* Heinr.; *Thyridopteryx ephemeraeformis* (Haw.); *Pegomya calyprata* (Zett.); *P. hyoscyami* (Panz.); *Cimex americana* Leach; *Ametastegia glabrata* (Fall.); *Caliroa aethiops* (F.); *C. amygdalina* Roh.; *C. cerasi* (L.); *C. obsoleta* (Nort.); *Heterarthrus nemoratus* (Fall.); *Nematus populi* (Marl.); *N. ribesii* (Scop.); *?Pachynematus palliventris* (Cress.); *Pikonema alaskensis* (Roh.); *Profenus canadensis* (Marl.).

*Trichogramma (?) minuta* Riley, 1871. Mo. State Bd. Agr. Ann. Rpt. 6: 157.

*Trichogramma pretiosa* Riley, 1879. Canad. Ent. 11: 161. ♂ ♀.

*Ttichogramma minutissimum* Packard, 1881. Boston Soc. Nat. Hist. Proc. 21: 37. ♂ ♀.

*Trichogramma odontotae* Howard, 1885. Ent. Amer. 1: 117. ♂ ♀.

*Trichogramma intermedium* Howard, 1889. In Scudder, Butterflies of Eastern U. S. and Canada, pp. 1872, 1895. ♂ ♀.

*Xanthoatomus albipes* Ashmead, 1904. Carnegie Mus. Mem. 1: xi, 360. ♀.

*Trichogramma pretiosa* var. *nigra* Girault, 1906. Canad. Ent. 38: 82. ♂ ♀. N. syn.

*Trichogramma helocharae* Perkins, 1907. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 4: 58.

*Pentarthron euproctidis* Girault, 1911. Amer. Ent. Soc. Trans. 37: 46. ♂ ♀.

Biology: Newcomer, 1915. U. S. Dept. Agr. Bul. 265: 34.—Cleare, 1928. Ent. Res. Bul. 19: 31-38.—Holloway, Haley, and Loftin, 1928. U. S. Dept. Agr. Tech. Bul. 41: 40-42, 55-56.—Wishart, 1929. Sci. Agr. 9: 616-617.—Peterson, 1929. Ent. Soc. Ontario Ann. Rpt. 59: 83-84.—Flanders, 1929 (1928). Fourth Internat. Cong. Ent. Trans., pp. 110-130.—Hinds and Spencer, 1929 (1928). Fourth Internat. Cong. Ent. Trans., pp. 1029-1035.—Garman, 1930 (1929). Conn. Pomol. Soc. Proc. 39: 41-43.—Garman, 1930. Conn. Agr. Expt. Sta. Bul. 313: 441-444.—Hinds and Spencer, 1930. Jour. Econ. Ent. 23: 121.—Flanders, 1931. Hilgardia 5: 395-406.—Morrill, 1931. Jour. Econ. Ent. 24: 1264-1273.—Essig, 1931. Hist. of Ent., pp. 325-329.—Crowley, 1931. Wash. Agr. Expt. Sta. Bul. 260: 68.—Schread, 1932. Conn. Agr. Expt. Sta. Bul. 338: 600-601.—Slate, 1932. Conn. Agr. Expt. Sta. Bul. 337: 462-463.—Hinds and Osterberger, 1932. Internat. Soc. Sugar Cane Technol., Fourth Cong. Bul. 52, pt. 2.—Hinds, Osterberger, and Dugas, 1933. La. Agr. Expt. Sta. Bul. 235: 1-36.—Hinds, Osterberger, and Dugas, 1934. La. Agr. Expt. Sta. Bul. 248: 1-34.—Van Steenburgh, 1934. Canad. Jour. Res. 10: 287-314.—Nettles, 1934. S. C. Agr. Expt. Sta. Bul. 295: 25-27.—Van Steenburgh, 1935. Ent. Soc. Ontario Ann. Rpt. 65: 68-69.—Schread, 1936. Conn. Agr. Expt. Sta. Bul. 383: 344-346.—Jaynes and Bynum, 1936. Sugar Bul. 14 (19): 1-4.—Keen, 1938. U. S. Dept. Agr. Misc. Pub. 273: 71.—Smith and Garman 1938. Conn. Agr. Expt. Sta. Bul.

408: 228-230.—Jaynes and Bynum, 1941. U. S. Dept. Agr. Tech. Bul. 743: 1-42.—Douglas and Ingram, 1942. U. S. Dept. Agr. Cir. 632: 14.—Summerland and Steiner, 1943. Jour. Econ. Ent. 36: 75.—Underhill, 1943. Va. Agr. Expt. Sta. Bul. 349: 13.—McKinney, 1944. U. S. Dept. Agr. Tech. Bul. 846: 14.

**Economics:** Alden, 1929. Ga. State Hort. Soc. Proc. 53: 35-37.—Flanders, 1929 (1928). Fourth Internat. Cong. Ent. Trans., pp. 110-130.—Flanders, 1930. Hilgardia 4: 465-501.—Hinds, 1933. Trav. V. Cong. Internat. d'Ent., pp. 557-572.—Spence, Brown and Phillips, 1935. U. S. Dept. Agr. Cir. 376: 1-17.—Garman, 1939. Conn. Agr. Expt. Sta. Bul. 428: 65-67.—Ingram and Bynum, 1941. U. S. Dept. Agr. Farmers' Bul. 1884: 8-9.—Spence, Brown, and Phillips, 1949. U. S. Dept. Agr. Cir. 818: 1-17.

**Taxonomy:** Peterson, 1930. N. Y. Ent. Soc. Jour. 38: 1-7.—Peterson, 1930. U. S. Dept. Agr. Tech. Bul. 215: 1-21.—Lund, 1934. Ent. Soc. Amer. Ann. 27: 324-340.—Bare, 1935. Jour. Econ. Ent. 28: 803-815.

**retorridum** (Girault). Iowa, N. Mex. Host: *Protoleucania albilinea* (Hbn.).

*Pentarthron retorridum* Girault, 1911. Amer. Ent. Soc. Trans. 37: 52. ♂  
♀.

**Biology:** Webster, 1912. Jour. Econ. Ent. 5: 335.

**semblidis** (Aurivillius). Ont., N. Y., Sask. Hosts: *Chauliodes rastriicornis* Ramb.; *Sialis infumata* Newm.; *Ephestia kühniella* Zell.; *Sitotroga cerealella* (Oliv.); *Chrysops aestuans* Wulp; *C. excitans* Wlkr.; *C. mitis* O. S.; *C. striatus* O. S.; ?*Tabanus lasiophthalmus* Macq.

*Oophthora semblidis* Aurivillius, 1897. Ent. Tidskr. 18: 253. ♂ ♀.

**Biology:** Cameron, 1926. Bul. Ent. Res. 17: 38-39.—Van Steenburgh, 1938. Ent. Soc. Ontario Ann. Rpt. 69: 74-75.—Salt, 1939 (1938). Parasitology 30: 511-522.—Salt, 1942 (1941). Cambridge Phil. Soc. Biol. Rev. 16: 249.

### Genus APHELINOIDEA Girault

*Aphelinoidaea* Girault, 1911. Amer. Ent. Soc. Trans. 37: 2.

Type: *Aphelinoidaea semifuscipennis* Girault. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 9.

**plutella** Girault. Ill., Tex., N. Mex., Calif., Utah, Idaho. Host: *Circulifer tenellus*<sup>8</sup> (Baker).

*Aphelinoidaea plutella* Girault, 1912. Ent. News 23: 296. ♂ ♀.

**Biology:** Henderson, 1941. U. S. Dept. Agr. Cir. 593: 1-18.

**semifuscipennis** Girault. Ill.

*Aphelinoidaea semifuscipennis* Girault, 1911. Amer. Ent. Soc. Trans. 37: 4.  
♀.

### Genus ZAGA Girault

*Zaga* Girault, 1911. Amer. Ent. Soc. Trans. 37: 30.

Type: *Zaga latipennis* Girault. Monob.

**latipennis** Girault. Va. Host: Recorded from apple twigs infested with *Aspidiota perniciosus* Comst. but probably from membracid eggs.

*Zaga latipennis* Girault, 1911. Amer. Ent. Soc. Trans. 37: 31. ♂.

### Genus TRICHOGRAMMATOMYIA Girault

*Trichogrammatomyia* Girault, 1916. Canad. Ent. 48: 268.

Type: *Trichogrammatomyia tortricis* Girault. Monob.

**tortricis** Girault. Ont., N. B., N. Y. Hosts: *Archips argyrospila* (Wlkr.); *A. cerasivorana* (Fitch).

*Trichogrammatomyia tortricis* Girault, 1916. Canad. Ent. 48: 268. ♂ ♀.

**Biology:** Baird, 1918. Agr. Gaz. Canada 5: 766, 771.—Chapman, Pearce, and Avens, 1941. Jour. Econ. Ent. 34: 643-644.

### Genus LATHROMEROIDES Girault

*Lathromerooides* Girault, 1913. Ent. News 24: 211.

Type: *Lathromerooides longicorpus* Girault. Monob.

**Krygeriola** Nowicki, 1934. Polski Pismo Ent. 12: 3.

Type: *Krygeriola dolichoptera* Nowicki. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 10.

**neomexicanus** Girault. N. Mex. Host: Membracid.

*Lathromeroides neomexicanus* Girault, 1916. Ent. News 27: 5. ♀.

#### Genus LATHROMERIS Foerster

**Lathromeris** Foerster, 1856. Hym. Stud., v. 2, pp. 87, 89.

Type: *Lathromeris scutellaris* Foerster. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 7.

**scutellaris** Foerster. ?W. Va. Host: Lepidopterous eggs on wild cherry twigs.

*Lathromeris scutellaris* Foerster, 1856. Hym. Stud., v. 2, p. 89. ♂.

Biology: Hopkins, 1893. W. Va. Agr. Expt. Sta. Bul. 32: 228.

#### Genus MEGAPHRAGMA Timberlake

**Megaphragma** Timberlake, 1924. Hawaii. Ent. Soc. Proc. 5: 413.

Type: *Megaphragma mymaripenne* Timberlake. Monob.

**Sethosiella** Kryger, 1932. Soc. Ent. d'Egypte Bul., p. 38.

Type: *Sethosiella priesneri* Kryger. Monob.

Revision: Ghesquière, 1939. Rev. Zool. Bot. Africaines 33: 39.

**mymaripennis** Timberlake. La.

*Megaphragma mymaripenne* (!) Timberlake, 1924. Hawaii. Ent. Soc. Proc. 5: 413. ♀.

#### Genus POROPOEA Foerster

**Poropoea** Foerster, 1851. Naturh. Ver. Rheinlande Verh. 8: 28.

Type: *Poropoea stollwerckii* Foerster. Monob.

**attelaborum** Girault. Eastern U. S. Host: *Attelabus analis* Ill.

*Poropoea attelaborum* Girault, 1911. Amer. Ent. Soc. Trans. 37: 68. ♂.

#### Genus ZAGELLA Girault

**Zagella** Girault, 1918. No. Amer. Hym. Trichogrammatidae, v. 2, p. 7.

Type: *Paracentrobria flavipes* Girault. Monob.

**flavipes** (Girault). D. C., Ga. Hosts: *Leistes* sp.; ?*Tachypterellus quadrigibbus* (Say).

*Paracentrobria flavipes* Girault, 1905. Ent. News 16: 287. ♂ ♀.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 75. ♂ ♀.

#### Genus XENUFENS Girault

**Xenufens** Girault, 1916. Ent. News 27: 5.

Type: *Xenufens ruskini* Girault. Monob.

**ruskini** Girault. Fla. Hosts: *Calpodes ethlius* (Stoll); *Lerema accius* (A. and S.);

*Urbanus proteus* (L.).

*Xenufens ruskini* Girault, 1916. Ent. News 27: 6. ♀.

#### Genus TUMIDICLAVA Girault

**Tumidiclava** Girault, 1911. Amer. Ent. Soc. Trans. 37: 6.

Type: *Tumidiclava pulchrinotum* Girault. Monob.

**pulchrinotum** Girault. Ill.

*Tumidiclava pulchrinotum* Girault, 1911. Amer. Ent. Soc. Trans. 37: 8. ♀.

#### Genus OLIGOSITA Haliday

**Oligosita** Haliday, 1851. In Walker, Ann. Mag. Nat. Hist. (2) 7: 212, 213.

Type: *Oligosita collina* Walker. Monob.

**Westwoodia** Ashmead, 1904. Carnegie Mus. Mem. 1: 359.

Type: *Oligosita subfasciata* Westwood. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, pp. 8-9.

**americana** Girault. S. C., Ind., Ill., N. Mex. Hosts: *Dorycephalus platyrhynchus* Osb.; Cicadellid eggs in *Elymus* stems; *Halticus bracteatus* (Say); *Harmolita grandis* (Riley); *H. tritici* (Fitch); *H. neocaptiva* Peck.

**Oligosita americana** Girault, 1909. *Psyche* 16: 106. ♀.  
Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 56-63. ♂ ♀.

**comosipennis** (Girault). N. Y.

*Westwoodella comosipennis* Girault, 1911. Amer. Ent. Soc. Trans. 37: 66.  
♀.

**marylandia** Girault, emend. Md.

*Oligosita marilandia* Girault, 1917. Chalcidoidea Nova Marilandensis II, p.  
1. ♀.

**sanguinea clarimaculosa** (Girault). Ill.

*Westwoodella clarimaculosa* Girault, 1911. Amer. Ent. Soc. Trans. 37: 67.  
♀.

**sanguinea claripes** Girault. Ariz. Hosts: *Asphondylia milkii* Wachtl; *A. websteri* Felt.

*Oligosita sanguinea* var. *claripes* Girault, 1916. Ent. News 27: 4. ♀.

**sanguinea sanguinea** (Girault). D. C., Ohio, Ill. Hosts: *Oscinus* sp.; ? *Harmolita* in *Eragrostis pooides*.

*Westwoodella sanguinea* Girault, 1911. Amer. Ent. Soc. Trans. 37: 58. ♂  
♀.

**subfasciatipennis** (Girault). Wash. Host: Cicadellid in wheat.

*Westwoodella subfasciatipennis* Girault, 1911. Amer. Ent. Soc. Trans. 37:  
63. ♂ ♀.

#### Genus BRACHISTA Haliday

**Brachista** Haliday, 1851. In Walker, Ann. Mag. Nat. Hist. (2) 7: 212 (no species).

Type: *Brachysticha fidiae* Ashmead. Included by Ashmead, 1894.

*Brachysticha* Foerster, 1856. Hym. Stud., v. 2, p. 88. Emend.

**Giraultiola** Nowicki, 1936. Ztschr. f. Angew. Ent. 23: 136.

Type: *Brachysticha fidiae* Ashmead. Monob.

**fidiæ** (Ashmead). Pa., Va., Ohio. Hosts: *Magicicada septendecim* (L.); *Fidia viticida* Walsh.

**Brachysticha fidiae** Ashmead, 1894. Cincinnati Soc. Nat. Hist. Jour. 17:  
171. ♀.

**Lathromeromus cicadae** Howard, 1898. Canad. Ent. 30: 102. ♂ ♀.

Biology: Johnson and Hammar, 1910. U. S. Dept. Agr. Bur. Ent. Bul. 89: 51, 56-57.  
—Marlatt, 1898. U. S. Dept. Agr. Div. Ent. Bul. 14 (n. s.): 99.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 69-74.

#### Genus UFENS Girault

**Ufens** Girault, 1911. Amer. Ent. Soc. Trans. 37: 32.

Type: *Trichogramma nigrum* Ashmead. Monob.

**Stephanoththeisa** Soika, 1931. Natuurh. Maandbl. 20: 111.

Type: *Stephanoththeisa vitoldi* Soika. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 6.

**niger** (Ashmead). D. C., N. C., Fla., Ill., Tex. Hosts: *Draeculacephala mollipes* (Say); *Homalodisca* sp.; *Diatraea saccharalis* (F.).

**Trichogramma nigrum** Ashmead, 1888. Canad. Ent. 20: 107. ♀.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 35. ♂ ♀.

**spiritus americanus** Girault. Md.

**Ufens spiritus americanus** Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 6.

**spiritus spiritus** Girault. Md.

**Ufens spiritus** Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 6.

#### Genus HYDROPHYLITA Ghesquière

**Hydrophylax** Matheson and Crosby, 1912. Ent. Soc. Amer. Ann. 5: 65.  
Preocc.

Type: *Hydrophylax aquivolans* Matheson and Crosby. Monob.

*Hydrophylita* Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 371. N. name.

*aquivolans* (Matheson and Crosby), n. comb. N. Y. Host: *Ischnura* sp., probably *verticalis* (Say).

*Hydrophylax aquivolans* Matheson and Crosby, 1912. Ent. Soc. Amer. Ann. 5: 65. ♂ ♀.

### Genus USCANA Girault

*Uscana* Girault, 1911. Amer. Ent. Soc. Trans. 37: 22.

Type: *Uscana semifumipennis* Girault. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, pp. 9-10.

*marylandica* Girault, emend. Md. Host: *Callosobruchus maculatus* (F.).

*Uscana marilandica* Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 10.

*semifumipennis* Girault. Tex. Host: *Callosobruchus maculatus* (F.).

*Uscana semifumipennis* Girault, 1911. Amer. Ent. Soc. Trans. 37: 23. ♂ ♀.

Biology: Paddock and Reinhard, 1919. Tex. Agr. Expt. Sta. Bul. 256: 81-83.

### Genus ABELLA Girault

*Abella* Girault, 1911. Amer. Ent. Soc. Trans. 37: 9.

Type: *Abella subflava* Girault. Orig. desig.

*Ittys* Girault, 1911. Amer. Ent. Soc. Trans. 37: 25.

Type: *Trichogramma ceresarum* Ashmead. Monob.

*Brachistella* Girault, 1911. N. Y. Ent. Soc. Jour. 19: 184.

Type: *Trichogramma acuminata* Ashmead. Monob.

*Jassidophthora* Perkins, 1912. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 10: 17.

Type: *Jassidophthora prima* Perkins. Monob.

*Abbellisca* Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 371. N. name.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, pp. 5-6, 7 (*Abella*, *Ittys*).

*acuminata* (Ashmead). N. Y., Fla., Ill. Hosts: *Lespes uncatus* Kirby; *L. unguiculatus* Hagen; *Draeculacephala minor* (Wlkr.); *D. mollipes* (Say).

*Trichogramma acuminatum* Ashmead, 1888. Canad. Ent. 20: 107. ♂ ♀.

*Brachista pallida* Ashmead, 1900. Ent. News 11: 616. ♀.

Biology: Gibson, 1915. U. S. Dept. Agr. Bul. 254: 14.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 77.

*americana* Girault. Utah. Host: Cicadellid in *Elymus*.

*Abella americana* Girault, 1917. U. S. Natl. Mus. Proc. 53: 445. ♂ ♀.

*auriscutellum* Girault. Ariz. Host: *Draeculacephala mollipes* (Say).

*Abella auriscutellum* Girault, 1916. Ent. News 27: 4. ♀.

Biology: Gibson, 1915. U. S. Dept. Agr. Bul. 254: 14.

*ceresarum* (Ashmead), n. comb. N. S., N. J., Ohio, Ill. Hosts: *Ceresa borealis* Farm.; *C. bubalus* (F.); *C. taurina* Fitch; *Stictocephala inermis* (F.).

*Trichogramma ceresarum* Ashmead, 1888. Canad. Ent. 20: 107. ♀.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 26-30, ♂ ♀.

*nympha* Girault. U. S. Hosts: Cicadellid on *Ambrosia artemisiaefolia*; *Diplosis* sp. on *A. artemisiaefolia*.

*Abella nympha* Girault, 1911. Entomologist 44: 197. ♀.

*perditrix* Gahan. Ariz. Host: *Stictocephala festina* (Say).

*Abella (Ittys) perditrix* Gahan, 1918. Ent. Soc. Wash. Proc. 20: 25. ♂ ♀.

*prima* (Perkins). Southwest U. S.

*Jassidophthora prima* Perkins, 1912. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 10: 18. ♂ ♀.

*subflava* Girault. D. C., S. C., Ill., Kans., S. Dak., Idaho, Calif., Wash. Hosts: *Blissus leucopterus* (Say); *Balclutha impicta* (Van Duzee); *Circulifer tenellus* (Baker); *Empoasca* sp.; *Halticus bracteatus* (Say); *Polynemra eutettixi* (Gir.).

*Abella subflava* Girault, 1911. Amer. Ent. Soc. Trans. 37: 11. ♂ ♀.

Biology: McCulloch, 1915. Ent. News 26: 147-148.—Stahl, 1920. Jour. Agr. Res. 20: 250.—Henderson, 1941. U. S. Dept. Agr. Cir. 593: 1-18.

### Genus NEOBRACHISTELLA Girault

*Neobrachistella* Girault, 1912. Queensland Mus. Mem. 1: 89.

Type: *Neobrachistella maxima* Girault. Monob.

Revision: Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 11.

*livii* Girault. Md.

*Neobrachistella livii* Girault, 1918. No. Amer. Hym. Trichogrammatidae, p. 11. ♀.

### Genus CENTROBIOPSIS Girault

*Centrobiopsis* Girault, 1918. No. Amer. Hym. Trichogrammatidae, pp. 4, 7.

Type: *Centrobia odonatae* Ashmead. Monob.

*odonatae* (Ashmead). N. Y., Ill. Hosts: *Lestes uncatus* Kirby; *L. unguiculatus* Hagen.

*Centrobia odonatae* Ashmead, 1900. Ent. News 11: 616. ♀.

Taxonomy: Girault, 1911. Amer. Ent. Soc. Trans. 37: 74, ♀.

## Family EULOPHIDAE

### Subfamily EULOPHINAE

#### Genus PNIGALIO Schrank

*Pnigalio* Schrank, 1802. Fauna Boica, v. 2, sec. 2, p. 315.

Type: *Ichneumon pectinicornis* Linnaeus. Monob.

*Notanisomorphomyia* Girault, 1913. Queensland Mus. Mem. 2: 289. N. syn.  
Type: *Notanisomorphomyia albicoxa* Girault. Monob.

*agromyzae agromyzae* (Gahan). Maine, Md., Fla. Hosts: *Agromyza parvicornis* Loew; *Phytomyza aquilegiae* Hardy.

*Sympiesis agromyzae* Gahan, 1913. U. S. Natl. Mus. Proc. 46: 440. ♀.

*Sympiesis wordsworthi* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 10. ♀. N. syn.

*agromyzae pennsylvanicus* (Girault), n. comb. N. J., Pa. Hosts: *Coptodisca kalmiella* Dietz; *Callisto geminatella* (Pack.).

*Sympiesis agromyzae* var. *pennsylvanicus* Girault, 1917. Deser. Stellarum Nov., p. 7. ♀.

*coloni* (Girault), n. comb. Calif. Host: Leaf miner on *Convolvulus*.

*Sympiesis coloni* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 2. ♀.

*dandoloni* (Girault), n. comb. Va.

*Sympiesis dandoloni* Girault, 1917. New Chalcid Flies, p. 1. ♂ ♀.

*felti* (Crawford). Ont., N. Y., Conn. Hosts: *Agromyza melampyga* Loew; *Phytomyza ilicis* (Curt.).

*Sympiesis felti* Crawford, 1911. U. S. Natl. Mus. Proc. 40: 448. ♀.

*flavipes* (Ashmead), n. comb. Fla. Host: Rose gall.

*Sympiesus flavipes* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 133. ♀.

*guttiventris* (Girault), n. comb. Del., D. C., La. Host: *Tischeria malifoliella* Clem.

*Eulophus guttiventris* Girault, 1906. Ent. News 17: 305. ♂ ♀.

*kukakensis* (Ashmead), n. comb. Alaska.

*Eulophus kukakensis* Ashmead, 1902. Wash. Acad. Sci. Proc. 4: 147. ♂.

*lineaticoxa* (Girault). Conn., Mo., La. Hosts: *Callisto geminatella* (Pack.); *Tischeria* sp.

*Eulophus lineaticoxa* Girault, 1916. Soc. Ent. 31: 37. ♀.

**maculipes** (Crawford). Ont., Maine, Mass., N. Y., Wis. Hosts: *Coleophora pruniella* Clem.; *Cameraria hamamelica* Busek; *Lithocolletis* sp.; mines of *Cameraria hamadryadella* (Clem.) in leaves of swamp white oak; *Agromyza melampygia* Loew.

**Sympiesis maculipes** Crawford, 1913. U. S. Natl. Mus. Proc. 45: 258. ♂ ♀.

**metacomet** (Crawford), n. comb. Maine, Mass., La., Tex. Host: *Cameraria caryaefoliella* (Clem.).

**Sympiesis metacomet** Crawford, 1913. U. S. Natl. Mus. Proc. 45: 257. ♀.

**minio** (Walker), n. comb. Fla.

**Eulophus Minio** Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 26. ♀.

**proximus** (Ashmead), n. comb. W. Va., Va.

**Elachistus proximus** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 340. ♂ ♀.

**quercicola** (Ashmead), n. comb. N. J., Ill., Kans. Host: *Caulocampus acericaulis* (MacG.).

**Sympiesis quercicola** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII. ♀.

**tischeriae** (Ashmead), n. comb. D. C., Ill., Mo., Kans. Hosts: *Callisto geminatella* (Pack.); *Tischeria malifoliella* Clem.

**Sympiesis tischeriae** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VI. ♀.

**unicarinatus** (Ashmead), n. comb. W. Va., Va.

**Sympiesis uncarinatus** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 343. ♀.

**uroplatae** (Howard), n. comb. Maine, D. C., Mich., Mo., Kans., Oreg. Hosts: *Chalepus dorsalis* Thunb.; *Baliosus ruber* (Web.); *Coleophora salmani* Heinr.; *Cameraria cincinnatiella* (Chamb.); *Gracilaria belfragella* Chamb.; *G.* sp. on pepperwood; *Rhus* leaf roller.

**Sympiezus uroplatae** Howard, 1885. Ent. Amer. 1: 117. ♂.

Biology: Chittenden, 1902. U. S. Dept. Agr. Div. Ent. Bul. 38: 82.

Taxonomy: Girault, 1916. Soc. Ent. 31: 37.

### Genus SYMPIESIS Foerster

**Sympiesis** Foerster, 1856. Hym. Stud., v. 2, pp. 74, 76.

Type: *Eulophus sericeicornis* Nees. Orig. desig.

**Sympiezus** Thomson, 1878. Hym. Scand., v. 5, p. 208. Emend.

**Notanisomorphella** Girault, 1913. Queensland Mus. Mem. 2: 287.

Type: *Notanisomorphella australiensis* Girault. Orig. desig.

**Pseudopheliminus** Girault, 1913. Queensland Mus. Mem. 2: 286.

Type: *Pseudopheliminus longiventris* Girault. Monob.

**aneylae** Girault. N. J., Ohio, Iowa. Hosts: *Ancylis comptana* (Froel.); *A.* sp.; *Sparganothis sulfureana* (Clem.).

**Sympiesis aneylae** Girault, 1917. U. S. Natl. Mus. Proc. 53: 448. ♀.

**argenticoxae** Girault. Md., W. Va. Host: *Coleophora malivorella* Riley.

**Sympiesis argenticoxae** Girault, 1917 (1916). Insector Inscitiae Menstruus 4: 120. ♀.

**bimaculatipennis** (Girault). Maine, N. H., Iowa, Kans. Hosts: ?Hyperparasite of *Acleris minuta* (Rob.); *Callisto geminatella* (Pack.); *Tischeria malifoliella* Clem.

**Astichus bimaculatipennis** Girault, 1912. Canad. Ent. 44: 8. ♀.

**Sympiesis bimaculata** Crawford, 1913. U. S. Natl. Mus. Proc. 45: 259. ♀.

Taxonomy: Girault, 1917. U. S. Natl. Mus. Proc. 53: 449.

**chenopodii** Ashmead. Ill., Kans. Host: *Lithocolletis* mining in *Chenopodium hybridum*.

**Sympiesis chenopodii** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII.

**compressicornis** (Provancher), n. comb. Ont.

**Coccophagus compressicornis** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 206. ♀.

**conica** (Provancher), n. comb. Que.

**Metacolus conicus** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 200. ♀.

- dolichogaster** Ashmead. Ont., Maine, Fla., La., Kans., Ill. Hosts: *Episimus argutus* (Clem.); *Gracillaria cuculipennella* (Hbn.); *G.* sp. near *violacella* Clem. *Sympiesis dolichogaster* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII. ♀.  
Taxonomy: Girault, 1916. Soc. Ent. 31: 36-37, ♀.
- gracillariae** (Chambers), n. comb. Ky. Host: *Gracilaria stigmatella* (F.).  
*Eulophus Gracillariae* Chambers, 1872. Canad. Ent. 4: 28.
- guttatipennis** Girault. Md. Host: *Polyhymno luteostrigella* Chamb.  
*Sympiesis guttatipennis* Girault, 1917. Descr. Stellarum Nov., p. 15. ♀.
- lexingtonensis** Girault. Maine, Ky. Host: Blotch miner of beech.  
*Sympiesis lexingtonensis* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 6. ♀.
- marylandensis** Girault. Md.  
*Sympiesis marylandensis* Girault, 1917. Entomologist 50: 37. ♀.
- marylandia** Girault, emend. Md.  
*Sympiesis marilandia* Girault, 1917. Chaleidoidea Nova Marilandensis [I], p. I. ♀.
- marylandica** Girault, emend. Md.  
*Sympiesis marilandica* Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 119. ♀.
- massasoit** Crawford. Mass., Conn., Pa., Wis., Iowa, La. Hosts: *Coleophora pruniella* Clem.; *Callisto geminatella* (Pack.); *Gracilaria azaleella* Brants; *?Lithocolletis crataegella* (Clem.), mines of *Cameraria hamadryadella* (Clem.); *Tischeria malifoliella* Clem.; *Apanteles melanoscelus* (Ratz.).  
*Sympiesis massasoit* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 258. ♂ ♀.
- meteori** Girault. Mo. Host: *Callisto geminatella* (Pack.).  
*Sympiesis meteori* Girault, 1916. Soc. Ent. 31: 37. ♀.
- miltoni** Girault. Pa.  
*Sympiesis miltoni* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 7. ♀.
- nigrifemora** Ashmead. Maine to D. C.; Mich. Ohio, Ill., Mo., Kans. Hosts: *Callisto geminatella* (Pack.); *Cameraria cincinnatiella* (Chamb.); *?Lithocolletis crataegella* (Clem.); *Tischeria malifoliella* Clem.; lepidopterous leaf miner on elm; dipterous and coleopterous leaf miners of *Ambrosia artemesiae-folia*; balsam leaf miner; oak leaf miner.  
*Sympiesis nigrifemora* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII. ♀.  
*Sympiesis lithocolletidis* Viereck, 1916. Conn. State Geol. and Nat. Hist. Survey Bul. 22: 461.
- nigripes** Ashmead. Maine, N. J., Ohio, Ind., Tex., Kans. Hosts: *Cameraria caryaefoliella* (Clem.); *Lithocolletis* sp. on soft maple; *Tischeria malifoliella* Clem.; lepidopterous leaf miner of Burr Oak; *Amelanchier* blotch miner.  
*Sympiesis nigripes* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII. ♂ ♀.
- rex** Girault. Maine, Oreg. Hosts: *Lithocolletis crataegella* (Clem.); blotch miner on willow.  
*Sympiesis rex* Girault, 1917. New Chalcid Flies, p. 2.
- stigmata** Girault. Calif.  
*Sympiesis stigmatus* Girault, 1917. Descr. Stellarum Nov., p. 15. ♀.
- stigmatipennis** Girault. Va., Calif. Hosts: *Gnorimoschema operculella* (Zell.); *Keiferia lycopersicella* (Busck).  
*Sympiesis stigmatipennis* Girault, 1917. Descr. Stellarum Nov., p. 14. ♂ ♀.  
Biology: Graf, 1917. U. S. Dept. Agr. Bul. 427: 33-38.
- substigmata** Girault. Conn.  
*Sympiesis substigmatus* Girault, 1917. U. S. Natl. Mus. Proc. 53: 447. ♀
- viridula** (Thomson), n. comb. Ont., Mich., Ohio, Ind. Hosts: *Pyrausta ainsliei* Heinr.; *P. nubilalis* (Hbn.); *P. penitalis* (Grote).  
*Eulophus viridulus* Thomson, 1878. Hym. Scand., v. 5, p. 233. ♀.

**Biology:** Dudich, 1928. Internat. Corn Borer Invest. Sci. Rpt. (1): 188.—Thompson and Parker, 1928. U. S. Dept. Agr. Tech. Bul. 59: 17.—Sachtleben, 1930. Internat. Corn Borer Invest. Sci. Rpt. 3: 52, 108–111.—Parker and Smith, 1933. Ent. Soc. Amer. Ann. 26: 21–39, ♂ ♀.—Baker and Bradley, 1940 (1939). Sixth Pacific Sci. Cong. Proc. 4: 332–333.—Wishart, 1943. Ent. Soc. Ontario Ann. Rpt. 73: 28–29.

**Taxonomy:** Ellinger and Sachtleben, 1928. Internat. Corn Borer Invest. Sci. Rpt. (1): 126–129, ♂ ♀.

#### Genus NECREMNUS Thomson

*Necremnus* Thomson, 1878. Hym. Scand., v. 5, pp. 208, 234.

Type: *Eulophus leucarthros* Nees. Desig. by Ashmead, 1904.

**Revision:** Gahan, 1941. Wash. Acad. Sci. Jour. 31: 196–203.

*breviramulus* Gahan. Kans. Hosts: ?*Hypera compta* (Say); *H. eximius* (Lec.).

*Necremnus breviramulus* Gahan, 1941. Wash. Acad. Sci. Jour. 31: 197, 199. ♂ ♀.

*californicus* (Girault). Calif.

*Eulophus californicus* Girault, 1917. U. S. Natl. Mus. Proc. 53: 446. ♀.

*comptus* Gahan. Calif.

*Necremnus comptus* Gahan, 1941. Wash. Acad. Sci. Jour. 31: 197, 198. ♀.

*cyriades* (Walker), n. comb. Fla., D. C. Host: *Hedia ochroleucana* (Hbn.).

*Eulophus Cyriades* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 25. ♂.

*duplicatus* Gahan. Wash. Host: *Ceutorhynchus assimilis* (Payk.).

*Necremnus duplicatus* Gahan, 1941. Wash. Acad. Sci. Jour. 31: 197, 198, 201.

♂ ♀.

**Biology:** Hanson, Carlson, and Breakley, 1948. Wash. Agr. Expt. Sta. Bul. 498: 14–15.

*iphinoë* (Walker), n. comb. Fla.

*Eulophus Iphinoë* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 25. ♂.

*oregonensis* Gahan. Oreg. Host: *Hypera rumicis* (L.).

*Necremnus oregonensis* Gahan, 1941. Wash. Acad. Sci. Jour. 31: 197, 200. ♂ ♀.

#### Genus HEMIPTARSENUST Westwood

*Hemiptarsenus* Westwood, 1833. Mag. Nat. Hist. 6: 122.

Type: *Hemiptarsenus fulvicollis* Westwood. Desig. by Westwood, 1840.

*Hemiptarsenoideus* Girault, 1916. Queensland Mus. Mem. 5: 220.

Type: *Hemiptarsenoideus semialbiclara* Girault. Desig. by Gahan and Fagan, 1923.

*americanus* (Girault), n. comb. D. C.

*Hemitarsenoideus americanus* Girault, 1916. U. S. Natl. Mus. Proc. 51: 47. ♀.

*calavius* (Walker), n. comb. Fla.

*Eulophus Calavius* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 24. ♂ ♀.

#### Genus PARDIAULOMELLA Girault

*Pardiaulomella* Girault, 1915. Queensland Mus. Mem. 3: 295.

Type: *Pardiaulomella consonus* Girault. Monob.

*ibseni* Girault. D. C., Va. Host: *Desmia funeralis* (Hbn.).

*Pardiaulomella ibseni* Girault, 1916. U. S. Natl. Mus. Proc. 51: 50. ♂ ♀.

**Biology:** Strauss, 1916. U. S. Dept. Agr. Bul. 419: 9–12.

#### Genus DIAULOMORPHA Ashmead

*Diaulomorpha* Ashmead, 1900. Linn. Soc. N. S. Wales Proc. 25: 347.

Type: *Diaulomorpha australiensis* Ashmead. Monob.

*borrowi* (Girault), n. comb. Calif.

*Eulophus borrowi* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 9. ♀.  
Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 201.

#### Genus SOLENOTUS Foerster

*Solenotus* Foerster, 1856. Hym. Stud., v. 2, pp. 74, 76.

Type: *Solenotus viridis* Foerster. Monob.

*Diaulus* Ashmead, 1904. Carnegie Mus. Mem. 1: 356, 357. Preocc.  
Type: *Diaulus begini* Ashmead. Monob.

*Solenonotus* Schulz, 1906. Spolia Hym., p. 143. Emend. Preocc.  
*Diaulinus* Schulz, 1906. Spolia Hym., p. 146. N. name.

Revision: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 183-185. (*Diaulinus*).

*begini* (Ashmead), n. comb. N. H., N. Y., Md., Ind., Kans., N. Mex., Calif. to Idaho, Wyo. Hosts: *Agromyza parvicornis* Loew; *A. pusilla* Meig.; *A. scutellata* Fall., *Phytomyza albiceps* Meig.; *P. aquilegiae* Hardy; *P. chrysanthemi* Kow.

*Diaulus begini* Ashmead, 1904. Carnegie Mus. Mem. 1: 356, 372. ♀.

Biology: Webster and Parks, 1913. Jour. Agr. Res. 1: 78.—Sweetman, 1936. Biol. Control of Insects, pp. 146-147.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 315.

*carlylei* (Girault), n. comb. Calif.

*Diaulinus carlylei* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 6. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 203, ♀.

*intermedius* (Girault), n. comb. R. I. Host: *Phytomyza chrysanthemi* Kow.

*Diaulinus intermedius* Girault, 1916. Canad. Ent. 48: 265. ♀.

*pulchripes* (Crawford). N. Y., Md., Ind., Ill., Mich., Ont. Hosts: *Agromyza melampyga* Loew; *A. parvicornis* Loew; *A. posticata* Meig.; *Phytomyza aquilegiae* Hardy; *Macrosargus clavis* Will.

*Diaulinus pulchripes* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 184. ♀.

*websteri* (Crawford), n. comb. N. Y., Kans., Ariz., Utah, Nev., Calif. Hosts: *Agromyza parvicornis* Loew; *A. pusilla* Meig.; *A. scutellata* Fall.; *Calycomyza artemisiae* (Kalt.); *Cerodonta dorsalis* Loew; *C. femoralis* Meig.; *Phytomyza obscurella* Fall.

*Diaulinus websteri* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 184. ♂ ♀.

Biology: Webster and Parks, 1913. Jour. Agr. Res. 1: 78-79.

#### Genus NOTANISOMORPHA Ashmead

*Notanisomorpha* Ashmead, 1904. Carnegie Mus. Mem. 1: 356, 357.

Type: *Notanisomorpha collaris* Ashmead. Monob.

*ainsliei* Crawford. Ind., Colo., Utah. Hosts: *Agromyza angulata* Loew; *A. parvicornis* Loew.

*Notanisomorpha ainsliei* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 185. ♂ ♀.

*collaris* Ashmead. Md.

*Notanisomorpha collaris* Ashmead, 1904. Carnegie Mus. Mem. 1: 356, 382. ♀.

Taxonomy: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 185.—Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 2.—Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.

*longifasciata* Girault. Ind. Host: *Agromyza angulata* Loew.

*Notanisomorpha longifasciata* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 2. ♀.

*meromyzae* Gahan. Ind., Kans., S. Dak. Host: *Meromyza americana* Fitch.

*Notanisomorpha meromyzae* Gahan, 1917. U. S. Natl. Mus. Proc. 53: 216. ♂ ♀.

*nevadensis* Girault. Nev.

*Notanisomorpha nevadensis* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 1. ♀.

**noncarinata** Girault. Ariz.

**Notanisomorpha noncarinata** Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 1. ♀.

**particola** Girault. Fla.

**Notanisomorpha particola** Girault, 1916. Soc. Ent. 31: 42. ♀.

### Genus EULOPHUS Geoffroy

**Eulophus** Geoffroy, 1762. Hist. Abrégé des Insectes, v. 2, p. 312.

Type: *Ichneumon ramicornis* Fabricius. Desig. by Latreille, 1810.

**Comedo** Schrank, 1802. Fauna Boica 2, pt. 2, p. 315.

Type: *Ichneumon larvarum* Linnaeus. Monob.

**Cratotechus** Thomson, 1878. Hym. Scand., v. 5, pp. 208, 219.

Type: *Ichneumon larvarum* Linnaeus. Desig. by Ashmead, 1904.

**Cratotrechus** Dalla Torre, 1898. Cat. Hym., v. 5, p. 55. Emend.

Revision: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 186-188 (*Comedo*).

**anomocerus** (Crawford), n. comb. Conn., N. J., W. Va. Hosts: *Schizura unicornis* (A. and S.); *Anthophila pariana* (Clerck).

**Comedo anomocerus** Crawford, 1912. U. S. Natl. Mus. Proc. 43: 187. ♂ ♀. Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 81, 154.

**basalis** Say. Ind., Mo.

**Eulophus basalis** Say, 1836. Boston Jour. Nat. Hist. 1: 273. ♀.

**Comedo omari** Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 9. ♀. N. syn.

**brevicapitatus** (Cook and Davis), n. comb. Que., Mass., Mich., La. Hosts: *Euplexia benesimilis* McD.; *Heterocampa bilineata* (Pack.); *H. manteo* (Dbdly.); *Symmerista albifrons* (A. and S.).

**Cratotechus brevicapitatus** Cook and Davis, 1891. Mich. Agr. Expt. Sta. Bul. 73: 12. ♂ ♀.

Biology: Dimmock, 1898. Ent. Soc. Wash. Proc. 4: 150.—Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 154.

**koebelia** (Crawford), n. comb. Calif. Host: *Hemerocampa vetusta* (Bdvl.).

**Comedo koebelia** Crawford, 1912. U. S. Natl. Mus. Proc. 43: 187. ♀.

**magnisulcatus** Girault. N. J., W. Va. Host: *Coleophora malivorella* Riley.

**Eulophus magnisulcatus** Girault, 1916. Ent. News 27: 404. ♀.

**nebulosus** (Provancher), n. comb. Ont., Mass., Va. Hosts: *Amphipyra pyramidoides* Guen.; *Lithophane* sp.

**Miotropis nebulosa** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 208. ♀.

**Comedo hookeri** Crawford, 1912. U. S. Natl. Mus. Proc. 43: 188. ♀. N. syn. Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 49, 154.

**neomexicanus** (Girault), n. comb. N. Mex.

**Comedo neomexicanus** Girault, 1917. New Chalcid Flies, p. 4.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 201.

**orgyiae** (Fitch), n. comb. Ont., N. Y., N. J., Pa., N. C. Hosts: *Hemerocampa leucostigma* (A. and S.); *Stenoma algidella* (Wlk.).

**Trichogramma? orgyiae** Fitch, 1856. Country Gentleman 7: 235.

Taxonomy: Fitch, 1856. N. Y. State Agr. Soc. Trans. 15: 448-449.—Howard, 1897. U. S. Dept. Agr., Div. Ent., Tech. Ser. 5: 28.—Girault, 1920. U. S. Natl. Mus. Proc. 58: 201.

**pallipes** (Provancher), n. comb. Ont., N. H., Mass., Md. Hosts: *Paonias excaecata* (A. and S.); *Amphipyra pyramidoides* Guen.

**Caccophagus (?) pallipes** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 206. ♀.

**Cratotechus smerinthii** Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 158. ♂ ♀. N. syn.

**Coccophagus pallidipes** Provancher. Dalla Torre, 1898. Cat. Hym., v. 5, p. 226. Emend.

Biology: Dimmock, 1898. Ent. Soc. Wash. Proc. 4: 150.—Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 52, 154.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 201.

**tricladus** Provancher. Ont., N. Y., Mich. Hosts: *Cameraria cincinnatiella* (Chamb.); *Tischéria malifoliella* Clem.

**Eulophus tricladus** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 208. ♂ ♀.

### Genus DAHLBOMINUS Hincks

**Microplectron** Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Förh. 14: 292 (no species). Preocc. Type: *Entedon fuscipennis* Zetterstedt. Included by Thomson, 1878.

**Dahlbominus** Hincks, 1945. Entomologist 78: 90. N. name.

**fuscipennis** (Zetterstedt). Newfoundland to Conn., N. Y., Que., and Ont. Hosts: *Diprion frutetorum* (F.); *D. hercyniae* (Htg.); *D. similis* (Htg.). *Entedon fuscipennis* Zetterstedt, 1838. Insecta Lapponica, p. 427 [recte 429].

Biology: Morris and Cameron, 1935. Bul. Ent. Res. 26: 407-418. ♂ ♀.—Ulyett, 1936. Bul. Ent. Res. 27: 195-217.—Ulyett, 1936. Roy. Soc. London, Proc. Ser. B 120: 253-291.—Dowden, 1939. Jour. Econ. Ent. 32: 623.—Miller, 1940. U. S. Bur. Ent. Plant Quar. ET-161: 1-5.—Balch, 1941 (1940). N. S. Dept. Lands and Forests Rpt., pp. 72-74.—Wilkes, 1942. Roy. Soc. London, Proc. Ser. B 130: 400-415.—Wilkes, 1947. Roy. Soc. London, Proc. Ser. B 134: 227-245.

### Genus DIMMOCKIA Ashmead

**Dimmockia** Ashmead, 1904. Carnegie Mus. Mem. 1: 357.

Type: *Eulophus incongruus* Ashmead. Monob.

**Crateulophus** Masi, 1917. Novitates Zool. 24: 206.

Type: *Crateulophus niger* Masi. Monob.

**incongrua** (Ashmead). Ont., Mass., N. Y., Pa., N. C., Ill. Hosts: *Sphecodina abbotti* (Swains.); *Sparganothis pelitana* (Rob.); *Exorista larvarum* (L.); *Winthemia datanae* (Tsn.); *Alegina annulata* Ashm.; *Gelis tenellus* (Say); *Sphecocephala burra* Cress.; *Apanteles elisiocampae* Ashm.; *A. congregatus* (Say); *A. melanoscelus* (Ratz.); *Psychophagus omnivorus* (Wlkr.).

**Eulophus incongruus** Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 158. ♂ ♀.

**Dimmockia botticellini** Girault, 1917. New Chalcid Flies, p. 2. N. syn.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 29-30.—Proper, 1934. Jour. Agr. Res. 48: 362.

Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 66.

**marylandica** Girault. Md.

**Dimmockia marylandica** Girault, 1920. U. S. Natl. Mus. Proc. 58: 202. ♀.

**pallipes** Muesebeck. Mass. Host: *Apanteles melanoscelus* (Ratz.).

**Dimmockia pallipes** Muesebeck, 1927. Jour. Agr. Res. 34: 333. ♂ ♀.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 30.

### Genus DICLADOCERUS Westwood

**Dicladocerus** Westwood, 1832. London, Edinb., and Dublin Phil. Mag. and Jour. Sci. (3) 1: 128.

Type: *Dicladocerus westwoodii* Westwood, Monob.

**albitarsis** (Ashmead), n. comb. D. C.

**Eulophus albitarsis** Ashmead, 1900. Ent. News 11: 623. ♀.

**dicladus** (Say), n. comb. Ind.

**Eulophus dicladus** Say, 1836. Boston Jour. Nat. Hist. 1: 273. ♀.

**westwoodii** Westwood. Ont. Host: *Coleophora laricella* (Hbn.).

**Dicladocerus Westwoodii** Westwood, 1832. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 1: 128.

Biology: Thorpe, 1933. Bul. Ent. Res. 24: 277-280.—Graham, 1944. Ent. Soc. Ontario Ann. Rpt. 74: 50-51.

Taxonomy: Ferrière, 1933. In Thorpe, Bul. Ent. Res. 24: 290.

### Subfamily APHELININAE

Revisions: Mercet, 1912. Trab. Mus. Cien. Nat., Madrid 10: 1-306.—Mercet, 1929. Rev. Biol. Forest. y Limnologia (B) 1: 1-99.—De Santis, 1948. La Plata Mus. Rev. Zool. (n. s.) 5: 23-280.

#### Genus ERETMOCERUS Haldeman

*Eretmocerus* Haldeman, 1850. Amer. Jour. Sci. Arts (2) 9: 111.

Type: *Eretmocerus corni* Haldeman. Monob.

Revisions: Dozier, 1932. Ent. Soc. Wash. Proc. 34: 112-118.—Compere, 1936. Calif. Univ., Pubs., Ent. 6: 316-321.

*californicus* Howard. Calif. Host: *Aleyrodes* on *Quercus agrifolia*.

*Eretmocerus californicus* Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 16. ♂ ♀.

*corni* Haldeman. N. J., Pa. Hosts: *Tetraneurodes corni* (Hald.); *Trialeurodes packardi* (Morrill).

*Eretmocerus corni* Haldeman, 1850. Amer. Jour. Sci. Arts (2) 9: 110.

Taxonomy: Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 16.

*haldemani* Howard. Fla., Miss., Calif. Hosts: *Aleyrodes* spp. on *Ambrosia*, on *Erigonum*, on *Hardinbergia*, on *Quercus*, and on *Solidago*; *Aleuroplatus coronatus* (Quaint.); *Aleurothrixus floccosus* Mask.; *Trialeurodes vaporariorum* (Westw.).

*Eretmocerus haldemani* Howard, 1908. Ent. Soc. Wash. Proc. 10: 65. ♂ ♀.

Biology: Watson and Berger, 1932. Fla. Agr. Expt. Sta. Ext. Bul. 67: 56-57.—Watson and Berger, 1937. Fla. Agr. Expt. Sta. Ext. Bul. 88: 53-55.

*illinoiensis* Dozier. Ill.

*Eretmocerus illinoiensis* Dozier, 1932. Ent. Soc. Wash. Proc. 34: 115. ♂.

#### Genus EUDEROMPHALE Girault

*Euderomphale* Girault, 1916. Canad. Ent. 48: 410.

Type: (*Euderomphale fuscipennis* Girault)=[*Gyrolasia flavimedita* (Howard)]. Monob.

*Aleurodiphagus* Nowicki, 1929. Neue Beitr. System. Insektenk. 4: 154.

Type: *Pteroptrix flavimedita* Howard. Present desig.

Revision: Dozier, 1932. Ent. Soc. Wash. Proc. 34: 120.

*flavimedita* (Howard). Md., N. Mex., Calif. Hosts: *Aleyrodes pruinosa* Bernis; *A. spiraeoides* Quaint.; *A. spp.* on *Aquilegia*, on *Fuchsia*, on *Iris*, on *Samucus*, on *Sonchus*, on *willow*.

*Gyrolasia flavimedita* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 369. ♂.

*Euderomphale fuscipennis* Girault, 1916. Canad. Ent. 48: 410. ♀.

*quercicola* Dozier. La. Host: *Tetraneurodes* sp. on *Quercus virginiana*.

*Euderomphale quercicola* Dozier, 1933. Ent. Soc. Wash. Proc. 35: 85. ♂ ♀.

#### Genus ARCHENOMUS Howard

*Archenomus* Howard, 1898. Ent. Soc. Wash. Proc. 4: 136.

Type: *Archenomus bicolor* Howard. Monob.

*bicolor* Howard. Ga., cosmopolitan. Host: *Aspidiotus* sp. on sweet gum.

?*Pteroptrix dimidiatus* Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 3: 344.

*Archenomus bicolor* Howard, 1898. Ent. Soc. Wash. Proc. 4: 137. ♂ ♀.

#### Genus CENTRODORA Foerster

*Centrodora* Foerster, 1878. Naturh. Ver. Rheinlande Verh. 35: 66.

Type: *Centrodora amoena* Foerster. Monob.

*Paraphelinus* Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 1: 264.

Type: *Paraphelinus xiphidii* Perkins. Monob.

**speciosissima** (Girault). N. Y. to Va., Ky., and Ill. Hosts: *Conocephalus fuscus* (F.); *C.* sp.; *Phytophaga destructor* (Say); *Platygaster vernalis* (Myers); *Harmolita tritici* (Fitch).

?*Agonioneurus locustarum* Giraud, 1863. Zool.-Bot. Gesell. Wien. Verh. 13: 1278. ♂ ♀.

?*Centrodora amoena* Foerster, 1878. Naturh. Ver. Rheinlande Verh. 35: 67. ♂ ♀.

*Paraphelinus speciosissimus* Girault, 1911. N. Y. Ent. Soc. Jour. 19: 181. ♀. Biology: Hill and Smith, 1928. Jour. Agr. Res. 36: 153-155.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 124-128, ♂ ♀.

Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 5, 11-13.

### Genus MARIETTA Motschulsky

**Marietta** Motschulsky, 1863. Moskov. Obschch. Isp. Prirody 36 (2): 51.

Type: *Marietta leopardina* Motschulsky. Monob.

**Perissopterus** Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 20.

Type: *Aphelinus pulchellus* Howard. Orig. desig.

**Pseudaphelinus** Brèthes, 1918. Soc. Rur. Argentina An. 53: 157.

Type: *Pseudaphelinus caridei* Brèthes. Monob.

**Paraphytis** Compere, 1925. Amer. Ent. Soc. Trans. 51: 129.

Type: *Paraphytis vittata* Compere. Monob.

Revision: Compere, 1936. Calif. Univ., Pubs., Ent. 6: 306-315.

**carnesi** (Howard). Del., Va., ?Calif. Hosts: *Aspidiotus perniciosus* Comst.; *Lepidosaphes beckii* (Newm.); *Comperiella bifasciata* How.

**Perissopterus carnisi** Howard, 1910. Ent. News 21: 162. ♀.

**javensis** (Howard). Asia, ?Calif. Hosts: *Coccophagus lycimnia* (Wlkr.); *Microterys flavus* (How.).

**Perissopterus javensis** Howard, 1907. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 12: 87, 88. ♂ ♀.

Biology: Timberlake, 1913. Jour. Econ. Ent. 6: 300

**mexicana** (Howard). Pa., Va., Calif. Hosts: *Aspidiotus perniciosus* Comst.; *Coccus hesperidum* L.; *Lecaniodiaspis rufescens* (Ckll.); *Lecanium nigrofasciatum* Perg.; *Lepidosaphes ulmi* (L.); *Aphytus lounsburyi* How.

**Perissopterus mexicanus** Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 21. ♂ ♀.

Biology: Smith, 1933. Ent. Soc. Amer. Ann. 26: 525.—Essig, 1931. A Hist. of Ent., pp. 348-349, 354.—Flanders, 1940. Ent. Soc. Amer. Ann. 33: 252.—Cox, 1942. Jour. Econ. Ent. 35: 700-701.

**pulchella** (Howard). Que., R. I., N. Y., N. J., D. C., Ill., Mo., La., Nebr., Mont., Calif., B. C. Hosts: *Aspidiotus forbesi* Johns.; *A. juglans-regiae* Comst.; *A. perniciosus* Comst.; *Chionaspis americana* Johns.; *Lecaniodiaspis* sp. on *Tilia americana*; *L.* sp. on willow; *Phenacaspis pinifoliae* (Fitch); *Proso-pophora* on cottonwood; *Pseudaulacaspis pentagona* (Targ.).

**Aphelinus pulchellus** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 356. ♀.

Biology: Felt, 1916. N. Y. State Mus. Bul. 180: 84.

### Genus APHYTIS Howard

**Aphytis** Howard, 1900. Canad. Ent. 32: 168.

Type: *Aphytis chilensis* Howard. Monob.

**Prospaphelinus** DeGregorio, 1914. Agr. Siciliana Ann. 3 (4): 406.

Type: *Prospaphelinus silvestrii* DeGregorio. Monob.

Revision: Mercet, 1932. Eos 8: 353-365.

**abnormis** (Howard). N. J., D. C. Hosts: *Lepidosaphes ulmi* (L.); *L.* sp. on *Salix caprea*.

**Aphelinus abnormis** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, pp. 353, 355. ♀.

**chilensis** Howard. Calif. Hosts: *Aspidiotus camelliae* Sign.; *A. hederae* (Vallot); *A.* sp. on *Pinus radiata*; *Diaspis zamiae* Morg.; *Phenacaspis pinifoliae* (Fitch).

**Aphytis Chilensis** Howard, 1900. Canad. Ent. 32: 168. ♀.

*Aphelinus longiclavae* Mercet, 1911. Assoc. Españ. Prog. Cien., Cong. Valencia, p. 14. ♂ ♀.

*Aphelinus capitis* Rust, 1915. Ent. News 26: 73. ♀.

Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 11.

*chrysomphali* (Mercet). N. Y., Fla., La., Calif. Hosts: *Aonidiella aurantii* (Mask.), *A. citrina* (Coq.); *Chrysomphalus dictyospermi* (Morg.); *C. umboniferus* Newst.

*Aphelinus chrysomphali* Mercet, 1912. Soc. Españ. Hist. Nat. Bol. 12: 135. ♀.

*Aphelinus quaylei* Rust, 1915. Ent. News 26: 75. ♀.

Biology: Quayle, 1932. Calif. Agr. Expt. Sta. Bul. 542: 31-33.—Woglum, LaFollette, Landon, and Lewis, 1947. Jour. Econ. Ent. 40: 818-819.

Taxonomy: De Santis, 1948. La Plata Mus. Rev. Zool. (n. s.) 5: 122-126. ♀.

*mytilaspidis* (LeBaron). Cosmopolitan. Hosts: *Aspidiotus britannicus* Newst.; *A. hederae* (Vallot); *A. juglans-regiae* Comst.; *A. ostreaeformis* Curt.; *A. perniciosus* Comst.; *Aulacaspis rosae* (Bouché); *Chionaspis furfura* (Fitch); *C. salicis-nigrae* (Walsh); *Diaspis carueli* Targ.; *Lepidosaphes ulmi* L.; *L. sp. on Ptelea trifoliata*; *Parlatoria blanchardii* (Targ.); *Phenacaspis pinifoliae* (Fitch); *P. pinifoliae* var. *heterophyllae* Cooley; *Pinnaspis aspidistrae* (Sign.).

*Aphelinus mytilaspidis* LeBaron, 1870. Amer. Ent. and Bot. 2: 360. ♀.

Biology: Imms, 1916. Quart. Jour. Microsc. Sci. 61: 218-272, ♂ ♀.—Griswold, 1925. N. Y. (Cornell) Agr. Expt. Sta. Mem. 93: 44-47, 56-67.—Essig, 1931. A Hist. of Ent., p. 339.—Lord, 1949 (1947). Canad. Ent. 79: 196-208.

*proclia* (Walker). Cosmopolitan. Hosts: *Aonidiella aurantii* (Mask.); *Aspidiotus camelliae* Sign.; *A. destructor* Comst.; *A. hederae* (Vallot); *A. juglans-regiae* Comst.; *A. ostreaeformis* Curt.; *A. perniciosus* Comst.; *A. uvae* Comst.; *Aulacaspis rosae* (Bouché); *Chrysomphalus aonidum* (L.); *C. dictyospermi* (Morg.); *Diaspis bromeliae* (Kern.); *D. echinocacti* (Bouché); *Lepidosaphes beckii* (Newm.); *L. gloveri* (Pack.); *L. ulmi* (L.); *Pinnaspis strachani* (Cooley); *Pseudoaonidua duplex* (Ckll.); *Pseudaulacaspis pentagona* (Targ.); *Unaspis euonymi* (Comst.).

*Aphelinus Proclia* Walker, 1839. Monog. Chalciditum, v. 1, p. 9. ♀.

*Aphelinus diaspidis* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 355. ♂ ♀.

*Aphelinus fuscipennis* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 356. ♀.

Biology: Smith, 1897. N. J. Agr. Expt. Sta. Ann. Rpt. 17: 483-519.—Quayle, 1911. Calif. Agr. Expt. Sta. Bul. 214: 463-466.—Essig, 1931. A Hist. of Ent., pp. 339-341.

Taxonomy: De Santis, 1948. La Plata Mus. Rev. Zool. (n. s.) 5: 133-138, ♂ ♀.

### Genus APHELINUS Dalman

*Aphelinus* Dalman, 1820. Svenska Vetensk. Akad. Handl. 21: 181.

Type: *Entedon abdominalis* Dalman. Monob.

*Agonineurus* Westwood, 1833. Mag. Nat. Hist. 6: 122.

Type: *Agonineurus basalis* Westwood. Monob.

*Myina* Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 189.

Type: *Myina abdominalis* Nees. Desig. by Gahan and Fagan, 1923.

*Eriophilus* Haldeman, 1851. Pa. Farm Jour. 1: 130.

Type: *Eriophilus malii* Haldeman. Monob.

*Misina* Rondani, 1870. Arch. Zool., Anat. e Fisiol. (2) 2: 11. Error for *Myina*.

*aureus* Gahan. Calif. Host: *Chaitophorus salicola* Essig.

*Aphelinus aureus* Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 9. ♂ ♀.

*automatus* Girault. Ill. Host: *Hysteronera setariae* (Thos.).

*Aphelinus automatus* Girault, 1911. Entomologist 44: 178. ♀.

*howardii* Dalla Torre. Calif.

*Aphelinus flaviceps* Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Bul. 1: 25. ♂. Preocc.

*Aphelinus howardii* Dalla Torre, 1898. Cat. Hym., v. 5, p. 221. N. name.

**jucundus** Gahan. Ont., Que., N. Y., Calif. Hosts: *Macrosiphum cornelli* Patch; *M. pseudodirhodum* Patch; *M. solanifoli* (Ashm.); *Myzus persicae* (Sulz.).

**Aphelinus jucundus** Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 8. ♀.  
Biology: Griswold, 1927. Jour. Econ. Ent. 20: 93.—Griswold, 1929. Ent. Soc. Amer. Ann. 22: 440.

**lapisigni** Howard. Idaho, Oreg. Host: *Anuraphis bakeri* (Cowen).

**Aphelinus lapisigni** Howard, 1917. Biol. Soc. Wash. Proc. 30: 77. ♀.  
Biology: Smith, 1923. Idaho Agr. Expt. Sta. Res. Bul. 3: 55-57.

**mali** (Haldeman). Throughout U. S.; Ont., B. C., cosmopolitan. Hosts: *Aphis monardae* Oestl.; *A. pomi* Deg.; *Brevicoryne brassicae* (L.); *Colopha eragrostidis* Midd.; *Eriosoma crataegi* Oestl.; *E. lanigerum* (Haussm.); *Macrosiphum floridæ* Ashm.; *M. rosae* (L.); *Myzus lythri* Schrank; *Prociphilus fraxinifolii* (Riley); *Tetraneura graminis* Monell; *Toxoptera graminum* (Rond.); *Lepidosaphes ulmi* (L.); *Coleophora malivorella* Riley.

**Eriophilus mali** Haldeman, 1851. Pa. Farm Jour. 1: 130. ♂ ♀.

**Blastothrix rosae** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 130. ♀.

**Aphelinus varicornis** Girault, 1909. Psyche 16: 29. ♀.  
Biology: Lundie, 1924. N. Y. (Cornell) Agr. Expt. Sta. Mem. 79: 1-27.—Gibson, 1939. VII. Internat. Kong. Ent. Verhandl. 3: 1454.  
Taxonomy: De Santis, 1948. La Plata Mus. Rev. Zool. (n. s.) 5: 103.

**marlatti** (Ashmead). Ont., Kans. Host: *Aphis* sp. on *Cineraria*.

**Baeocharis Marlatti** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. V. ♂ ♀.

**Aphelinus subapterus** Girault, 1916. Ent. News 27: 405. ♂.

Biology: McLeod, 1938. Ent. Soc. Ontario Ann. Rpt. 68: 45-48.

Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 12.

**nigritus** (Howard). Minn., S. C., N. Mex., Kans. Hosts: *Hysteroneura setariae* (Thos.); *Toxoptera graminum* (Rond.); *Pseudococcus* on *Artemisia*.

**Aphelinus nigritus** Howard, 1908. Ent. News 19: 366. ♀.  
Biology: Webster and Phillips, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 110: 123.

**perpallidus** Gahan. Iowa, Calif. Hosts: *Monellia costalis* (Fitch); *M.* sp. on hickory; *Chromaphis juglandicola* (Kltb.); *Myzocallis fumipennellus* (Fitch).

**Aphelinus perpallidus** Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 10. ♂ ♀.

**sanborniae** Gahan. Pa., Ohio. Hosts: *Kakimia houghtonensis* (Troop); *Sanbornia juniperi* (Perg.).

**Aphelinus sanborniae** Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 7. ♂ ♀.

**semiflavus** Howard. N. Y., Ohio, Ind., Okla., N. Mex., Colo., Kans., Minn. Hosts: *Anuraphis viburnicola* (Gill.); *Capitophorus rosarum* (Kltb.); *Chaitophorus viminalis* Monell; *Macrosiphum cornelli* Patch; *M. granarium* (Kby.); *M. pisi* (Kltb.); *M. sanborni* Gill.; *Myzus persicae* (Sulz.); *M.* sp. on *Aquilegia*; *Rhopalosiphum poae* (Gill.); *R. pseudobrassicae* (Davis); *Toxoptera graminum* (Rond.).

**Aphelinus semiflavus** Howard, 1908. Ent. News 19: 366. ♂ ♀.

**Aphelinus brevipennis** Girault, 1917. Deser. Stellarum Nov., p. 18. ♀.  
Biology: Hartley, 1922. Ohio Jour. Sci. 22: 209-236, ♀.

**siphonophoræ** (Ashmead), n. comb. N. J., No. Amer. Host: *Macrosiphum* sp.  
*Anozus siphonophoræ* Ashmead, 1888. Canad. Ent. 20: 104. ♀.

#### Genus MESIDIA Foerster

**Mesidia** Foerster, 1856. Hym. Stud., v. 2, p. 30 (no species).

Type: *Mesidia pumila* Mayr. Included by Mayr, 1904.

**gillettei** Howard. Ill., Colo. Host: *Brachycolus tritici* Gill.

**Mesidia gillettei** Howard, 1914. Ent. Soc. Wash. Proc. 16: 80. ♀.  
Taxonomy: Dozier, 1933. Ent. Soc. Wash. Proc. 35: 90. ♀.

#### Genus ABLERUS Howard

**Ablerus** Howard, 1894. U. S. Dept. Agr. Insect Life 7: 7.

Type: *Centrodora clisiocampae* Ashmead. Monob.

**americanus** Girault. D. C. Host: *Aspidiotus uvae* Comst.

**Ablerus americanus** Girault, 1916. Soc. Ent. 31: 44. ♀.

**clisiocampae** (Ashmead). Ont., N. Y. and Mass. to Fla.; La., and Minn. Hosts: *Aspidiotus forbesi* Johns.; *A. perniciosus* Comst.; *A. uvae* Comst.; *Chionaspis furfura* (Fitch); *Chrysomphalus obscurus* (Comst.); *Pseudaulacaspis pentagona* (Targ.); *Malacosoma americanum* (F.); *M. dissitria* Hbn.

**Centrodora clisiocampae** Ashmead, 1894. Ent. Soc. Wash. Proc. 3: 10. ♀.  
Biology: Baker, 1933. U. S. Dept. Agr. Cir. 295: 8-9.—Hodson, 1939. Ent. Soc. Amer. Ann. 32: 131.

**perspeciosus** Girault. D. C. Hosts: *Chrysomphalus aonidum* (L.); *Pseudaulacaspis pentagona* (Targ.).

**Ablerus perspeciosus** Girault, 1916. Ent. Soc. Amer. Ann. 9: 292. ♀.

**Azotus silvestrii** Compere, 1926. Calif. Univ., Pubs., Ent. 4: 9. ♀.

Taxonomy: Gahan, 1942. U. S. Natl. Mus. Proc. 92: 47.

#### Genus AZOTUS Howard

**Azotus** Howard, 1898. Ent. Soc. Wash. Proc. 4: 138.

Type: *Azotus marchali* Howard. Monob.

**Dimacrocerus** Brèthes, 1914. Nunquam Otiosus, Buenos Aires, p. 4.

Type: *Dimacrocerus platensis* Brèthes. Monob.

**americanus** Dozier. Del. Hosts: *Aspidiotus perniciosus* Comst.; *Lecanium corni* Bouché; *Lepidosaphes ulmi* (L.).

**Azotus americanus** Dozier, 1928. Ent. Soc. Wash. Proc. 30: 36. ♂.

**marchali** Howard. D. C. Host: *Aspidiotus uvae* Comst.

**Azotus marchali** Howard, 1898. Ent. Soc. Wash. Proc. 4: 138. ♂.

#### Genus TUMIDISCAPUS Girault

**Tumidiscapus** Girault, 1911. N. Y. Ent. Soc. Jour. 19: 182.

Type: *Tumidiscapus flavus* Girault. Monob.

Revision: Milliron, 1947. Ent. Soc. Wash. Proc. 49: 195-196.

**cercopiphagus** Milliron. Wis. Host: *Aphrophora saratogensis* (Fitch).

**Tumidiscapus cercopiphagus** Milliron, 1947. Ent. Soc. Wash. Proc. 49: 193. ♂ ♀.

**flavus** Girault. Pa., S. Dak., Iowa, Ill., Tenn. Hosts: *Orchelimum vulgare* Harris; *Phytophaga destructor* (Say); *Lasioptera* sp. on *Muhlenbergia*.

**Tumidiscapus flavus** Girault, 1911. N. Y. Ent. Soc. Jour. 19: 182. ♂.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 121-124, ♂ ♀.

**orchelimumis** Gahan. Pa., Va., Ill. Host: *Orchelimum vulgare* Harris.

**Tumidiscapus orchelimumis** Gahan, 1932. Ent. Soc. Amer. Ann. 25: 741. ♂ ♀.

**orthopterae** Gahan. Fla. Host: Tettigoniid eggs on *Andropogon glomeratus*.

**Tumidiscapus orthopterae** Gahan, 1919. U. S. Natl. Mus. Proc. 55: 406. ♂ ♀.

#### Genus PHYSCUS Howard

**Physcus** Howard, 1895. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 1: 43.

Type: *Coccophagus varicornis* Howard. Monob.

Revision: De Santis, 1940 (1939). La Plata Univ. Nac., Facultad de Agron. Rev. 24: 29-44.

**howardi** Compere. Calif. Host: *Aspidiotus californicus* Col.

**Physcus howardi** Compere, 1928. Calif. Univ., Pubs., Ent. 4: 223. ♂ ♀.

**stanfordi** Howard. Calif. Host: *Stramenaspis kelloggi* Col.

**Physcus stanfordi** Howard, 1914. Ent. Soc. Wash. Proc. 16: 84. ♀.

**varicornis** (Howard). Que. to Fla., Calif., Nebr. Hosts: *Aspidiotus aenylus* (Putn.); *A. juglans-regiae* Comst.; *A. perniciosus* Comst.; *A. uvae* Comst.; *Chionaspis americana* Johns.; *C. furfura* (Fitch); *C. quercus* Comst.; *Chrysomphalus obscurus* (Comst.); *Lecanium nigrofasciatum* Perg.; *Phenacaspis pinifoliae* (Fitch).

**Coccophagus varicornis** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880. p. 360. ♀.

**Phycus variicornis** Howard. Dalla Torre, 1898. Cat. Hym., v. 5, p. 226.  
Emend.

Biology: Baker, 1933. U. S. Dept. Agr. Cir. 295: 8-9.  
Taxonomy: Girault, 1911. N. Y. Ent. Soc. Jour. 19: 183, ♂.

### Genus PROSPALTELLA Howard

**Prospalta** Howard, 1894. U. S. Dept. Agr. Insect Life 7: 6. Preocc.

Type: (*Prospalta murtfeldtii* Howard)=*Prospaltella murtfeldtiae* (Howard). Monob.

**Prospaltella** Ashmead, 1904. Ent. Soc. Wash. Proc. 6: 126. N. name.

**Mimatomus** Cockerell, 1911. Ent. News 22: 464.

Type: *Mimatomus peltatus* Cockerell. Monob.

Revision: Howard, 1908. Ent. Soc. Amer. Ann. 1: 281-284.

**aurantii** (Howard). Cosmopolitan. Hosts: *Aonidiella aurantii* (Mask.); *A. citrina* (Coq.); *Aspidiotus aencylus* (Putn.); *A. aencylus* var. on linden; *A. camelliae* Sign.; *A. californicus* Col.; *A. forbesi* Johns.; *A. hederae* (Vallot); *A. howardi* Ckll.; *A. juglans-regiae* Comst.; *A. perniciosus* Comst.; *Chionaspis* sp.; *Chrysomphalus dictyospermi* (Morg.); *Kermes nigropunctatus* Ckll.; *Lecanium corni* Bouché; *L. nigrofasciatus* Perg.; *L. persicae* (F.); *Lepidosaphes beckii* (Newm.); *L. concolor* (Ckll.); *L. gloverii* (Pack.); *L. ulmi* (L.); *Pseudoaonidia duplex* (Ckll.); *Aleuroplatus coronatus* Quaint.

**Coccophagus aurantii** Howard, 1894. U. S. Dept. Agr. Insect Life 6: 231. ♀.

Biology: Taylor, 1907. Colo. Agr. Expt. Sta. Bul. 120: 10.—Essig, 1913. Calif. State Comm. Hort. Monthly Bul. 2: 276.—Griffiths and Stearns, 1947. Fla. Ent. 30: 4-7.

Taxonomy: Rust, 1913. Ent. News 24: 161.

**bella** Gahan. Mich. Host: *Phenacaspis pinifoliae* (Fitch).

**Prospaltella bella** Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 21. ♂ ♀.

**berlesei** (Howard). D. C., La. Hosts: *Chrysomphalus obscurus* (Comst.); *Pseudaulacaspis pentagona* (Targ.).

**Prospalta berlesei** Howard, 1906. Ent. News 17: 292. ♀.

Biology: Baker, 1933. U. S. Dept. Agr. Cir. 295: 8-9.

Taxonomy: Silvestri, 1908. Lab. Zool. Gen. e Agr. Portici Bol. 3: 22-28.—Masi, 1908. Lab. Zool. Gen. e Agr. Portici Bol. 3: 143-146.

Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 66.

**citrella** Howard. Fla., Ariz., Calif. Hosts: *Aleuroplatus coronatus* Quaint.; *Kermes* sp. on *Quercus undulata*.

**Prospaltella citrella** Howard, 1908. Ent. Soc. Amer. Ann. 1: 282. ♀.

**diaspidicola** Silvestri. Va. Host: *Aspidiotus perniciosus* Comst.

**Prospalta diaspidicola** Silvestri, 1909. R. Accad. Naz. dei Lincei Atti. 18 (1): 564. ♀.

**fasciata** Malenotti. La. Host: *Pseudoaonidia duplex* (Ckll.).

**Prospaltella fasciata** Malenotti, 1916. Redia 12: 195. ♀.

**fasciativentris** Girault. Mich., Ill. Hosts: *Aspidiotus aesculi* (Johns.); *A. forbesi* Johns.; *A. juglans-regiae* Comst.; ?*A. perniciosus* Comst.; ?*Chionaspis furfur* (Fitch).

**Prospaltella fasciativentris** Girault, 1908. Psyche 15: 117. ♀.

**forbesi** Dozier. Del. Host: *Aspidiotus forbesi* Johns.

**Prospaltella forbesi** Dozier, 1928. Ent. Soc. Wash. Proc. 30: 37. ♀.

**fuscipennis** Girault. Ill., La. Host: *Chrysomphalus obscurus* (Comst.).

**Prospaltella fuscipennis** Girault, 1908. Psyche 15: 120. ♀.

Biology: Baker, 1933. U. S. Dept. Agr. Cir. 295: 8-9.

**murtfeldtiae** (Howard), emend. D. C., Ill., Mo., Mont. Hosts: *Aspidiotus forbesi* Johns.; *A. uva* Comst.; *Pseudaulacaspis pentagona* (Targ.).

**Prospalta murtfeldtii** Howard, 1894. U. S. Dept. Agr. Insect Life 7: 6. ♀.

**peltatus** (Cockerell). Colo. Host: *Aleyrodes pruinosa euphorbiarum* Ckll.

**Mimatomus peltatus** Cockerell, 1911. Ent. News 22: 464. ♀.

**perniciosi** Tower. Ont., N. Y. to Va.; Ind., Ill., Ark., Kans. Hosts: *Aspidiotus perniciosus* Comst.; *Lepidosaphes ulmi* (L.).

**Prospaltella perniciosi** Tower, 1913. Ent. Soc. Amer. Ann. 6: 125. ♂ ♀.

Biology: Tower, 1914. Jour. Econ. Ent. 7: 422.—Tower, 1914. Ent. Soc. Amer. Ann. 7: 249.—Rice, 1937. Abs. Doctors' Diss. Ohio State Univ. 24: 267-278.—Flanders, 1939. Jour. Econ. Ent. 32: 890.—Flanders, 1944. Science 100: 168.

**perspicuipennis** Girault. Ill.

*Prospaltella perspicuipennis* Girault, 1910. N. Y. Ent. Soc. Jour. 18: 234. ♀.

**querericola** Howard. Calif. Hosts: *Aleuroplatus coronatus* (Quaint.); *A. gelatinosus* (Ckll.).

*Prospaltella querericola* Howard, 1908. Ent. Soc. Amer. Ann. 1: 282. ♀.

#### Genus ENCARSIA Foerster

**Encarsia** Foerster, 1878. Naturh. Ver. Rheinlande Verh. 35: 65.

Type: *Encarsia tricolor* Foerster. Monob.

**Doloresia** Mercet, 1912. Madrid Mus. Cien. Nat. Trab. 10: 294.

Type: *Prospaltella filicornis* Mercet. Monob.

Revision: Howard, 1907. U. S. Dept. Agr. Bur. Ent. Tech. Bul. 12 (4): 76-79.

**angelica** Howard. Calif. Hosts: *Aleuroplatus coronatus* (Quaint.); *Aleyrodes* sp. on willow, *A. sp.*

*Encarsia angelica* Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 30. ♂.

**coquilletti** Howard. Calif. Host: *Aleyrodes* sp. on *Sonchus*.

*Encarsia coquilletti* Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 29. ♂ ♀.

**formosa** Gahan. Canada, N. Y., D. C., Ohio, Mich., Idaho, cosmopolitan. Host: *Trialeurodes vaporariorum* (Westw.).

*Encarsia formosa* Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 14. ♂ ♀.

Biology: Speyer, 1927. Bul. Ent. Res. 17: 301-308.—McLeod, 1938. Sci. Agr. 18: 529-535.—Burnett, 1948. Ecology 29: 181-189.—Burnett, 1949. Ecology 30: 113-133.

**luteola** Howard. Mass., Conn., D. C. Hosts: *Trialeurodes fernaldi* (Morrill); *T. packardi* (Morrill).

*Encarsia luteola* Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 29. ♀.

Biology: Morrill and Back, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 102: 8.

**meritoria** Gahan. Fla. Host: *Trialeurodes floridensis* (Quaint.).

*Encarsia meritoria* Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 19. ♂ ♀.

**pergandiella** Howard. N. Y., D. C., Mich., Ky., Ill., Calif., Wash. Hosts: *Aleuroplatus coronatus* (Quaint.); *Trialeurodes vaporariorum* (Westw.).

*Encarsia pergandiella* Howard, 1907. U. S. Dept. Agr. Bur. Ent. Tech. Bul. 12: 78. ♀.

*Encarsia versicolor* Girault, 1908. Psyche 15: 53. ♂ ♀. N. syn.

Biology: Garman, 1922. Ky. Agr. Expt. Sta. Bul. 241: 92-93.

**quaintancei** Howard. D. C. Host: *Aleyrodes* on *Polygonum*.

*Encarsia quaintancei* Howard, 1907. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 12: 79. ♀.

**variegata** Howard. Fla. Host: *Paraleyrodes perseae* (Quaint.).

*Encarsia variegata* Howard, 1908. Ent. Soc. Wash. Proc. 10: 64. ♀.

Biology: Morrill and Back, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 102: 8.

#### Genus ASPIDIOTIPHAGUS Howard

**Aspidiotiphagus** Howard, 1894. U. S. Dept. Agr. Insect Life 6: 229-230.

Type: *Coccophagus citrinus* Craw. Monob.

**Prospaltoides** Brèthes, 1914. Nunquam Otiosus, Buenos Aires, p. la.

Type: (*Prospaltoides howardi* Brèthes)=[*Coccophagus*] *citrinus* (Craw). Monob.

Revision: Compere, 1936. Calif. Univ., Pubs., Ent. 6: 294-302.

**citrinus agilior** Berlese. Va.; cosmopolitan. Host: *Unaspis euonymi* (Comst.).

*Aspidiotiphagus citrinus* var. *agilior* Berlese, 1916. Redia 12: 5, 7, 10. ♀.

Taxonomy: Paoli, 1926. Soc. Ent. Ital. Bol. 58: 97-105.

**citrinus citrinus** (Craw). Widespread in U. S.; cosmopolitan. Hosts: *Aonidiella aurantii* (Mask.); *A. citrina* (Coq.); *Aspidirotus aencylus* (Putn.); *A. britanicus* Newst.; *A. californicus* Col.; *A. destructor* Sign.; *A. hederae* (Vallot); *A. perniciosus* Comst.; *Aulacaspis rosae* (Bouché); *Chrysomphalus aonidum* (L.); *C. dictyospermi* (Morg.); *Coccus hesperidum* L.; *Diaspis bromeliae* (Kern.); *D. echinocacti* (Bouché); *D. visci* (Schrank); *Kuwanaspis hikosani* (Kuw.); *Lepidosaphes beckii* (Newm.); *L. ulmi* (L.); *Melanaspis tenebricosus* (Comst.); *Parlatoria oleae* (Colv.); *P. pergandii* Comst.; *Phenacaspis pinifoliae* (Fitch); *Pinnaspis aspidistrae* (Sign.); *P. strachani* (Cooley); *Pseudoaomidia duplex* (Ckll.); *Pseudaulacaspis pentagona* (Targ.).

**Coccophagus citrinus** Craw, 1891. Calif. State Bd. Hort. Bul. 57: 4.

Biology: Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 7, 31. ♀.—Isaac, 1905. Calif. State Commr. Hort. Bien. Rpt. 1: 95.—Essig, 1931. A Hist. of Ent., pp. 341–342, 386.

Taxonomy: Paoli, 1926. Soc. Ent. Ital. Bol. 58: 97–105.—Dozier, 1926. Puerto Rico Dept. Agr. Jour. 10: 275–276.—De Santis, 1948. La Plata Mus. Rev. Zool. (n. s.) 5: 225–231.

Morphology: Parker and Thompson, 1925. Ent. Soc. Amer. Ann. 18: 387.

**lounsburyi** (Berlese and Paoli). Fla. Hosts: *Aonidiella aurantii* (Mask.); *Chrysomphalus aonidum* (L.); *C. dictyospermi* (Morg.).

**Prospaltella lounsburyi** Berlese and Paoli, 1916. Redia 11: 305. ♀.

Biology: Mathis, 1947. Fla. Ent. 29: 33.

### Genus ANERISTUS Howard

**Aneristus** Howard, 1895. Canad. Ent. 27: 351.

Type: *Aneristus ceroplastae* Howard. Monob.

Revisions: Dozier, 1932. Puerto Rico Dept. Agr. Jour. 16: 94–102.—Compere, 1936. Calif. Univ., Pubs., Ent. 6: 285–288.—Ghesquière, 1949. Soc. Ent. Belg. Bul. et Ann. 85: 161–167.

The species in this genus are internal parasites of lecaniine Coccoidea.

**ceroplastae** Howard. La., Calif. Hosts: *Coccus hesperidum* L.; *C. pseudomagnilarum* (Kuw.); *Saissetia hemisphaerica* (Targ.).

**Aneristus ceroplastae** Howard, 1895. Canad. Ent. 27: 351. ♀.

**Coccophagus orientalis** Howard, 1896. In Howard and Ashmead, U. S. Natl. Mus. Proc. 18: 633. ♀.

Biology: Smith and Compere, 1928. Calif. Univ., Pubs., Ent. 4: 242, 246–247.

Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 13.

**youngi** Girault. La., Tex. Hosts: ?*Ceroplastes* sp. on *Chrysanthemum*; *Coccus hesperidum* L.; *Saissetia hemisphaerica* (Targ.).

**Anenistus** (?) **youngi** Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V. p. 11. ♀.

### Genus COCCOPHAGUS Westwood

**Coccophagus** Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 3: 344.

Type: *Entedon scutellaris* Dalman. Desig. by Westwood, 1840.

**Paracharitopus** Brèthes, 1913. Buenos Aires Mus. Nac. Hist. Nat. An. 24: 105.

Type: *Paracharitopus lecanii* Brèthes. Monob.

**Onophilus** Brèthes, 1918. Soc. Rural Argentina An. 53: 155.

Type: *Onophilus caridei* Brèthes. Monob.

**Parencarsia** Mercet, 1930. Eos 6: 198.

Type: *Coccophagus krygeri* Mercet. Monob.

Revisions: Mercet, 1929. Rev. Biol. Forest. y Limnologia (B) 1: 87–91.—Compere, 1931. U. S. Natl. Mus. Proc. 78 (7): 1–132.

**albicoxa** Howard. Calif. Host: *Physokermes insignicola* (Craw).

**Coccophagus albicoxa** Howard, 1911. Jour. Econ. Ent. 4: 276. ♀.

**capensis** Compere. Calif. Hosts: *Saissetia nigra* (Nietn.); *S. oleae* (Bern.).

**Coccophagus modestus** Amer. Auct., nec Silvestri.

**Coccophagus modestus** var. **capensis** Compere, 1931. U. S. Natl. Mus. Proc. 78 (7): 83.

Biology: Smith and Compere, 1926. Calif. Univ., Pubs., Ent. 4: 51-61.—Essig, 1931. A Hist. of Ent., pp. 346-386.—Flanders, 1936. Jour. Econ. Ent. 29: 468.—Cendana, 1937. Univ. Calif., Pubs., Ent. 6: 390-396.

**cinguliventris** Girault. Md., Ill., Wis. Hosts: *Lecanium corni* Bouché; *L. nigrofasciatum* Perg.

**Coccophagus cinguliventris** Girault, 1909. Psyche 16: 79. ♀.

Taxonomy: Girault, 1916. Ent. Soc. Amer. Ann. 9: 297. ♂.

**flavifrons** Howard. Fla. Hosts: ?*Lecanium* sp. on *Pinus palustris*; *Toumeyella liriodendri* (Gmel.).

**Coccophagus flavifrons** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 25. ♂.

**Coccophagus koebeli** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 25. ♂.

**fletcheri** Howard. Ont., N. Y. Host: *Lecanium fletcheri* Ckll.

**Coccophagus fletcheri** Howard, 1897. U. S. Dept. Agr. Div. Ent. Bul. 7 (n. s.): 63. ♀.

**fraternus** Howard. N. Y. to Va.; Mich., Fla., Colo. Hosts: *Lecanium nigrofasciatum* Perg.; *L. persicae* (F.); *Pulvinaria acericola* (W. and R.).

**Coccophagus fraternus** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 359. ♀.

**Coccophagus fuscipes** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 359. ♂ ♀.

Taxonomy: Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 34.

**gossypariae** Gahan. N. B., N. Y., Mass. Host: *Gossyparia spuria* (Mod.).

**Coccophagus gossypariae** Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 24. ♀.

Biology: Griswold, 1927. Ent. Soc. Amer. Ann. 20: 553.

**gurneyi** Compere. Calif. Hosts: *Phenacoccus gossypii* T. and C.; *P. solani* Ferris; *Pseudococcus adonidum* (L.); *P. citri* (Risso); *P. comstocki* (Kuw.); *P. gahani* Green; *P. maritimus* (Ehrh.); *Tetracnemus peregrinus* Comp.

**Coccophagus gurneyi** Compere, 1929. Calif. Univ., Pubs., Ent. 5: 1. ♂ ♀.

Biology: Compere and Smith, 1932. Hilgardia 6: 585-617.—Cendana, 1937. Calif. Univ., Pubs., Ent. 6: 340-359.—Clancy, 1944. Jour. Econ. Ent. 37: 450.—DeBach, 1949. Ecology 30: 16-24.

**immaculatus** Howard. N. Y., Pa., D. C., Fla., Ala., Colo., Calif. Hosts: *Aspidiotus perniciosus* Comst.; *Coccus hesperidum* L.; *Eriococcus azaleae* Comst.; *Lecanium* sp. on mulberry; *Pulvinaria bigeloviae* (Ckll.); *Saissetia hemisphaerica* (Targ.); *Toumeyella parvicornis* (Ckll.); *T. turgida* Ckll.

**Coccophagus immaculatus** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 358. ♂ ♀.

Biology: Felt, 1916. N. Y. State Mus. Bul. 180: 65.

**longifasciatum** Howard. Ill. Host: *Lecanium nigrofasciatum* Perg.

?*Aphelinus Inaron* Walker, 1839. Monog. Chalciditum, v. 1, p. 10. ♂.

**Coccophagus longifasciatus** Howard, 1907. U. S. Dept. Agr. Bur. Ent. Tech. Bul. 12: 80. ♂ ♀.

Taxonomy: Mercet, 1931. Eos 7: 400.

**lycimnia** (Walker). Cosmopolitan. Hosts: *Aspidiotus perniciosus* Comst.; *Ceroplastes floridensis* Comst.; *Coccus hesperidum* L.; *C. pseudomagnoliarum* (Kuw.); *Icerya purchasi* Mask.; *Kermes* sp. on ash; *Lecanium corni* Bouché; *L. fletcheri* Ckll.; *L. nigrofasciatum* Perg.; *L. persicae* (F.); *L. pruinosa* Coq.; *L. quercifex* Fitch; *Lepidosaphes beckii* (Newm.); *Parlatoria pergandei* Comst.; *Phenacoccus acericola* (King); *Physokermes insignicola* (Craw.); *Pseudococcus citri* (Risso); *Pulvinaria acericola* (W. and R.); *P. amygdali* Ckll.;? *P. bigeloviae* Ckll.; *P. vitis* (L.); *P. floccifera* (Westw.); *Saissetia hemisphaerica* (Targ.); *S. nigra* (Nietn.); *S. oleae* (Bern.); *Toumeyella liriodendri* (Gmel.).

*Aphelinus Lycimnia* Walker, 1839. Monog. Chalciditum, v. 1, p. 11. ♀.

*Platygaster Lecanii* Fitch, 1859. N. Y. State Agr. Soc. Trans. 18: 805.

**Coccophagus lecanii** E. A. Smith, 1878. Amer. Nat. 12: 661.

**Coccophagus ater** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 359. ♂ ♀.

**Coccophagus cognatus** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 359. ♂ ♀.

**Coccophagus flavoscutellum** Ashmead, 1881. Fla. Agr. 4: 65. ♂ ♀.

*Coccophagus vividus* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 24.  
♂ ♀.

*Coccophagus californicus* Howard, 1889. U. S. Dept. Agr. Insect Life, v. 1,  
p. 269. ♀.

*Coccophagus couperi* Girault, 1917. Deser. Stellarum Nov., p. 1.

*Coccophagus coccidis* Girault, 1917. Deser. Stellarum Nov., p. 2. ♀.

Biology: Flanders, 1936. Science 84: 85.—Flanders, 1936. Jour. Econ. Ent. 29: 468.  
—Flanders, 1936. Ent. Soc. Amer. Ann. 29: 253.—Flanders, 1942.  
Ecology 23: 120.—Flanders, 1943. Jour. Econ. Ent. 36: 802.

*ochraceus* Howard. La., Calif. Hosts: *Lecanium corni* Bouché; *Saissetia hemisphaerica* (Targ.); *S. nigra* (Nietn.); *S. oleae* (Bern.).

*Coccophagus ochraceus* Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 38. ♂ ♀.

*Coccophagus bifasciaticorpus* Girault, 1916. Soc. Ent. 31: 44. ♂ ♀.

Biology: Cendana, 1937. Calif. Univ., Pubs., Ent. 6: 359–371.—Flanders, 1942.  
Ecology 23: 120.

*perflavus* Girault. Que., Wis. Hosts: *Kermes* sp. on ash; *Lecanium corni* Bouché.

*Coccophagus perflavus* Girault, 1916. Soc. Ent. 31: 43. ♀.

*purpureus* Ashmead. Fla.

*Coccophagus purpureus* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 132. ♀.

*rusti* Compere. Calif. Host: *Saissetia oleae* (Bern.).

*Coccophagus rusti* Compere, 1928. In Smith and Compere, Calif. Univ., Pubs., Ent. 4: 261–262. ♀.

Biology: Flanders, 1942. Jour. Econ. Ent. 35: 687.

*scutatus* Howard. Calif. Host: *Kermes nigropunctatus* Ehrh. and Ckll.

*Coccophagus scutatus* Howard, 1895. U. S. Dept. Agr. Div. Ent. Tech. Ser. 1: 38. ♂ ♀.

*scutellaris* (Dalman). Calif., cosmopolitan. Hosts: *Coccus hesperidum* L.; *C. pseudomagnolarium* (Kuw.); *Lecanium corni* Bouché; *Saissetia hemisphaericum* (Targ.); *S. oleae* (Bern.).

*Entedon scutellaris* Dalman, 1825. Svenska Vetensk. Akad. Handl. 46: 365.

*Coccophagus lunulatus* [Howard], 1894. U. S. Dept. Agr. Insect Life 6: 232.  
♀.

Biology: Smith and Compere, 1928. Calif. Univ., Pubs., Ent. 4: 242, 254–257.—Cendana, 1937. Calif. Univ., Pubs., Ent. 6: 379–390.

*timberlakei* Compere. Utah. Host: *Pulvinaria bigeloviae* Ckll.

*Coccophagus timberlakei* Compere, 1931. U. S. Natl. Mus. Proc. 78 (7): 28.  
♀.

*trifasciatus* Compere. Calif. Host: *Saissetia oleae* (Bern.).

*Coccophagus trifasciatus* Compere, 1925. Calif. Univ., Pubs., Ent. 3: 311.  
♂ ♀.

Biology: Cendana, 1937. Calif. Univ., Pubs., Ent. 6: 372–379.—Flanders, 1942.  
Ecology 23: 120.

#### Genus TETRACYCLOS Kryger

*Tetracyclos* Kryger, 1942. Ent. Meddel. 22: 260.

Type: *Tetracyclos boreios* Kryger. Monob.

*boreios* Kryger. Greenland.

*Tetracyclos boreios* Kryger, 1942. Ent. Meddel. 22: 260. ♀.

#### Subfamily TETRASTICHINAE

Revision: Kurdjumov, 1913. Rev. Russe d'Ent. 13: 243–256 (transl. by Nowicki, 1927. Eos. 3: 513–617).

#### Genus CERATONEURA Ashmead

*Ceratoneura* Ashmead, 1894. In Riley and Howard, Linn. Soc. London, Jour. Zool. 25: 178.

Type: *Ceratoneura petiolata* Ashmead. Desig. by Ashmead, 1904.

*Ceratotetrastichodes* Girault, 1917. Speciosissima Genera Nova Eulophidorum, p. 2.

Type: *Ceratoneura pretiosa* Gahan. Monob.

*pretiosa* Gahan. Tex.

*Ceratoneura pretiosa* Gahan, 1914. U. S. Natl. Mus. Proc. 48: 165. ♂ ♀.  
Biology: Gahan, 1941. Ent. Soc. Wash. Proc. 43: 2.

#### Genus PARASPALANGIA Ashmead

*Paraspalangia* Ashmead, 1904. Carnegie Mus. Mem. 1: 334.

Type: *Paraspalangia annulipes* Ashmead. Monob.

*Stigmatotraisticus* Girault, 1916. Ent. Soc. Amer. Ann. 9: 303.

Type: (*Stigmatotraisticus emersoni* Girault)=*Paraspalangia annulipes* Ashmead. Monob.

*annulipes* Ashmead. Tex.

*Paraspalangia annulipes* Ashmead, 1904. Carnegie Mus. Mem. 1: 334. ♀.

*Stigmatotraisticus emersoni* Girault, 1916. Ent. Soc. Amer. Ann. 9: 304.

♀.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.

#### Genus WINNEMANA Crawford

*Winnemana* Crawford, 1911. U. S. Natl. Mus. Proc. 39: 620.

Type: *Winnemana argei* Crawford. Monob.

*argei* Crawford. Md. Hosts: Eggs of *Arge pectoralis* (Leach) and *A. salicis* Roh.

*Winnemana argei* Crawford, 1911. U. S. Natl. Mus. Proc. 39: 620. ♂ ♀.

#### Genus THRIPOCTENUS Crawford

*Thripoctenus* Crawford, 1911. Ent. Soc. Wash. Proc. 13: 233.

Type: *Thripoctenus russelli* Crawford. Monob.

*americensis* Girault. Utah, Alta. Host: ?Thrips in alfalfa.

*Thripoctenus americensis* Girault, 1917. U. S. Natl. Mus. Proc. 53: 448.

♀.

*nubilipennis* Williams. Mass. Hosts: *Cryptothrips rectangularis* Hood; *Meglothrips spinosus* Hood.

*Thripoctenus nubilipennis* Williams, 1916. Psyche 23: 54. ♂ ♀. Biol.

*russelli* Crawford. Calif. Hosts: *Frankliniella tritici* (Fitch); *Hercothrips fasciatus* (Perg.); ?*Scirtothrips citri* (Moult.); *Taeniothrips simplex* (Mor.); *Thrips tabaci* Lind.

*Thripoctenus russelli* Crawford, 1911. Ent. Soc. Wash. Proc. 13: 233. ♀.

Biology: Russell, 1912. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 23: 25-52.—Bailey, 1933. Hilgardia 7: 501-502.—Bailey, 1937. Calif. Agr. Expt. Sta. Bul. 609: 26.

#### Genus THRIPOSOMA Crawford

*Thriposoma* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 255.

Type: *Thriposoma grafti* Crawford. Monob.

*grafti* Crawford. Calif.

*Thriposoma grafti* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 255. ♀.

#### Genus OMPHALOMOPSIS Girault

*Omphalomopsis* Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 88.

Type: *Omphalomopsis marilandia* Girault. Monob.

*marylandia* Girault, emend. Md.

*Omphalomopsis marilandia* Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 88.

♀.

#### Genus GALEOPSOMYIA Girault

*Galeopsomyia* Girault, 1916. Ent. News 27: 348.

Type: *Euderus columbianus* Ashmead. Monob.

*columbiana* (Ashmead). N. J., Md., D. C., Fla., Tex. Host: *Asphondylia globulus* O. S.

*Euderus columbiana* Ashmead, 1888. Canad. Ent. 20: 104. ♀.

Taxonomy: Girault, 1912. Canad. Ent. 44: 50-52.

**nigrocyanea** (Ashmead), n. comb. Fla., La. Host: Gall of *Belonocnema treatae* Mayr.

**Cyrolasia nigrocyaneus** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 134. ♀.

#### Genus PARAGALEOPSOMYIA Girault

**Paragaleopsomyia** Girault, 1917. Speciosissima Genera Nova Eulophidorum, p. 1.

Type: **Paragaleopsomyia ejia** Girault. Monob.

**eja** Girault. Kans.

**Paragaleopsomyia ejia** Girault, 1917. Speciosissima Genera Nova Eulophidorum, p. 1. ♀.

**gallicola** Gahan. Ariz. Host: Itonidid gall on *Plucheä borealis*.

**Paragaleopsomyia gallicola** Gahan, 1919. Ent. Soc. Amer. Ann. 12: 167. ♂ ♀.

#### Genus PROTHMYUS Girault

**Prothymus** Girault, 1917. New Chalcid Flies, p. 1.

Type: **Prothymus novus** Girault. Monob.

**novus** Girault. Fla.

**Prothymus novus** Girault, 1917. New Chalcid Flies, p. 1.

#### Genus GALEOPSOMOPSIS Girault

**Galeopsomopsis** Girault, 1917. Speciosissima Genera Nova Eulophidorum, p. 1.

Type: **Galeopsomopsis multisulcata** Girault. Orig. desig.

**squamosa** Girault. Calif.

**Galeopsomopsis squamosus** Girault, 1917. New Chalcid Flies, p. 3.

**transcarinata** Gahan. Ariz. Host: *Asphondylia websteri* Felt.

**Galeopsomopsis transcarinatus** Gahan, 1919. Ent. Soc. Amer. Ann. 12: 168. ♂ ♀.

#### Genus THYMISCUS Ghesquière

**Thymus** Girault, 1916. Canad. Ent. 48: 113. Preocc. by *Timus*.

Type: **Encyrtus albocinctus** Ashmead. Monob.

**Thymiscus** Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 371. N. name.

**albocinctus** (Ashmead). Fla. Host: Gall of *Cynips* sp. on *Quercus nigra*.

**Eupelmus** (!) **albocinctus** Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. XVI. ♀.

#### Genus TETRASTICHUS Walker

**Tetrastichus** Walker, 1842. Ann. Mag. Nat. Hist. 10: 116.

Type: **Cirrospilus lycidas** Walker. Present desig.

**Trichoceras** Ratzelburg, 1844. Ichn. d. Forstins., v. 1, table opposite p. 40, p. 171.

Type: **Trichoceras erythrophthalmus** Ratzelburg. Monob.

**Geniocerus** Ratzelburg, 1848. Ichn. d. Forstins., v. 2, p. 175. N. name.

**Baryscapus** Foerster, 1856. Hym. Stud., v. 2, p. 84 (no species).

Type: **Baryscapus centricolae** Ashmead. Included by Ashmead, 1887.

**Oomyzus** Rondani, 1870. Comizio Agr. Parma Bol. 3: 141.

Type: **Oomyzus gallerucae** Rondani. Monob.

**Tetrastichodes** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 203.

Type: (**Tetrastichus floridanus** Ashmead)= [Entedon] **hagenowii** (Ratzelburg). Monob.

**Neotetraстichus** Perkins, 1912. Hawaii. Sugar Planters' Assoc. Expt. Sta., Div. Ent. Bul. 10: 14.

Type: **Neotetraстichus mimus** Perkins. Monob.

**Epitetraстichus** Girault, 1913. Queensland Mus. Mem. 2: 205 (footnote), 229.

Type: **Epitetraстichus speciosissimus** Girault. Orig. desig.

**Neomphaloидella** Girault, 1913. Roy. Soc. So. Australia Trans. 37: 69.

Type: **Neomphaloидella fasciativentris** Girault. Monob.

***Epomphalooides*** Girault, 1913. Arch. f. Naturgesch. 79A (6): 49.

Type: ***Epomphalooides flavus*** Girault. Monob.

***Neotetrastrichodes*** Girault, 1913. Queensland Mus. Mem. 2: 228.

Type: ***Neotetrastrichodes flavus*** Girault. Orig. desig.

***Aprostocerolooides*** Girault, 1913. Queensland Mus. Mem. 2: 243.

Type: ***Aprostocerolooides speciosus*** Girault. Orig. desig.

***Blattotetrastrichus*** Girault, 1917. Ent. News 28: 257.

Type: ***Entedon hagenowii*** Ratzeburg. Monob.

Revision: Burks, 1943. U. S. Natl. Mus. Proc. 93: 505-608.

**acutus** Ashmead. Fla.

***Tetrastrichus acutus*** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 134. ♂.

**aeneoviridis** (Girault). Ill. Hosts: ?*Malacosoma americanum* (F.); Syrphid puparia.

***Trichaporus aeneoviridis*** Girault, 1912. Canad. Ent. 44: 52, 76. ♂ ♀.

**agrili** Crawford. N. Y. Host: *Agabus sinuatus* (Oliv.).

***Tetrastrichus agrili*** Crawford, 1914. Insecutor Insectiae Menstruus 2: 181. ♀.

**ainsliei** Gahan. N. Y., Conn., Md., Va., Ill., Iowa, Kans., S. Dak., N. Dak. Hosts: *Mordellistena pustulata* (Melsch.); *Cylindrocopturus adspersus* (Lec.); *Phytophaga destructor* (Say).

***Tetrastrichus ainsliei*** Gahan, 1917. U. S. Natl. Mus. Proc. 53: 214. ♂ ♀.

***Neomphaloidella mediogutta*** Girault, 1917. Ent. News 28: 255. ♀.

**alaskensis** Ashmead. Alaska.

***Tetrastrichus alaskensis*** Ashmead, 1902. Wash. Acad. Sci. Proc. 4: 146. ♂.

**anthophilus** Burks. Ill. Host: *Rhopalomyia anthophila* O. S.

***Tetrastrichus anthophilus*** Burks, 1947. Ent. News 58: 85. ♂ ♀.

**anthracinus** Ashmead. Alaska. Host: ?*Agabus angelicus* Horn.

***Tetrastrichus anthracinus*** Ashmead, 1902. Wash. Acad. Sci. Proc. 4: 146. ♀.

**argyrus** Burks. Va., S. C., Ga., Iowa. Host: Itoniid in leaf gall of *Solidago leavenworthii*.

***Tetrastrichus argyrus*** Burks, 1943. U. S. Natl. Mus. Proc. 93: 558. ♂ ♀.

**asparagi** Crawford. Man., Ont., Que., N. B., N. Y., Mass., R. I., Conn., Md., Ill., Ky., Va., W. Va., Ariz. Host: *Criocerus asparagi* (L.).

***Tetrastrichus asparagi*** Crawford, 1909. Ent. Soc. Wash. Proc. 11: 150.

Biology: Russell and Johnston, 1912. Jour. Econ. Ent. 5: 429.—Johnston, 1915. Jour. Agr. Res. 4: 303.

**baldufi** Burks. Ill. Host: Gall of *Neuroterus verrucarum* O. S.

***Tetrastrichus baldufi*** Burks, 1943. U. S. Natl. Mus. Proc. 93: 540. ♂ ♀.

**banksii** Howard. N. J., D. C., Fla. Host: Egg sacs of argiopid spiders.

***Tetrastrichus banksii*** Howard, 1892. Ent. Soc. Wash. Proc. 2: 299. ♀.

**blastophagi** (Ashmead). D. C., Fla. Host: Gall of *Callirhytis blastophaga* (Ashm.).

***Hyperteles blastophagi*** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 202. ♂ ♀.

**brevistigma** Gahan. New England, D. C., Ohio, Ind., Ky., Calif., Oreg., Wash. Host: *Galerucella xanthomelaena* (Schrank).

***Tetrastrichus brevistigma*** Gahan, 1936. Ent. Soc. Wash. Proc. 38: 76. ♂ ♀.

Biology: Berry, 1938. U. S. Dept. Agr. Cir. 485: 1-11.

**bruchivorus** Gahan. N. C. Host: *Bruchus bruchialis* Fahr.

***Tetrastrichus bruchivorus*** Gahan, 1942. Ent. Soc. Wash. Proc. 44: 8. ♂ ♀.

**bruchophagi** Gahan. Generally distributed in North America. Hosts: *Bathyplectes curculionis* (Thoms.); *Bruchophagus gibbus* (Boh.).

***Tetrastrichus brucophagi*** Gahan, 1913. U. S. Natl. Mus. Proc. 46: 439. ♂ ♀.

***Tetrastrichus bruchophagi*** Girault, 1916. U. S. Natl. Mus. Proc. 51: 128, 1932. Emend.

Biology: Urbahns, 1917. Jour. Agr. Res. 8: 277-282.—Urbahns, 1920. U. S. Dept. Agr. Bul. 812: 17.

**carinatus** Forbes. Ont. to N. C., Kans., Minn.; Oreg., Wash. Hosts: ?*Dasyneura leguminicola* (Lint.); *Phytophaga destructor* (Say); *Platygaster herricki* Pack.; *P. vernalis* (Myers); *P. zosine* Wlkr.

- Tetrastichus carinatus** Forbes, 1885. Ill. State Dept. Agr. Trans. 22: App. p. 48. ♀.  
 Biology: Hill, Pinckney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 4-7, 10-15.  
 Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 138-142, 144.—Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 10-13.
- carpatus** Burks. N. H., Mass., Md., Ohio, Mo., Calif. Hosts: *Tineola bisselliella* (Hum.); *Tinea fuscipunctella* Haw.; *T. pellionella* (L.); *Apanteles carpatus* (Say).  
**Tetrastichus carpatus** Burks, 1943. U. S. Natl. Mus. Proc. 93: 566. ♂ ♀.  
**cassidis** Burks. La. Hosts: *Deloyala guttata* (Oliv.); *Metriona bicolor* (F.).  
**Tetrastichus cassidis** Burks, 1943. U. S. Natl. Mus. Proc. 93: 555. ♂ ♀.  
**centricolae** (Ashmead). N. C. Host: Gall of *Atrusca centricola* (O. S.).  
**Baryscapus centricolae** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 202. ♀.  

**chlamydis** Ashmead. Maine, N. J., Md., D. C., Va., Ill., Miss., Minn. Hosts: *Chlamisus gibbosa* (F.); C. spp.; *Exema dispar* Lacord.  
**Tetrastichus chlamydis** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 234. ♂ ♀.

**chrysopae** (Crawford). Md. to Fla., Ohio, Tenn., Tex.; Ill.; Calif. Hosts: *Chrysopa californica* Coq.; *C. oculata* Say; *C. plorabunda* Fitch; *C. rufilabris* Burm.  
**Geniocerus chrysopae** Crawford, 1915. U. S. Natl. Mus. Proc. 48: 584. ♀.  
**Aprostoceroides annapolis** Girault, 1917. Chalcidoidea Nova Marilandensis, II, p. 2. ♀.  
 Biology: Clancy, 1946. Calif. Univ., Pubs., Ent. 7: 448-454. ♀.

**coerulescens** Ashmead. N. B. to Ga., Tex. and Kans.; Colo., Calif., Nev. Hosts: *Malacomyza westwoodi* Fitch; *Chalcodermus collaris* Horn; *Fascista cererisella* (Chamb.); ?*Recurvaria thujaella* Kearf.; ?*Argyresthia thiarella* (Pack.); *Coleophora malivorella* Riley; *Callisto geminatella* (Pack.); *Amphibolips cinerea* (Ashm.); *Apanteles congregatus* (Say); *Bracon gelechiae* Ashm.; *B. hebetor* Say; ?*Microgaster* sp.; *Calotoccus aeneoviridis* Gir.; *Dibrachys cavus* (Wlk.); *Merapostus* sp.; *Pteromalus* sp.  
**Tetrastichus coerulescens** Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 130. ♂ ♀.  
**Tetrastichus doteni** Crawford, 1911. Ent. Soc. Wash. Proc. 13: 234. ♂ ♀.  

**compsivorus** Crawford. Miss., Tex., Okla. Host: *Compsus auricephalus* (Say).  
**Tetrastichus compsivorus** Crawford, 1915 (1914). Insecutor Inscitiae Menstruus 2: 180. ♂ ♀.

**cormus** Burks. Ill. Hosts: Gall of *Aulacidea podagrae* (Bass.); ?gall of *Hemadas nubilipennis* (Ashm.).  
**Tetrastichus cormus** Burks, 1943. U. S. Natl. Mus. Proc. 93: 579. ♂ ♀.  

**diarthronomyiae** Gahan. Md. Host: *Diarthronomyia hypogaea* (Loew).  
**Tetrastichus diarthronomyiae** Gahan, 1923. Ent. Soc. Wash. Proc. 25: 65. ♀.  
 Biology: Hamilton, 1924. Md. Agr. Expt. Sta. Bul. 269: 32.

**dolosus** Gahan. La., Tex., Kans. Hosts: *Ancylis comptana* (Froehl.); *Fascista cererisella* (Chamb.); *Euplectrus comstockii* How.; *E. plathypenae* How.  
**Tetrastichus dolosus** Gahan, 1917. U. S. Natl. Mus. Proc. 53: 215. ♂ ♀.

**dyrus** Burks. Mont. Hosts: *Trioza* nymphs on *Angelica lyalli*, on *Salix*, and on *Thalictrum occidentale*.  
**Tetrastichus dyrus** Burks, 1943. U. S. Natl. Mus. Proc. 93: 541. ♂ ♀.  

**epidius** Walker. Fla.  
**Tetrastichus Epidius** Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 28. ♀.

**euplectri** Gahan. La., Tex. Hosts: *Meteorus* sp.; *Euplectrus plathypenae* How.  
**Tetrastichus euplectri** Gahan, 1914. U. S. Natl. Mus. Proc. 48: 167. ♂ ♀.

**faustus** Burks. Mont. Host: *Rhagoletis fausta* (O. S.).  
**Tetrastichus faustus** Burks, 1943. U. S. Natl. Mus. Proc. 93: 582. ♀.  

**flavipes** Ashmead. Fla. Host: Gall of *Disholcaspis virens* (Ashm.).  
**Tetrastichus flavipes** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 135.

**flavopictus** (Ashmead). Fla.

*Ceranisus flavopictus* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 202. ♂ ♀.

**flora** (Girault). Md., D. C., Fla., Tenn. Host: *Monarthropalpus buxi* (Laboulb.).

*Aprostocetus flora* Girault, 1917. New Chalcid Flies, p. 3.

*Epitetrastichus tricolor* Girault, 1917. Descr. Stellarum Nov., p. 9. ♀.

**floridae** (Girault), emend., n. comb. Fla.

*Neomphaloidella florida* Girault, 1917. New Chalcid Flies, p. 4. ♂ ♀.

**fumipennis** (Girault). Md., D. C., Va., Ind., Ill., Iowa. Hosts: ?*Gnorimoschema gallaeolidaginis* (Riley); gall of *Asteromyia carbonifera* (Felt).

*Neomphaloidella fumipennis* Girault, 1917. Chalcidoidea Nova Marilandensis [I], p. 2. ♀.

**gala** Walker. Fla.

*Tetrastichus Gala* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 28. ♀.

**gelastus** Burks. Fla. Host: *Triozza* on Chinese elm.

*Tetrastichus gelastus* Burks, 1943. U. S. Natl. Mus. Proc. 93: 539. ♀.

**gerstaecheriae** Gahan. Tex. Hosts: *Gerstaecheria nobilis* Lec.; *G. porosa* Lee.

*Tetrastichus gerstaecheriae* Gahan, 1936. U. S. Natl. Mus. Proc. 83: 485. ♂ ♀.

**gibboni** (Girault). Ariz. Host: *Languria mozardi* Latr.

*Ootetrastichus gibboni* Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 86. ♀.

**gigas** Burks. Calif., Oreg., Wash. Host: Gall of *Andricus californicus* Ashm.

*Tetrastichus gigas* Burks, 1943. U. S. Natl. Mus. Proc. 93: 560. ♂ ♀.

**granulatus** Walker. Ont.

*Tetrastichus granulatus* Walker, 1844. Ann. Mag. Nat. Hist. (1) 14: 17. ♀.

**hagenowii** (Ratzeburg). Fla., La. Hosts: *Blatta orientalis* L.; *Blattella germanica* (L.); *Periplaneta americana* (L.); *P. australasiae* (F.); *Evania appendigaster* (L.).

*Entedon Hagenowii* Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 211.

*Tetrastichus floridanus* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 203. ♂ ♀.

Taxonomy: Gahan, 1914. U. S. Natl. Mus. Proc. 48: 168.

**hesperius** Burks. Ill. Host: Gall of *Diplolepis ignota* (O. S.).

*Tetrastichus hesperius* Burks, 1947. Ent. News 58: 88. ♂ ♀.

**hibus** Burks. Calif. Host: Cup-gall on *Artemisia ludoviciana*.

*Tetrastichus hibus* Burks, 1943. U. S. Natl. Mus. Proc. 93: 582. ♂ ♀.

**hillmeadia** (Girault). Md.

*Ootetrastichus hillmeadia* Girault, 1917. Chalcidoidea Nova Marilandensis III, p. 2. ♀.

**holbeini** Girault. W. Va., Mo., Calif. Hosts: *Chrysobothris femorata* (Oliv.); *C. mali* Horn.

*Tetrastichus holbeini* Girault, 1917. New Chalcid Flies, p. 2. ♀.

**hunteri** Crawford. Conn., Miss., La., Tex. Host: *Anthophonus grandis* Boh.

*Tetrastichus hunteri* Crawford, 1909. Ent. Soc. Wash. Proc. 11: 150. ♀.

Biology: Pierce, Cushman, and Hood, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 100: 1, 52, 56-63.

**ichthyrus** Burks. Tex. Hosts: ?Gall of *Neuroterus rileyi* Ashm.; probably *Xanthoteras emoryi* (Ashm.).

*Tetrastichus ichthyrus* Burks, 1943. U. S. Natl. Mus. Proc. 93: 528. ♂ ♀.

**impexus** Girault. Va. Host: Gall of *Disholcaspis quercus-globulus* (Fitch).

*Tetrastichus impexus* Girault, 1917. New Chalcid Flies, p. 2.

**johsoni** Ashmead. Ill. Host: Nest of *Phanagenia bombycina* (Cress.).

*Tetrastichus johsoni* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 233. ♀.

**juniperi** (Crawford). N. Y., Va., Oreg. Host: Juniper berries, probably with itonidid larvae or *Anthophonus juniperinus* Sanb.

*Geniocerus juniperi* Crawford, 1915. U. S. Natl. Mus. Proc. 48: 585. ♀.

Biology: Marcovitch, 1915. Ent. Soc. Amer. Ann. 8: 169. ♂ ♀.

- lasius** Burks. Ohio. Hosts: *Asteromyia argostis* O. S.; *Lasioptera muhlenbergiae* Mart.
- Tetrastichoides lasiopterae** Ashmead, 1894. Cincinnati Soc. Nat. Hist. Jour. 17: 54. ♂ ♀. Preocc.
- Tetrastichus lasius** Burks, 1943. U. S. Natl. Mus. Proc. 93: 596. ♂ ♀. N. name.
- lissus** Burks. Ariz. Host: In pods of *Astragalus mollissimus*.
- Tetrastichus lissus** Burks, 1943. U. S. Natl. Mus. Proc. 93: 527. ♀.
- longicorpus** (Girault). N. Mex. Host: *Rhyacionia frustrana bushnelli* (Busck).
- Neotetrastichodes longicorpus** Girault, 1916. U. S. Natl. Mus. Proc. 51: 129. ♀.
- malacosomae** Girault. Que., N. Y., Mass., Conn., Del., Pa., Nebr., N. Mex., Idaho, Calif., Oreg. Hosts: *Malacosoma americanum* (F.); *M. disstria* Hbn., *M. fragile* Stretch.
- Tetrastichus malacosomae** Girault, 1917 (1916). Insecutor Inscitiae Mensstruus 4: 110. ♂ ♀.
- malophilus** Burks. Ohio. Host: *Rhynchaenus pallicornis* (Say).
- Tetrastichus malophilus** Burks, 1943. U. S. Natl. Mus. Proc. 93: 585. ♀.
- marcovitchi** (Crawford). N. Y. Hosts: ?*Tetrastichus juniperi* (Cwf.); ?phytophagous *Eurytoma* sp. in berries of *Juniperus virginiana*.
- Geniocerus marcovitchi** Crawford, 1915. U. S. Natl. Mus. Proc. 48: 586. ♂ ♀.
- Biology: Marcovitch, 1915. Ent. Soc. Amer. Ann. 8: 170.
- marylandensis** (Girault). Mass., Md., D. C., Va., Miss., Mo., Ill. Hosts: ?*Aphis maidis* Fitch; ?*Rhyacionia frustrana* (Comst.); ?*Exoteleia pinifoliella* (Chamb.), ?*Itionidid*.
- Epitetrastichus marylandensis** Girault, 1916. Ent. Soc. Amer. Ann. 9: 295. ♀.
- Epitetrastichus cuneiformis** Girault, 1917. Deser. Stellarum Nov., p. 18. ♀.
- melanis** Burks. Ont., Mass., Wash. Host: *Coccinella quinquepunctata* Kirby.
- Tetrastichus melanis** Burks, 1943. U. S. Natl. Mus. Proc. 93: 529. ♂ ♀.
- microrhopalae** Ashmead. Man., N. J., D. C., Va. Hosts: *Cicindela limbalis* var. *awemeana* Casey; *Microrhopala xerene* Newm.
- Tetrastichus microrhopalae** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 234. ♂ ♀.
- minutus** (Howard). Conn., D. C., Va., Fla., Kans., N. Mex., Ariz., Utah, Calif. Hosts: *Aphis gossypii* Glov.; *A. pomi* Deg.; *Lecanium corni* Bouché; *L. nigrofasciatum* Perg.; *L. persicae* (F.); *Phenacoccus acericola* King; *P. helianthi* (Ckll.); *Physokermes insignicola* (Craw.); *Pseudococcus juniperi* Ehrh.; *Pulvinaria bigeloviae* Ckll.; *Saissetia oleae* (Bern.); ?*Cycloneda sanguinea* (L.); *C. sanguinea immaculata* (F.); *Coccophagus albicoxa* How.; *C. lycimnia* (Wlk.); *Anagyrus yuccae* (Coq.) *Apophytes lounsburyi* How.; *A. physokermis* Timb.; *Blastothrix longipennis* How.; ?*Chalcaspis phenacocci* (Ashm.); *Chrysoplatycerus ferrisi* Timb.; *C. splendens* How.; *Clausenia purpurea* Ishii; ?*Homalotylus terminalis* (Say); *Microterys mazzinini* Gir.; *Pseudeleptomastix squammulata* Gir.; *Zarhopalus corvinus* (Gir.); *Pachyneuron californicum* Gir.
- Astichus minutus** Howard, 1881. U. S. Dept. Agr. Rpt. for 1880, p. 369. ♂.
- Tetrastichus lecanii** Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. XIX. ♂.
- Tetrastichus blypyri** Ashmead, 1902. Canad. Ent. 34: 302. ♀.
- Tetrastichus (Tetrastichodes) detrimentosus** Gahan, 1913. U. S. Natl. Mus. Proc. 46: 439. ♂ ♀.
- Biology: Timberlake, 1924. Calif. Univ., Publs., Ent. 3: 248-251.—Clausen, 1924. Calif. Univ., Publs., Ent. 3: 257-266, 286-287.—Smith and Compere, 1928. Calif. Univ., Publs., Ent. 4: 242, 306-308.
- Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 19.
- modestus** Howard. N. J. to Va. and Ohio; Iowa, Calif. Hosts: *Apanteles atlantae* (Pack.); *A. edwardsii* Riley; *Microgaster congregatiformis* Vier.
- Tetrastichus modestus** Howard, 1889. In Scudder, Butterflies of Eastern U. S. and Canada, pp. 1872, 1894. ♂ ♀.

***Epitetrastichus mundicornis*** Girault, 1917. Chalcidoidea Nova Marilandensis III, p. 1. ♀.

***nebraskensis*** (Girault) Nebr.

***Neomphaloidella nebraskensis*** Girault, 1916. Canad. Ent. 48: 103. ♀.

***neuroteri*** (Ashmead). N. Y., D. C., Va., Fla., Mo., Ill. Hosts: *Neuroterus rileyi* Ashm.; gall of *N. saltarius* Weld.

***Hyperteles neuroteri*** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 203. ♂ ♀.

***oecanthivorus compar*** Gahan. Pa., S. C., Tex. This may be identical with *T. oecanthivorus oecanthivorus* Gahan, 1932, n. name for *T. dispar* Silvestri, preocc., occurring in Italy. Host: *Oecanthus nigricornis quadripunctatus* Beut.

***Tetrastichus oecanthivorus*** var. ***compar*** Gahan, 1932. Ent. Soc. Amer. Ann. 25: 743. ♂ ♀.

***oklahomae*** (Girault), emend. Okla., Utah. Host: ?*Harmolita* sp. in grass stem.

***Neomphaloidella oklahoma*** Girault, 1917. Deser. Stellarum Nov., p. 9. ♂ ♀.

***oncideridis*** Gahan. W. Va. Host: *Oncideres cingulatus* (Say).

***Tetrastichus oncideridis*** Gahan, 1932. Ent. Soc. Amer. Ann. 25: 745. ♂ ♀.

***ovipransi*** Crosby and Leonard. Va. Host: *Blepharida rhois* (Forst.).

***Tetrastichus ovipransi*** Crosby and Leonard, 1917. Ent. News 28: 368. ♀.

***pandora*** Burks. Oreg. Host: *Coloradia pandora* Blake.

***Tetrastichus pandora*** Burks, 1943. U. S. Natl. Mus. Proc. 93: 530. ♂ ♀.

***paracholus*** Burks. Va. Host: *Gnorimoschema gallaesolidaginis* (Riley).

***Tetrastichus paracholus*** Burks, 1943. U. S. Natl. Mus. Proc. 93: 551. ♂ ♀.

***pattersonae*** Fullaway. Fla., Utah. Calif. Hosts: *Antron echinus* (Ashm.); *Callirhytis pomiformis* Ashm.; ?*Disholcaspis chrysolepidis* (Beut.).

***Tetrastichus pattersonae*** Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 280. ♀.

***phegus*** Burks. Ill., Tex., Calif. Hosts: *Disholcaspis cinerosa* (Bass.); gall of *D. mamma* (Walsh); gall of *Heteroecus pacificus* Ashm.

***Tetrastichus phegus*** Burks, 1943. U. S. Natl. Mus. Proc. 93: 559. ♂ ♀.

***polynemae*** Ashmead. N. Y., Del., Ill. Hosts: Egg of *Lestes* sp.; *Polynema needhami* (Ashm.).

***Tetrastichus p. lynemae*** Ashmead, 1900. Ent. News 11: 616. ♀.

***Ootetrastichus mymaridis*** Girault, 1916. U. S. Natl. Mus. Proc. 51: 130. ♀.

***productus*** Riley. P. E. I., N. J., Ohio, Mo., Kans. Hosts: ?*Phytophaga destructor* (Say); gall on *Salix*.

***Tetrastichus productus*** Riley, 1885. U. S. Natl. Mus. Proc. 8: 419. ♂ ♀. Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 143-144, ♂ ♀.

***pulchiventris*** (Girault). Md., La.

***Neomphaloidella pulchiventris*** Girault, 1916. Canad. Ent. 48: 101. ♀.

***punctatifacies*** Girault. Australia; ?Conn.

***Tetrastichus punctatifacies*** Girault, 1926. Insecutor Inscitiae Menstruus 14: 142.

Taxonomy: Britton, 1938. Conn. State Geol. and Nat. Hist. Survey Bul. 60: 144.

***punctatifrons*** (Girault). Ariz. Host: ?*Paraleucoptera albella* (Chamb.).

***Epitetrastichus punctatifrons*** Girault, 1916. U. S. Natl. Mus. Proc. 51: 128. ♀.

***racemariae*** Ashmead. Ont., Conn., N. J., W. Va., Ill., Fla., Kans., Minn., Calif. Hosts: ?*Eurytoma californica* Ashm.; galla of: *Amphibolips cinerea* Ashm.; *A. prunus* Cress.; *A. racemaria* Ashm.; *Andricus flocci* (O. S.); *A. lasius* (Ashm.); *Callirhytis pomiformis* (Ashm.); *Disholcaspis mamma* (Walsh); ?*Neuroterus noxiosus* (Bass.); *N. quercus-batatus* (Fitch).

***Tetrastichus racemariae*** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 134. ♂ ♀.

***Tetrastichus californicus*** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 203. ♀.

***Hyperteles flocci*** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 203. ♂ ♀.

- rapo** (Walker). N. Y., D. C., N. C., cosmopolitan. Host: *Apanteles glomeratus* (L.).
- Cirrospilus Rapo** Walker, 1839. Ann. Mag. Nat. Hist. (1) 3: 415. ♂ ♀.
- Biology: Masi, 1908. Lab. Zool. Gen. e Agr. Portici Bol. 3: 133.
- repulsus** Girault. Iowa.
- Tetrastichus repulsus** Girault, 1917. New Chalcid Flies, pp. 2, 4.
- rosae** Ashmead. N. J., D. C., Va., Fla., Mich., Colo., Idaho, B. C. Hosts: *Diplopeltis ignota* (O. S.); *D. ostensackeni* (Beut.).
- Tetrastrichus rosae** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 134. ♀ (♂ misdet.).
- rugglesi** Rohwer. N. Y., Conn., W. Va., Minn. Hosts: *Agrilus arcuatus* (Say); *A. champlaini* Frost; *A. viridis* var. *fagi* (Ratz.).
- Tetrastichus rugglesi** Rohwer, 1919. Canad. Ent. 51: 160. ♀.
- saunderii** (Packard). Ont., Conn., N. J. Hosts: *Strymon* sp., presumably *edwardsii* (Saund.); *S. falacer* (Godt.).
- Eulophus Saundersii** Packard, 1881. Boston Soc. Nat. Hist. Proc. 21: 34. ♂.
- scolyti** Ashmead. N. J., W. Va. Host: *Scolytus rugulosus* (Ratz.).
- Tetrastichus scolyti** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 343. ♀.
- scriptus** Burks. N. J. Host: ?*Euplectrus* sp.
- Tetrastichus scriptus** Burks, 1943. U. S. Natl. Mus. Proc. 93: 550. ♀.
- semauraticeps** (Girault). Maine, Colo., Ariz. Hosts: Needle gall on *Pinus ponderosa*; bud gall on *Pinus scopulorum*.
- Epitetrastichus semauraticeps** Girault, 1916. U. S. Natl. Mus. Proc. 51: 127. ♀.
- semideae** (Packard). N. H., Conn. Host: *Oeneis melissa* (Say). \*
- Eulophus semideae** Packard, 1874. In Hitchcock and Huntington, Geol. of N. H., pt. 1, p. 347. ♂ ♀.
- semilongifasciata** (Girault). Md., D. C.
- Neomphaloidea semilongifasciata** Girault, 1916. Soc. Ent. 31: 35. ♀.
- silvaticus** Gahan. N. B., Vt., Conn., Minn. Host: *Malacosoma disstria* Hbn.
- Tetrastichus silvaticus** Gahan, 1937. Ent. Soc. Wash. Proc. 39: 266. ♂ ♀.
- Biology: Hodson, 1939. Ent. Soc. Amer. Ann. 32: 131-136.
- sobrius** Gahan. Conn., Ariz., Calif. Hosts: ?*Asphondylia bea* Felt; *A. websteri* Felt.
- Tetrastichus sobrius** Gahan, 1919. Ent. Soc. Amer. Ann. 12: 166. ♂ ♀.
- solidaginis** Burks. Utah. Host: Gall of *Eurosta solidaginis* (Fitch).
- Tetrastichus solidaginis** Burks, 1943. U. S. Natl. Mus. Proc. 93: 534. ♂ ♀.
- spilopteris** Burks. N. Mex., Calif., Oreg. Hosts in galls of: *Andricus kingi* Bass.; *Dryocosmus bicornis* (McC. and E.); *Neuroterus saltatorius* (Edw.).
- Tetrastichus spilopteris** Burks, 1943. U. S. Natl. Mus. Proc. 93: 564. ♂ ♀.
- stanfordiensis** Fullaway. Calif. Host: Pimply gall on *Quercus douglasii*, possibly *Antron douglasii* (Ashm.).
- Tetrastichus stanfordiensis** Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 281. ♀.
- strobilus** Burks. Oreg. Host: Lepidopteron in cone of *Pseudotsuga taxifolia*, probably *Barbara colfaxiana* Kearn.
- Tetrastichus strobilus** Burks, 1943. U. S. Natl. Mus. Proc. 93: 570. ♂ ♀.
- tesserus** Burks. Va., Mich., Ill., Iowa. Host: *Asteromyia* gall on goldenrod.
- Tetrastichus tesserus** Burks, 1943. U. S. Natl. Mus. Proc. 93: 552. ♂ ♀.
- thanasi** Ashmead. Pa., W. Va., Mich., Mont., Calif. Hosts: *Chilocorus stigma* (Say); *Cymatodera* sp.; *Thanasimus dubius* (F.); *T. trifasciatus* (Say); *T. larva* in sumach.
- Tetrastichus thanasi** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 343. ♀.
- theclae** (Packard). New England, N. J. Host: *Strymon falacer* (Godt.).
- Eulophus theclae** Packard, 1881. Boston Soc. Nat. Hist. Proc. 21: 34. ♂.
- thripophonus** Waterston. Fla. Host: *Liothrips laureli* (Mason).
- Tetrastichus thripophonus** Waterston, 1923. Bul. Ent. Res. 13: 453. ♀.
- Biology: Mason, 1922. Ent. News 33: 199.

- tibialis** (Ashmead). N. Y., Mass., Del., W. Va., Ont. Hosts: *Apanteles* sp. on *Apatela americana* (Harr.); *Olesicampe* sp.; *Homalotylus* sp.
- Tetrastichodes tibialis** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 344. ♀. Biology: Dimmock, 1898. Ent. Soc. Wash. Proc. 4: 150.
- triozae** Burks. Kans., Colo., N. Mex., Ariz., Calif., Idaho, Mont., Wash. Hosts: ?*Calophya nigripennis* Riley; *Paratriozza cockerelli* (Sule).
- Tetrastichus triozae** Burks, 1943. U. S. Natl. Mus. Proc. 93: 542. ♂ ♀.
- trisulatus** Provancher. N. B. to Va., west to Ill. and Ont. Hosts: *Arge pectoralis* (Leach); ?*Neodiprion* sp.
- Tetrastichus trisulatus** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 211. ♂ ♀.
- Hyperteles hylotomae** Ashmead, 1888. Canad. Ent. 20: 105. ♀. N. syn.
- turionum** (Hartig). N. Y., Conn., Mass., N. J. Host: *Rhyacionia buoliana* (Schiff.). **Eulophus turionum** Hartig, 1838. Jahresber. über die Fortsch. der Fortw. u. Forstl. Naturk. 1: 268. ♂ ♀.
- Biology: Dowden, 1934. Ent. Soc. Amer. Ann. 27: 600.—Bergold and Rüpper, 1937. Ztschr. f. Parasitenk. 9: 399, 414–415.
- ulysses** (Girault). Md. *Aprostocetus ulysses* Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 112. ♀.
- varicornis** (Girault). Md. *Epitetrastichus varicornis* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 4. ♀.
- venustus** Gahan. Ind., Iowa, Ariz., Calif. Hosts: ?*Asphondylia websteri* Felt; ?*Bruchophagus gibbus* (Boh.). ?*Cynips brevicornis* Panzer, 1804. Syst. Nomencl., p. 134.
- Tetrastichus venustus** Gahan, 1914. U. S. Natl. Mus. Proc. 48: 168. ♀. Biology: Urbans, 1920. U. S. Dept. Agr. Bul. 812: 18.
- verrucarii** Balduf. N. Y., D. C., Va., Ill., Calif. Hosts in galls of: *Neuroterus floccosus* (Bass.); *N. niger* Gill.; *N. varians* Kinsey; *N. verrucarum* O. S. **Tetrastichus verrucarii** Balduf, 1929. Canad. Ent. 61: 221. ♂ ♀. Biology: Balduf, 1929. Canad. Ent. 61: 125–130.
- whitmani** (Girault). Md., Minn., S. Dak. Host: *Physonota unipunctata* (Say). *Aprostocetus whitmani* Girault, 1916. Ent. Soc. Amer. Ann. 9: 296. ♂ ♀. *Aprostocetus marilandicus* (!) Girault, 1917. Ent. News 28: 21. ♀.
- xanthomelaenae** (Rondani). N. Y., Conn., N. J., D. C. Host: *Galerucella xanthomelaena* (Schrank). *Oomyzus xanthomelaenae* Rondani, 1872. Repertorio degli insetti parassiti e della loro vittime, v. 2, p. 16.
- Biology: Berry, 1938. Jour. Agr. Res. 57: 859–863.
- xanthops** (Ratzeburg). Mass. Hosts: *Fenusula ulmi* (Sund.); *Heterarthrus nemoratus* (Fall.). **Eulophus xanthops** Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 170. ♀. Biology: Berry, 1938. Jour. Agr. Res. 57: 859–863.—Dowden, 1941. U. S. Dept. Agr. Tech. Bul. 757: 8, 10, 32–35.

### Genus APROSTOCETUS Westwood

**Aprostocetus** Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 2: 444.

Type: *Aprostocetus caudatus* Westwood. Monob.

**Lonchetedon** Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 215.

Type: (*Eulophus longicaudatus* Foerster)=*Aprostocetus caudatus* Westwood. Monob.

**Tetrastichomorpha** Girault, 1913. Queensland Mus. Mem. 2: 227. N. syn.

Type: *Tetrastichomorpha flava* Girault. Orig. desig.

**Neomphaloidomyia** Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 118. N. syn.

Type: *Hyperteles polynemae* Ashmead. Monob.

**ajax** (Girault), n. comb. D. C.

**Tetrastichomorpha ajax** Girault, 1916. U. S. Natl. Mus. Proc. 51: 132–133. ♀.

**americanus** Ashmead. N. H., Kans.

*Aprostocetus americanus* Ashmead, 1888. Canad. Ent. 20: 106. ♀.  
Biology: Brandhorst, 1943. Kans. Acad. Sci. Trans. 46: 169.

**animus** Girault. N. Mex.

*Aprostocetus animus* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 6. ♀.

**bewicki** Girault. Wash.

*Aprostocetus bewicki* Girault, 1917. New Chalcid Flies, p. 2. ♂ ♀.

**canadensis** Ashmead. Canada, Ohio. Hosts: "?Cecidomyia sp."; *Orellia florescentiae* (L.); ?*Crataepus fletcheri* Ashm.

*Aprostocetus canadensis* Ashmead, 1888. Canad. Ent. 20: 106. ♀.  
Biology: Detmers, 1927. Ohio Agr. Expt. Sta. Bul. 414: 26-29, ♀.

**cincinnatus** (Girault), n. comb. Md.

*Neomphaloides cincinnatus* Girault, 1917. Psyche 24: 92. ♀.

**diplosidis** Crawford. La., Tex. Host: *Contarinia sorghicola* Coq.

*Aprostocetus diplosidis* Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 180. ♂ ♀.  
Biology: Dean, 1911. U. S. Dept. Agr. Bur. Ent. Bul. 85: (4) 55-57.—Walter, 1941.  
U. S. Dept. Agr. Tech. Bul. 778: 18.

**fidius** Girault. Miss., N. Mex.

*Aprostocetus fidius* Girault, 1917. New Eulophidae, p. 1. ♀.

Biology: Myers, 1930. Bul. Ent. Res. 21: 309-313.

**granulatus** Ashmead. Fla.

*Aprostocetus granulatus* Ashmead, 1888. Canad. Ent. 20: 105. ♀.

*Tetrastichus microcosmus* Girault, 1917. Deser. Stellarum Nov., p. 22.  
N. name.

Taxonomy: Burks, 1943. U. S. Natl. Mus. Proc. 93: 605.

**irvingi** (Girault), n. comb. N. Mex.

*Neomphaloidea irvingi* Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 118. ♀.

**kansasiae** Girault, emend. Kans.

*Aprostocetus kansasia* Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 88. ♀.

**oviductus** (Girault), n. comb. Md.

*Epitetrastichus oviductus* Girault, 1917 (1916). Insecutor Inscitiae Mensstruus 4: 111. ♀.

**polynemae** (Ashmead), n. comb. N. Y., Ill. Host: *Polynema needhami* Ashm.

*Hyperteles polynemae* Ashmead, 1900. Ent. News 11: 615. ♂ ♀.

### Genus SYNTOMOSPHYRUM Foerster

*Syntomosphyrum* Foerster, 1878. Naturh. Ver. Rheinlande Verh. 35: 60.

Type: *Syntomosphyrum fulvipes* Foerster. Monob.

*Tetrastichopsis* Girault, 1916. U. S. Natl. Mus. Proc. 51: 132.

Type: *Tetrastichopsis prionomeri* Girault. Monob.

**esurus** (Riley). N. B., Conn., N. J., Pa., D. C., W. Va., Ga., Ala., Tex. Hosts: *Chilocorus similis* (Rossi); *Hyphantria cunea* (Drury); *Alabama argillacea* (Hbn.); *Anomis erosa* (Hbn.); *Hemerocampa leucostigma* (A. and S.); *Nygma phaeorrhoea* (Donov.); ?*Porthetria dispar* (L.); *Diatraea saccharalis* (F.); *Grapholita molesta* (Busck); *Stenoma algidella* (Wlk.).

*Cirrospilus esurus* Riley, 1879. Canad. Ent. 11: 162. ♂ ♀.

*Syntomosphyrum orgyiae* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 343.  
♀. N. syn.

Biology: Howard, 1897. U. S. Dept. Agr. Div. Ent. Tech. Ser. 5: 38-39.—Driggers, 1931. N. J. Agr. Expt. Sta. Ann. Rpt. 52: 192-193.

**ischnopterae** (Girault), n. comb. Md. Host: Eggs of *Ischnoptera* sp.

*Epompaloides ischnopterae* Girault, 1917. Ent. News 28: 257. ♂ ♀.

**philodromi** (Gahan), n. comb. Ohio. Host: *Philodromus aureolus* (Oliv.).

*Tetrastichus philodromi* Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 18.  
♂ ♀.

Biology: Auten, 1925. Ent. Soc. Amer. Ann. 18: 242.

*prionomeri* (Girault), n. comb. Tenn. Host: *Odontopus calceatus* Say.  
*Tetrastichopsis prionomeri* Girault, 1916. U. S. Natl. Mus. Proc. 51: 132. ♀.

#### Genus PAROMPHALOIDOMYIIA Girault

*Paromphaloidomyia* Girault, 1917. New Chalcid Flies, p. 1.

Type: *Paromphaloidomyia homeri* Girault. Monob.

*homeri* Girault. Va.

*Paromphaloidomyia homeri* Girault, 1917. New Chalcid Flies, p. 1

#### Genus MELITTOBIA Westwood

*Melittobia* Westwood, 1847. Ent. Soc. London Trans. 5: Proc. p. xviii, lxv.

Type: (*Melittobia audouinii* Westwood) = *Cirrospilus acasta* Walker. Monob.

*Anthophorabia* Newport, 1849. Gard. Chron., p. 183.

Type: (*Anthophorabia retusa* Newport) = *Cirrospilus acasta* Walker. Monob.

*Aceratoneuromyia* Girault, 1917. Insector Inscitiae Menstruus 5: 151.

Type: *Aceratoneuromyia australis* Girault. Monob.

*chalybii* Ashmead. N. Y., N. J., Pa., Va., La., B. C. Hosts: *Periplaneta americana* (L.); *Saperda candida* F.; *Pikonema alaskensis* (Roh.); *Sphecocephaga burra* (Cress.); *Eumenes fraternus* Say; *Chalybion californicum* (Sauss.); *Sceliphron caementarium* (Drury); *Trypoxylon politum* (Say).

*Melittobia chalybit* Ashmead, 1892. Ent. Soc. Wash. Proc. 2: 231. ♂ ♀.

Biology: Buckell, 1928. Pan-Pacific Ent. 5: 14-22.—Schmieder, 1933. Biol. Bul. 65: 338-354.—Schmieder, 1938. Biol. Bul. 74: 256-266.—Schmieder, 1939. Ent. News 50: 128-131.—Flanders, 1944. Jour. Econ. Ent. 37: 410.

*megachilis* (Packard). Vt., N. J., Wis. Hosts: *Monodontomerus* sp.; *Pemphitis* sp.; *Megachile centuncularis* (L.); *Anthophora* sp.; *Ceratina* sp.

*Anthophorabia megachilis* Packard, 1864. Essex Inst. Proc. 4: 134. ♀.

*Melittobia megalochilae* Packard, 1906. Spolia Hym., p. 143. Emend.

*Chrysocharis aeneus* Brues, 1909 (1908). Wis. Nat. Hist. Soc. Bul. 6: 161. ♀.

Biology: Packard, 1869. Guide to Study of Insects, p. 206.

#### Genus CRATAEPIUS Foerster

*Crataepus* Foerster, 1878. Naturh. Ver. Rheinlande Verh. 35: 61.

Type: *Crataepus aquisgranensis* Foerster. Monob.

*fletcheri* Ashmead. Ont. Hosts: *Orellia florescentiae* (L.); dipterous larvae in *Cirsium arvense*.

*Crataepus Fletcherii* Ashmead, 1892. Canad. Ent. 24: 309. ♀.

#### Subfamily ELACHERTINAE

#### Genus EUPLECTRUS Westwood

*Euplectrus* Westwood, 1832. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 1: 128.

Type: (*Euplectrus maculiventris* Westwood) = [*Pteromalus*] *bicolor* (Swederus). Monob.

*Diplectron* Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Förh. 14: 292 (no species).

Type: *Pteromalus bicolor* Swederus. Desig. by Gahan and Fagan, 1923.

*Pachyscapha* Howard, 1897 (1896). Linn. Soc. London, Jour., Zool. 26: 159.

Type: *Pachyscapha insularis* Howard. Monob.

Revision: Girault, 1916. Canad. Ent. 48: 265.

*bicolor* (Swederus). Maine, Mass., N. J. Hosts: *Amathes c-nigrum* (L.); *Epiglaea apiaata* Grote.

*Pteromalus Bicolor* Swederus, 1795. Svenska Vetensk. Akad. Handl. 16: 204.

Biology: Lacroix, 1924. Ent. News 35: 217.—Beckwith, 1929. N. Y. Ent. Soc. Jour. 37: 415.

- catocalae** Howard. N. J., Md., Ill., Mo. Hosts: *Catocala* sp.; geometrid on birch.  
**Euplectrus catocalae** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 27.  
 ♂ ♀.
- comstockii** Howard. Conn. to N. C.; Fla. to Tex. and Kans.; S. Dak., Ariz. Hosts: *Alabama argillacea* (Hbn.); *Autographa* sp.; *Heliothis armigera* (Hbn.); *Laphygma frugiperda* (A. and S.); *Plathypena scabra* (F.); *Prodenia ornithogalli* Guen.; *Trichoplusia ni* (Hbn.); geometrid.  
**Euplectrus Comstockii** Howard, 1880. Canad. Ent. 12: 158. ♂.  
 Biology: Schwarz, 1881. Amer. Nat. 15: 61–63.—Howard, 1914 (1913). Ent. Soc. Wash. Proc. 15: 161.—Luginbill, 1928. U. S. Dept. Agr. Tech. Bul. 34: 72–73.—Bibby, 1942. Jour. Econ. Ent. 35: 943.
- frontalis** Howard. Ont., Que., N. H., N. J., Va., Kans. Hosts: *Amathes c-nigrum* (L.); phalaenid larva on walnut; yellow geometrid larva.  
**Euplectrus frontalis** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 27. ♀.  
 Biology: Fyles, 1896. Ent. News 7: 44.
- hircinus** (Say). Ind., Kans.  
*Eulophus hircinus* Say, 1836. Boston Jour. Nat. Hist. 1: 274.
- insularis** (Howard). Fla.  
**Pachyscapha insularis** Howard, 1896. Linn. Soc. London, Jour., Zool. 26: 159.  
 ♂.
- junetus** Gahan. Fla. Host: *Isoparce cupressi* (Bdyl.).  
**Euplectrus junctus** Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 30. ♀.
- leucotrophis** Howard. Fla. Hosts: Arctiid larva; phalaenid larva.  
**Euplectrus leucotrophis** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 26. ♂.
- marginatus** Ashmead. Fla. Host: Phalaenid larva.  
**Euplectrus (!) marginatus** Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xviii. ♂ ♀.
- mellipes** Provancher. Ont., Que. Hosts: *Feralia jocosa* Guen.; *Coleophora laricella* (Hbn.).  
**Euplectrus mellipes** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 207. ♀.
- pachyscapha** Girault. Kans.  
**Euplectrus pachyscapha** Girault, 1917. New Chalcid Flies, p. 2. ♂ ♀.
- plathypenae** Howard. N. J. to Fla., Tex. and Kans. Hosts: *Protoparce sexta* (Johan.); *Cirphis unipuncta* (Haw.); *Heliothis armigera* (Hbn.); *Laphygma exigua* (Hbn.); *L. frugiperda* (A. and S.); *Leucania latiuscula* H.-S.; ?*L. multilinea* Wlkr.; *Peridroma margaritosa* (Haw.); *Plathypena scabra* (F.); *Prodenia ornithogalli* Guen.; *P. sunia* (Guen.); *Diatraea saccharalis* (F.).  
**Euplectrus platyhynae** (!) Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 26. ♂ ♀.  
 Biology: Vickery, 1929. U. S. Dept. Agr. Tech. Bul. 138: 16–21, 42–45, 55–59.—Wilson, 1933. Fla. Ent. 17: 3, 7–12.
- semimarginatus** Girault. Host: *Aphis rumicis* L.  
**Euplectrus semimarginatus** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 1. ♀.
- ### Genus EUPLECTROMORPHA Girault
- Euplectromorpha** Girault, 1913. Queensland Mus. Mem. 2: 276.  
 Type: **Euplectromorpha unifasciata** Girault. Orig. desig.
- americana** Girault. Md.  
**Euplectromorpha americana** Girault, 1916. Insecutor Inscitiae Menstruus 4: 114. ♂.
- ### Genus DIAULINOPSIS Crawford
- Diaulinopsis** Crawford, 1912. U. S. Natl. Mus. Proc. 43: 182.  
 Type: **Diaulinopsis callichroma** Crawford. Monob.

*Achrysochareloidea* Girault, 1913. Roy. Soc. So. Australia Trans. 37: 109.  
N. syn.

Type: *Achrysochareloidea pax* Girault. Monob.

*albiscapus* (Girault), n. comb. Md.

*Achrysochareloidea albiscapus* Girault, 1916. Canad. Ent. 48: 336. ♀.

*callichroma* Crawford. Ind., Fla., Miss., Ariz. Hosts: *Agromyza scutellata* Fall.;  
*Calycomyza artemisiae* (Kltb.); *Cerodonta dorsalis* Loew; *Liriomyza pusilla*  
Meig.

*Diaulinopsis callichroma* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 183.  
♂ ♀.

#### Genus ARDALUS Howard

*Ardalus* Howard, 1896. Linn. Soc. London, Jour., Zool. 26: 161.

Type: *Ardalus aciculatus* Howard. Desig. by Ashmead, 1904.  
Revision: Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 20.

*insuetus* (Gahan). Fla. Host: *Lerema accius* (A. and S.).

*Euplectrus insuetus* Gahan, 1914. U. S. Natl. Mus. Proc. 48: 164. ♀.  
Biology: Ainslie, 1922. Fla. Ent. 6: 14.  
Taxonomy: Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 19-20.

#### Genus PARAOLINX Ashmead

*Paraolinx* Ashmead, 1894. Linn. Soc. London, Jour., Zool. 25: 166.

Type: *Paraolinx lineatifrons* Ashmead. Monob.

*Leucodesmia* Howard, 1895. U. S. Dept. Agr. Insect Life 7: 403.

Type: *Leucodesmia typica* Howard. Monob.

*nigriventris* (Girault). Va., Fla. Hosts: *Grapholitha molesta* (Busck); *Pyroderces rileyi* (Wlsm.).

*Leucodesmia nigriventris* Girault, 1916. U. S. Natl. Mus. Proc. 51: 46. ♀.

*typica* (Howard). Conn., N. J., Fla. Hosts: Coleopterous larva ex stem of *Ambrosia artemisiolae*, probably *Dicymolomia julianalis* (Wlkr.); *Laetilia coccidivora* Comst.; ?*Thyridopteryx ephemeraeformis* (Haw.); larva ex fruit cluster of *Rhus*.

*Leucodesmia typica* Howard, 1895. U. S. Dept. Agr. Insect Life 7: 402.  
♂ ♀.

#### Genus STENOMESIUS Westwood

*Stenomesius* Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and  
Jour. Sci. (3) 3: 343.

Type: *Stenomesius pulchellus* Westwood. Desig. by Westwood,  
1840.

*harrisinae* Ashmead. N. J., Fla. Host: *Harrisina americana* (Guér.).

*Stenomesius harrisinae* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 200. ♀.

#### Genus MIOTROPIS Thomson

*Miotropis* Thomson, 1878. Hym. Scand., v. 5, pp. 187, 197.

Type: *Miotropis sulcicristata* Thomson. Desig. by Ashmead,  
1904.

*Mionotropis* Schulz, 1906. Spolia Hym., p. 143. Emend.

*Tetrastichomyia* Girault, 1916. U. S. Natl. Mus. Proc. 51: 48.

Type: *Miotropis clisiocampae* Ashmead. Monob.

*clisiocampae* Ashmead. Conn., N. J., Va., W. Va., Ohio, Ill. Hosts: *Achatodes zeae* (Harr.); *Malacosoma americanum* (F.); *Diatraea zeacolella* Dyar;  
*Pyrausta nubilalis* (Hbn.); *Grapholitha molesta* (Busck); *Microplitis gortynae* Riley.

*Miotropis clisiocampae* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 341. ♀.  
Biology: Balduf, 1929. Ohio Jour. Sci. 29: 227-228.—Proper, 1934. Jour. Agr. Res. 48: 370.

*orgyiae* (Girault), n. comb. D. C. Host: *Hemerocampa leucostigma* (A. and S.).

*Tetrastichomyia orgyiae* Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 111.  
♀.

*silvensis* (Girault), n. comb. Md.

*Tetrastichomyia silvensis* Girault, 1919. Brooklyn Ent. Soc. Bul. 11: 111.  
♀.

**Genus ELACHERTUS Spinola**

*Elachertus* Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 151.

Type: *Diplopeltis lateralis* Spinola. Desig. by Gahan and Fagan, 1923.

*Microterus* Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 151.

Type: *Diplopeltis petiolata* Spinola. Desig. by Gahan and Fagan, 1923.

*Elachestus* Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 135. Emend.

*Elachistus* Foerster, 1856. Hym. Stud., v. 2, p. 73. Emend.

*Epardalus* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 5. N. syn.

Type: *Elachistus cidariae* Ashmead. Orig. desig.

*aeneoniger* Girault. Ont., N. Y., Ohio. Hosts: *Ancylis comptana* (Froel.); *Argyrotaenia pinitubana* (Kearf.); *Argyresthia oreasella* Clem.

*Elachistus aeneoniger* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 2. ♀.

*cacoeciae* Howard. N. H., Mass., N. J., Pa., D. C., Va., Mo., Utah. Hosts: *Hyphantria cunea* (Drury); *Heterocampa guttivitta* (Wlkr.); *Schizura unicornis* (A. and S.); *Ancylis comptana fragariae* (W. and R.); *Archips argyrospila* (Wlkr.); *A. rosaceana* (Harr.); *Argyrotaenia velutinana* (Wlkr.); *Eulophus orgiae* (Fitch).

*Elachistus cacoeciae* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 28.  
♂.

*cidariae* Ashmead. N. H., Mass. Host: *Lygris diversilineata* (Hbn.).

*Elachistus cidariae* Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 157. ♀.

Taxonomy: Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 5.

*coxalis* Howard. Mich., D. C., Calif. Host: *Polychrosis viteana* (Clem.).

*Elachistus coxalis* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 28. ♀.

*glacialis* Ashmead. Alaska.

*Elachistus glacialis* Ashmead, 1902. Wash. Acad. Sci. Proc. 4: 147. ♂ ♀.

*hyphantriae* Crawford. N. Y., N. J., Colo. Hosts: *Hyphantria cunea* (Drury); *Hemeroecampa plagiata* (Wlkr.).

*Elachertus hyphantriae* Crawford, 1911. U. S. Natl. Mus. Proc. 39: 622. ♀.  
Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 37, 155.

*levana* Walker. Fla.

*Elachestus Levana* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 27. ♀.

*louisianae* (Girault), emend, n. comb. La.

*Epardalus louisiana* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 5. ♀.

*marylandicus* Girault. Mass., Conn., N. J., Md. Hosts: *Diacrisia virginica* (F.); *Hyphantria cunea* (Drury).

*Elachistus marylandicus* Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 112.  
♀.

Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 36, 155.

*multidentatus* (Girault), n. comb. Fla.

*Parentedon multidentatus* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 5. ♀.

*pini* Gahan. Maine, Vt., Mass., Va., Mich. Hosts: *Dioryctria* sp.; *Rhyacionia frustrana* (Comst.).

*Elachertus pini* Gahan, 1927. Jour. Agr. Res. 34: 547. ♂ ♀.

Biology: Cushman, 1927. Jour. Agr. Res. 34: 617.

*proteoteratis* Howard. Conn., N. J., Pa., Mo. Hosts: *Proteoteras aesculana* Riley; *Stenoma algidella* (Wlkr.).

*Elachistus proteoteratis* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5:  
27. ♀.

**spilosomatis** Howard. N. J. Host: *Diacrisia virginica* (F.).

*Elachistus spilosomatis* Howard, 1891. U. S. Dept. Agr. Insect Life 4: 195.

**viridaeneus** (Provancher), n. comb. Ont.

*Euplectrus viridaeneus* Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 207; errata. ♀.

### Genus HYSSOPUS Girault

**Hyssopus** Girault, 1916. Canad. Ent. 48: 115.

Type: *Hyssopus thymus* Girault. Monob.

*Hyssopiscus* Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 370. N. name.

**benefactor** (Crawford), n. comb. N. Y. Host: *Petrova comstockiana* (Fern.).

*Elachertus benefactor* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 182. ♀.

**evetriae** (Girault). Minn., Idaho, Oreg. Hosts: *?Barbara colfaxiana colfaxiana* (Kearf.); *Barbara colfaxiana taxifoliella* (Busck); *Melissopus latiferreanus* (Wlsm.); *Petrova albicapitana* Busck.

*Elachistus evetriae* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 1. ♀.

Biology: Dohanian, 1942. Jour. Econ. Ent. 35: 837, 840.

**johannseni** (Crawford), n. comb. Maine.

*Elachertus johannseni* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 181. ♀.

**novus** Girault. Calif.

*Hyssopus novus* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 3. ♀.

**rhyacioniae** Gahan. Va. Host: *Rhyacionia frustrana* (Comst.).

*Hyssopus rhyacioniae* Gahan, 1927. Jour. Agr. Res. 34: 546. ♂ ♀.

Biology: Cushman, 1927. Jour. Agr. Res. 34: 617.—Underhill, 1943. Va. Agr. Expt. Sta. Bul. 349: 12.

**sanninoideae** (Girault). Conn., Va., Ark. Hosts: *Sanninoidea exitiosa* (Say); *Thamnosphaeria scitula* (Harr.).

*Elachistus sanninoideae* Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 85. ♂ ♀.

Biology: Underhill, 1935. Jour. Econ. Ent. 28: 396.

**thymus** Girault. Conn., Va., Nebr., Calif. Hosts: *Dioryctria xanthoebares* Dyar; *Rhyacionia buoliana* (Schiff.); *R. frustrana* (Comst.).

*Hyssopus thymus* Girault, 1916. Canad. Ent. 48: 115. ♀.

Biology: Slate, 1936. Conn. Agr. Expt. Sta. Bul. 381: 181.—Friend, Plumb, and Hicock, 1938. Jour. Econ. Ent. 31: 511.

### Genus PSEUDOLYNX Girault

**Pseudolynx** Girault, 1916. Ent. News 27: 152.

Type: *Pseudolynx io* Girault. Orig. desig.

**flavimaculata** Girault. Minn.

*Pseudolynx flavimaculatus* Girault, 1916. Ent. News 27: 153. ♀.

**io** Girault. Mass.

*Pseudolynx io* Girault, 1916. Ent. News 27: 152. ♀.

**marylandia** Girault, emend. Md.

*Pseudolynx marilandia* Girault, 1917. Chalcidoidea Nova Marilandensis [I], p. 1. ♀.

### Genus MIROLYNX Girault

**Mirolynx** Girault, 1916. U. S. Natl. Mus. Proc. 51: 131.

Type: *Mirolynx flavitibiae* Girault. Monob.

**flavitibiae** Girault. Calif.

*Mirolynx flavitibiae* Girault, 1916. U. S. Natl. Mus. Proc. 51: 131. ♂ ♀.

### Genus GROTIUSOMYIA Girault

**Grotiusomyia** Girault, 1917. Psyche 24: 95.

Type: *Grotiusomyia flavicornis* Girault. Monob.

**flavicornis** Girault. D. C., N. C. Host: Pyralid leaf miner on oak.

**Grotiusomyia flavicornis** Girault, 1917. Psyche 24: 95. ♀.  
Taxonomy: Girault, 1918. Ent. News 29: 126.

### Genus APTEROLOPHUS Gahan

**Apterolophus** Gahan, 1919. Ent. Soc. Wash. Proc. 21: 3.

Type: **Apterolophus pulchricornis** Gahan. Monob.

**pulchricornis** Gahan. N. Y. Host: ?*Proteides clarus* (Cram.).

**Apterolophus pulchricornis** Gahan, 1919. Ent. Soc. Wash. Proc. 21: 3. ♀

### Genus GIRAULTIA Gahan and Fagan

**Cirrospilopsis** Girault, 1915. Queensland Mus. Mem. 3: 263. Preocc.

Type: **Cirrospilopsis nigrivariegatus** Girault. Orig. desig.

**Giraulta** Gahan and Fagan, 1923. U. S. Natl. Mus. Bul. 124: 66. N. name.  
Type: **Cirrospilopsis nigrivariegatus** Girault. Autob.

**fuscipennis** (Girault), n. comb. Md.

**Cirrospilopsis fuscipennis** Girault, 1916. Ent. Soc. Amer. Ann. 9: 293. ♀.

**metallicus** (Girault), n. comb. Md.

**Cirrospilopsis metallicus** Girault, 1917. Psyche 24: 100. ♀.

**sapientia** (Girault), n. comb. D. C.

**Cirrospilopsis sapientia** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 13. ♀.

### Genus CIRROSPILOIDEUS Ashmead

**Cirrospiloideus** Ashmead, 1904. Carnegie Mus. Mem. 1: 354, 355.

Type: **Miotropis platynotae** Howard. Monob.

**Alophus** Ashmead, 1904. Carnegie Mus. Mem. 1: 353, 519. Preocc. N. syn.

Type: **Alophus flavus** Ashmead. Orig. desig.

**Alophomyia** Ashmead, 1904. Ent. Soc. Wash. Proc. 6: 126. N. name. N. syn.

**Diglyphomorphomyia** Girault, 1913. Queensland Mus. Mem. 2: 281.

Type: **Diglyphomorphomyia nigriscutellum** Girault. Monob.

**Sympiesomorphelleus** Girault, 1913. Arch. f. Naturgesch. 79A (6): 75.

Type: **Sympiesomorphelleus suttneri** Girault. Monob.

**bicoloriceps** (Girault), n. comb. La. Host: *Keiferia glochinella* (Zell.).

**Sympiesomorphelleus bicoloriceps** Girault, 1919. Ent. Soc. Amer. Ann. 9: 302. ♀.

**californicus** (Girault), n. comb. Calif.

**Sympiesomorphelleus californicus** Girault, 1916. Jour. Ent. and Zool. 8: 119. ♀.

**johsoni** Girault. Maine, D. C., Ill. Host: ?*Carpocapsa pomonella* (L.).

**Cirrospiloideus johsoni** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 7. ♀.

**mediolineatus** Girault. Md.

**Cirrospiloideus mediolineatus** Girault, 1917. Chalcidoidea Nova Marilandensis II, p. 2. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 198, ♀.

**nigriceps** (Girault). Tex.

**Sympiesomorphelleus nigriceps** Girault, 1916. U. S. Natl. Mus. Proc. 51: 44. ♀.

**nigriprothorax** (Girault). Kans.

**Sympiesomorphelleus nigriprothorax** Girault, 1916. U. S. Natl. Mus. Proc. 51: 131. ♀.

**platynotae** (Howard). Fla. Host: *Platynota rostrana* (Wlkr.).

**Miotropis platynotae** Howard, 1885. In Hubbard, Insects Affecting the Orange, p. 217. ♂ ♀.

**seminigriventris** Girault. Pa., Ohio. Host: *Eurukuttarus confederata* (Grote).

**Cirrospiloideus seminigriventris** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 1. ♀.

**Genus CIRROSPILUS Westwood**

*Cirrospilus* Westwood, 1832. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 1: 128.

Type: *Cirrospilus elegantissimus* Westwood. Monob.

*Pseudiglyphomyia* Girault, 1913. Queensland Mus. Mem. 2: 267.

Type: *Pseudiglyphomyia biguttata* Girault. Orig. desig.

*Atoposomoidea* Howard, 1910. U. S. Dept. Agr. Bur. Ent. Tech. Bul. 19: 9 N. syn.

Type: *Atoposomoidea ogimae* Howard. Monob.

*americanus* (Girault), n. comb. Ohio.

*Pseudiglyphomyia americana* Girault, 1916. U. S. Natl. Mus. Proc. 51: 43, 45, 48. ♀.

*cinctithorax* (Girault). Maine, Ill., Wis. Hosts: *Coleophora pruniella* Clem.; *C. salmani* Heinr.; *Phyllocnistis populiella* Chamb.; *Phyllonorycter tremuloidiella* (Braun); *Bucculatrix canadensisellea* Chamb.; *Heterarthrus nemoratus* (Fall.); ?*Apanteles melanoscelus* (Ratz.); *Meteorus versicolor* (Wesm.).

*Pseudiglyphomyia cinctithorax* Girault, 1916. U. S. Natl. Mus. Proc. 51: 45. ♀.

Biology: Proper, 1934. Jour. Agr. Res. 48: 366.—Doner, 1936. Ent. Soc. Amer. Ann. 29: 226.

*columbiae* (Girault), emend., n. comb. D. C.

*Pseudiglyphomyia columbia* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, pp. 6, 7. ♀.

*coptodisceae* (Girault). New England, Ky. Hosts: *Coptodisca splendoriferella* (Clem.); ?*Apanteles melanoscelus* (Ratz.).

*Pseudiglyphomyia coptodisceae* Girault, 1916. Canad. Ent. 48: 266. ♂ ♀.

*eunapius* Walker. Fla.

*Cirrospilus Eunapius* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 27. ♀.

*flavicinctetus* Riley. Maine to D. C., Mo., Kans. and north to Minn.; Wash. Hosts: *Archips semiferana* (Wlk.); *Coptodisca splendoriferella* (Clem.); *Coleophora malivorella* Riley; *C. pruniella* Clem.; *C. salmani* Heinr.; *Bucculatrix pomifoliella* Clem.; ?*Tischeria malifoliella* Clem.; *Heterarthrus nemoratus* (Fall.); ?*Apanteles melanoscelus* (Ratz.).

*Cirrospilus flavicinctus* Riley, 1883. In Lintner, First Ann. Rpt. Injurious Ins. N. Y., p. 159. ♂ ♀.

*Cirrospilus flavomaculatus* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 341. ♀.

Biology: [Christensen], 1934. Wis. Agr. Expt. Sta. Bul. 428: 101.—Doner, 1936. Ent. Soc. Amer. Ann. 29: 233–234.

*flavifacies* (Girault), n. comb. Calif.

*Pseudiglyphomyia flavifacies* Girault, 1916. U. S. Natl. Mus. Proc. 51: 43. ♀.

*flavoviridis* Crawford. Utah, Nev. Hosts: *Agromyza parvicornis* Loew; *A. pusilla* Meig.; *A. scutellata* Fall.; *Cerodonta femoralis* Meig.

*Cirrospilus flavoviridis* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 317. ♂ ♀.

*giraulti* Peck, n. name. U. S. Host: *Bucculatrix* sp.

*Pseudiglyphomyia pulchra* Girault, 1916. U. S. Natl. Mus. Proc. 51: 45. ♀. Preocc. by Masi, 1911.

*inimicus* Gahan. Ill. Host: *Gambrus extrematis* (Cress.).

*Cirrospilus inimicus* Gahan, 1934. Ent. Soc. Wash. Proc. 36: 123. ♂ ♀. Biology: Marsh, 1938. N. Y. Ent. Soc. Jour. 46: 27–29.

*mariandae* Girault. Conn., Md., N. C. Hosts: *Coptodisca* sp.; ?*Apanteles melanoscelus* (Ratz.).

*Cirrospilus mariandi* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 4. ♀.

*Cirrospilus marylandae* Britton, 1920. Conn. State Geol. and Nat. Hist. Survey Bul. 31: 324. Emend.

*marylandicus* (Girault), emend., n. comb. Md.

*Pseudiglyphomyia marylandica* Girault, 1917. Psyche 24: 91. ♀.

**niger** Howard. N. J. Hosts: *Vanessa atalanta* (L.); *Eulophus* sp.

*Cirrospilus niger* Howard, 1889. In Scudder, Butterflies of Eastern U. S. and Canada, p. 1872. ♂ ♀.

**nigrivariegata** (Girault). Ind., Iowa, Kans., S. Dak. Hosts: *Callisto geminatella* (Pack.); *Tischeria malifoliella* Clem.

*Pseudiglyphomyia nigrivariegata* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 7. ♀.

**ocellatus** Girault. Que., Conn., Ill. Host: *Bucculatrix canadensisella* Chamb.

*Cirrospilus ocellatus* Girault, 1917. U. S. Natl. Mus. Proc. 53: 446. ♀.

**ovisugosus** Crosby and Matheson. N. Y. Host: *Poecilocapsus lineatus* (F.).

*Cirrospilus ovisugosus* Crosby and Matheson, 1915. Canad. Ent. 47: 181. ♂ ♀.

**pictus** (Nees). Ont., Que., Maine. Hosts: *Coleophora laricella* (Hbn.). *Fenusia pusilla* (Klug); *Heterarthrus nemoratus* (Fall.).

*Eulophus pictus* Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 165. ♂ ♀. Biology: Dowden, 1941. U. S. Dept. Agr. Tech. Bul. 757: 8-9, 37-41. ♀. Taxonomy: Ferrière, 1933. In Thorpe, Bul. Ent. Res. 24: 289-290.

**pulchera** Girault. Kans.

*Cirrospilus pulchera* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 8. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 195.

**purpureus** Ashmead. Fla.

*Cirrospilus purpureus* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 133. ♀.

**unguttatipennis** (Girault), n. comb. Calif.

*Pseudiglyphomyia unguttatipennis* Girault, 1916. Jour. Ent. and Zool. 8: 120. ♀.

### Genus ZAGRAMMOSOMA Ashmead

**Hippocephalus** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII. Preocc. Type: *Hippocephalus multilineatus* Ashmead. Monob.

**Zagrammosoma** Ashmead, 1904. Carnegie Mus. Mem. 1: 354. N. name.

**Zagmatosoma** Schulz, 1906. Spolia Hym., p. 142. Emend.

**Atoposoma** Masi, 1907. Lab. Zool. Gen. e. Agr. Portici Bol. 1: 276.

Type: *Atoposoma variegatum* Masi. Monob.

**americanum** Girault. Colo.

*Zagrammosoma americana* Girault, 1916. U. S. Natl. Mus. Proc. 51: 125, 126. ♀.

**centrolineatum** Crawford. Calif. Hosts: *Cameraria mediodorsella* (Braun); *Gracilaria ?alnivorella elongella* (L.).

*Zagrammosoma centrolineata* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 256. ♀.

**flavolineatum** Crawford. Colo., Calif. Host: *Gnorimoschema operculella* (Zell.).

*Zagrammosoma flavolineata* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 255. ♀.

**interlineatum** Girault. D. C.

*Zagrammosoma interlineata* Girault, 1916. U. S. Natl. Mus. Proc. 51: 125. ♀.

**mirum** Girault. Calif.

*Zagrammosoma mira* Girault, 1916. Jour. Ent. and Zool. 8: 119. ♀.

**multilineatum multilineatum** (Ashmead). Md., D. C., S. C., W. Va., Fla., Ohio, Ind., La., Kans. Hosts: ?*Microrhopala* *xerene* (Newm.); ?*Exoteleia pinifoliella* (Chamb.); *Callisto geminatella* (Pack.); *Phyllocnistis magnoliella* Ashm.; ?*Cameraria hamadryadella* (Clem.); *Lithocolletis* sp.; ?*L. ostensackenella* (Fitch); *Tischeria malifoliella* Clem.; *Agromyza parvicornis* Loew; *A. pusilla* Loew; *A. scutellata* Fall.; *Phytomyza aquilegiae* Hardy.

*Hippocephalus multilineatus* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VII. ♂ ♀.

Biology: Phillips, 1914 Jour. Agr. Res. 2: 27.

**multilineatum puniceum** Girault. D. C., Ill. Host: *Tischeria malifoliella* Clem.  
**Zagromosoma multilineata** var. *punicea* Girault, 1911. Arch. f. Naturgesch. 77 (1), sup. 2: 123. ♀.

**nigrolineatum** Crawford. Maine, Calif. Hosts: ?*Aleyrodes* sp.; *Argyresthia thuiella* (Pack.).

**Zagromosoma nigrolineata** Crawford, 1913. U. S. Natl. Mus. Proc. 45: 257. "♀" = ♂.

**sanguineum** Girault. Colo.

**Zagromosoma sanguinea** Girault, 1916. U. S. Natl. Mus. Proc. 51: 133. ♀.

#### Genus STENOMESIOIDEUS Ashmead

**Stenomesioideus** Ashmead, 1904. Carnegie Mus. Mem. 1: xi (emend.), 355 (*Stenomesioidea*), 389 (*Stenomesioideus*).

Type: *Stenomesioideus melleus* Ashmead. Monob.

**Stenomesioidea** Girault, 1916. U. S. Natl. Mus. Proc. 51: 43.

Type: *Stenomesioidea mellea* Girault. Monob.

**melleus** Ashmead. No. Amer.

**Stenomesioideus melleus** Ashmead, 1904. Carnegie Mus. Mem. 1: xi, 355. ♀.

**Stenomesioidea mellea** Girault, 1916. U. S. Natl. Mus. Proc. 51: 44. ♀.

#### Subfamily ENTEDONTINAE

##### Genus ASTICHUS Foerster

**Astichus** Foerster, 1856. Hym. Stud., v. 2, pp. 78, 80.

Type: *Euderus arithmeticus* Foerster. Monob.

**arizonensis** Ashmead. Ariz.

**Astichus arizonensis** Ashmead, 1888. Canad. Ent. 20: 101. ♂.

**auratus** Ashmead. Fla. Host: Gall of *Neuroterus minutissimus* Ashm.

**Astichus auratus** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 200. ♀.

**pulchrilineatus** Gahan. Va., ?N. Y. Hosts: *Brachycis brevicollis* Casey; *B.* sp.; *Ceracis* sp.

**Astichus pulchrilineatus** Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 28. ♂ ♀.

##### Genus EUOPHTHALMOMYIA Ashmead

**Euophthalmomyia** Ashmead, 1904. Carnegie Mus. Mem. 1: 339, 340.

Type: *Euophthalmomyia pallidipes* Ashmead. Monob.

**pallidipes** Ashmead. D. C.

**Euophthalmomyia pallidipes** Ashmead, 1904. Carnegie Mus. Mem. 1: 339, 375. ♀.

##### Genus OMPHALE Haliday

**Omphale** Haliday, 1833. Ent. Mag. 1: 339.

Type: *Omphale salicis* Haliday. Monob.

**Smaragdites** Westwood, 1833. Mag. Nat. Hist. 6: 419.

Type: (*Smaragdites admirabilis* Westwood) = *Omphale salicis* Haliday. Monob.

**bicincta** Ashmead. W. Va., Fla. Host: ?*Chalepus dorsalis* Thunb.

**Omphale bicincta** Ashmead, 1888. Canad. Ent. 20: 103. ♂.

##### Genus HUBBARDIELLA Ashmead

**Hubbardiella** Ashmead, 1904. Carnegie Mus. Mem. 1: 339, 340.

Type: *Hubbardiella arizonensis* Ashmead. Monob.

**Miromphalomyia** Girault, 1916. Entomologist 49: 249.

Type: (*Miromphalomyia perlampoides* Girault) = *Hubbardiella arizonensis* Ashmead. Monob.

*arizonensis* Ashmead. Ariz.

*Hubbardiella arizonensis* Ashmead, 1904. Carnegie Mus. Mem. 1: 339, 378.  
♀.

*Miromphalomyia perlampoides* Girault, 1916. Entomologist 49: 250. ♀.

### Genus CLOSTEROCERUS Westwood

*Closterocerus* Westwood, 1833. Mag. Nat. Hist. 6: 419.

Type: *Closterocerus trifasciatus* Westwood. Monob.

Revision: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 175.

*cinctipennis* Ashmead. Que., Conn., N. J., D. C., Fla., Mo., Iowa. Hosts: *Brachys aerosus* Melsh.; *B. ovatus* Web.; *Cameraria hamadryadella* (Clem.); *C. ulmella* (Chamb.); *Bucculatrix canadensisella* Chamb.; *Nepticula gossypii* F. and L.; *Caliroa cerasi* (L.); *Neodiprion rugifrons* Midd.; *N. swainei* Midd.

*Closterocerus cinctipennis* Ashmead, 1888. Canad. Ent. 20: 104. ♂.

Biology: Webster, 1911. Ent. Soc. Amer. Ann. 4: 185.—Weiss and Nicolay, 1918. Psyche 25: 128–130.—Schedl, 1939. Seventh Internat. Kong. Ent. Verh. 3, pp. 2066–2090.

*tau* Girault. Calif.

*Closterocerus tau* Girault, 1917. Psyche 24: 101. ♀.

*tricinctus* (Ashmead). Ont., Maine to Va.; Mich., Ind., Iowa, Kans. Hosts: *Microrhopala xerene* (Newm.); *Cosmopteryx* sp. in *Carex vesicaria*; *Recurvaria thujaella* Kearf., *Argyresthia thuiella* (Pack.); *Coptodisca splendoriferella* (Clem.); *Cameraria guttifinitella* (Clem.); *Phyllocnistis populiella* Chamb.; *Lithocelletis* sp. on sycamore; *L. lucetiella* Clem.; *L. tremuloidella* Braun; *Tischeria malifoliella* Clem.; *Agromyza melampygia* Loew; *A. parvicornis* Loew; *Phytomyza aquilegiae* Hardy; *P. ilicis* Curtis; *P. obscurella* Fall.

*Pleurotropis tricincta* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VIII. ♀.

*utahensis californicus* Girault. Calif.

*Closterocerus utahensis* var. *californicus* Girault, 1916. U. S. Natl. Mus. Proc. 51: 46. ♀.

*utahensis cincinnatus* Girault. Ohio. Host: Cynipid.

*Closterocerus utahensis cincinnatus* Girault, 1916. U. S. Natl. Mus. Proc. 51: 47. ♂.

*utahensis utahensis* Crawford. Conn., Md., Utah, Ariz., Calif. Hosts: *Symydobius chrysolepis* Swain; *Bucculatrix thurberiella* Busck; *Agromyza parvicornis* Loew; *A. scutellata* Fall.; *Liriomyza pusilla* Meig.; *Phytomyza aquilegiae* Hardy; *Fenusia pusilla* (Klug).

*Closterocerus utahensis* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 175. ♀.  
Biology: Clancy, 1946. Jour. Econ. Ent. 39: 328.

*winnemanae* Crawford. Md. Host: *Winnemana argei* Cwfd.

*Closterocerus winnemanae* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 176.  
♂ ♀.

### Genus EPRHOPALOTUS Girault

*Eprhopalotus* Girault, 1916. U. S. Natl. Mus. Proc. 51: 49.

Type: *Eprhopalotus purpureithorax* Girault. Monob.

*purpureithorax* Girault. U. S. Host: *Cynips* sp. from gall of *Cincticornia pilulæ* Walsh.

*Eprhopalotus purpureithorax* Girault, 1916. U. S. Natl. Mus. Proc. 51: 49.  
♀.

### Genus EMERSONELLA Girault

*Emersonella* Girault, 1916. Soc. Ent. 31: 36.

Type: *Emersonella lemae* Girault. Monob.

Revision: Girault, 1922. No. Amer. Spp. of *Emersonella* and *Entedon*. One page.

*lemae* Girault. D. C., Va. Egg host: *Lema trilineata* (Oliv.).

*Emersonella lemae* Girault, 1916. Soc. Ent. 31: 36. ♂ ♀.

Biology: Chittenden, 1924. Ent. Soc. Wash. Proc. 26: 46.

**niveipes** Girault. N. Y., D. C. Host: Eggs of *Chelymorpha cassidea* (F.).  
**Emersonella niveipes** Girault, 1917. Descr. Hym. Chalcidoid. Variorum  
 cum Observ. III, p. 3. ♀.

### Genus EUDERUS Haliday

**Euderus** Haliday, 1844 (1843). Ent. Soc. London Trans. 3: 298.

Type: *Entedon amphis* Walker. Monob.

**Secodella** Girault, 1913. Arch. f. Naturgesch. 79A (6): 48.

Type: *Secodella lineata* Girault. Monob.

**Omphalomorpha** Girault, 1913. Arch. f. Naturgesch. 79A (6): 103.

Type: *Omphalomorpha viridis* Girault. Monob.

**Allomphale** Silvestri, 1914. Lab. Zool. Gen. e Agr. Portici Bol. 9: 217.

Type: *Allomphale cavasolae* Silvestri. Monob.

Revisions: Crawford, 1915. Ent. Soc. Wash. Proc. 17: 142 (*Secodella*).—Girault, 1924.  
 Insecutor Inscitiae Menstruus 12: 94.

**acrobasis** (Crawford), n. comb. Ga., Fla., Idaho. Hosts: *Acrobasis caryaef* Grote;  
*A. juglandis* (LeB.); *Carpocapsa pomonella* (L.).

**Secodella acrobasis** Crawford, 1915. Ent. Soc. Wash. Proc. 17: 143. ♂ ♀.

Biology: Wakeland, 1929. Jour. Econ. Ent. 22: 985.

**amphis** (Walker). Ont. Host: *Coleophora laricella* (Hbn.).

**Entedon Amphis** Walker, 1839. Monog. Chalciditum, v. 1, p. 106. ♀.

Taxonomy: Graham, 1944. Ent. Soc. Ontario Ann. Rpt. 74: 49.

**argyresthiae** (Crawford). N. Y., Minn., Wash. Hosts: *Cylindrocopturus furnissi* Buch.; *Argyresthia alternatella* Kearf.

**Secodella argyresthiae** Crawford, 1915. Ent. Soc. Wash. Proc. 17: 100. ♂ ♀.

Biology: Furniss, 1942. Jour. Econ. Ent. 35: 858.

**crawfordi** Peck, n. name. No. Amer.

**Secodella viridis** Crawford, 1915. Ent. Soc. Wash. Proc. 17: 144. ♂ ♀.  
 Preocc. by Girault, 1913.

**cushmani** (Crawford), n. comb. Pa., Wis., Calif. Hosts: *Polychrosis viteana* (Clem.); *Anarsia lineatella* Zell.; *Argyresthia thuiella* (Pack.); *Coleophora pruniella* Clem.

**Secodella cushmani** Crawford, 1915. Ent. Soc. Wash. Proc. 17: 142. ♂ ♀.

Biology: Keifer and Jones, 1933. Calif. Dept. Agr. Monthly Bul. 22: 388.

**elongatus** Ashmead. Maine, N. H., Conn., Fla. Hosts: *Attelabus rhois* Boh.

**Euderus elongatus** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 201. ♀.

Biology: Frost, 1908. Psyche 15: 29.

**herillus** (Walker). Fla. Host: *Desmia funeralis* (Hbn.).

**Entedon (Euderus) Herillus** Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 23.  
 ♀.

**lividus** (Ashmead), n. comb. N. H., N. J., D. C., Va., Fla., Ill., Calif. Hosts:  
*Ceutorhynchus rapae* Gyll.; *Anarsia lineatella* Zell.; *Monoptilotra pergratialis* (Hulst).

**Oxyomorpha (!) livida** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 135. ♀.

Biology: Duruz, 1923. Calif. Agr. Expt. Sta. Bul. 355: 436–437.—Lamiman, 1937.  
 Calif. Agr. Expt. Sta. Ext. Cir. 103: 75.

**marylandicus** Girault, emend. Md.

**Euderus marilandicus** Girault, 1917. Chalcidoidea Nova Marilandensis II,  
 p. 1. ♀.

**multilineatus** (Girault), n. comb. U. S.

**Secodes multilineatus** Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 85. ♀.

**rugosus rubriscapus** (Girault), n. comb. Md.

**Secodella rugosus** var. *rubriscapus* Girault, 1916. Soc. Ent. 31: 36. ♀.

**rugosus rugosus** (Crawford), n. comb. N. Y.

**Secodella rugosus** Crawford, 1915. Ent. Soc. Wash. Proc. 17: 143. ♀.

**subopacus** (Gahan). Ont., Va., Ohio, La., Calif. Hosts: *Cylindrocopturus eatoni* Buch.; *Grapholitha molesta* Busck; *Rhyacionia buoliana* (Schiff.); *R. frustrana* (Comst.).

**Secodella subopaca** Gahan, 1917. Jour. Agr. Res. 34: 548. ♂ ♀.

Biology: Cushman, 1927. Jour. Agr. Res. 34: 617.

Genus **CHRYSOCHARIS** Foerster

**Chrysocharis** Foerster, 1856. Hym. Stud., v. 2, pp. 79, 82.

Type: **Chrysocharis femoralis** Foerster. Desig. by Ashmead, 1904.

**Omphalchrysocharis** Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 3.

Type: **Omphalchrysocharis orientalis** Girault. Orig. desig.

Species of this genus attack lepidopterous and dipterous leaf miners.

**ainsliei** Crawford. Conn., Wis., Utah, Ariz., Calif., Idaho, Wash. Hosts: *Coleophora pruniella* Clem.; *Agromyza parvicornis* Loew; *A. pusilla* Meig.; *A. scutellata* Fall.

**Chrysocharis ainsliei** Crawford, 1912. U. S. Natl. Mus. Proc. 43: 174. ♂ ♀. Biology: Webster and Parks, 1913. Jour. Agr. Res. 1: 79-80.

**compressicornis** Ashmead. Ohio. Host: ?Galls of *Aulax flavigornis* Ashm. [nom. nud.] on *Lactuca*.

**Chrysocharis compressicornis** Ashmead, 1894. Cincinnati Soc. Nat. Hist. Jour. 17: 53. ♀.

**gemma** (Walker). B. C. Host: *Phytomyza ilicis* (Curt.).

**Entedon gemma** Walker, 1839. Monog. Chalciditum, v. 1, p. 53. ♂.

Biology: Cameron, 1939. Bul. Ent. Res. 30: 178-186.—Downes and Andison, 1940. Jour. Econ. Ent. 33: 948.

**laricinellae** (Ratzeburg). Maine, Vt., N. H., Mass., N. Y. Hosts: *Coleophora laricella* (Hbn.); *Fenusia pusilla* (Klug); *F. ulmi* Sund.; *Heterarthrus nemoratus* Fall.

**Entedon laricinellae** Ratzeburg, 1848. Ichn. d. Forstins., v. 2, p. 161. ♂. Biology: Thorpe, 1933. Bul. Ent. Res. 24: 277-280.—Dowden, 1941. U. S. Dept. Agr. Tech. Bul. 757: 9-11, 44-49.—Graham, 1949. Ent. Soc. Ontario Ann. Rpt. 79: 45-50.

Taxonomy: Ferrière, 1933. In Thorpe, Bul. Ent. Res. 24: 290.

**livida** Ashmead. N. Y., Fla., Ill., Mich. Hosts: *Lecanium corni* Bouché; *Oberea ulmicola* Chitt.

**Chrysocharis lividus** Ashmead, 1894. Linn. Soc. London, Jour., Zool. 25: 175. ♂ ♀.

Taxonomy: Forbes, 1908. Ill. State Ent. Rpt. 24: 128-129.

**mallochi** Gahan. Conn., Ill. Host: *Agromyza feltii* Mall.

**Chrysocharis (?) mallochi** Gahan, 1917. U. S. Natl. Mus. Proc. 53: 213. ♂ ♀.

**orientalis** (Girault), n. comb. N. H.

**Omphalchrysocharis orientalis** Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 3. ♀.

**oscinidis** Ashmead. Kans. Host: Dipterous mines in cottonwood leaves.

**Chrysocharis oscinidis** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VIII. ♂.

Taxonomy: Girault, 1916. U. S. Natl. Mus. Proc. 51: 42.

**pallipes** (Gahan). Conn., Md., Ohio. Hosts: *Rhynchaenus pallicornis* (Say); *Phytophaga destructor* (Say); *Phytomyza aquilegiae* Hardy; *Fenusia pusilla* (Klug).

**Derostenus pallipes** Gahan, 1917. U. S. Natl. Mus. Proc. 53: 214. ♀.

Taxonomy: Gahan, 1932. Ent. Soc. Amer. Ann. 25: 748.

**parksi** Crawford. N. Y., Utah., Ariz., Calif., Idaho. Hosts: *Agromyza parvicornis* Loew; *A. pusilla* Meig.; *A. texana* Mel.; *Cerodonta femoralis* Meig.; *Phytomyza aquilegiae* Hardy; *P. chrysanthemi* (Kowarz); *P. obscurella* Fall.

**Chrysocharis parksi** Crawford, 1912. U. S. Natl. Mus. Proc. 43: 173. ♂ ♀. Biology: Webster and Parks, 1913. Jour. Agr. Res. 1: 79-80.

**petiolata** (Girault), n. comb. D. C. Host: Chloropid on daisy.

**Omphalchrysocharis petiolatus** Girault, 1918. Ent. News 29: 131. ♂ ♀.

**thomsoni** (Crawford), n. comb. Ind. Host: *Agromyza angulata* Loew.

**Entedon thomsoni** Crawford, 1913. U. S. Natl. Mus. Proc. 45: 316. ♂ ♀.

**viridis** Provancher. Ont.

*Chrysosucharoides viridis* Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 209. ♀.

#### Genus ACHRYSOCHAROIDES Girault

*Achrysocharoides* Girault, 1913. Roy. Soc. So. Australia Trans. 37: 72.

Type: *Chrysosucharoides sarcophagus* Girault. Monob.

**Neoderostenus** Girault, 1913. Queensland Mus. Mem. 2: 144. N. syn.

Type: *Neoderostenus australiensis* Girault. Monob.

**bipunctatus** (Girault), n. comb. Maine, Md. Host: *Lithocolletis tremuloidiella* Braun.

*Neoderostenus bipunctatus* Girault, 1916. Canad. Ent. 48: 409. ♀.

**guizoti** Girault. Ind.

*Achrysocharoides guizoti* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 11. ♀.

**titiani** Girault. Ind.

*Achrysocharoides titiani* Girault, 1916. U. S. Natl. Mus. Proc. 51: 42. ♀.

#### Genus RHICNOPELTOMYIA Girault

*Rhicnopeltomyia* Girault, 1913. Queensland Mus. Mem. 2: 174.

Type: *Rhicnopeltomyia washingtoni* Girault. Orig. desig.

**achrysocharoides** Girault. D. C.

*Rhicnopeltomyia achrysocharoides* Girault, 1916. U. S. Natl. Mus. Proc. 51: 39. ♀.

**belisarii** Girault. East. U. S.

*Rhicnopeltomyia belisarii* Girault, 1917. New Chalcid Flies, p. 4.

**carlylei carlylei** Girault. Md.

*Rhicnopeltomyia carlylei* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 6. ♀.

**carlylei poeta** Girault. Md.

*Rhicnopeltomyia carlylei* var. *poeta* Girault, 1920. U. S. Natl. Mus. Proc. 58: 197. ♀.

**marylandensis** Girault. Md.

*Rhicnopeltomyia marylandensis* Girault, 1916. U. S. Natl. Mus. Proc. 51: 39. ♀.

**marylandi** Girault. Md.

*Rhicnopeltomyia marylandi* Girault, 1917. New Chalcid Flies, pp. 4, 5.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 196. ♀.

**scutellata** Girault. D. C.

*Rhicnopeltomyia scutellata* Girault, 1916. U. S. Natl. Mus. Proc. 51: 40. ♀.

**viridiscurtum** Girault. D. C.

*Rhicnopeltomyia viridiscurtum* Girault, 1916. U. S. Natl. Mus. Proc. 51: 40. ♀.

#### Genus RHICNOPELTOIDEA Girault

*Rhicnopeltoidea* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 3.

Type: *Rhicnopeltoidea amsterdamensis* Girault. Monob.

**amsterdamensis** Girault. Maine, N. Y., Ind. Hosts: *Cameraria corylisella* (Chamb.); *C. guttifinitella* (Clem.); *C. picturatella* Braun.

*Rhicnopeltoidea amsterdamensis* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 3. ♀.

#### Genus CARLYLEIA Girault

*Carlyleia* Girault, 1917. Ent. News 28: 20.

Type: *Carlyleia marylandica* Girault. Monob.

**marylandica** Girault, emend. Md.

*Carlylea marilandica* Girault, 1917. Ent. News 28: 20. ♀.

#### Genus CHRYSOCHAROMYIA Girault

**Chrysocharomyia** Girault, 1915. Queensland Mus. Mem. 3: 207.

Type: *Chrysocharomyia elongata* Girault. Orig. desig.

**eleganta** Girault. Md.

*Chrysocharomyia eleganta* Girault, 1917. Ent. News 28: 21. ♀.

**elegantissima** Girault. N. Y. Host: *Phytomyza obscurella* Fall.

*Chrysocharomyia elegantissima* Girault, 1917. Deser. Stellarum Nov., p. 20. ♀.

**occidentalis** Girault. Calif.

*Chrysocharomyia occidentalis* Girault, 1916. U. S. Natl. Mus. Proc. 51: 41. ♀.

**omari** Girault. Pa.

*Chrysocharomyia omari* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 9. ♀.

**splendidissima** Girault. Pa.

*Chrysocharomyia splendidissima* Girault, 1917. Deser. Stellarum Nov., p. 20. ♀.

#### Genus PARACHRYSOCHARIS Girault

**Parachrysocharis** Girault, 1913. Queensland Mus. Mem. 2: 177.

Type: *Parachrysocharis javensis* Girault. Monob.

**semiflava** Girault. Tex.

*Parachrysocharis semiflava* Girault, 1917. Canad. Ent. 49: 129. ♂ ♀.

#### Genus ACHRYSOCHARIS Girault

**Achrysocharis** Girault, 1913. Arch. f. Naturgesch. 79A (6): 104.

Type: *Achrysocharis bifasciatus* Girault. Monob.

**aemilia** Girault. Fla. Host: Itonidid on *Eugenia buxifolia*.

*Achrysocharis aemilia* Girault, 1917. New Chalcid Flies, p. 3. ♀.

**athanasii** Girault. Md.

*Achrysocharis athanasii* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 3. ♀.

**divina** Girault. Md.

*Achrysocharis divina* Girault, 1917. Ent. News 27: 22. ♀.

**donna** Girault. N. Y. Host: *Taphrocerus gracilis* (Say).

*Achrysocharis donna* Girault, 1917. Deser. Stellarum Nov., p. 22. ♀.

**kansensis** Girault. Minn., Kans. Host: *Sofus pilicornis* (Holmg.).

*Achysocaris* (!) *kansensis* Girault, 1916. U. S. Natl. Mus. Proc. 51: 42. ♀.

**partifuscipennis** Girault. Md.

*Achrysocharis partifuscipennis* Girault, 1916. Ent. Soc. Amer. Ann. 9: 294. ♀.

#### Genus ACHRYSOCHARELLA Girault

**Achrysocharella** Girault, 1913. Queensland Mus. Mem. 2: 171.

Type: *Achrysocharella dubia* Girault. Orig. desig.

**Wolfiella** Krausse, 1917. Ztschr. f. Forst u. Jagdw. 49: 29.

Type: *Wolfiella ruforum* Krausse. Monob.

**acuminaticornis** Girault. D. C.

*Achrysocharella acuminaticornis* Girault, 1916. U. S. Natl. Mus. Proc. 51: 50. ♀.

**acuminiventris** Girault. D. C.

*Achrysocharella acuminiventris* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 6. ♀.

*americana* Girault. D. C.

*Achrysocharella americana* Girault, 1916. Ent. Soc. Amer. Ann. 9: 295.

*obscurinotata* Girault. Md.

*Achrysocharella obscurinotata* Girault, 1916. Ent. Soc. Amer. Ann. 9: 306.  
♀.

*partiaeneiceps* Girault. Md.

*Achrysocharella partiaeneiceps* Girault, 1917. New Eulophidae, p. 1. ♀.

*pulchrella* Girault. D. C.

*Achrysocharella pulchrella* Girault, 1917. Psyche 24: 94. ♀.

### Genus DEROSTENUS Westwood

*Derostenus* Westwood, 1833. Mag. Nat. Hist. 6: 495.

Type: *Derostenus gemmeus* Westwood. Monob.  
Revision: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 179.

*agromyzae* Crawford. Ind. Hosts: *Agromyza angulata* Loew; *A. pusilla* Meig.;  
*A. scutellata* Fall.

*Derostenus agromyzae* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 314, 315.  
♂ ♀.

*arizonensis* Crawford. Utah, Ariz., Calif.

*Derostenus arizonensis* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 315.  
♂ ♀.

Biology: Webster and Parks, 1913. Jour. Agr. Res. 1: 80.

*diastatae* (Howard). Conn. to Fla. and Kans. Hosts: *Agromyza angulata* Loew;  
*A. parvicornis* Loew; *A. pusilla* Meig.; *A. scutellata* Fall.; *Diastata* sp.  
mining corn ears; dipterous leaf miner of *Panicum dichsiomiflorum*; *Fenusia pusilla* (Klug).

*Entedon diastatae* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 246.  
♂ ♀.

Biology: Phillips, 1914. Jour. Agr. Res. 2: 26-27.

*fullawayi* Crawford. Conn., Va., La., S. Dak. Hosts: *Argyresthia thuiella* (Pack.);  
*Agromyza parvicornis* Loew; *A. pusilla* Meig.; *Fenusia pusilla* (Klug).

*Derostenus fulloicayi* (?) Crawford, 1913. U. S. Natl. Mus. Proc. 43: 348. ♀.  
*Achrysocharis camilli* Girault, 1917. New Chalcid Flies, p. 5. N. syn.

*Derostenus fullawayi* Glick, 1939. U. S. Dept. Agr. Tech. Bul. 673: 47. Emend.  
Biology: Underhill, 1943. Va. Agr. Expt. Sta. Bul. 349: 22.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 196.

*leucopus* Ashmead. Ohio, Kans. Host: Beech leaf miner.

*Derostenus leucopus* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p.  
VIII. ♀.

*pictipes* Crawford. Md., S. C., Ind., Kans., Colo., Utah. Hosts: *Agromyza coquilletti* Mall.; *A. pusilla* Meig.; *A. scutellata* Fall.; *Phytomyza aquilegiae* Hardy; *Hordeum* leaf miner.

*Derostenus pictipes* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 180. ♂ ♀.

*punctiventris* Crawford. Ind., Wyo., Utah. Hosts: *Agromyza parvicornis* Loew;  
*A. pusilla* Meig.; *A. scutellata* Fall.

*Derostenus punctiventris* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 180.  
♀.

Biology: Phillips, 1914. Jour. Agr. Res. 2: 28.

*silvia* (Girault), n. comb. Md.

*Achrysocharella silvia* Girault, 1917. Two New Achrysocharella, p. 1. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 197.

*variipes* Crawford. Md., Ind. Hosts: *Agromyza pusilla* Meig.; *Phytomyza aquilegiae* Hardy; leaf roller of *Rubus allegheniensis*.

*Derostenus variipes* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 315. ♀.

Taxonomy: Gahan, 1914. U. S. Natl. Mus. Proc. 48: 164.

### Genus LOPHOCOMUS Haliday

*Lophocomus* Haliday, 1844 (1843). Ent. Soc. London Trans. 3: 297.

Type: *Cirrospilus anaitis* Walker. Monob.

**verticillatus** Ashmead. Kans.

**Lophocomus verticillatus** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VIII. ♂.

### Genus HORISMENUS Walker

**Horismenus** Walker, 1843. Ann. Mag. Nat. Hist. 11: 117.

Type: **Horismenus cleodora** Walker. Monob.

**Holcopelte** Foerster, 1856. Hym. Stud., v. 2, pp. 78, 81.

Type: **Elachistus obscurus** Foerster. Monob.

**Holcopelta** Schulz, 1906. Spolia Hym., p. 141. Emend.

**Pseudomphale** Schrottky, 1909. Soc. Cient. Argentina An. 67: 209.

Type: **Pseudomphale opsiphonis** Schrottky. Monob.

**ancyiae** (Girault), n. comb. Va. Host: *Anchylopera nubeculana* Clem.

**Pseudomphale aancyiae** Girault, 1916. Ent. News 27: 223. ♂ ♀.

Biology: Leach, 1916. U. S. Dept. Agr. Bul. 435: 11.

**atrosapus** (Girault), n. comb. Fla. Host: ?*Tetralopha subcanalis* (Wlkr.).

**Pseudomphale atrosapus** Girault, 1917. Deser. Stellarum Nov., p. 20. ♀

**depressus** Gahan. Calif. Host: *Stator pruininus* (Horn).

**Horismenus depressus** Gahan, 1930. U. S. Natl. Mus. Proc. 77 (8): 8. ♂ ♀.

**euplectri** (Howard). Conn., N. J., Fla., Ala. Host: *Euplectrus comstocki* How.

**Elachistus euplectri** Howard, 1885. In Riley, U. S. Dept. Agr. Ent. Comm. Rpt. 4: App. p. 108. ♂ ♀.

**flavipes** (Ashmead). Fla.

**Elachistus (?) flavipes** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 133. ♀.

**floridanus** (Ashmead). Tenn., N. C., Fla. Host: *Apanteles congregatus* (Say).

**Holcopelte floridana** Ashmead, 1888. Canad. Ent. 20: 102. ♀.

**fraternus** (Fitch). Wis., N. Y., N. J., Fla., La., Tex., Kans., Iowa. Hosts: *Coleophora pruniella* Clem.; *Callisto geminatella* (Pack.); *Cameraria caryaefoliella* (Clem.); *Tischeria malifoliella* Clem.

**Trichogramma? fraterna** Fitch, 1856. Country Gentleman 7: 235.

Taxonomy: Packard, 1890. U. S. Dept. Agr. Ent. Comm. Rpt. 5: 265.

**haemon** (Walker). Fla., Kans.

**Tetrastichus Haemon** Walker, 1847. Ann. Mag. Nat. Hist (1) 20: 28. ♀.

**lixivorus** Crawford. Maine, Tex. Hosts: *Lixus musculus* Say; *L. scrobicollis* Boh.; *Phyllocnistis populiella* Chamb.

**Horismenus (?) lixivorus** Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 180. ♂ ♀.

Biology: Pierce, 1910. Jour. Econ. Ent. 3: 453.

**microgaster** (Ashmead). Maine to W. Va. and Ohio; Ga., Ill., Mo., Tex., Kans., Iowa. Hosts: *Apion decoloratum* Smith; *Ceratomia catalpae* Bdvl.; *Celama sorghiiella* (Riley); *Pterophorus periscelidactylus* Fitch; *Ancylis comptana fragariae* (W. and R.); *Acleris minuta* (Rob.); *Dichomeris marginella* (F.); *Coleophora malivorella* Riley; *Phyllocnistis populiella* Chamb.; *Apanteles congregatus* (Say); *A. glomeratus* (L.); *A. solitarius* (Ratz.); *Microplitis cera-tomiae* Riley; *Microgaster* sp.; *Oncophanes americanus* (Weed); *Chorinaeus* sp.; *Catolaccus aeneoviridis* (Gir.).

**Holcopelte microgaster** Ashmead, 1888. Canad. Ent. 20: 102. ♂.

**Pediobioidea cyanea** Girault, 1911. Canad. Ent. 43: 407.

Biology: Proper, 1934. Jour. Agr. Res. 48: 365.

Taxonomy: Girault, 1911. Canad. Ent. 43: 407, 409-411.

**missouriensis** (Ashmead). N. C., Ga., Mo. Host: *Amblycerus robiniae* (F.).

**Holcopelte missouriensis** Ashmead, 1888. Canad. Ent. 20: 101. ♀.

**nitens** (Howard), n. comb. D. C. Host: Egg bag of *Epeira* sp.

**Holcopelte nitens** Howard, 1892. Ent. Soc. Wash. Proc. 2: 298. ♂ ♀.

**popenoei** (Ashmead). D. C., Mo., Kans. Hosts. *Tischeria malifoliella* Clem.; *Heterospilus* sp.

**Holcopelte Popenoei** Ashmead, 1888. Canad. Ent. 20: 101. ♀.

**productus** (Ashmead). N. Mex. Host: *Mimosestes amicus* (Horn).

**Holcopelte producta** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 342. ♂ ♀.

**sardus** (Walker). No. Amer.

**Entedon (Horismenus) Sardus** Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 23. ♀.

**texanus** (Girault). Conn., Md., Va., Ala., Mo., Iowa, Kans., Tex., N. Mex., Ariz.  
Hosts: *Phytophaga destructor* (Say); *Eumetopiella rufipes* Macq.; *Meromyza americana* (Fitch).

**Pseudomphale texana** Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 120. ♀.

Biology: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 128-131.

**violaceus** (Ashmead). Ind., Fla., Tex., Kans. Hosts: *Callisto geminatella* (Pack.); *Cameraria caryaefoliella* (Clem.); *Tischeria malifoliella* Clem.; tineid larva in woolly galls of *Andricus flocci* Walsh.

**Holcopelte violacea** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 200. ♀.

### Genus PLEUROTROPIS Foerster

**Pleurotropis** Foerster, 1856. Hym. Stud., v. 2, pp. 78, 82 (no species).

Type: *Pleurotropis isomera* Foerster. Included by Foerster, 1861.

**Pseudacrias** Girault, 1913. Arch. f. Naturgesch. 79A (6): 104.

Type: *Pseudacrias micans* Girault. Monob.

**Pseudacriasoides** Girault, 1917. Descr. Stellarum Nov., p. 9.

Type: *Pleurotropis utahensis* Crawford. Monob.

**Epipleurotropis** Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 7.

Type: *Epipleurotropis longfellowi* Girault. Monob.

Revision: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 177-179.

**albipes** (Provancher), n. comb. Ont.

**Holcopelte albipes** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 210. ♂.

**albitarsis** (Ashmead). N. H., Mass., N. J., Va. Hosts: *Apanteles congregatus* (Say); *?Alegina annulata* Ashm.; *?Gelis tenellus* (Say); *Eupteromalus nidulans* (Thoms.).

**Entedon albitarsis** Ashmead, 1888. Canad. Ent. 20: 102, 103. ♂ ♀.

Taxonomy: Girault, 1924. Insecutor Inscitiae Menstruus 12: 94.

**benefica** Gahan. Ont., N. Y., Pa., Md., W. Va., Va., west. Canada. Hosts: *Phytophaga destructor* (Say); *Cephus cinctus* Nort.; *C. pygmaeus* (L.); *C. tabidus* (F.).

**Pleurotropis benefica** Gahan, 1921. Ent. Soc. Wash. Proc. 28: 117. ♂ ♀.

Biology: Salt, 1931. Bul. Ent. Res. 22: 482, 534-541.—Udine, 1941. U. S. Dept. Agr. Cir. 607: 7.

Taxonomy: Gahan, 1932. Ent. Soc. Amer. Ann. 25: 751.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 131.

**bucculatricis** Gahan. Que., Maine, Conn. Hosts: *Phylloconistis populiella* Chamb.; *Bucculatrix canadensisella* Chamb.

**Pleurotropis bucculatricis** Gahan, 1927. Psyche 34: 171. ♂ ♀.

**kansensis** Girault. Kans.

**Pleurotropis kansensis** Girault, 1918. Ent. News 29: 128. ♀.

**lithocletidis** (Ashmead). Maine, Conn., Va., N. C., Ind., Ill., Kans. Hosts: Probably *Anthonomus nigrinus* Boh.; *Argyresthia thuiella* (Pack.); *Cameraria guttifinitella* (Clem.); *Lithocletis* larva on *Helianthus grosse-serratus*; *Agromyzidae* plathyptera Thos.; *Phytomyza ilicis* (Curt.).

**Entedon lithocletidis** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VIII. ♂ ♀.

**longa** Girault. Ind. Host: *?Harmolita* sp.

**Pleurotropis longus** Girault, 1916. Canad. Ent. 48: 342. ♀.

**longfellowi** (Girault). Maine, Pa. Host: *Cameraria aceriella* (Clem.).

**Epipleurotropis longfellowi** Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 7. ♀.

**metallica** (Nees). P. E. I., N. Y. to Va., Ill. and Mich., Oreg., Wash. Hosts: *Phytophaga destructor* (Say); *Oscinella* sp.

**Eulophus metallicus** Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 176.  
♂ ♀.

**Entedon Epigonus** Walker, 1839. Monog. Chalciditum, v. 1, p. 112. ♂ ♀.  
**Semiotellus (?) nigripes** Lindeman, 1887. Soc. Imp. Nat. Moscou Bul. (2)  
1: 179, 185, 192. ♂ ♀.

Biology: Hill, Pinckney and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 4-6, 10-15.  
Taxonomy: Riley, 1893. U. S. Dept. Agr. Insect Life 6: 133.—Gahan, 1933. U. S.  
Dept. Agr. Misc. Pub. 174: 132-138.—Hill and Pinckney, 1940. U. S.  
Dept. Agr. Tech. Bul. 715: 9, 11-13.

**nawai** (Ashmead). New England. Hosts: *Grapholitha molesta* (Busck); *Apanteles melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *Dibrachys cavus* (Wlkr.); *Eupteromalus nidulans* (Thom.).

**Derostenus nawai** Ashmead, 1904. N. Y. Ent. Soc. Jour. 12: 160. ♂ ♀.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 31-32.—  
Proper, 1934. Jour. Agr. Res. 48: 362-375.—Haussler, 1940. U. S.  
Dept. Agr. Tech. Bul. 728: 33.

**nigra** (Ashmead). Ill., Fla.

**Closterocerus niger** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 232. ♂.

**perdubia** (Girault). Utah.

**Amestocharis perdubius** Girault, 1917. Descr. Stellarum Nov., p. 8. ♀.

**phyllotretae** Riley. Mo. Host: *Phyllotreta zimmermanni* (Crotch).

**Pleurotropis phyllotretae** Riley, 1885. U. S. Dept. Agr. Ann. Rpt. for 1884,  
p. 307. ♂ ♀.

**quercicola** (Ashmead). Que., Ill., Kans. Hosts: Tineid larvae in oak apple gall;  
gall of *Amphibolips inanis* O. S.; *A. spongifica* (O. S.).

**Asecodes quericola** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p.  
VIII. ♂ ♀.

**rugosithorax** Crawford. Ind., Utah. Hosts: *Agromyza angulata* Loew; *A. pusilla*  
Meig.; *A. scutellata* Fall.; *A. sp.* in alfalfa.

**Pleurotropis rugosithorax** Crawford, 1912. U. S. Natl. Mus. Proc. 43: 179.  
♂ ♀.

Biology: Webster and Parks, 1913. Jour. Agr. Res. 1: 82, 84.

**sexdentata** (Girault). Mass., N. J., Ohio, N. C., Kans. Hosts: *Trichoplusia ni*  
(Hbn.); *Ancylis comptana* (Froel.); *A. comptana fragariae* (W. and R.);  
? *Gnorimoschema gallaesolidaginis* (Riley); *G. salinaria* Busck.

**Pseudacras sexdentatus** Girault, 1916. Soc. Ent. 31: 36. ♀.

Biology: Patterson, 1915. Biol. Bul. 29: 340-341.

**singularis** (Howard), n. comb. D. C. Host: *Cameraria hamadryadella* (Clem.).

**Chrysocaris singularis** Howard, 1891. U. S. Dept. Agr. Insect Life 4: 194.

Biology: Howard, 1882. Amer. Nat. 16: 61.

**splendens** (Cook and Davis.) Mich. Hosts: *Heterocampa manteo* (Dbldy.); *Symmerista albifrons* (A. and S.).

**Derostenus splendens** Cook and Davis, 1891. Mich. Agr. Expt. Sta. Bul. 73:  
13. ♂ ♀.

**tarsalis** (Ashmead). N. H. to N. C.; Ill., La., Kans., Calif., Oreg., Wash. Hosts:  
*Magdalisa aenescens* Lec.; *Plagiodesma versicolora* (Laich.); [?] *Pseudogaurax anchora* (Loew); *Sphinx* sp.; *Hemerocampa vetusta* (Bdvl.); *Apanteles lacteicolor* Vier.; *A. melanoscelus* (Ratz.); *Gelis tenellus* (Say); *Dimmockia incongrua* (Ashm.); *D. pallipes* Mues.; *Eupelmella vesicularis* (Retz.); *Eupelmus spongipartus* Foerst.; *Cheiropachus colon* (L.); *Dibrachys cavus* (Wlkr.); *Dinotiscus* sp.; *Eupteromalus nidulans* (Thoms.); *Habrocytus phycidis* Ashm.; *Schizonotus sieboldi* (Ratz.); *Eurytoma appendigaster* (Swed.); smoke tree leaf roller.

**Holcopelte tarsalis** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 341. ♂ ♀.

**Asecodes albitarsis** Ashmead, 1888. Canad. Ent. 20: 103. ♀. Preocc.

**Pleurotropis ashmeadi** Crawford, 1912. U. S. Natl. Mus. Proc. 43: 177. N.  
name.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 31.—Proper  
1934. Jour. Agr. Res. 48: 361-370.—Marsh, 1937. Ecology 18: 108-111.  
—Dowden, 1939. Jour. Agr. Res. 58: 591.

Taxonomy: Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 26.

**testaceipes** Crawford. S. C.

**Pleurotropis testaceipes** Crawford, 1914. Insecutor Inscitiae Menstruus 2: 37. ♀.

**utahensis** Crawford. Man., Mont., N. Dak., Utah. Hosts: *Agromyza parvicornis* Loew; *Cephus cinctus* Nort.

**Pleurotropis utahensis** Crawford, 1913. U. S. Natl. Mus. Proc. 45: 316. ♂ ♀. Biology: Ainslie, 1929. U. S. Dept. Agr. Tech. Bul. 157: 19-20.—Neilson, 1949. Canad. Ent. 81: 174-180.

Taxonomy: Phillips, 1914. Jour. Agr. Res. 2: 28.—Gahan, 1921. Ent. Soc. Wash. Proc. 23: 113-117.

**wilderi** (Howard). Que., N. Y., D. C., S. C., Calif. Hosts: ?*Coccygomimus aquilonia* (Cress.); *Tromatobia rufopectus* (Cress.); *Aranea solitaria* (Emert.); *Argiope aurantia* (Lucas).

**Mestocharis wilderi** Howard, 1892. Ent. Soc. Wash. Proc. 2: 298. ♂ ♀.

**williamsoni** (Girault), n. comb. Ill. Host: *Phyocephala sagittaria* (Say).

**Mestocharis williamsoni** Girault, 1911. N. Y. Ent. Soc. Jour. 19: 179. ♂ ♀.

#### Genus ENTEDON Dalman

**Entedon** Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 136, 181.  
Type: *Entedon cyanellus* Dalman. Desig. by Ashmead, 1904.

**Eriglyptus** Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 179.

Type: *Eriglyptus robustus* Crawford. Monob.

**Entedonella** Girault, 1913. Queensland Mus. Mem. 2: 154.  
Type: *Entedonella magnifica* Girault. Monob.

Revision: Girault, 1922. No. Amer. Spp. of *Emersonella* and *Entedon*, one page.

**aphidiphagus** Ashmead. Fla. Host: *Macrosiphum solanifolii* (Ashm.).

**Entedon aphidiphagus** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 201. ♀.

**bigeloviae** Ashmead. Kans., N. Mex., Ariz., Utah, Oreg. Host: *Aciurina bigeloviae* (Ckll.).

**Entedon bigeloviae** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 342. ♀.

**columbianus** Ashmead. D. C.

**Entedon columbiana** Ashmead, 1888. Canad. Ent. 20: 103. ♀.

**damastes** (Walker). Fla.

**Closterocerus Damastes** Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 22. ♀.

**leucogramma** (Ratzeburg). N. Y., N. C. Hosts: *Scolytus multistriatus* (Marsh.); *S. rugulosus* (Ratz.).

**Ichneumon (Elachestus) Leucogramma** Ratzeburg, 1884. Forst.-Ins. d. Wald. Preuss., v. 3, p. 28. ♂.

**leucopus** (Ashmead), n. comb. Fla.

**Pleurotropis leucopus** Ashmead, 1888. Canad. Ent. 20: 102. ♀.

**occidentalis** Girault. Utah, Calif., Oreg.

**Entedon occidentalis** Girault, 1916. U. S. Natl. Mus. Proc. 51: 48. ♀.

**robustus** (Crawford). D. C. Host: *Anthonomus nigrinus* Boh.

**Eriglyptus robustus** Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 180. ♂ ♀.

**tachypterelli** Gahan. N. Y., Colo. Hosts: *Tachypterellus consors cerasi* List; *T. quadrigibbus* (Say).

**Entedon tachypterelli** Gahan, 1931. Wash. Acad. Sci. Proc. 21: 38. ♂ ♀.

Biology: List, 1932. Colo. Agr. Expt. Sta. Bul. 385: 59, 61-62.—Hammar, 1936. N. Y. State Agr. Expt. Sta. Tech. Bul. 240: 44-45.

**washingtoni** Girault. D. C.

**Entedon washingtoni** Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 109. ♀.

#### Genus PARACRIAS Ashmead

**Paracrias** Ashmead, 1904. Carnegie Mus. Mem. 1: 343, 344, 510.

Type: *Paracrias laticeps* Ashmead. Monob.

**Euplectrentedon** Girault, 1917. Speciosissima Genera Nova Eulophidorum, p. 3. N. syn.

Type: *Euplectrentedon mirus* Girault. Monob.

**mirus** (Girault), n. comb. Iowa.

*Euplectrentedon mirus* Girault, 1917. Speciosissima Genera Nova Eulophidorum, p. 3. ♀.

#### Genus EMERSONOPSIS Girault

*Emersonopsis* Girault, 1917. Canad. Ent. 49: 110.

Type: *Entedon arizonensis* Ashmead. Monob.

Revision: Girault, 1924. Insecutor Inscitiae Menstruus 12: 93.

**arizonensis** (Ashmead). Ariz.

*Entedon arizonensis* Ashmead, 1888. Canad. Ent. 20: 103. ♀.

**cupreicollis** (Ashmead). Kans.

*Entedon cupreicollis* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VIII. ♂ ♀.

#### Genus ACRIAS Walker

*Acrias* Walker, 1847. Ann. Mag. Nat. Hist. 20: 29.

Type: *Acrias nileus* Walker. Monob.

**nileus** Walker. Fla.

*Acrias Nileus* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 29. ♀.

#### Genus NESOMYIA Ashmead

*Nesomyia* Ashmead, 1904. Carnegie Mus. Mem. 1: 344.

Type: *Nesomyia albipes* Ashmead. Monob.

**cimbicis** Brues. Wis. Host: *Cimbex americana* Leach.

*Nesomyia cimbicis* Brues, 1909 (1908). Wis. Nat. Hist. Soc. Bul. 6: 162. ♀. Biology: Girault, 1912. Ent. News 23: 81-82.

### Family ELASMIDAE

Revision: Girault, 1918. No. Amer. Hym. Elasmidae, pp. 1-4.

#### Genus ELASmus Westwood

*Elasmus* Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 3: 343.

Type: *Eulophus flabellatus* Fonscolombe. Monob.

*Aneure* Nees, 1834. Hym. Ichn. Aff. Monogr., v. 2, p. 194.

Type: *Aneure nuda* Nees. Desig. by Gahan and Fagan, 1923.

*Cyclopleura* Cameron, 1913 (1912). Indian Forest Rec. 4: 96.

Type: *Cyclopleura fumipennis* Cameron. Desig. by Gahan and Fagan, 1923.

**albicoxa** Howard. N. J., Ind., Mo., Kans. Hosts: ?*Basilarchia archippus* (Cram.); *Callisto geminatella* (Pack.); ?*Microgaster* sp.

*Elasmus albicoxa* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 30. ♂. Biology: Howard, 1892. U. S. Dept. Agr. Insect Life 4: 253.

**apanteli** Gahan. Ind., Tenn., Tex. Hosts: *Apanteles marginiventris* (Cress.); *Meteorus laphygmae* Vier.

*Elasmus apanteli* Gahan, 1913. U. S. Natl. Mus. Proc. 46: 438. ♀.

**aspidiscae** Girault. D. C. Host: *Coptodisca splendoriferella* (Clem.). *Elasmus aspidiscae* Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 117. ♀.

**atratus** Howard. Conn., D. C., Ohio. Hosts: *Apanteles delicatus* How.; *A. hyphantriæ* Riley; *A. melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *A. sp.*; *Meteorus hyphantriæ* Riley; *Campoplex validus* (Cress.); *Phobocampe pallipes* (Prov.).

*Elasmus atratus* Howard, 1897. U. S. Dept. Agr. Div. Ent. Tech. Ser. 5: 40, 56. ♂ ♀.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 29.—Balduf, 1929. Ohio Jour. Sci. 29: 237.—Proper, 1934. Jour. Agr. Res. 48: 365.

Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 65.

**borrowi** Girault. D. C.

*Elasmus borrowi* Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 117. ♀.

**floridensis** Girault. Fla.

*Elasmus floridensis* Girault, 1917. Soc. Ent. 31: 42. ♀.

**marylandicus** Girault. Conn., Md. Host: Larva ex stem of *Ambrosia artemisi-aefolia*.

*Elasmus marylandicus* Girault, 1915. Ent. Soc. Amer. Ann. 8: 281. ♀.

**meteori** Ashmead. Ill. Hosts: *Apanteles canarsiae* Ashm.; *Meteorus vulgaris* (Cress.).

*Elasmus meteori* Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 128. ♂ ♀.

**missouriensis** Girault. Mo.

*Elasmus missouriensis* Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 117. ♀.

**mordax** Girault. Md., D. C. Host: *Cameraria guttifinitella* (Clem.).

*Elasmus mordax* Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 114. ♀.

**nigripes** Howard. N. J., Mo. Host: *Porphyrosela desmodiella* (Clem.).

*Elasmus nigripes* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 30. ♂.

Biology: Howard, 1892. U. S. Dept. Agr. Insect Life 4: 253.

**pulex** Girault. Md.

*Elasmus pulex* Girault, 1916. Soc. Ent. 31: 43. ♀.

*Elasmus daedalus* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 8. ♀. N. syn.

**pullatus** Howard. Ohio, Mo., Kans. Hosts: ?*Hyphantria cunea* (Drury); ?*Tischeria malifoliella* Clem.

*Elasmus pullatus* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 30. ♂.

Biology: Howard, 1892. U. S. Dept. Agr. Insect Life 4: 253.

**setosiscutellum** Crawford. Va., La., Tex., Wis., Nebr., Kans., Calif. Hosts: *Rhyacionia frustrana* (Comst.); *Anarsia lineatella* Zell.; *Coleophora malivorella* Riley; *C. pruniella* Clem.; tephritid seed maggot from iron weed.

*Elasmus setosiscutellatus* Crawford, 1910 (1909). Ent. Soc. Wash. Proc. 11: 206. ♂ ♀.

**tischeriae** Howard. N. J., D. C., Va., Kans. Host: *Tischeria solidaginifoliella* Clem.

*Elasmus tischeriae* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 30. ♀.

**varius** Howard. N. H., Mo. Hosts: Probably *Gracillaria rhoifoliella* Chamb.; *Apanteles hyphantriae* Riley; *Meteorus hyphantriae* Riley; *Rogas stigmator* (Say); *Hyposoter fugitivus* (Say); *Phobocampe clisiocampae* (Weed).

*Elasmus varius* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 29. ♂.

Biology: Howard, 1892. U. S. Dept. Agr. Insect Life 4: 253.—Fiske, 1903. N. H. Agr. Expt. Sta. Tech. Bul. 6: 182, 228.

**zigzag** Girault. Fla.

*Elasmus zigzag* Girault, 1917. Descr. Stellarum Nov., p. 16. ♀.

## Family THYSANIDAE

The Nearctic host records for this family include only Homoptera or chalcid parasites of Homoptera.

Revision: Girault, 1913. U. S. Natl. Mus. Proc. 45: 189–233 (Signiphorinae).

### Genus THYSANUS Walker

**Thysanus** Walker, 1840 (1839). Ann. Nat. Hist. 4: 234.

Type: *Thysanus ater* Haliday. Monob.

**Triphasius** Foerster, 1856. Hym. Stud., v. 2, pp. 83, 84. N. name.

**Plastocharis** Foerster, 1856. Hym. Stud., v. 2, p. 145. N. name.

**Thusanus** Walker, 1872. Notes on Chalcid., v. 7, p. 114. Emend.

**Signiphora** Ashmead, 1880. Orange Insects, p. 29, 30.

Type: *Signiphora flavopalliatius* Ashmead, Monob.

**Neosigniphora** Rust, 1913. Ent. News 24: 164.

Type: *Neosigniphora nigra* Rust. Monob.

**Mattritia** Mercet, 1916. Soc. Espan. Hist. Nat. Bol. 16: 523, 525.

Type: *Signiphora (Mattritia) conjugalis* Mercet. Monob.

Revision: Girault, 1913. U. S. Natl. Mus. Proc. 45: 193-233 (*Signiphora*).

**aleyrodis** (Ashmead), n. comb. Pa., Calif. Hosts: *Aleuroplatus coronatus* (Quaint.); *Chrysomphalus aonidum* (L.); *C. dictyospermi* (Morg.).

*Signiphora aleyrodis* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 409, 412. ♀.

**aspidioti** (Ashmead). Va.

*Signiphora aspidioti* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 412. ♀.

**citrifolii** (Ashmead), n. comb. Fla. Hosts: *Aleuroplatus coronatus* (Quaint.); *A. gelatinosus* (Ckll.); *Aleyrodes* sp. on *Quercus agrifolia*; *Macrosiphum solani-folii* (Ashm.).

*Signiphora Citrifolii* Ashmead, 1880. Orange Insects, p. 66. ♀.

**coquilletti** (Ashmead). N. Y., Calif. Hosts: *Aspidiotus* sp.; *Diaspis boisduvali* Sign.

*Signiphora coquilletti* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 412. ♀.

**dactylopii** (Ashmead). D. C., N. Mex. Hosts: *Phenacoccus cevaliae* Ckll.; *Pseudococcus ephedrae* (Coq.).

*Signiphora dactylopii* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 410. ♀.

**elongatus** (Girault). Va., S. Dak., Calif. Hosts: *Coccus hesperidum* (L.); *Pseudococcus comstocki* (Kuw.); cocid on *Muehlenbergia*; *Tetrastichus minutus* (How.); *Acerophagus notativentris* (Gir.); *Achrysothagrus modestus* Timb.; *Anagyrus yuccae* (Coq.); *Clausenia purpurea* (Ishii); *Pseudoleptomastix squammula* Gir.; *Zarhopalus corvinus* Gir.

*Neosigniphora elongata* Girault, 1916. Psyche 23: 41. ♀.

Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 257-266, 281-284.—Clancy, 1944. Jour. Econ. Ent. 37: 451.

Taxonomy: Timberlake, 1924. Calif. Univ. Pubs., Ent. 3: 246-248.

**flavellus** (Girault), n. comb. Fla. Host: *Aspidiotus lataniae* Sign.

*Signiphora flavella* Girault, 1913. U. S. Natl. Mus. Proc. 45: 214. ♀.

*Signiphora basilica* Girault, 1913. U. S. Natl. Mus. Proc. 45: 215. ♀. N. syn.

**flavopalliatius** (Ashmead), n. comb. Ga., Fla., La., Calif. Hosts: *Aleyrodes* sp.; *Aonidiella aurantii* (Mask.); *A. citrina* (Coq.); *Aspidiotus camelliae* Sign.; *A. lataniae* Sign.; *Chionaspis* sp. on *Magnolia*; *Chrysomphalus dictyospermi* (Morg.); *Lepidosaphes beckii* (Newm.); *L. gloverii* (Pack.); *Pseudaonidia duplex* (Ckll.).

*Signiphora flavopalliatius* Ashmead, 1880. Orange Insects, p. 29. ♀.

*Signiphora flavo-palliatius* Ashmead, 1880. Orange Insects, p. 31.

**louisianae** Dozier. La. Host: *Aspidiotus lataniae* Sign.

*Thysanus louisianae* Dozier, 1933. Ent. Soc. Wash. Proc. 35: 100. ♂.

**merceti** (Malenotti), n. comb. La. Host: *Chrysomphalus dictyospermi* (Morg.).

*Signiphora merceti* Malenotti, 1916. Redia 12: 181. ♀.

Biology: Cressman, 1933. Jour. Econ. Ent. 26: 704.

Taxonomy: Malenotti, 1916. Soc. Espan. de Hist. Nat. Bol. 16: 529.

**mexicanus** (Ashmead), n. comb. Calif. Host: *Aspidiotus hederae* (Vallot).

*Signiphora mexicana* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 411. ♀.

**niger** (Ashmead). N. Y. to Va.; Ill., Calif. Hosts: *Aspidiotus perniciosus* Comst.; *Coccus hesperidum* L.; *Pseudococcus adonidum* (L.); *P. comstocki* (Kuw.); *Saissetia oleae* (Bern.); *Aphytus lounsburyi* How.; *Clausenia purpurea* Ishii; *Leptomastidea abnormis* (Gir.).

*Signiphora nigra* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 410. ♀.

Biology: Clancy, 1944. Jour. Econ. Ent. 37: 451.—Compere, 1925. Calif. Univ. Pubs., Ent. 3: 296.

Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 242, 332-334.

**nigrellus** (Girault), n. comb. Tex. Host: *Chrysomphalus tenebricosus* (Comst.).

*Signiphora nigrella* Girault, 1913. U. S. Natl. Mus. Proc. 45: 215. ♂.

*occidentalis* (Howard), n. comb. Calif. Hosts: *Aleyrodes* sp.; *Aonidiella aurantii* (Mask.); *A. citrina* (Coq.); *Aspidiotus juglans-regiae* Comst.; *A. lataniae* Sign.; *Lepidosaphes gloveri* (Pack.).

*Signiphora occidentalis* Howard, 1894. U. S. Dept. Agr. Insect Life 6: 233. ♂ ♀.

*pulcher* (Girault). N. J. to Va. and Ill. Hosts: *Aspidiotus perniciosus* Comst.; *A. wuae* Comst.; *A.* sp. on cherry (?*forbesi* Johns.); *A.* sp. on currant; *Aulacaspis rosae* (Bouché); *Chionaspis americana* Johns.; *Lecanium nigrofasciatum* Perg.; *Pseudaulacaspis pentagona* (Targ.).

*Signiphora pulchra* Girault, 1913. U. S. Natl. Mus. Proc. 45: 215. ♂ ♀.

*Signiphora nigrita* Girault, 1913. U. S. Natl. Mus. Proc. 45: 215.

*thoreauini* (Girault), n. comb. Calif. Host: *Aspidiotus hederae* (Vallot).

*Signiphora thoreauini* Girault, 1916. Psyche 23: 41. ♀.

*townsendi* (Ashmead). D. C., Tex. Hosts: *Aleyrodes* sp.; *Aspidiotus lataniae* Sign.; *A. perniciosus* Comst.; *Pseudaulacaspis pentagona* (Targ.).

*Signiphora townsendi* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 412. ♀.

*unifasciatus* (Ashmead). Ga., Fla. Host: *Ceropsylla sideroxyli* Riley.

*Signiphora unifasciata* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 410. ♀.

## Family EUTRICHOSOMATIDAE Peck, New Family

### Genus EUTRICHOSOMA Ashmead

*Eutrichosoma* Ashmead, 1899. Ent. Soc. Wash. Proc. 4: 204 (no species).

Type: *Eutrichosoma mirabile* Ashmead. Included by Ashmead, 1904.

*albipes* Crawford. Tex. Hosts: *Auleutes tenuipes* (Lec.); *Smicronyx tychoides* (Lec.).

*Eutrichosoma albipes* Crawford, 1908 (1907). Ent. Soc. Wash. Proc. 9: 158. ♂ ♀.

Biology: Pierce, 1910. Jour. Econ. Ent. 3: 453.

*mirabile* Ashmead. Mont.

*Eutrichosoma mirabile* Ashmead, 1904. Carnegie Mus. Mem. 1: 291, 375. ♀. Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 315.

## Family TANAOSTIGMATIDAE Peck, New Family

### Genus TANAOSTIGMOPDES Ashmead

*Tanaostigmodes* Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 9, 18.

Type: *Tanaostigmodes howardii* Ashmead. Orig. desig. Revision: Crawford, 1911. U. S. Natl. Mus. Proc. 40: 442.

*albielava* Girault. Ariz.

*Taneostigmodes* (!) *albielavus* Girault, 1917. Deser. Stellarum Nov., p. 4. ♀.

*howardii* Ashmead. Ariz., Calif. Hosts: Galls on *Acacia greggi*, *Mimosa biuncifera*, and *Prosopis* sp.

*Tanaostigmodes howardii* Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 19. ♀.

*slossonae* Crawford. Fla.

*Tanaostigmodes slossonae* Crawford, 1911. U. S. Natl. Mus. Proc. 40: 442. ♂ ♀.

*tychii* Ashmead. Calif. Host: *Tychius semisquamosus* Lec.

*Tanaostigmodes tychii* Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 19. ♀.

## Family ENCYRTIDAE

Revisions: Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 323-412.—Girault, 1915. Queensland Mus. Mem. 4: 120-128, 179-183.—Mercet, 1921. Fauna Ibérica, Himer., Encirtidos, pp. 1-732. —Timberlake, 1923. Ent. Soc. Wash. Proc. 25: 57-60.

## Subfamily ENCYRTINAE

## Genus TINEOPHOCTONUS Ashmead

*Tineophoctonus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 328, 351.  
Type: *Phaenodiscus armatus* Ashmead. Orig. desig.

*armatus* (Ashmead). Fla.

*Phaenodiscus armatus* Ashmead, 1888. Ent. Amer. 4: 17. ♀.

*tineaevorus* (Ashmead). Fla. Host: Tineid larva in gall of *Andricus pattoni* (Bass.).

*Leptomastix tineaevora* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 191. ♀.  
Taxonomy: Ashmead, 1888. Ent. Amer. 4: 16.

## Genus LEPTOMASTIX Foerster

*Leptomastix* Foerster, 1856. Hym. Stud., v. 2, pp. 34, 37 (no species).  
Type: *Leptomastix histrio* Mayr. Included by Mayr, 1875.

*Stenoterys* Thomson, 1876 (1875). Hym. Scand., v. 4, pp. 115, 128.  
Type: *Stenoterys orbitalis* Thomson. Monob.

*Calocerinella* Girault, 1913. Wis. Nat. Hist. Soc. Bul. 11: 46.  
Type: *Calocerinella trifasciatus* Girault. Monob.

*dactylopii* Howard. Que., D. C., La., Calif., Wash. Hosts: *Phenacoccus gossypii* Tns. and Ckll.; *P. solani* Ferris; *Pseudococcus adonidum* (L.); *P. citri* (Risso); *P. comstocki* (Kuw.); *P. maritimus* (Ehrh.); *P. gahani* Green.

*Leptomastix dactylopii* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 23.  
♂ ♀.

Biology: Flanders, 1939. In Howard, Calif. Univ. Pubs., Ent. 7: 58.—Watson, 1939. Citrus Grower (Fla.) 1 (17): 11.—Bess, 1939. Ent. Soc. Amer. Ann. 32: 202–206.—McLeod, 1940 (1939). Ent. Soc. Ontario Ann. Rpt. 70: 65–66.—Clancy, 1944. Jour. Econ. Ent. 37: 450.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

Taxonomy: Compere, 1939. Calif. Univ. Pubs., Ent. 7: 57–58.

## Genus ANAGYRUS Howard

*Anagyrus* Howard, 1896. U. S. Natl. Mus. Proc. 18: 638.  
Type: *Anagyrus greeni* Howard. Monob.

*Epidinocarsis* Girault, 1913. Arch. f. Naturgesch. 79A (6): 83.  
Type: *Epidinocarsis tricolor* Girault. Monob.

Revisions: Timberlake, 1924. Calif. Univ. Pubs., Ent. 3: 224–231.—Compere, 1947. Calif. Univ. Pubs., Ent. 8: 20–22.

*clauseni* Timberlake. Calif. Host: *Pseudococcus maritimus* (Ehrh.).

*Anagyrus clauseni* Timberlake, 1924. Calif. Univ. Pubs., Ent. 3: 225. ♀.

*fusciventris* (Girault). Calif. Host: *Pseudococcus adonidum* (L.).  
*Epidinocarsis fusciventris* Girault, 1915. Queensland Mus. Mem. 4: 144. ♀.

Biology: Flanders, 1940. Jour. Econ. Ent. 33: 757–758.—Flanders, 1940. Calif. Citrog. 25: 154.

*nigritus* (Howard). Calif. Host: *Dactylopis* sp. on *Artemisia*.

*Aphytus nigritus* Howard, 1898. U. S. Natl. Mus. Proc. 21: 243. ♀.

*pallidipes* Ashmead. D. C., La.

*Anagyrus pallidipes* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 354. ♂.

*pseudococci* (Girault). Calif. Host: *Pseudococcus citri* (Risso).

*Epidinocarsis pseudococci* Girault, 1915. Entomologist 48: 185. ♂ ♀.

Biology: Flanders, 1939. Jour. Econ. Ent. 32: 889.

*pulcher* (Ashmead). Conn., Fla.

*Dinocarsis pulcher* Ashmead, 1888. Ent. Amer. 4: 17. ♀.

*putonophilus* Compere. Calif. Hosts: *Puto ambigua* (Full.); *P. yuccae* (Coq.).

*Anagyrus putonophilus* Compere, 1947. Calif. Univ. Pubs., Ent. 8: 20, 22. ♀.  
Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 45, 57–59.

**thyridopterygis** (Ashmead). N. J., Fla. Host: Recorded from *Thyridopteryx ephemeraeformis* (Haw.), but probably from an associated coccid.  
**Dinococcus thyridopterygis** Ashmead, 1886. Canad. Ent. 18: 97. ♀.

**townsendi** (Howard). N. Mex. Host: ?*Phenacoccus* sp. on cotton.  
**Aphytus townsendi** Howard, 1898. U. S. Natl. Mus. Proc. 21: 243. ♀.

**yuccae** (Coquillett). Hosts: *Pseudococcus crawii* (Coq.); *P. maritimus* (Ehrh.); ?*P. sp.* on grapes; *Puto yuccae* (Coq.); *Achrysonophagus modestus* Timb.  
**Blastothrix yuccae** Coquillett, 1890. West. Amer. Scientist 7: 44. ♀.  
**Epidinocarsis subalbicornis** Girault, 1916. Psyche 16: 44. ♀.  
**Anagyrus ferrisi** Compere, 1926. Calif. Univ. Pubs., Ent. 4: 18. ♂ ♀.  
Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 256-266, 274-276.—Maple, 1947.  
Calif. Univ. Pubs., Ent. 8: 55, 59.  
Taxonomy: Gahan, 1949. Hawaii. Ent. Soc. Proc. 13: 359-360.  
Morphology: Maple, 1937. Ent. Soc. Amer. Ann. 30: 146.

### Genus COMPERIA Gomes

**Comperia** Gomes, 1942 (1941). Esc. Nac. Agron. Rio de Janeiro Bol. 2: 41.  
Type: **Dicarnosis merceti** Compere. Monob.

**merceti** (Compere). Fla., Tex. Hosts: *Blatella germanica* (L.); *Supella supellec-tilium* (Serv.).  
**Dicarnosis merceti** Compere, 1938. Bul. Ent. Res. 29: 317. ♀.  
**Comperia merceti** var. *falsicornis* Gomes, 1942 (1941). Esc. Nac. Agron. Rio de Janeiro Bol. 2: 43. ♂ ♀. N. syn.

### Genus APOANAGYRUS Compere

**Apoanagyrus** Compere, 1947. Calif. Univ. Pubs., Ent. 8: 18.  
Type: **Apoanagyrus californicus** Compere. Monob.

**californicus** Compere. Calif. Host: *Pseudococcus solani* (Ckll.).  
**Apoanagyrus californicus** Compere, 1947. Calif. Univ. Pubs., Ent. 8: 18.  
♂ ♀.  
Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 63-66.

### Genus PSEUDLEPTOMASTIX Girault

**Pseudoleptomastix** Girault, 1915. Ent. Soc. Amer. Ann. 8: 272.  
Type: **Pseudoleptomastix squammulatus** Girault. Monob.

**squammulata** Girault. Calif. Hosts: *Ammonotherium lichtensiooides* (Ckll.); *Pseudococcus maritimus* (Ehrh.).  
**Pseudoleptomastix squammulatus** Girault, 1915. Ent. Soc. Amer. Ann. 8: 272. ♀.  
**Paraleptomastix (!) notatus** Girault, 1917. Entomologist 50: 38. ♀.  
**Pseudoleptomastix flatulescens** Compere, 1926. Calif. Univ. Pubs., Ent. 4: 22. ♂ ♀.

Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 257-266, 277-279.—Maple 1947. Calif. Univ. Pubs., Ent. 8: 112-113.  
Taxonomy: Timberlake, 1924. Calif. Univ. Pubs., Ent. 3: 232-235.—Compere, 1947. Calif. Univ. Pubs., Ent. 8: 17.

### Genus ECTROMATOPSIS Compere

**Ectromatopsis** Compere, 1947. Calif. Univ. Pubs., Ent. 8: 13.  
Type: **Ectromatopsis americana** Compere. Orig. desig.

**americana** (Howard). N. Mex., Calif. Host: *Phenacoccus solani* Ferris.  
**Ectroma americanum** Howard, 1898. U. S. Natl. Mus. Proc. 21: 248. ♀.  
**Ectromatopsis americana** Compere, 1947. Calif. Univ. Pubs., Ent. 8: 13, 15.  
Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 78-80.

### Genus HENICOPYGUS Ashmead

**Henicopygus** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 329, 355.  
Type: **Henicopygus subapterus** Ashmead. Monob.

**subapterus** Ashmead. Tex., Colo.

**Henicopygus subapterus** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 356. ♀.  
Biology: Brues and Melander, 1903. Biol. Bul. 5: 21.

#### Genus CALOCERINUS Howard

**Calocerinus** Howard, 1892. U. S. Natl. Mus. Proc. 15: 362, 368.  
Type: **Tetracnemus floridanus** Ashmead. Monob.

**floridanus** (Ashmead). Fla.

**Tetranemus** (!) **floridanus** Ashmead, 1885. Amer. Ent. Soc. Trans 12: Proc. p. xviii. ♂.  
Taxonomy: Girault, 1917. Descr. Stellarum Nov., p. 7.

#### Genus TETRALOPHIDEA Ashmead

**Tetralophidea** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 327, 348.  
Type: **Tetralophidea bakeri** Ashmead. Monob.

**bakeri** Ashmead. Colo.

**Tetralophidea bakeri** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 348. ♂.

#### Genus ANUSIA Foerster

**Anusia** Foerster, 1856. Hym. Stud., v. 2, p. 32 (no species).  
Type: **Anusia nasicornis** Foerster. Desig. by Gahan and Fagan, 1923.

**neomexicana** Ashmead. N. Mex., Calif. Host: *Amonotherium lichtensiooides* (Ckll.).

**Anusia neomexicana** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 355. ♀.

**xerophila** Brues. Tex.

**Anusia xerophila** Brues, 1906. Ent. News 17: 61. ♂ ♀.

#### Genus MEROMYZOBIA Ashmead

**Meromyzobia** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 328, 349.  
Type: **Ericydinus maculipennis** Ashmead. Orig. desig.

**americana** (Ashmead). Fla.

**Prionomastix americana** Ashmead, 1888. Ent. Amer. 4: 16. ♂.

**bifasciata** (Ashmead). Colo.

**Homalotylus bifasciatus** (!) Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 28. ♀.

**flava** Ashmead. D. C.

**Meromyzobia flava** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 350. ♂.

**flavicincta** (Ashmead). Fla.

**Choreia flavicincta** Ashmead, 1888. Ent. Amer. 4: 17. ♀.

**maculipennis** (Ashmead). N. J., Ohio. Hosts: *Anthracophaga ingrata* (Will.); *Meromyza americana* Fitch.

**Ericydinus maculipennis** Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser. Bul. 1: 162. ♂.

**unifasciata** Ashmead. Miss.

**Meromyzobia unifasciata** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 350. ♀.

#### Genus TETRACNEMUS Westwood

**Tetracnemus** Westwood, 1837. Mag. Nat. Hist. 1: 258.

Type: **Tetracnemus diversicornis** Westwood. Monob.

**Charitopus** Foerster, 1856. Hym. Stud., v. 2, p. 31 (no species).

Type: **Charitopus fuliventris** Foerster. Included by Foerster 1860.

**Diversicornia** Mercet, 1916. Soc. Espan. Hist. Nat. Bol. 16: 371.

Type: **Diversicornia pinicola** Mercet. Monob.

**peregrinus** Compere. Calif. Host: *Pseudococcus adonidum* (L.).

**Tetracnemus peregrinus** Compere, 1939. Calif. Univ. Pubs., Ent. 7: 59.  
♂ ♀.

Biology: Flanders, 1940. Jour. Econ. Ent. 33: 757.—Flanders, 1944. Jour. Econ. Ent. 37: 308, 309.—DeBach, 1949. Ecology 30: 16–24.

**pretiosus** Timberlake. Calif. Hosts: *Pseudococcus adonidum* (L.); *P. gahani* Green.  
**Tetracnemus pretiosus** Timberlake, 1929. Calif. Univ. Pubs., Ent. 5: 5.  
♂ ♀.

Biology: Compere and Smith, 1932. Hilgardia 6: 585, 601–605, 609–617.—Quayle, 1932. Calif. Agr. Expt. Sta. Bul. 542: 51.—Clancy, 1934. Calif. Univ. Pubs., Ent. 6: 231–248.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 114–115.—DeBach, 1949. Ecology 30: 16–24.

### Genus HABROLEPOIDEA Howard

**Habrolepoidea** Howard, 1894. Linn. Soc. London, Jour., Zool. 25: 89.

Type: *Habrolepoidea glauca* Howard. Monob.

**Zarhopalooides** Girault, 1915. Queensland Mus. Mem. 4: 99.

Type: *Zarhopalooides axillaris* Girault. Orig. desig.

**depressa** Girault. Ill. Host: *Megacyllene robiniae* (Forst.).

**Habrolepoidea depressa** Girault, 1916. Canad. Ent. 48: 343. ♂ ♀.

**perplexa** Girault. Pa.

**Habrolepoidea perplexa** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 8. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 185. ♀.

**tarsalis** Girault. Ind.

**Habrolepoidea tarsalis** Girault, 1916. Canad. Ent. 48: 344. ♀.

### Genus TETRALOPHIELLUS Ashmead

**Tetralophiellus** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 330, 357.

Type: *Tetralophiellus brevicollis* Ashmead. Monob.

**brevicollis** Ashmead. Fla.

**Tetralophiellus brevicollis** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 357.  
♂.

### Genus TETRACLADIA Howard

**Tetracladia** Howard, 1892. U. S. Natl. Mus. Proc. 15: 367.

Type: *Tetracladia texana* Howard. Desig. by Ashmead, 1900.

**gracilis** Howard. Fla.

**Tetracladia gracilis** Howard, 1892. U. S. Natl. Mus. Proc. 15: 368. ♂.

**texana** Howard. Tex.

**Tetracladia texana** Howard, 1892. U. S. Natl. Mus. Proc. 15: 367. ♂.

### Genus TETRACNEMOPSIS Ashmead

**Tetracnemopsis** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 330, 358.

Type: *Tetracnemus westwoodi* Cockerell. Monob.

**westwoodi** (Cockerell). Colo. Host: *Phenacoccus minimus* Tinsley.

**Tetracnemus Westwoodi** Cockerell, 1898. Canad. Ent. 30: 224. ♂ ♀.

### Genus PENTACNEMUS Howard

**Pentacnemus** Howard, 1892. U. S. Natl. Mus. Proc. 15: 362, 366.

Type: *Pentacnemus bucculatricis* Howard. Monob.

**bucculatricis** Howard. Ont., Maine, N. Y., Conn., Va., Mo. Hosts: *Recurvaria thujella* Kearf.; *Argyresthia thuiella* (Pack.).

**Pentacnemus bucculatricis** Howard, 1892. U. S. Natl. Mus. Proc. 15: 366.  
♂ ♀.

Biology: Underhill, 1943. Va. Agr. Expt. Sta. Bul. 349: 22.

## Genus LEPTOMASTIDEA Mercet

**Leptomastidea** Mercet, 1916. Soc. Espan. Hist. Nat. Bol. 16: 112.

Type: *Leptomastidea aurantiaca* Mercet. Monob.

**Tanaomastix** Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 362.

Type: *Paraleptomastix abnormis* Girault. Orig. desig.

Revision: Mercet, 1924. Soc. Espan. Hist. Nat. Bol. 24: 252-258.

**abnormis** (Girault). Que., N. Y., Ill., Fla., La., Calif. Hosts: *Phenacoccus gossypii* Tns. and Ckll.; *Pseudococcus citri* (Risso); *P. kraunhiae* (Kuw.).

**Paraleptomastix abnormis** Girault, 1915. Entomologist 48: 184. ♀.

Biology: Smith, 1917. Jour. Econ. Ent. 10: 262-268.—Armitage, 1920. Calif. Dept. Agr., Monthly Bul. 9: 446.—Compere and Smith, 1932. Hilgardia 6: 610-611.—McLeod, 1940 (1939). Ent. Soc. Ontario Ann. Rpt. 70: 65-66.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 91-93.

**claripennis** (Timberlake). Calif. Host: *Pseudococcus ryani* (Coq.).

**Tanaomastix claripennis** Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 363, 365. ♀.

## Genus HABROLEPOPTERYX Ashmead

**Habroleptopteryx** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 330, 359.

Type: *Psilophrys pulchripennis* Ashmead. Monob.

**marylandia** Girault, emend. Md.

**Habroleptopteryx marilandia** Girault, 1917. Chalcidoidea Nova Marilandensis I, p. 1. ♀.

**pulchripennis aeneiscapus** Girault. Fla.

**Habroleptopteryx pulchripennis** var. *aeneiscapus* Girault, 1916. Ent. News 27: 225. ♀.

**pulchripennis pulchripennis** (Ashmead). Fla.

**Psilophrys pulchripennis** Ashmead, 1888. Ent. Amer. 4: 16. ♀.

Taxonomy: Girault, 1916. Ent. News 27: 225.

## Genus CLAUSENIA Ishii

**Clausenia** Ishii, 1923. Japan Dept. Agr. and Com., Imp. Plant Quar. Sta. Bul. 3: 98, 100.

Type: *Clausenia purpurea* Ishii. Monob.

**purpurea** Ishii. Ont., Conn., Va. Host: *Pseudococcus comstocki* (Kuw.).

**Clausenia purpurea** Ishii, 1923. Japan Dept. Agr. and Com., Imp. Plant Quar. Sta. Bul. 3: 100. ♂ ♀.

Biology: Cox, 1940. Jour. Econ. Ent. 33: 446.—Clancy, 1944. Jour. Econ. Ent. 37: 450-451.—Haeussler and Clancy, 1944. Jour. Econ. Ent. 37: 503.—

Hough, Clancy, and Pollard, 1945. Jour. Econ. Ent. 38: 423-425.

Morphology: Flanders, 1942. Ent. Soc. Amer. Ann. 35: 252, 262.

## Genus ENCYRTUS Latreille

**Encyrtus** Latreille, 1809. Gen. Crust. Ins., v. 4, p. 31.

Type: *Chrysis infidus* Rossi. Desig. by Latreille, 1810.

**Eucomys** Foerster, 1856. Hym. Stud., v. 2, pp. 32, 34.

Type: *Encyrtus swederi* Dalman. Orig. desig.

**Comys** Foerster, 1856. Hym. Stud., v. 2, pp. 144, 145. N. name.

**Howardia** Dalla Torre, 1897. Wien. Ent. Ztg. 16: 86. Preocc.

Type: *Bothriothorax peckhami* Ashmead. Monob.

**Howardiella** Dalla Torre, 1898. Cat. Hym., v. 5, p. 228. N. name.

**albicoxa** (Ashmead). Fla. Hosts: *Pseudococcus adonidum* (L.); *P. citri* (Risso).

**Comys albicoxa** Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xvi. ♂ ♀.

**atys** (Girault), n. comb. N. Y.

**Eucomys atys** Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 2. ♀.

**barbatus** Timberlake. Calif.

- Encyrtus barbatus*** Timberlake, 1919. Hawaii. Ent. Soc. Proc. 4: 209. ♂ ♀.  
 Biology: Ishii, 1932. Japan Dept. Agr. and Com., Imp. Agr. Expt. Sta. Bul. 3: 181, 187-188, 194.
- bicolor** (Howard). Ont., N. Y., N. J., D. C., Ohio, Mich., La., Kans., Colo., Calif.  
 Hosts: *Coccus hesperidum* L.; *Lecanium corni* Bouché; *L. fletcheri* Ckll.  
**Comys bicolor** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, pp. 350, 362. ♂ ♀.  
 Biology: Hubbard, 1885. Insects Affecting the Orange, p. 52.—Craw, 1894. Calif. State Bd. Hort. Bien. Rpt. 4: 97.
- californicus** (Girault). Calif. Hosts: *Lecanium corni* Bouché; *L. quercifex* Fitch.  
**Eucomys californicus** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 2. ♀.  
 Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.
- cyanoccephalus** Dalman. Europe, ?Ont. Hosts: *Lecanium caryaee* Fitch; *L. corni* Bouché.  
**Encyrtus cyanoccephalus** Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 344. ♀.  
 Biology: Jarvis, 1911 (1910). Ent. Soc. Ontario Ann. Rpt. 41: 75.
- fuscus** (Howard). Ont., Que., N. Y., Mass., Conn., N. J., Ohio, Ala., Kans., Calif.  
 Hosts: *Lecanium corni* Bouché; *L. nigrofasciatum* Perg.; *L. pruinosum* Coq.; *L. spp.* on laurel-leaved oak, on *Heteromeles* and on *Quercus nigra*; *Pulvinaria vitis* (L.); *Saissetia hemisphaerica* (Targ.).  
**Comys fuscus** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 363. ♂ ♀.  
**Chiloneurus maculatipennis** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 203. ♀.  
 Biology: Isaac, 1905. Calif. State Commr. Hort. Bien. Rpt. 1: 99.—Smith, 1915. Calif. State Comm. Hort. Monthly Bul. 4: 269.  
 Taxonomy: Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 360.
- infelix** (Embleton). N. Y. Host: *Saissetia hemisphaerica* (Targ.).  
**Comys infelix** Embleton, 1902. Ent. Soc. London Trans., p. 223. ♀.  
 Biology: Maple, 1937. Ent. Soc. Amer. Ann. 30: 144, 148-151.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 82-83, 86-87.  
 Taxonomy: Embleton, 1904. Linn. Soc. London, Trans., Zool. (2) 9: 231-254.
- infidus** (Rossi). Europe, ?No. Amer.  
**Chrysis? infidus** Rossi, 1790. Fauna Etrusca, v. 2, p. 80.  
 Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 84, 87-88.  
 Taxonomy: Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 360.
- kansensis** (Girault), n. comb. Kans.  
**Eucomys kansensis** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 2. ♀.
- lecaniorum** (Mayr). Europe, ?No. Amer.  
**Comys Lecaniorum** Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien, Verh. 25: 740. ♀.  
 Taxonomy: Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 360.
- marylandicus alpinus** (Girault). N. Y.  
**Eucomys marilandicus** var. **alpinus** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 2. ♀.
- marylandicus marylandicus** (Girault). Maine, Md., N. C.  
**Eucomys marilandicus** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 2. ♀.  
**Encyrtus marylandicus** Gahan, Crosby and Leonard, 1928. N. Y. (Cornell) Agr. Expt. Sta. Mem. 101: 979. Emend.
- peckhamii** (Ashmead). N. C., Wis. Host: *Lecanium corni* Bouché.  
**Bothriothorax Peckhamii** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 132. ♂ ♀.  
 Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 183.
- scutellatus** (Swederus). Europe, ?Ont., ?Kans. Host: *Lecanium caryaee* Fitch.  
**Pteromalus Scutellatus** Swederus, 1795. Svenska Vetensk. Akad. Handl. 16: 218.  
 Taxonomy: Mercet, 1921. Fauna Ibérica, Hímen., Encirtidos, pp. 559, 562.

**Genus PSILOPHRYS Mayr**

**Psilophrys** Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien, Verh. 25: 727.  
Type: *Encyrtus longicornis* Walker. Monob.

**armata** Ashmead. Fla.

**Psilophrys armatus** Ashmead, 1888. Ent. Amer. 4: 16. ♂ ♀.

**Genus PARAPSILOPHRYS Howard**

**Parapsilosiphrys** Howard, 1898. U. S. Natl. Mus. Proc. 21: 232.  
Type: *Parapsilosiphrys gelechiae* Howard. Monob.

**gelechiae** Howard. Wyo. Host: *Gelechia* sp. on cottonwood.

**Parapsilosiphrys gelechiae** Howard, 1898. U. S. Natl. Mus. Proc. 21: 233.  
♂ ♀.

**Genus PSILOPHRYOIDEA Compere**

**Psiolophryoidea** Compere, 1928. Calif. Univ. Pubs., Ent. 4: 214.  
Type: *Psiolophryoidea comesor* Compere. Monob.

**comesor** Compere. Calif. Host: *Kermes cockerelli* Ehrh.

**Psiolophryoidea comesor** Compere, 1928. Calif. Univ. Pubs., Ent. 4: 214. ♀.

**Genus PARALITOMASTIX Mercet**

**Paralitomastix** Mercet, 1921. Fauna Iberica, Himen., Encirtidos, pp. 70, 438.  
Type: *Encyrtus varicornis* Nees. Monob.

**pyralidis** (Ashmead). Ont., Mich., Md., D. C., Fla., Utah, Calif. Hosts: *Anarsia lineatella* Zell.; *Trichotaphe flavocostella* Clem.; *T. setosella* Clem.

**Encyrtus (!) pyralidis** Ashmead, 1888. Ent. Amer. 4: 15. ♀.

**Copidosoma variegatum** Howard, 1888. U. S. Dept. Agr. Insect Life 1: 197.  
♀.

Biology: Pack, 1930. Utah Agr. Expt. Sta. Bul. 216: 15-16.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 109.

Taxonomy: Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 366.

**Genus COPIDOSOMA Ratzeburg**

**Copidosoma** Ratzeburg, 1844. Ichn. d. Forstins., v. 1, table facing p. 40, p. 157.  
Type: *Copidosoma bouchéanum* Ratzeburg. Monob.

**Berecyntus** Howard, 1898. U. S. Natl. Mus. Proc. 21: 237. Preocc.  
Type: *Berecyntus bakeri* Howard. Monob.

**Litomastix** Thomson, 1875. Hym. Scand., v. 4, pp. 118, 171. N. syn.  
Type: *Encyrtus chalconotus* Dalman. Desig. by Ashmead, 1900.

**Copidosomopsis** Girault, 1915. Queensland Mus. Mem. 4: 94.

Type: *Copidosomopsis perminutus* Girault. Monob.  
**Paracopidosomopsis** Girault, 1916. Psyche 23: 49. N. syn.

Type: (*Berecyntus floridanus* Ashmead) = *Copidosoma truncatellum* (Dalm.). Monob. and orig. desig.

**Verdunia** Mercet, 1917. Soc. Espan. Hist. Nat. Bol. 17: 203.

Type: *Verdunia gloriosa* Mercet. Monob.

**Litomastiellus** Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, p. 443. N. syn.

Type: *Litomastix (Litomastiellus) claviger* Mercet. Present desig.

**Limastotix** Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, p. 443. N. syn.  
Type: *Litomastix (Limastotix) hispanicus* Mercet. Monob.

**Neocopidosoma** Ishii, 1923. Japan Dept. Agr. and Com., Imp. Plant Quar. Sta. Bul. 3: 101.

Type: *Neocopidosoma komabae* Ishii. Monob.

**Berecyntisus** Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 368. N. name.  
N. syn.

**Arrhenoclavus** Doutt, 1948. Pan-Pacific Ent. 24: 145. N. syn.

Type: *Copidosoma koehleri* Blanchard. Monob.

- bakeri arizonensis** (Girault), n. comb. Ariz. Host: *Chorizagrotis* sp.  
*Berecyntus bakeri* var. *arizonensis* Girault, 1916. Psyche 23: 49. ♀.
- bakeri bakeri** (Howard), n. comb. Ont., Mass., Colo., Utah. Hosts: *Chorizagrotis auxiliaris* (Grote); *Sidemia devastator* (Brace).  
*?Litomastix auricollis* Thomson, 1875. Hym. Scand., v. 4, p. 175. ♂ ♀.  
*Berecyntus bakeri* Howard, 1898. U. S. Natl. Mus. Proc. 21: 238. ♀.  
 Biology: Gibson, 1915. Canada Dept. Agr. Ent. Branch Bul. 10: 11.—Snow, 1925. Jour. Econ. Ent. 18: 606.
- bakeri euxoae** (Strickland), n. comb. Alta., Kans., N. Mex. Hosts: *Chorizagrotis auxiliaris* (Grote); *Feltia subgothica* (Haw.).  
*Berecyntus bakeri* var. *euxoae* [Strickland], 1916. Canada Dept. Agr. Ent. Branch Bul. 13: 21. ♀.  
 Taxonomy: Girault, 1917. Descr. Stellarum Nov., p. 18.
- bakeri gemma** (Girault). Ont., Sask. Hosts: *Agrotis venerabilis* Wlkr.; *Chorizagrotis thanatologia* Dyar; *Euxoa detersa* (Wlkr.); *E. flavidollis* (Smith); *E. tristicula* (Morr.); *Feltia ducens* Wlkr.; *Crymodes devastator* (Brace).  
*Berecyntus bakeri* var. *gemma* Girault, 1916. Psyche 23: 49. ♂ ♀.  
 Biology: King and Atkinson, 1928. Ent. Soc. Amer. Ann. 21: 174.
- celaenae** Howard. Que., Conn., Ohio, Ind., Mo., Miss. Hosts: *Euxoa scolastica* McD.; *Lacinipolia renigera* (Steph.).  
*Copidosoma celaenae* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 11. ♀.  
**gelechiae gelechiae** Howard. N. H. to N. C.; Ont., Minn., Mo., Kans., Ariz. Hosts: *Epiblema scudderiana* (Clem.); *Gnorimoschema asterella* (Kell.); *G. gallaesolidaginis* (Riley); *G. salinaris* Busck.  
*Copidosoma gelechiae* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 10. ♂ ♀.  
*Psilophrys hyalinipennis* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 21. ♂. N. syn.  
*Psilophrys pallipes* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. V. ♀. Preocc.  
*Psilophrys pallidipes* Schulz, 1906. Spolia Hym., p. 146. Emend.  
 Biology: Patterson, 1919. Jour. Hered. 10: 346.—Barber, 1938. N. Y. Ent. Soc. Jour. 46: 169–171, 174–175.  
 Morphology: Leiby, 1922. Jour. Morphology 37: 195–285.
- gelechiae sagum** Girault. Ont.  
*Copidosoma gelechiae* var. *saga* Girault, 1920. U. S. Natl. Mus. Proc. 58: 188. ♂ ♀.
- geniculatum** (Dalman). Mass., N. Y., Conn. Host: *Rhyacionia buoliana* (Schiff.).  
*Encyrtus geniculatus* Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 361. ♂.  
 Biology: Dowden, 1934. Ent. Soc. Amer. Ann. 27: 600.  
 Taxonomy: Mayr, 1875. Zool.-Bot. Gesell. Wien Verh. 25: 734–737.
- intermedium** Howard. N. J., Mo., Kans. Host: *Gnorimoschema gallae-asterella* (Kell.).  
*Copidosoma intermedium* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 12. ♂ ♀.
- lymani** Howard. Ont. Host: *Anacampsis lupinella* Busck.  
*Copidosoma Lymani* Howard, 1907. Canad. Ent. 39: 103. ♀.
- melanocerum** (Ashmead). D. C., N. C., Kans., Iowa. Host: *Feltia subgothica* (Haw.).  
*Liothorax melanocera* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 363. ♀.
- truncatellum** (Dalman). Que. to Fla., west to Tex. and Ariz. Hosts: *Anomis erosa* Hbn.; *Autographa* sp.; *Prodenia ornithogalli* Guen.; *Trichoplusia ni* (Hbn.); *Zeuzera pyrina* (L.).  
*Encyrtus truncatellus* Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 168.  
*Berecyntus floridanus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 365. ♀.  
 Biology: Silvestri, 1937. Harvard Univ., Mus. Compar. Zool. Bul. 81: 472–487.  
 Taxonomy: Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 456–457.
- turni** (Packard). N. H., Conn., N. J. Host: *Papilio glaucus* (L.).  
*Encyrtus turni* Packard, 1881. Boston Soc. Nat. Hist. Proc. 21: 32. ♂ ♀.

Taxonomy: Howard, 1889. In Scudder, Butterflies of Eastern U. S. and Canada, pp. 1872, 1888.

**vagum** Howard. Que., N. J., Mo., Host: *Filitima pseudoacaciella* (Chamb.).

**Copidosoma vagum** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 11.  
♂ ♀.

**Copidosoma** n. sp. (*nanellae* Amer. authors, not Silvestri). Maine, N. Y. Conn., Oreg. Hosts: *Eucordylea huntella* Keif.; *Exoteleia pinifoliella* (Chamb.); *Recurvaria thujaella* Kearf.

Taxonomy: Gahan, 1930. U. S. Natl. Mus. Proc. 77 (8): 7.

#### Genus **SCEPTROPHORUS** Foerster

**Sceptrophorus** Foerster, 1856. Hym. Stud., v. 2, pp. 34, 38.

Type: *Encyrtus sceptriger* Foerster. Desig. by Ashmead, 1900.

**marylandicus** Girault, emend. Md.

**Sceptrophorus marilandicus** Girault, 1917. Ent. News 28: 256. ♀.

#### Genus **CERCHYSIUS** Westwood

**Cerchysius** Westwood, 1832. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 1: 127.

Type: (*Encyrtus urocerus* Dalman) = *Encyrtus subplanus* Dalman. Desig. by Westwood, 1840.

Revision: Girault, 1918. Ent. News 29: 65.

**elasmoceri** Ashmead. D. C., Va. Host: *Monophylla terminata* (Say).

**Cerchysius elasmoceri** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 379. ♀.

**flaccus** (Walker). Fla.

**Encyrtus (Cerchysius) Flaccus** Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 21. ♀.

**hubbardii** Ashmead. Calif. Host: *Vrittella hubbardi* Schwarz [?nomen nudum] infesting stems of *Alleuroffia occidentalis*.

**Cerchysius hubbardi** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 380. ♀.

**marylandicus** Girault, emend. Md.

**Cerchysius marilandicus** Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 119. ♀.

**pallipes** (Provancher). Ont.

**Copidosoma pallipes** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 205. ♀.

**Copidosoma pallidipes** Dalla Torre, 1898. Cat. Hym., v. 5, p. 243. Emend.

#### Genus **BAEOCHARIS** Mayr

**Baeocharis** Mayr, 1875. Zool.-Bot. Gesell. Wien Verh. 25: 767.

Type: **Baeocharis pascuorum** Mayr. Monob.

**Sphaeropisthus** Thomson, 1875. Hym. Scand., v. 4, pp. 116, 131.

Type: **Sphaeropisthus pascuorum** Thomson. Monob.

**annulicornis** (Ashmead). Fla.

**Sphaeropisthus annulicornis** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 369. ♂.

**auriceps** (Ashmead). Fla.

**Sphaeropisthus auriceps** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 369. ♀.

#### Genus **CHESTOMORPHA** Ashmead

**Chestomorpha** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 335, 343, 370.

Type: **Chestomorpha biformis** Ashmead. Monob.

**biformis** Ashmead. N. Mex.

**Chestomorpha biformis** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 370. ♀.

### Genus AENASIUS Walker

*Aenasius* Walker, 1846. Ann. Mag. Nat. Hist. 17: 181.

Type: *Encyrtus (Aenasius) hyettus* Walker. Monob.  
Revision: Compere, 1937. Hawaii. Ent. Soc. Proc. 9: 383-404.

*maplei* Compere. Calif. Host: *Puto yuccae* (Coq.).

*Aenasius maplei* Compere, 1937. Hawaii. Ent. Soc. Proc. 9: 384, 390, 397.

♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 55-57.

### Genus CHALCASPIS Howard

*Chalcaspis* Howard, 1895. U. S. Natl. Mus. Proc. 17: 606.

Type: *Chalcaspis pergandi* Howard. Monob.

*arizonensis* Girault. Ariz.

*Chalcaspis arizonensis* Girault, 1915. Ent. Soc. Amer. Ann. 8: 280. ♀.

*pergandi* Howard. Mass., D. C., S. Dak.

*Chalcaspis pergandi* Howard, 1895. U. S. Natl. Mus. Proc. 17: 606. ♀.

*phenacocci* (Ashmead). N. Mex., Calif. Host: *Phenacoccus cecalliae* Ckll.

*Blepyrus phenacocci* Ashmead, 1902. Canad. Ent. 34: 301. ♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

### Genus BOTHRIENCYRTUS Timberlake

*Bothriencyrtus* Timberlake, 1919 (1918). Hawaii. Ent. Soc. Proc. 4: 185, 212.

Type: *Bothriothorax planiformis* Howard. Orig. desig.

*planiformis* (Howard). Calif.

*Bothriothorax planiformis* Howard, 1895. U. S. Natl. Mus. Proc. 17: 611. ♀.

### Genus BOTHRIOTHORAX Ratzeburg

*Bothriothorax* Ratzeburg, 1844. Ichn. d. Forstins., v. 1, table facing p. 40; p. 208.

Type: (*Bothriothorax altensteinii* Ratzeburg) = *Encyrtus clavigornis* Dalman. Monob.

*Trimorphocerus* Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Förh. 14: 293 (no species).

Type: (*Bothriothorax altensteinii* Ratzeburg) = *Encyrtus clavigornis* Dalman. Desig. by Gahan and Fagan, 1923.

Revision: Howard, 1895. U. S. Natl. Mus. Proc. 17: 607-611.

*californicus* Howard. Calif. Hosts: *Scaeva pyrastri* (L.); *Syrphus nitens* Zett.; *S. opinator* O. S.

*Bothriothorax californicus* Howard, 1895. U. S. Natl. Mus. Proc. 17: 609. ♀.  
Biology: Kamal, 1926. Jour. Econ. Ent. 19: 726-728.

*faridi* Kamal. Calif. Host: *Syrphus opinator* O. S.

*Bothriothorax faridi* Kamal, 1926. Canad. Ent. 58: 283. ♂ ♀.  
Biology: Kamal, 1939. Egypt Min. Agr. Tech. and Sci. Serv. Ent. Sect. Bul. 207: 33, 46, 48.

*flaviscapus* Girault. U. S. Host: Syrphid.

*Bothriothorax flaviscapus* Girault, 1915. Ent. Soc. Amer. Ann. 8: 276. ♂ ♀.

*macroglenes* Ashmead. Kans.

*Bothriothorax macroglenes* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 4: App. p. V. ♀.

*nigripes* Howard. N. Mex., Calif. Host: *Eupeodes volucris* O. S.

*Bothriothorax nigripes* Howard, 1895. U. S. Natl. Mus. Proc. 17: 611. ♀.  
Biology: Kamal, 1939. Egypt Min. Agr. Tech. and Sci. Serv. Ent. Sect. Bul. 207: 33, 46, 48.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 70-71.

*noveboracensis* Howard. N. H., N. Y., N. J.

*Bothriothorax noveboracensis* Howard, 1895. U. S. Natl. Mus. Proc. 17: 609.  
♀.

**peculiaris** Howard. N. H., N. J., Va., Ill., Wis. Hosts: *Metasyrphus wiedemanni* Johns.; *Syrphus rectus* O. S.; *S. ribesii* (L.).

**Bothriothorax peculiaris** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 20. ♂ ♀.

**rotundiformis** Howard. Calif.

**Bothriothorax rotundiformis** Howard, 1895. U. S. Natl. Mus. Proc. 17: 610. ♀.

**virginiensis** Howard. Va.

**Bothriothorax virginiensis** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 20. ♀.

#### Genus PENTELICUS Howard

**Pentelicus** Howard, 1895. U. S. Natl. Mus. Proc. 17: 606, 611.

Type: *Pentelicus aldrichi* Howard. Monob.

**aldrichi** Howard. S. Dak.

**Pentelicus aldrichi** Howard, 1895. U. S. Natl. Mus. Proc. 17: 612. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 183.

#### Genus BLEPYRUS Howard

**Blepyrus** Howard, 1898. U. S. Natl. Mus. Proc. 21: 233.

Type: *Blepyrus mexicanus* Howard. Desig. by Ashmead, 1900.

**Coccophoctonus** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 337, 344, 375.

Type: (*Coccophagus dactylopis* Ashmead)=*Blepyrus mexicanus* Howard. Monob.

**insularis** (Cameron). Tex. Host: *Ferrisia virgata* (Ckll.).

**Encyrtus insularis** Cameron, 1886. In Blackburn and Cameron, Manchester Lit. Phil. Soc. Mem. (3) 10: 243. "♂"=♀.

**Blepyrus texanus** Howard, 1898. U. S. Natl. Mus. Proc. 21: 235. ♀.

Taxonomy: Timberlake, 1922. Hawaii. Ent. Soc. Proc. 5: 170-173.

**saccharicola** Gahan. Fla., La. Host: *Pseudococcus* sp. on sugarcane.

**Blepyrus saccharicola** Gahan, 1942. U. S. Natl. Mus. Proc. 92: 47. ♂ ♀.

#### Genus HEMAENASIUS Ashmead

**Hemaenasius** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 336, 374.

Type: *Hemaenasius confusus* Ashmead. Monob.

**Hemiaenasius** Schulz, 1906. Spolia Hym., p. 146. Emend.

**confusus** Ashmead. D. C.

**Hemaenasius confusus** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 374. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 183.

#### Genus TRICHOMASTHUS Thomson

**Trichomasthus** Thomson, 1875. Hym. Scand. v. 4, pp. 131, 134.

Type: *Encyrtus cyaneus* Dalman. Desig. by Gahan and Fagan, 1923.

**cyanifrons** (Dalman). Va. Host: *Lecanium corni* Bouché.

**Encyrtus cyanifrons** Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 159. Taxonomy: Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 369-372.

#### Genus DISCODES Foerster

**Discodes** Foerster, 1856. Hym. Stud., v. 2, pp. 32, 34, 144.

Type: *Encyrtus aeneus* Dalman. Orig. desig.

**Phaenodiscus** Foerster, 1856. Hym. Stud., v. 2, p. 144. N. name.

**arizonensis** (Howard), n. comb. Colo., N. Mex., Ariz.

**Phaenodiscus arizonensis** Howard, 1898. U. S. Natl. Mus. Proc. 21: 248. ♀.

**unicolor** (Ashmead), n. comb. Fla.

**Aphytus unicolor** Ashmead, 1888. Ent. Amer. 4: 15. ♀.

### Genus EURYRHOPALUS Howard

*Euryrhopalus* Howard, 1898. U. S. Natl. Mus. Proc. 21: 237.

Type: *Euryrhopalus schwarzi* Howard. Monob.

*Synaspidia* Timberlake, 1923. Hawaii. Ent. Soc. Proc. 5: 397.

Type: *Synaspidia pretiosa* Timberlake. Monob.

Revision: Gahan, 1942. U. S. Natl. Mus. Proc. 92: 49.

*schwarzi* Howard. Fla.

*Euryrhopalus schwarzi* Howard, 1898. U. S. Natl. Mus. Proc. 21: 237. ♀.  
Taxonomy: Gahan, 1942. U. S. Natl. Mus. Proc. 92: 49.

### Genus RHYTIDOTHORAX Ashmead

*Rhytidothorax* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 337, 344, 377.

Type: *Rhytidothorax marlatti* Ashmead. Monob.

*marlatti* Ashmead. Kans.

*Rhytidothorax marlatti* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 377. ♀.

### Genus HOMALOTYLUS Mayr

*Homalotylus* Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien Verh. 25: 752.

Type: *Encyrtus flaminius* Dalman. Desig. by Ashmead, 1900.

*Nobrimus* Thomson, 1875. Hym. Scand., v. 4, pp. 116, 137.

Type: *Encyrtus flaminius* Dalman. Desig. by Timberlake, 1919.

*Mendozaniella* Brèthes, 1913. Buenos Aires Mus. Nac. Hist. Nat. An. 24: 97.

Type: *Mendozaniella mirabilis* Brèthes. Monob.

*Hemaenasoidea* Girault, 1916. Ent. Soc. Amer. Ann. 9: 307.

Type: *Hemaenasoidea oculata* Girault. Monob.

Revision: Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 133.

*affinis* Timberlake. Calif. Host: *Hyperaspis osculans* Lec.

*Homalotylus affinis* Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 165. ♀.

*albitarsus* Gahan. Md. Hosts: *Lecanium? nigrofasciatum* Perg. on peach; coccinellid.

*Homalotylus albitarsus* Gahan, 1910. Canad. Ent. 42: 206. ♀.

*cockerelli* Timberlake. Tex. Hosts: ?*Dactylopius confusus* (Ckll.); *Pseudococcus* sp.; ?*Hyperaspidius trimaculatus* (L.).

*Homalotylus cockerelli* Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 163. ♂ ♀.

*flaminius* (Dalman). La.

*Encyrtus flaminius* Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 340. ♂.

Taxonomy: Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 519-522, 712.

*hyperaspidis* Timberlake. Utah, Calif. Host: *Hyperaspis undulata* (Say).

*Homalotylus hyperaspidis* Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 167. ♂ ♀.

*punctifrons* Timberlake. Fla.

*Homalotylus punctifrons* Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 169. ♀.

*terminalis californicus* Girault. Mass., Md., D. C., S. C., Utah, Calif. Hosts: *Adalia bipunctata* (L.); *Coccinella novemnotata* Hbst.; *C. quinquepunctata* Kby.; *C. transversoguttata* Falda.; *Hippodamia convergens* Guér.; *Disonycha* sp.

*Homalotylus obscurus* var. *californicus* Girault, 1915. Ent. Soc. Amer. Ann. 8: 274. ♀.

*terminalis terminalis* (Say). N. Y., Mass., N. J., Pa., Del., Ind., Ill., Fla., La., Tex. Hosts: *Coleomegilla maculata* (Deg.); *C. sp.*; *Cyclonedda sanguinea* (L.); *C. sanguinea immaculata* (F.); *Chilocorus similis* (Rossi); *Coccinella novemnotata* Hbst.; *C. sanguinea* (L.); *Hippodamia convergens* Guér.; *Neomysia pullata* (Say); *Psyllobora viginti-maculata* (Say); *Scymnus* sp.

*Serlion* (!) *terminalis* Say, 1828. Contrib. Maclur. Lyc. Phila. 1: 80.

*Eutelus* ? *scymnae* Shimer, 1869. Amer. Ent. Soc. Trans. 2: 385. ♂.

*Homalotylus obscurus* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 22. ♀.

### Genus ANISOTYLUS Timberlake

*Anisotylus* Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 170.  
Type: *Homalotylus similis* Ashmead. Orig. desig.

**pallentipes** Timberlake. Ariz.

*Anisotylus pallentipes* Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 175. ♀.

**similis similis** (Ashmead). Fla. Host: *Scymnus cervicalis* Muls.

*Homalotylus similis* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 190.

**similis texanus** Timberlake. Tex. Host: *Hyperaspis bigeminata* (Rand.).

*Anisotylus similis* subsp. *texanus* Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 173. ♀.

**similis utahensis** Timberlake. Utah, Calif. Hosts: *Scymnus americanus* Muls.; *S. lacustris* Lec.

*Anisotylus similis utahensis* Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 174.  
♂ ♀.

### Genus AGENIASPIS Dahlbom

*Ageniaspis* Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Forh. 14: 293  
(no species).

Type: *Encyrtus fuscicollis* Dalman. Desig. by Ashmead, 1904.

*Holcothorax* Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien Verh. 25: 691.

Type: *Encyrtus (Holcothorax) testaceipes* Ratzeburg. Desig. by Gahan and Fagan, 1923.

**bucculatricis** (Howard). Ont., N. Y., N. J., D. C., Ohio, Mo. Hosts: *Bucculatrix pomifoliella* Clem.; galls of *Rhabdophaga cornuta* Walsh and *R. siliqua* Walsh.

*Encyrtus bucculatricis* Howard, 1883. In Lintner, Injurious Insects N. Y. Ann. Rpt. 1: 160. ♀.

### Genus PRIONOMITUS Mayr

*Prionomitus* Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien Verh. 25: 701.

Type: (*Encyrtus chlorinus* Dalman)=*Encyrtus mitratus* Dalman. Monob.

**mitratus** (Dalman). Utah.

*Encyrtus mitratus* Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 352. ♀.

**tiliaris** (Dalman). Europe. ?No. Amer.

*Encyrtus tiliaris* Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 171.

### Genus THYSANOMASTIX Perkins

*Thysanomastix* Perkins, 1907. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 4: 55.

Type: *Thysanomastix koebelei* Perkins. Monob.

**koebelei** Perkins. Ariz. Host: *Cuerna lateralis* (F.).

*Thysanomastix koebelei* Perkins, 1907. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 4: 55. ♀.

### Genus PSYLLAEPHAGUS Ashmead

*Psyllaephagus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 339, 345, 382.  
Type: *Encyrtus pachypsyllae* Howard. Orig. desig.

**arbuticola** Gahan and Waterston. Calif. Host: *Euphyllura arbuti* Schwarz.

*Psyllaephagus arbuticola* Gahan and Waterston, 1926. Bul. Ent. Res. 16: 373.  
♂ ♀.

**pachypsyllae** (Howard). Md., N. C., Kans. Host: *Pachypsylla celtidis-gemma* (Riley).

*Encyrtus pachypsyllae* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 15.  
♂ ♀.

**solus** (Howard). Fla. Host: *Trioza magnoliae* (Ashm.).

**Encyrtus solus** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 15. ♀.  
Taxonomy: Gahan and Waterston, 1926. Bul. Ent. Res. 16: 375.

**trioziphagus** (Howard). Md., N. C., Ohio. Hosts: *Trioza diospyri* (Ashm.).

**Encyrtus trioziphagus** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 14. ♂ ♀.  
Biology: Eddy, 1927. Ohio Jour. Sci. 27: 196-197.

### Genus MICROTERYS Thomson

**Microterys** Thomson, 1875. Hym. Scand., v. 4, pp. 118, 155.

Type: **Encyrtus sylvius** Dalman. Desig. by Ashmead, 1900.  
Revision: Compere, 1926. Calif. Univ. Pubs., Ent. 4: 39-44 (Calif.).

**bolus** (Walker). Ont. Host: ?*Coccus* sp. on willow twigs.

**Encyrtus Bolus** Walker, 1844. Ann. Mag. Nat. Hist. (1) 14: 17. ♀.

**cincticornis** Ashmead. N. H., Mass., Ill. Host: *Kermes pubescens* Bogue.

**Microterys cincticornis** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 390.

**claripennis** Compere. Calif. Host: *Lecanium corni* Bouché.

**Microterys claripennis** Compere, 1928. Calif. Univ. Pubs., Ent. 4: 216. ♂ ♀.

**dubiosus** (Dalla Torre). Calif. Host: *Icerya purchasi* Mask.

**Encyrtus dubius** Howard, 1889. U. S. Dept. Agr. Insect Life 1: 270. ♂.  
Preocc.

**Encyrtus dubiosus** Dalla Torre, 1898. Cat. Hym., v. 5, p. 257. N. name.

**flavus** (Howard). Ont., N. J., Ohio. Ill., Fla., Calif. Hosts: *Coccus hesperidum* L.;  
*C. pseudomagnolarum* (Kuw.); *Lecanium corni* Bouché; *L. fletcheri* Ckll.;  
*Pulvinaria vitis* (L.); *Saissetia hemisphaerica* (Targ.).

**Encyrtus flavus** Howard, 1881. U. S. Dept. Agr. Rpt. for 1880, p. 367.  
♂ ♀.

Biology: Isaac, 1905. Calif. State Commr. Hort. Bien. Rpt. 1: 99, 102.—Timberlake,  
1913. Jour. Econ. Ent. 6: 295.—Maple, 1947. Calif. Univ. Pubs., Ent.  
8: 98-100, 102-103.

**fuscicornis** (Howard). Md., Minn. Host: *Toumeyella numismaticum* (P. and MeD.).

**Encyrtus fuscicornis** Howard, 1885. U. S. Dept. Agr. Div. Ent. Bul. 5: 13. ♀.

**interpunctus** (Dalman). Europe, Greenland, ?No. Amer.

**Encyrtus interpunctus** Dalman, 1820. Svenska Vetensk. Akad. Handl.  
41: 157. ♀.

**lachni** (Ashmead). Fla. Host: *Lachnus australis* Ashm.

**Homalotylus lachni** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 132. ♀.

**lunatus** (Dalman). Europe, ?No. Amer.

**Encyrtus lunatus** Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 156. ♀.

**marginatus** Ashmead. N. Mex.

**Microterys marginatus** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 392. ♀.

**mazzinini** Girault. Calif. Host: *Physokermes insignicola* (Craw).

**Microterys mazzinini** Girault, 1917. Descr. Stellarum Nov., pp. 12, 13.  
♂ ♀.

**montinus** (Packard). N. H. Host: ?*Lecanium* sp.

**Encyrtus Montinus** Packard, 1874. In Hitchcock and Huntington, Geol. of  
N. H., v. 1, p. 347. ♀.

Taxonomy: Howard, 1888. Ent. Soc. Wash. Proc. 1: 91.

**physokermis** Compere. Calif. Host: *Physokermes insignicola* (Craw).

**Microterys physokermis** Compere, 1926. Calif. Univ. Pubs., Ent. 4: 43. ♀.

**speciosissimus** Girault. Ill. Host: *Kermes pubescens* Bogue.

**Microterys speciosissimus** Girault, 1911. Canad. Ent. 43: 175. ♀.

**sublestus** (Howard). Conn., Fla. Hosts: ?*Lecanium* sp. on *Pinus palustris*, *L.* sp.

**Encyrtus sublestus** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 12. ♂.

**sylvius** (Dalman). Europe, ?No. Amer.

**Encyrtus sylvius** Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 154. ♀.  
Taxonomy: Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 394-397. ♂ ♀.

**tessellatus** (Dalman). Greenland.

*Encyrtus tessellatus* Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 342.  
♀.

Taxonomy: Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 420-423. ♂ ♀.

**titiani** Girault. Calif. Host: *Lecanium corni* Bouché.

*Microterys titiani* Girault, 1917. Descr. Stellarum Nov., p. 13. ♂ ♀.

Biology: DeBach, 1939. Jour. Econ. Ent. 32: 728.

**xanthopsis** Compere. Calif. Hosts: *Lecanium corni* Bouché; *L. persicae* (F.).

*Microterys xanthopsis* Compere, 1926. Calif. Univ. Pubs., Ent. 4: 41. ♀.

**yolandae** Compere. Calif. Host: *Kermes cockerelli* Ehrh.

*Microterys yolandae* Compere, 1926. Calif. Univ. Pubs., Ent. 4: 39. ♀.

#### Genus EPIENCYRTUS Ashmead

*Epiencyrtus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 340, 346, 396.

Type: *Encyrtus thyreodontis* Ashmead. Orig. desig.

**artaceae** (Howard). Fla.

*Encyrtus artaceae* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 252.  
♂ ♀.

Taxonomy: Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 397.

**thyreodontis** (Ashmead). Mass. Host: *Thyreodon atricolor* (Oliv.).

*Encyrtus thyreodontis* Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 156. ♀.

Biology: Dimmock, 1898. Ent. Soc. Wash. Proc. 4: 149.

#### Genus ISODROMUS Howard

*Isodromus* Howard, 1887. U. S. Dept. Agr. Ann. Rpt. for 1886, p. 488.

Type: *Isodromus iceryae* Howard. Monob.

*Parataneostigma* Girault, 1915. Ent. Soc. Amer. Ann. 8: 275.

Type: (*Parataneostigma nigriaxillae* Girault)=*Isodromus iceryae* Howard. Monob.

Revision: Timberlake, 1919. U. S. Natl. Mus. Proc. 56: 176-190.

The true hosts of this genus are probably Chrysopidae.

**atriventris** Ashmead. Ont., Que., Mass., Va., Fla. Host: *Chrysopa lateralis* Guér.

*Isodromus atriventris* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 379. ♀.

**iceryae** Howard. Md., D. C., N. C., S. C., Fla., La., Mo., Kans., Calif. Hosts: *Sypherobius angustus* (Banks); *S. californicus* (Banks); *Chrysopa californica* Coq.; *C. lateralis* Guér.; *C. rufilabris* Burm.; ?*Saissetia oleae* (Bern.).

*Isodromus iceryae* Howard, 1887. U. S. Dept. Agr. Ann. Rpt. for 1886, p. 488.  
♀.

*Parataneostigma nigriaxillae* Girault, 1915. Ent. Soc. Amer. Ann. 8: 275.  
♀.

*Isodromus pulcher* Girault, 1917. Descr. Stellarum Nov., p. 16. ♀.

Biology: Riley, 1889. U. S. Dept. Agr. Ann. Rpt. for 1888, pp. 85-86.—Clancy, 1946. Calif. Univ. Pubs., Ent. 7: 426-432.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 90.

**niger** Ashmead. Mass., D. C., Wis., Utah, Calif. Hosts: *Sypherobius angustus* (Banks); *Chrysopa californica* Coq.; *C. majuscula* Banks; *C. oculata* Say.

*Isodromus niger* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 379. ♀.

Biology: Clancy, 1946. Calif. Univ. Pubs., Ent. 7: 418-426.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 91-92.

**puncticeps** (Howard). D. C., Va., Fla., Calif. Hosts: *Chrysopa* sp.

*Encyrtus puncticeps* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 14.  
♀.

*Aphycus chrysopae* Ashmead, 1888. Ent. Amer. 4: 15. ♀.

#### Genus NEOCOCCIDENCYRTUS Compere

*Neococcidencyrtus* Compere, 1928. Calif. Univ. Pubs., Ent. 4: 209.

Type: *Neococcidencyrtus alula* Compere. Monob.

*alula* Compere. Calif. Host: *Diaspis zamiae* Morg.

*Neococcidencyrtus alula* Compere, 1928. Calif. Univ. Pubs., Ent. 4: 213.  
 $\sigma^{\circ}$   $\varphi$ .

### Genus COCCIDENCYRTUS Ashmead

*Coccidencyrtus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 339, 345, 383.

Type: *Encyrtus ensifer* Howard. Monob.

*ensifer* (Howard). Mass., Maine, Fla. Hosts: *Aspidiotus corticalis* Riley; *A. juglans-regiae* Comst.; *A. perniciosus* Comst.; *Targionia dearnessi* Ckll.

*Encyrtus ensifer* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 13.  $\sigma^{\circ}$   $\varphi$ .  
 Taxonomy: Girault, 1915. Ent. Soc. Amer. Ann. 8: 284.—Compere, 1928. Calif. Univ. Pubs., Ent. 4: 212.

*ochraceipes* Gahan. N. Y. Host: *Diaspis boisduvali* Sign.

*Coccidencyrtus ochraceipes* Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 18.  
 $\varphi$ .

### Genus BOTHIROCRAERA Timberlake

*Bothriocraera* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 567.

Type: *Bothriocraera flavipes* Timberlake. Monob.

*flavipes* Timberlake. Utah. Host: Mealybug on *Elymus*.

*Bothriocraera flavipes* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 568.  
 $\sigma^{\circ}$   $\varphi$ .

### Genus PSEUDAPHYCUS Clausen

*Pseudaphycus* Clausen, 1915. Calif. Agr. Expt. Sta. Bul. 258: 41.

Type: *Pseudaphycus angelicus* Howard. Monob.

Revision: Gahan, 1946. U. S. Natl. Mus. Proc. 96: 311-327.

Nearctic host records of this genus refer only to pseudococcine scale insects.

*abstrusus* Gahan. Va. Host: *Pseudococcus comstocki* (Kuw.).

*Pseudaphycus abstrusus* Gahan, 1946. U. S. Natl. Mus. Proc. 96: 313, 316.  
 $\sigma^{\circ}$   $\varphi$ .

*alveolatifrons* Gahan. N. J. Host: *Pseudococcus comstocki* (Kuw.).

*Pseudaphycus alveolatifrons* Gahan, 1946. U. S. Natl. Mus. Proc. 96: 314, 326.  $\sigma^{\circ}$   $\varphi$ .

*angelicus* (Howard). Que., Calif. Hosts: *Phenacoccus gossypii* Tns. and Ckll.; *Pseudococcus adonidum* (L.); *P. gahani* Green; *P. maritimus* (Ehrh.); *P. ryanii* (Coq.); *P.* sp. on *Artemisia californica*; *P.* sp. on passion flowers.

*Aphycus angelicus* Howard, 1898. U. S. Natl. Mus. Proc. 21: 245.  $\varphi$ .

Biology: Flanders, 1940. Jour. Econ. Ent. 33: 756-758.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 110-111.—Haeussler and Clancy, 1944. Jour. Econ. Ent. 37: 504-509.

Taxonomy: Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 573-574.  $\sigma^{\circ}$   $\varphi$ .

*graminicola* Timberlake. N. Mex., Utah. Hosts: *Trionymus utahensis* (Ckll.); pseudococcine coccid on *Elymus condensatus*.

*Pseudaphycus graminicola* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 570.  
 $\sigma^{\circ}$   $\varphi$ .

*limatulus* Gahan. Md. Host: *Phenacoccus* sp. on *Andropogon* sp.

*Pseudaphycus limatulus* Gahan, 1946. U. S. Natl. Mus. Proc. 96: 313, 324.  
 $\sigma^{\circ}$   $\varphi$ .

*malinus* Gahan. Ont., Conn., N. J., Del., Va., Ohio. Host: *Pseudococcus comstocki* (Kuw.).

*Pseudaphycus malinus* Gahan, 1946. U. S. Natl. Mus. Proc. 96: 313, 317.  
 $\sigma^{\circ}$   $\varphi$ .

*meracus* Gahan. Va. Host: *Ferrisiana virgata* (Ckll.).

*Pseudaphycus meracus* Gahan, 1946. U. S. Natl. Mus. Proc. 96: 314, 325.  
 $\sigma^{\circ}$   $\varphi$ .

*meritorius* Gahan. Va. Host: *Ferrisiana virgata* (Ckll.).

*Pseudaphycus meritorius* Gahan, 1946. U. S. Natl. Mus. Proc. 96: 312, 314.  
 $\sigma^{\circ}$   $\varphi$ .

**mundus** Gahan. Va., Ga., Fla., La. Hosts: *Phenacoccus gossypii* Tns. and Ckll.; *Pseudococcus adonidum* (L.); *P. boninensis* (Kuw.); *P. comstocki* (Kuw.).

**Pseudaphycus mundus** Gahan, 1946. U. S. Natl. Mus. Proc. 96: 313. ♂ ♀. Biology: Bynum, 1938. La. Agr. Expt. Sta. Bul. 298: 27-29 (*terryi*).—Clancy and Pollard, 1947. Jour. Econ. Ent. 40: 579.

**prosopidis** Timberlake. N. Mex. Host: *Pseudococcus prosopidis* (Ckll.).

**Pseudaphycus prosopidis** Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 571. ♀.

**websteri** Timberlake. Ill., Ind. Hosts: *Pseudococcus maritimus* (Ehrh.); ?mealybug on stem of *Elymus virginicus*.

**Pseudaphycus websteri** Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 572. ♀.

#### Genus ACEROPHAGUS E. A. Smith

**Acerophagus** E. A. Smith, 1880. No. Amer. Ent. 1: 83.

Type: *Acerophagus cocois* Smith. Monob.

**Rhopoideus** Howard, 1898. U. S. Natl. Mus. Proc. 21: 235.

Type: *Rhopoideus citrinus* Howard. Monob.

Revisions: Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 574-579.—Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 347-351.

**citrinus** (Howard). Calif., Nev. Hosts: ?*Aspidiotus perniciosus* Comst.; ?*Aula-caspis rosae* (Bouché).

**Rhopoideus citrinus** Howard, 1898. U. S. Natl. Mus. Proc. 21: 235. ♀.

**cocois** Smith. Mass., N. J., Pa., Ill. Hosts: *Phenococcus acericola* King; *Pulvinaria vitis* (L.).

**Acerophagus cocois** Smith, 1880. No. Amer. Ent. 1: 84. ♀.

Biology: Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 361.

**erii** Timberlake. Utah. Host: *Amonostherium lichtensiooides* (Ckll.).

**Acerophagus erii** Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 577. ♂ ♀.

**fasciipennis** Timberlake. Calif. Host: *Pseudococcus crawii* (Coq.).

**Acerophagus fasciipennis** Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 347, 351. ♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 54, 109.

**gutierreziae** Timberlake. N. Mex. Host: *Pseudococcus gutierreziae* (Ckll.).

**Acerophagus gutierreziae** Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 577. ♂ ♀.

**notativentris** (Girault). Calif. Hosts: *Pseudococcus maritimus* (Ehrh.); *P. sp.* on grape; *P. sp.*

**Pseudaphycus notativentris** Girault, 1917. Deser. Hym. Chalcidoid Variorum cum Observ. III, p. 10. ♂ ♀.

Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 256-266, 271-274.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 54.

**pallidus** Timberlake. Calif. Hosts: *Phenacoccus gossypii* Tns. and Ckll.; *P. solani* Ferris; *Pseudococcus eriogoni* (Ehrh.); *P. maritimus* (Ehrh.).

**Acerophagus pallidus** Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 348. ♂ ♀.

Biology: Flanders, 1944. Jour. Econ. Ent. 37: 312.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 54-55, 109.

**texanus** (Howard). Tex. Host: *Ferrisiana virgata* (Ckll.).

**Aphytus texanus** Howard, 1898. U. S. Natl. Mus. Proc. 21: 245. ♀.

#### Genus CIRRHENCYRTUS Timberlake

**Cirrhencyrtus** Timberlake, 1918. Univ. Calif. Pubs., Ent. 1: 360, 362.

Type: *Pseudococcobius ehrhorni* Timberlake. Monob.

**ehrhorni** (Timberlake). Calif. Hosts: *Pseudococcus ryani* (Coq.); *P. sequoiae* (Colm.).

**Pseudococcobius ehrhorni** Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 564. ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

Taxonomy: Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 360, 362.

### Genus AENASIOIDEA Girault

*Aenasioidea* Girault, 1911. Canad. Ent. 43: 171.

Type: *Aenasioidea latiscapus* Girault. Monob.  
Revision: Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 579-585.

*armitagei* Compere. Calif. Host: ?*Kermes* on native oak.

*Aenasioidea armitagei* Compere, 1926. Calif. Univ. Pubs., Ent. 4: 30. ♀.

*kermicola* Timberlake. Utah, Calif. Hosts: *Kermes galliformis* Riley; *K. nigro-punctatus* Ehrh. and Ckll.

*Aenasioidea kermicola* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 583. ♂ ♀.

*latiscapus* Girault. Ill. Host: *Kermes pubescens* Bogue.

*Aenasioidea latiscapus* Girault, 1911. Canad. Ent. 43: 173. ♀.

*pulchella* (Howard). N. Y., N. J., Okla. Hosts: *Kermes pubescens* Bogue; *K. sp.* on *Quercus velutina*.

*Aphytus pulchellus* Howard, 1898. U. S. Natl. Mus. Proc. 21: 242. ♀.

*trimblei* Dozier. Pa. Host: *Lecanium quercifex* Fitch.

*Aenasioidea trimblei* Dozier, 1935. Ent. Soc. Wash. Proc. 37: 183. ♂ ♀.

### Genus APHYCUS Mayr

*Aphytus* Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien Verh. 25: 695.

Type: *Encyrtus apicalis* Dalman. Desig. by Ashmead, 1900.

*Pseudococcobius* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 563.

Type: *Aphytus terryi* Fullaway. Orig. desig.

*Metaphycus* Mercet, 1917. Soc. Espan. Hist. Nat. Bol. 17: 129, 138.

Type: *Metaphycus zebratus* Mercet. Monob.

*Euaphycus* Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, p. 197.

Type: *Encyrtus hederaceus* Westwood. Desig. by Mercet, 1925.

*Melanaphycus* Compere, 1947. Calif. Univ. Pubs., Ent. 8: 1. N. syn.

Type: *Pseudococcobius fumipennis* Timberlake. Orig. desig.

*Erythraphycus* Compere, 1947. Calif. Univ. Pubs., Ent. 8: 7. N. syn.

Type: *Erythraphycus argyrocomus* Compere. Orig. desig.

Revisions: Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 587-639.—Compere, 1947.  
Calif. Univ. Pubs., Ent. 8: 1-13.

Nearctic host records refer either to coccids or to chalcidoid parasites of coccids.

*alberti* Howard. Calif. Host: *Coccus hesperidum* (L.).

*Aphytus alberti* Howard, 1898. U. S. Natl. Mus. Proc. 21: 242, 247. ♂ ♀.

Biology: Timberlake, 1913. Jour. Econ. Ent. 6: 294-295.

Taxonomy: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 94-95.

*annulipes* (Ashmead), n. comb. Ont., Fla. Hosts: *Lecanium corni* Bouché; *L. nigro-fasciatum* Perg.; *L. sp.* on *Quercus nigra*.

*Coccophagus annulipes* Ashmead, 1882. Canad. Ent. 14: 37. ♀.

*apicalis* (Dalman). Europe; ?No. Amer.

*Encyrtus apicalis* Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 153.

Taxonomy: Mercet, 1921. Fauna Ibérica, Himen., Encirridos, pp. 228-231.

*argyrocomus* (Compere), n. comb. Calif. Host: *Eriococcus* sp. on eroton, asters, and *Ericameria* sp.

*Erythraphycus argyrocomus* Compere, 1947. Calif. Univ. Pubs., Ent. 8: 8. ♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 84-86, 88.

*bifasciatus* (Timberlake), n. comb. N. H. Host: *Phenacoccus* sp. on apple.

*Pseudococcobius bifasciatus* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 566. ♂ ♀.

Taxonomy: Compere, 1939. Calif. Univ. Pubs., Ent. 7: 61.

*brunneus* Howard. N. Y., N. J. Host: *Aulacaspis rosae* (Bouché).

*Aphytus brunneus* Howard, 1885. U. S. Dept. Agr. Div., Ent. Bul. 5: 17, 31, 36. ♀.

*Aphytus brunneus* Dalla Torre, 1898. Cat. Hym., v. 5, p. 251. Emend.

**californicus** Howard. Pa., Md., Calif. Host: *Lecanium nigrofasciatum* Perg.

*Aphytus californicus* Howard, 1898. U. S. Natl. Mus. Proc. 21: 245. ♀.

**calvus** (Compere). Calif.

*Erythraphytes calvus* Compere, 1947. Calif. Univ. Pubs., Ent. 8: 11. ♀.

**ceroplastis** Howard. ?Fla., N. Mex. Hosts: ?*Ceroplastes floridensis* Comst.; *C. irregularis* Ckll.; *C. sp.* on *Artemisia*.

*Aphytus ceroplastis* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 18. ♂ ♀.

**clauseni** (Timberlake), n. comb. Calif. Hosts: *Amonostherium lichtensioides* (Ckll.); ?*A. sp.* on cactus; *Eriococcus adenostomae* Ehrh.; *E. palustris* Dodds.

*Pseudococcobius clauseni* Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 358. ♂.

Biology: Dodds, 1923. Jour. Ent. and Zool. 15: 5.

**cockerelli** Howard. N. Mex. Host: *Lecanium* sp. on osage orange.

*Aphytus cockerelli* Howard, 1898. U. S. Natl. Mus. Proc. 21: 243. ♀.

**coquilletti** Howard. Utah, Calif. Host: *Pulvinaria bigeloviae* Ckll.

*Aphytus coquilletti* Howard, 1898. U. S. Natl. Mus. Proc. 21: 244. ♀.

**eriococci** Timberlake. Utah, Calif. Host: *Eriococcus quercus* (Comst.).

*Aphytus eriococci* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 631. ♀.

**eruptor** Howard. Va., Fla. Host: ?*Ceroplastes* sp.

*Aphytus eruptor* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 364. ♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

**flameus** (Compere), n. comb. Calif. Host: *Lecanium quercifex* Fitch.

*Metaphytes flameus* Compere, 1947. Calif. Univ. Pubs., Ent. 8: 13. ♀ ♂.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 95.

**flavus** Howard. N. Y., Md., Fla., Tex. Hosts: *Coccus pseudomagnoliarum* (Kuw.);

*Lepidosaphes gloverii* (Pack.); *Pulvinaria acericola* (W. and R.); *Tachardia* sp.; *Toumeyella liriodendri* (Gmel.).

*Aphytus flavus* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 365. ♀.

**fumipennis** (Timberlake), n. comb. Calif. Hosts: *Eriococcus* sp.; *Phenacoccus solani* Ferris; *Pseudococcus solani* (Ckll.).

*Pseudococcobius fumipennis* Timberlake, 1918. Calif. Univ. Pubs., Ent., p. 356. ♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 93-94.

**fuscipennis** Howard. Calif. Host: *Lecanium corni* Bouché.

*Aphytus fuscipennis* Howard, 1898. U. S. Natl. Mus. Proc. 21: 241. ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

Taxonomy: Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 597-599.

**hederaceus** (Westwood). Europe, ?N. Y. Host: *Pulvinaria acericola* (W. and R.).

*Encyrtus hederaceus* Westwood, 1837. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 10: 441. ♀.

Taxonomy: Howard, 1900. U. S. Dept. Agr. Div. Ent. Bul. 22 (n. s.): 23.—Mercet, 1921. Fauna Ibérica, Himen., Encirtidos, pp. 203-204. ♂ ♀.

**helvolus** Compere. Calif. Hosts: *Coccus hesperidum* (L.); *C. pseudomagnoliarum* (Kuw.); *Lecanium corni* Bouché; *Saissetia hemisphaerica* (Targ.); *S. nigra* (Nietn.); *S. oleae* (Bern.).

*Aphytus helvolus* Compere, 1926. Calif. Univ. Pubs., Ent. 4: 25. ♂ ♀.

Biology: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 242, 274.—Flanders, 1942. Jour. Econ. Ent. 35: 690-698.—Woglum, LaFollette, Landon, and Lewis, 1947. Jour. Econ. Ent. 40: 819.

Morphology: Flanders, 1942. Ent. Soc. Amer. Ann. 35: 253, 262-265.

**howardi** Cockerell. N. Mex., Calif. Hosts: *Eriococcus tinsleyi* Ckll.; *E. sp.* on *Ericameria*.

*Aphytus howardi* Cockerell, 1898. Canad. Ent. 30: 276. ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 94-97.

Taxonomy: Compere, 1947. Calif. Univ. Pubs., Ent. 8: 12.

**immaculatus** Howard. Calif. Host: *Aonidiella aurantii* (Mask.).

*Aphytus immaculatus* Howard, 1894. U. S. Dept. Agr. Insect Life 6: 235. ♂.

- johnsoni** Howard. Ont., Que., Pa., Ill. Hosts: *Kermes* on ash; *Lecanium corni* Bouché; *L. nigrofasciatum* Perg. *Aphyucus johnsoni* Howard, 1898. U. S. Natl. Mus. Proc. 21: 244. ♀.
- kincaidi** (Timberlake). Wash. Host: *Lecanium coryli* (L.). *Metaphycus kincaidi* Timberlake, 1929. Pan-Pacific Ent. 6: 43. ♂ ♀.
- kingi** Timberlake. Kans. Host: *Pulvinaria* sp. *Aphyucus kingi* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 613. ♀.
- lecanii** Howard. Calif. Hosts: *Lecanium corni* Bouché; *L. pubescens* Ehrh.; *L. quercifex* Fitch; *Physokermes insignicola* (Craw.). *Aphyucus lecanii* Howard, 1898. U. S. Natl. Mus. Proc. 21: 242. ♀ (♂ mis-det.). Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.
- lounsburyi** Howard. Mass., Calif. Hosts: *Saissetia oleae* (Bern.); *Cheiloneurus inimicus* Comp. *Aphyucus lounsburyi* Howard, 1898. U. S. Natl. Mus. Proc. 21: 244. ♀. Biology: Clausen, 1942. Jour. Econ. Ent. 35: 748.—Flanders, 1942. Ent. Soc. Amer. Ann. 35: 252, 262.—Flanders, 1942. Jour. Econ. Ent. 35: 696.—Flanders, 1943. Jour. Econ. Ent. 36: 922–925.—Flanders, 1944. Jour. Econ. Ent. 37: 409.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 95, 97–99. Woglum, LaFollette, Landon, and Lewis, 1947. Jour. Econ. Ent. 40: 819. Morphology: Compere, 1947. Calif. Univ. Pubs., Ent. 8: 8–9. Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 275–292.
- luteolus** Timberlake. Calif. Hosts: *Coccus hesperidum* L.; *C. pseudomagnoliarum* (Kuw.); *Lecanium corni* Bouché; *Saissetia oleae* (Bern.). *Aphyucus luteolus* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 636. ♂ ♀. Biology: Flanders, 1942. Jour. Econ. Ent. 35: 263.—Flanders, 1942. Jour. Econ. Ent. 35: 832–833.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 96, 99–100.—Woglum, LaFollette, Landon, and Lewis, 1947. Jour. Econ. Ent. 40: 819–820. Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 274–275.
- maculipennis** Timberlake. Mass. Host: *Lecanium corni* Bouché. *Aphyucus maculipennis* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 593. ♂ ♀.
- maculipes** Howard. Ont., Mass., S. C., Ohio, Ill. Hosts: *Coccus hesperidum* L.; *Lecanium corni* Bouché; *L.* sp. on *Quercus nigra*; *L.* sp. *Aphyucus maculipes* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 18, 41. ♂ ♀. *Aphyucus flaviceps* Howard, 1898. U. S. Natl. Mus. Proc. 21: 246. ♀.
- matteolus** (Compere). Calif. *Erythraphycus matteolus* Compere, 1947. Calif. Univ. Pubs., Ent. 8: 10. ♂.
- mexicanus** Howard. Pa., La. Hosts: *Ceroplastes cirripediformis* Comst. *Aphyucus mexicanus* Howard, 1898. U. S. Natl. Mus. Proc. 21: 247. ♀.
- oregonensis** Howard. Oreg. Hosts: *Pulvinaria* sp. on Oregon flowering currant; *P.* sp. on *Ribes*. *Aphyucus oregonensis* Howard, 1898. U. S. Natl. Mus. Proc. 21: 246. “♀”= ♂.
- physokermis** Timberlake. Calif. Host: *Physokermes insignicola* (Craw.). *Aphyucus physokermis* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 606. ♂ ♀.
- psyllidis** (Compere), n. comb. Calif. Host: *Paratriozia cockerelli* (Sulc.). *Metaphycus psyllidis* Compere, 1944. Pan-Pacific Ent. 19: 71. ♂ ♀.
- pulvinariae** Howard. Widespread in U. S. and Canada. Hosts: *Lecanium corni* Bouché; *L. fletcheri* Ckll.; *L. nigrofasciatum* Perg.; *L.* sp. on Japanese persimmon; *L.* sp. on wild goose plum; *Pulvinaria acericola* (W. and R.); *P. vitis* (L.); *P.* sp. on plum; *P.* sp. on willow; *Saissetia nigra* (Nietn.). *Aphyucus pulvinariae* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 238. ♀.
- punctipes** (Dalman). Europe; ?No. Amer. *Encyrtus punctipes* Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 154,

**rileyi** Timberlake. Ont., N. Y., Ohio, Mo., Tex. Hosts: *Lecanium corni* Bouché; *L. sp.* on Japanese persimmon.

*Aphytus rileyi* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 600. ♂ ♀.

**schwarzi** Timberlake. Ariz.

*Aphytus schwarzi* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 599. ♀.

**similis** Timberlake. Tex. Host: *Lecanium* sp. on Japanese persimmon.

*Aphytus similis* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 605. ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

**stanleyi** (Compere), n. comb. Calif. Hosts: *Coccus hesperidum* L.; *C. pseudomagnolarium* (Kuw.); *Eucalymnatus tessellatus* (Sign.); *Saissetia oleae* (Bern.).

*Metaphycus stanleyi* Compere, 1940. Bul. Ent. Res. 31: 10, 11, 20. ♂ ♀.  
Biology: Flanders, 1940. In Compere, Hilgardia 13: 418.—Flanders, 1942. Jour. Econ. Ent. 35: 833.

Taxonomy: Compere, 1940. Hilgardia 13: 417–419.

**stomachosus** Girault. Mass. to Va. and Ill. Host: *Lecanium nigrofasciatum* Perg.

*Aphytus stomachosus* Girault, 1909. Psyche 16: 77. ♂ ♀.

**subfasciatus** Timberlake. Kans. Host: *Lecanium corni* Bouché.

*Aphytus subfasciatus* Timberlake, 1916. U. S. Natl. Mus. Proc. 50: 601. ♂ ♀.

#### Genus APHYCOIDEUS Williams

**Aphycoideus** Williams, 1916. Psyche 23: 153.

Type: *Aphycoideus io* Williams. Monob.

**io** Williams. Mass. Host: *Malacosoma americanum* (F.).

*Aphycoideus io* Girault (!) Williams, 1916. Psyche 23: 153.

*Aphycoideus io* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 5.

#### Genus BLASTOTHRIX Mayr

**Blastothrix** Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien Verh. 25: 697.

Type: *Encyrtus sericeus* Dalman. Desig. by Ashmead, 1900.

*Anagyropis* Girault, 1917. Insecutor Inscitiae Menstruus 5: 136.

Type: *Anagyrus purpureus* Girault. Orig. desig.

**adjutabilis** Howard. Va., Fla. Hosts: *Lecanium* spp. on *Crataegus*, on Japanese persimmon, and on oak.

*Blastothrix adjutabilis* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 365. ♀.

**incerta** Howard. Fla. Hosts: ?*Lecanium* sp. on mesquite; *L. sp.*

*Blastothrix incerta* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 366. ♂.

**longipennis** Howard. Ont., N. Y., Mass., D. C., Mich., Wis., Minn., N. Mex., Calif., B. C. Hosts: *Kermes pubescens* Bogue; *Lecanium corni* Bouché; *L. fletcheri* Ckll.; *L. pruinosa* Coq.; *L. quercifex* Fitch.

?*Encyrtus sericeus* Dalman, 1820. Svenska Vetensk. Akad. Handl. 357. ♀.

*Blastothrix longipennis* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 366. ♀.

Biology: Glendenning, 1931. Brit. Columbia Ent. Soc. Proc. 28: 30–31.—Lyne, 1934. Calif. Dept. Agr. Monthly Bul. 23: 232.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 67–68.

Taxonomy: Girault, 1915. Ent. Soc. Amer. Ann. 8: 274.

**sericea** (Dalman). Que., N. H., ?Conn., Pa., La., B. C. Hosts: *Kermes* sp. on ash; *Lecanium coryli* (L.); *L. nigrofasciatum* Perg.; ?*Baccha fascipennis* Wied.

*Encyrtus sericeus* Dalman, 1820. Svenska Vetensk. Akad. Handl. 357. ♀.

?*Blastothrix longipennis* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 366. ♀.

Biology: Silvestri, 1919. Lab. Zool. e Agr. Portici Bol. 13: 163–173.—Glendenning, 1933. Canad. Ent. 65: 169–171.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 68–69.

Taxonomy: Girault, 1915. Ent. Soc. Amer. Ann. 8: 274.—Silvestri, 1919. Lab. Zool. e Agr. Portici Bol. 13: 163–173.—Mercet, 1921. Fauna Ibérica, Himen. Encirtidos, pp. 249–251.

### Genus OOENCYRTUS Ashmead

*Ooencyrtus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 338, 345, 381.

Type: *Encyrtus clisiocampae* Ashmead. Orig. desig.

*Schedius* Howard, 1910. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 19: 2.

Type: *Schedius kuvanae* Howard. Monob.

Members of this genus attack only the egg stage of their host.

**anabrivorus** Gahan. Wyo. Host: *Anabrus simplex* Hald.

*Ooencyrtus anabrivorus* Gahan, 1942. U. S. Natl. Mus. Proc. 92: 40. ♂ ♀.

**anasae** (Ashmead). N. C., Fla., La., Kans. Hosts: *Solubea pugnax* (F.); *Anasa tristis* (Deg.).

*Encyrtus anasae* Ashmead, 1887. U. S. Dept. Agr. Div. Ent. Bul. 14: 23. ♀. Biology: Ingram, 1927. U. S. Dept. Agr. Farmers' Bul. 1543: 4.—Douglas and Ingram, 1942. U. S. Dept. Agr. Cir. 632: 6.

**californicus** Girault. Calif. Host: *Anasa tristis* (Deg.).

*Oenocytus (!) californicus* Girault, 1917. Descr. Stellarum Nov. p. 22. ♀. Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 104–105.

**clisiocampae** (Ashmead). N. Y., Mass., Conn., N. J., Ohio, Ind., Ill., Minn. Hosts: *Malacosoma americanum* (F.); *M. disstria* Hbn.

*Encyrtus clisiocampae* Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser. Bul. 1: 163. ♀.

Biology: Hodson, 1939. Ent. Soc. Amer. Ann. 32: 131–136.

**johnsoni** (Howard). Md., Va., N. C., Fla., Tex., Calif. Hosts: *Arilus cristatus* (L.); *Chlorochroa sayi* Stål; *Murgantia histrionica* (Hahn); coccinellid eggs.

*Encyrtus Johnsoni* Howard, 1898. Canad. Ent. 30: 18. ♂ ♀.

Biology: Drake, 1920. Fla. State Plant Bd. Quart. Bul. 4: 81.—Essig, 1922. Jour. Ent. and Zool. 14: 76.—White and Brannon, 1933. U. S. Dept. Agr. Farmers' Bul. 1712: 5.—Maple, 1937. Ent. Soc. Amer. Ann. 30: 123–154.—Huffaker, 1941. Jour. Econ. Ent. 34: 117.—DeBach, 1942. Jour. Econ. Ent. 35: 787.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 105–107.

**kuwanai** (Howard), emend. New England. Hosts: *Nygma phaeorrhoea* (Donov.); *Porthetria dispar* (L.); *Stilpnobia salicis* (L.); *Apanteles melanoscelus* (Ratz.).

*Schedius kuvanae* Howard, 1910. U. S. Dept. Agr. Bur. Ent. Tech. Bul. 19: 3. ♂ ♀.

Biology: Howard and Fiske, 1911. U. S. Dept. Agr. Bur. Ent. Bul. 91: 86, 176–188, 307.—Crossman, 1925. Jour. Agr. Res. 30: 643–675.—Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 25.—Burgess and Crossman, 1929. U. S. Dept. Agr. Tech. Bul. 86: 31–38.—Parker, 1933. Jour. Agr. Res. 46: 23–34.—Lloyd, 1935. Nature 135: 472–473.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 107–109.

**moneilemae** Gahan. Tex. Host: *Moneilema crassa* Lec.

*Ooencyrtus moneilemae* Gahan, 1925. Ent. Soc. Wash. Proc. 27: 167. ♂ ♀.

### Genus APHIDENCYRTUS Ashmead

*Aphidencyrtus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 340, 347, 398.

Type: (*Encyrtus aphidiphagus* Ashmead) = [*Encyrtus*] *aphidivorus* (Mayr). Orig. desig.

**aphidivorus** (Mayr). N. Y. to Conn., Va., and Ind.; Fla., La., Idaho. Hosts: *Amphorophora solani* (Thos.); *Anuraphis bakeri* (Cowen); *Aspidaphis aquatica* (G. and B.); *Brevicoryne brassicae* (L.); *Macrosiphum cornelli* Patch; *M. granarium* (Kby.); *M. liriodendri* (Monell); *Myzus persicae* (Sulz.); *Siphonophora avenae* (F.); *Toxoptera graminum* (Rond.); *Trialeurodes vaporariorum* (Westw.); *Aphelinus jucundus* Gahan; *A. samborniae* Gahan; *A. semiflavus* How.; *A. sp.*; *Aphidius testaceipes* (Cress.); *A. spp.*

*Encyrtus aphidivorus* Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien. Verh. 25: 712, 724. ♂ ♀.

*Eupelmus (!) schizoneurae* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xvi. ♂ ♀.

*Encyrtus aphidiphagus* Ashmead, 1887. U. S. Dept. Agr. Div. Ent. Bul. 14: 14. ♀.

*Encyrtus? megourae* Ashmead, 1887. U. S. Dept. Agr. Div. Ent. Bul. 14: 19. ♂ ♀.

*Encyrtus Websteri* Howard, 1890. U. S. Dept. Agr. Insect Life 2: 247. ♂ ♀. Biology: Griswold, 1929. Ent. Soc. Amer. Ann. 22: 445.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 61–62.

Taxonomy: Gahan, 1930. U. S. Natl. Mus. Proc. 77 (8): 6.

*lachni* (Ashmead). Fla. Host: *Lachnus australis* Ashm.

*Eupelmus* (!) *lachni* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xvi. ♀.

Taxonomy: Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 18.

### Genus SYRPHOPHAGUS Ashmead

*Syrphophagus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 340, 346, 397.

Type: (*Encyrtus mesograptae* Ashmead)=[*Pteromalus*] *quadrimaculatae* (Ashmead). Orig. desig.

**4-maculatae** (Ashmead). S. C., Fla., Miss. Hosts: *Syrphus quadrimaculatus* Ashm.; *S. ribesii* (L.); *Toxomerus polita* (Say).

*Pteromalus 4-maculatae* Ashmead, 1881. Canad. Ent. 13: 171. ♂ ♀.

*Encyrtus mesograptae* Ashmead, 1896 (nec 1887). Amer. Ent. Soc. Trans. 23: 232. ♀.

Taxonomy: Girault, 1916. Canad. Ent. 48: 344.

**smithi** Kamal. Calif. Hosts: *Syrphus nitens* Zett.; *S. opinator* O. S.

*Syrphophagus smithi* Kamal, 1926. Canad. Ent. 58: 284. ♀.

Biology: Kamal, 1939. Egypt Min. Agr. Tech. and Sci. Serv. Ent. Sect. Bul. 207: 34 46, 48. ♀.

**vectius** (Walker). Fla.

*Encyrtus Vectius* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 21. ♂.

### Genus PSEUDENCYRTUS Ashmead

*Pseudencyrtus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 340, 346, 396.

Type: *Encyrtus cecidomyiae* Howard. Orig. desig.

**cecidomyiae** (Howard). N. Y., Conn., Va. Host: *Phytophaga rigidae* (O. S.).

*Encyrtus cecidomyiae* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 16. ♂ ♀.

Taxonomy: Girault, 1916. Ent. News 27: 402.

**pleuralis** (Ashmead), n. comb. Ohio. Host: ?*Atomaria* sp.

*Encyrtus pleuralis* Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser. Bul. 1: 163. ♀.

### Genus HOLCENCYRTUS Ashmead

*Holcencyrtus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 339, 346, 394.

Type: *Aphytus niger* Ashmead. Monob.

**niger** (Ashmead). Fla.

*Aphytus niger* Ashmead, 1888. Ent. Amer. 4: 15. ♂.

**physokermis** Girault. Wis. Host: *Physokermes piceae* (Schrank).

*Holcencyrtus physokermis* Girault, 1916. Ent. News 27: 226. ♂ ♀.

### Genus CHEILONEURUS Westwood

*Cheiloneurus* Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 3: 343.

Type: *Encyrtus elegans* Dalman. Monob.

*Chiloneurus* Foerster, 1856. Hym. Stud., v. 2, p. 50. Emend.

*Cristatithorax* Girault, 1911. Canad. Ent. 43: 169.

Type: *Cristatithorax pulcher* Girault. Monob.

Revision: Gahan, 1913. Ent. Soc. Amer. Ann. 7: 247.

**albicornis** Howard. Ont., N. H. to S. C., La., Mo., Iowa, Wis., Colo. Hosts: *Kermes* sp. on oak; *Lecanium caryaef* Fitch; *L. corni* Bouché; *L. fletcheri* Ckll.; *L. nigrofasciatum* Perg.; *Physokermes piceae* (Schrank); *Pulvinaria acericola* (W. and R.); *P. vitis* (L.); *P.* sp. on poison ivy.

**Chiloneurus albicornis** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 363. ♀.

Taxonomy: Girault, 1916. Ent. Soc. Amer. Ann. 9: 300. ♂ ♀.

**cupreicollis** Ashmead. Fla. Host: *Lecanium* sp. on oak.

**Chiloneurus cupreicollis** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 131. ♀.

**cushmani** Crawford. Va. Host: *Kermes* sp.

**Chiloneurus cushmani** Crawford, 1911. Ent. Soc. Wash. Proc. 13: 126. ♂ ♀.

**dubius** Howard. Mass., Mo., Wis. Hosts: *Kermes* sp., *Lecanium* sp. from dwarf mountain pine; *L.* sp. from Scotch pine.

**Chiloneurus dubius** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 17, 42. ♂.

**elegans** (Dalman). N. Y., N. J., Pa., Md., Va.; Europe. Hosts: *Phytophaga destructor* (Say); *Platygaster vernalis* (Myers).

**Encyrtus elegans** Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 151. ♀.

Biology: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 60-64.—Hill, Pinckney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 5, 12.

Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 5-6, 11-13.

**inimicus** Compere. Calif. Hosts: *Aphytus lounsburyi* How.; *A. physokermis* Timb.

**Cheiloneurus inimicus** Compere, 1925. Calif. Univ. Pubs., Ent. 3: 296. ♂ ♀.

Taxonomy: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 71.

**lineascapus** Gahan. Md., La., Calif. Hosts: *Kermes* sp. on lilac; *K.* sp. on oak; *Saissetia oleae* (Bern.); *Aphytus lounsburyi* How.

**Cheiloneurus lineascapus** Gahan, 1910. Canad. Ent. 42: 207. ♀.

Biology: Smith, 1933. Ent. Soc. Amer. Ann. 26: 525.

Morphology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 242, 271-272.

**noxius** Compere. Calif. Hosts: *Saissetia oleae* (Bern.); *Aphytus lounsburyi* How.

**Cheiloneurus noxius** Compere, 1925. Calif. Univ. Pubs., Ent. 3: 296, 302. ♀.

Biology: Flanders, 1940. Ent. Soc. Amer. Ann. 33: 252.—LePelley, 1937. Bul. Ent. Res. 28: 181-183.

Morphology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 71.

Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 242, 272-274.

**pulcher** (Girault), n. comb. Ill. Host: *Kermes pubescens* Bogue.

**Cristatithorax pulcher** Girault, 1911. Canad. Ent. 43: 170. ♀.

**swezeyi** Ashmead. Conn., Ohio. Hosts: *Ormenis septentrionalis* (Spin.); *Psilodryinus typhlocybae* (Ashm.).

**Cheiloneurus swezeyi** Ashmead, 1903. Ent. News 14: 193. ♂ ♀.

Biology: Swezey, 1903. Ohio Nat. 3: 446-447.

#### Genus **ACHRYSOPOPHAGUS** Girault

**Achrysopophagus** Girault, 1915. Queensland Mus. Mem. 4: 89.

Type: *Achrysopophagus oriductus* Girault. Orig. desig.

Revision: Mercet, 1928. Eos 5: 359-364.

**americanus** Girault. D. C.

**Achrysopophagus americanus** Girault, 1917. Descr. Stellarum Nov., p. 16. ♀.

**dactylopii** (Howard). D. C., N. Mex., Minn. Hosts: *Phenacoccus cevalliae* Ckll.; *Pseudococcus citri* (Risso).

**Chiloneurus dactylopii** Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 17. ♂ ♀.

**modestus** Timberlake, Calif. Hosts: *Pseudococcus maritimus* (Ehrh.); *Anagyrus yuccae* (Coq.); *Zarhopalus corvinus* (Gir.).

**Achrysopophagus modestus** Timberlake, 1924. Calif. Univ. Pubs., Ent. 3: 240. ♀.

Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 257-266, 284-286.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 55.

### Genus CHILONEURINUS Mercet

*Chiloneurinus* Mercet, 1921. Fauna Ibérica, Himen. Encirtidos, p. 646.  
Type: *Chiloneurus microphagus* Mayr. Monob.

*microphagus* (Mayr). N. Y., Conn., N. J., Va., S. C., Calif. Hosts: *Aspidiotus juglans-regiae* Comst.; *A. perniciosus* Comst.; *Lecanium nigrofasciatum* Perg.; *Lepidosaphes ulmi* (L.).

*Chiloneurus microphagus* Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien. Verh. 25: 745, 746. ♀.

*Chiloneurus diaspidinarum* Howard, 1894. U. S. Dept. Agr. Insect Life 7: 256. ♀.

*Aphidencyrtus aspidioti* Girault, 1915. Ent. Soc. Amer. Ann. 8: 283, 284. ♀.  
Biology: Griswold, 1925. N. Y. (Cornell) Agr. Expt. Sta. Mem. 93: 44-47.  
Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 1.

### Genus CHRYSOPOPHAGUS Ashmead

*Chrysopophagus* Ashmead, 1894. U. S. Dept. Agr. Insect Life 7: 245, 246.  
Type: *Chrysopophagus compressicornis* Ashmead. Monob.

*Saronotum* Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 1: 259.

Type: *Saronotum australiae* Perkins. Desig. by Gahan and Fagan, 1923.

*americanus* (Perkins). Ohio. Host: Dryinid.

*Saronotum americanum* Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 1: 260. ♀.

*amplicornis* (Gahan). Tex. Host: *Eriococcus* sp. on *Bouteloua*.

*Cheiloneurus amplicornis* Gahan, 1914. Ent. Soc. Amer. Ann. 7: 247. ♀.  
Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

*banksi* Howard. Tex., N. Mex.

*Chrysopophagus banksi* Howard, 1898. U. S. Natl. Mus. Proc. 21: 247. ♀.

*compressicornis* Ashmead. N. C., S. C., Miss., La., Mo., Iowa, Calif. Hosts: *Chrysopa californica* Coq.; *C. majuscula* Banks; *C. plorabunda* Fitch; *C. rufilabris* Burm.

*Chrysopophagus compressicornis* Ashmead, 1894. U. S. Dept. Agr. Insect Life 7: 246. ♂ ♀.  
Biology: Clancy, 1946. Calif. Univ. Pubs., Ent. 7: 432-440.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 72.

*kansensis* Girault. Kans.

*Chrysopophagus kansensis* Girault, 1917. U. S. Natl. Mus. Proc. 53: 447. ♀.

### Genus CERAPTEROCERUS Westwood

*Cerapterocerus* Westwood, 1833. Mag. Nat. Hist. 6: 495.

Type: *Cerapterocerus mirabilis* Westwood. Monob.

*Telegraphus* Ratzeburg, 1848. Ichn. d. Forstins., v. 2, p. 152.

Type: (*Telegraphus maculipennis* Ratzeburg)=*Cerapterocerus mirabilis* Westwood. Monob.

*floridanus* Ashmead. Fla.

*Cerapterocerus floridanus* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 190.  
♂.

### Genus HABROLEPIS Foerster

*Habrolepis* Foerster, 1856. Hym. Stud., v. 2, pp. 34, 38.

Type: (*Encyrtus nubilipennis* Walker)=*[Encyrtus] dalmani* (Westwood). Orig. desig.

*dalmani* (Westwood). Mass., Conn., Ohio. Hosts: *Asterolecanium quercicola* (Bouché); *A. variolosum* (Ratz.); *Lepidosaphes ulmi* (L.).

*Encyrtus Dalmanni* Westwood, 1837. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 10: 440.

*Habrolepis Dalmani* Mayr, 1876 (1875). Zool.-Bot. Gesell. Wien Verh. 75: 751.  
♂ ♀. Emend.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 90.

**rouxi** Compere. Calif. Host: *Aonidiella aurantii* Mask. on citrus.

**Habrolepis rouxi** Compere, 1936. Bul. Ent. Res. 27: 493-496. ♀.

Biology: Flanders, 1942. Ecology 23: 120.—Flanders, 1944. Jour. Econ. Ent. 37: 441.—Flanders, 1945. Amer. Nat. 79: 126, 131, 133-136.—Flanders, 1946. Pan-Pacific Ent. 22: 35.

### Genus ANABROLEPIS Timberlake

**Anabrolepis** Timberlake, 1920. Hawaii. Ent. Soc. Proc. 4: 131.

Type: *Anabrolepis extranea* Timberlake. Orig. desig.

**zetterstedtii** (Westwood). Maine to Ohio and Mich.; B. C. Hosts: *Aspidiotus ostreaeformis* Curt.; *A. perniciosus* Comst.; *Lepidosaphes ulmi* (L.).

**Encyrtus Zetterstedtii** Westwood, 1837. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 10: 440.

Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 2.

### Genus ADELENCYRTUS Ashmead

**Adelencyrtus** Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 341, 400.

Type: *Encyrtus chionaspidis* Howard. Orig. desig.

**Epiencyrtoides** Girault, 1915. Queensland Mus. Mem. 4: 108.

Type: *Epiencyrtoides quadridentatus* Girault. Orig. desig.

**aulacaspidis** (Brèthes). Ill., Calif. Host: *Aulacaspis rosae* (Bouché).

**Prionomitus aulacaspidis** Brèthes, 1914. An. de Zool. Aplicada 1: 29. ♀.

Taxonomy: Mercet, 1921. Fauna Ibérica, Himen. Encirtidos, pp. 294-297, 698.

### Genus CERAPTROCEROIDEUS Girault

**Ceraptroceroideus** Girault, 1916. Psyche 23: 47.

Type: *Ceraptroceroideus cinctipes* Girault. Monob. and orig. desig.

**cinctipes** Girault. Kans. Host: *Rhizaspidiotus dearnessi* Ckll.

**Ceraptroceroideus cinctipes** Girault, 1916. Psyche 23: 47. ♂ ♀.

### Genus CHRYSOPLATYGERUS Ashmead

**Rileya** Howard, 1888. In Smith, Ent. Amer. 4: 80. Preocc.

Type: *Rileya splendens* Howard. Monob.

**Chrysoplatygerus** Ashmead, 1889. Canad. Ent. 21: 38. N. name.

Revision: Timberlake, 1922. U. S. Natl. Mus. Proc. 61 (2): 1-10.

**ferrisi** Timberlake. Calif. Host: *Pseudococcus adenostomae* Ferris.

**Chrysoplatygerus ferrisi** Timberlake, 1922. U. S. Natl. Mus. Proc. 61 (2): 7.

♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

**splendens** (Howard). Que. (greenhouses), Calif. Hosts: *Pseudococcus adonidum* (L.); *P. citri* (Risso); *P. maritimus* (Ehrh.); *P. ryanii* (Coq.).

**Rileya splendens** Howard, 1888. In Smith, Ent. Amer. 4: 80.

Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 256-266, 279.—Clancy, 1944. Jour. Econ. Ent. 37: 450.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 115.

### Genus ANICETUS Howard

**Anicetus** Howard, 1896. U. S. Natl. Mus. Proc. 18: 639.

Type: *Anicetus ceylonensis* Howard. Monob.

**Asteropaeus** Howard, 1898. U. S. Natl. Mus. Proc. 21: 231. N. syn.

Type: *Asteropaeus primus* Howard. Monob.

**Habroleptopterygis** Girault, 1915. Queensland Mus. Mem. 4: 86.

Type: *Habroleptopterygis felix* Girault. Monob.

**Paraceraptrocerus** Girault, 1920. U. S. Natl. Mus. Proc. 58: 184.

Type: *Paraceraptrocerus africanus* Girault. Monob.

**annulatus** Timberlake. Calif.

**Anicetus annulatus** Timberlake, 1919. Hawaii. Ent. Soc. Proc. 4: 227. ♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 60.

### Genus ZARHOPALUS Ashmead

*Zarhopalus* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 342, 406.

Type: *Zarhopalus sheldoni* Ashmead. Orig. desig.

*Anagyrella* Girault, 1915. N. Y. Ent. Soc. Jour. 23: 168.

Type: *Anagyrella corvina* Girault. Monob.

Revision: Timberlake, 1924. Calif. Univ. Pubs., Ent. 3: 235-236.

**corvinus** (Girault). Que., Calif. Hosts: *Pseudococcus maritimus* (Ehrh.); *P. sp.*

*Anagyrella corvina* Girault, 1915. N. Y. Ent. Soc. Jour. 23: 169. ♀.

Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 256-271.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 55, 115.

**inquisitor** (Howard). Fla. Host: *Pseudococcus citri* (Risso).

*Encyrtus inquisitor* Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 367. ♀.

**sheldoni** Ashmead. N. Y., Calif. Host: *Pseudococcus maritimus* (Ehrh.).

*Zarhopalus sheldoni* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 406. ♀.

Biology: Clausen, 1924. Calif. Univ. Pubs., Ent. 3: 257-265.—Clancy and Pollard, 1947. Jour. Econ. Ent. 40: 578-579.

### Genus STEMMATOSTERES Timberlake

*Stemmatosteres* Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 352.

Type: *Stemmatosteres apterus* Timberlake. Monob.

**apterus** Timberlake. Calif. Host: *Pseudococcus timberlakei* Ckll.

*Stemmatosteres apterus* Timberlake, 1918. Calif. Univ. Pubs., Ent. 1: 354. ♂ ♀.

Biology: Maple, 1947. Calif. Univ. Pubs., Ent. 8: 109, 114.

### Genus HELEGONATOPUS Perkins

*Helegonatopus* Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 1: 257.

Type: *Helegonatopus pseudophanes* Perkins. Monob.

**pseudophanes** Perkins. Ohio. Host: *Gonatopus* sp. on allied form.

*Helegonatopus pseudophanes* Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 1: 258. ♀.

### Genus COCCOBIAUS Ratzeburg

*Coccobius* Ratzeburg, 1852. Ichn. d. Forstins. v. 3, p. 195.

Type: *Coccobius annulicornis* Ratzeburg. Desig. by Gahan and Fagan, 1923.

**diaspidis** Ashmead. D. C. Host: *Aulacaspis rosae* (Bouché).

*Coccobius diaspidis* Ashmead, 1900. U. S. Natl. Mus. Proc. 22: 408. ♀.

### Genus PSEUDHOMALOPODA Girault

*Pseudhomalopoda* Girault, 1915. N. Y. Ent. Soc. Jour. 23: 171.

Type: *Pseudhomalopoda prima* Girault. Monob.

**prima** Girault. Fla. Hosts: *Aleurocanthus woglumi* Ashby; *Aonidiella aurantii* (Mask.); *Chrysomphalus aonidum* (L.).

*Pseudhomalopoda prima* Girault, 1915. N. Y. Ent. Soc. Jour. 23: 171. ♀. Biology: Griffiths and Stearns, 1947. Fla. Ent. 30: 4-7.

### Genus EUSEMION Dahlbom

*Eusemion* Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Förh. 14: 293 (no species).

Type: *Encyrtus corniger* Haliday. Included by Thomson, 1875.

Revision: Compere, 1938. Bul. Ent. Res. 29: 320.

**californicum** Compere. Calif. Hosts: *Coccus hesperidum* L.; *Saissetia oleae* (Bern.); *Aphytus lounsburyi* How.

*Eusemion californicum* Compere, 1925. Calif. Univ. Pubs., Ent. 3: 296, 304.  
 $\sigma$  ♀.

Biology: Smith, 1933. Ent. Soc. Amer. Ann. 26: 525.—Flanders, 1940. Ent. Soc. Amer. Ann. 33: 252.—Flanders, 1943. Jour. Econ. Ent. 36: 923-924.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 90.

*longipennis* (Ashmead). Fla., Calif. Hosts: *Lecanium* sp.; *Aphytus flavus* How.; *Microterys flavus* How.

*Mira longipennis* Ashmead, 1888. Ent. Amer. 4: 17. ♀.

Biology: Timberlake, 1913. Jour. Econ. Ent. 6: 301.

#### Genus ATROPATES Howard

*Atropates* Howard, 1898. U. S. Natl. Mus. Proc. 21: 236.  
Type: *Atropates collinsi* Howard. Monob.

*collinsi* Howard. N. Y., Wash. Host: *Pulvinaria vitis* (L.).

*Atropates collinsi* Howard, 1898. U. S. Natl. Mus. Proc. 21: 236. ♂ ♀.

#### Genus XANTHOENCYRTUS Ashmead

*Xanthoencyrtus* Ashmead, 1902. Canad. Ent. 34: 302.

Type: *Xanthoencyrtus nigroclavatus* Ashmead. Monob.

*Mirastymachus* Girault, 1915. N. Y. Ent. Soc. Jour. 23: 166.

Type: *Mirastymachus europaeus* Girault. Orig. desig.

*Scelioencyrtus* Girault, 1915. Queensland Mus. Mem. 4: 161.

Type: *Scelioencyrtus nigriclavatus* Girault. Orig. desig.

*Pholidoceras* Mercet, 1918. Soc. Espan. Hist. Nat. Bol. 18: 237.

Type: *Pholidoceras brachyptera* Mercet. Monob.

Revision: Mercet, 1928. Eos. 4: 5-7.

*americanus* (Girault). D. C.

*Mirastymachus americanus* Girault, 1915. N. Y. Ent. Soc. Jour. 23: 167. ♀.

*nigroclavatus* Ashmead. Ind., Ill., S. Dak. Host: Coccid on *Panicum*.

*Xanthoencyrtus nigroclavatus* Ashmead, 1902. Canad. Ent. 34: 302. ♀.

Biology: Webster, 1903 (1902). Ind. Acad. Sci. Proc. p. 103.

#### Genus PAURIDIA Timberlake

*Pauridia* Timberlake, 1919. Hawaii. Ent. Soc. Proc. 4: 206.

Type: *Pauridia peregrina* Timberlake. Monob.

*peregrina* Timberlake. ?Calif. Hosts: *Pseudococcus kraunhiae* (Kuw.); *P. mari-timus* (Ehrh.).

*Pauridia peregrina* Timberlake, 1919. Hawaii. Ent. Soc. Proc. 4: 208. ♂ ♀.  
Biology: Armitage, 1920. Calif. Dept. Agr. Monthly Bul. 9: 446.—Essig, 1931. A Hist. of Ent., p. 361, 389.

#### Genus PLAGIOMERUS Crawford

*Plagiomerus* Crawford, 1910. U. S. Natl. Mus. Proc. 38: 89.

Type: *Plagiomerus diaspidis* Crawford. Monob.

Revision: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 1.

*cyaneus* (Ashmead). Fla.

*Comys cyanea* Ashmead, 1888. Ent. Amer. 4: 17. ♀.

Taxonomy: Dozier, 1926. Puerto Rico Dept. Agr. Jour. 10: 273-274.

*diaspidis* Crawford. D. C., N. Mex. Host: *Diaspis echinocacti* (Bouché).

*Plagiomerus diaspidis* Crawford, 1910. U. S. Natl. Mus. Proc. 38: 90. ♀.

#### Genus PSYLEDONTUS Crawford

*Psylledontus* Crawford, 1910. U. S. Natl. Mus. Proc. 38: 88.

Type: *Psylledontus insidiosus* Crawford. Monob.

*Metallonella* Girault, 1915. Queensland Mus. Mem. 4: 77.

Type: *Metallonella australiensis* Girault. Orig. desig.

**insidiosus** Crawford. N. Y. Host: *Psylla pyricola* Foerst.

*Psylledontus insidiosus* Crawford, 1910. U. S. Natl. Mus. Proc. 38: 89. ♂ ♀.

#### Genus AGROMYZAPHAGUS Gahan

*Agromyzaphagus* Gahan, 1912. Ent. Soc. Wash. Proc. 14: 6.

Type: *Agromyzaphagus detrimentosus* Gahan. Monob.

**detrimentosus** Gahan. Md. Host: *Leucopis* sp. probably *nigricornis* Egger.

*Agromyzaphagus detrimentosus* Gahan, 1912. Ent. Soc. Wash. Proc. 14: 7. ♂ ♀.

Taxonomy: Mercet, 1926. Eos 2: 318-319.

#### Genus PARACALOCERINUS Girault

*Paracalocerinus* Girault, 1915. Queensland Mus. Mem. 4: 142.

Type: *Paracalocerinus australiensis* Girault. Monob.

*Masia* Mercet, 1919. Soc. Espan. Hist. Nat. Bol. 19: 470.

Type: *Masia bifasciatella* Mercet. Monob.

**americanus** Girault. Kans.

*Paracalocerinus americanus* Girault, 1916. Ent. News 27: 225. ♀.

**marylandia** Girault, emend. Md., Ill.

*Paracalocerinus marilandia* Girault, 1917. Chalcidoidea Nova Marilandensis [II], p. 1. ♀.

Taxonomy: Dozier, 1933. Ent. Soc. Wash. Proc. 35: 94-95.

**tertius** Girault. Calif.

*Paracalocerinus tertius* Girault, 1917. Desc. Stellarum Nov., p. 7. ♀.

#### Genus ECHTHROGONATOPUS Perkins

*Echthrogonatopus* Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 1: 256.

Type: *Echthrogonatopus exitiosus* Perkins. Desig. by Gahan and Fagan, 1923.

**pachycephalus** Perkins. Ohio. Host: *Gonatopus* sp. or allied form.

*Echthrogonatopus pachycephalus* Perkins, 1906. Hawaii. Sugar Planters' Assoc. Expt. Sta. Div. Ent. Bul. 1: 257. ♀.

#### Genus IXODIPHAGUS Howard

*Ixodiphagus* Howard, 1907. Ent. News 18: 377.

Type: *Ixodiphagus texanus* Howard. Monob.

**texanus** Howard. Mass., Minn., Tex., Idaho. Hosts: *Dermacentor variabilis* (Say); *Haemaphysalis leporis-palustris* (Pack.); ?*Ixodes cookei* Pack.; *I. dentatus* Marx, *I. scapularis* Say; *Rhipicephalus sanguineus* (Latr.).

*Ixodiphagus texanus* Howard, 1907. Ent. News 18: 375. ♀.

Biology: Larson, 1937. Jour. Parasitol. 23: 496-498.—Larson and Green, 1938. Jour. Parasitol. 24: 363-368.—Smith, Cole, and Gouck, 1946. U. S. Dept. Agr. Tech. Bul. 905: 72.

Taxonomy: Gahan, 1934. Ent. Soc. Wash. Proc. 36: 89-97.

#### Genus HUNTERELLUS Howard

*Hunterellus* Howard, 1908. Canad. Ent. 40: 240.

Type: *Hunterellus hookeri* Howard. Monob.

**hookeri** Howard. Mass., S. C., Fla., Tex., Calif., Idaho, Mont. Hosts: *Dermacentor andersoni* Stiles; *D. parumapertus* Neum.; *D. variabilis* (Say); *Haemaphysalis leporis-palustris* (Pack.); *Ixodes dentatus* Marx; *I. muris* B. and S.; *I. scapularis* Say; *Rhipicephalus sanguineus* (Latr.).

*Hunterellus Hookeri* Howard, 1908. Canad. Ent. 40: 239. ♂ ♀.

*Ixodiphagus Caucurtei* du Buysson, 1912. Arch. de Parasitol. 15: 246. ♂ ♀.

Biology: Cooley, 1927. Mont. State Bd. Ent. Bien. Rpt. 6: 15-17.—Cooley and Kohls, 1928. Science 67: 656.—Larrousse, King and Wolbach, 1928.

Science 67: 351-353.—Cooley, 1929 (1927-1928). Mont. State Bd. Ent. Bien. Rpt. 7: 10-16; 17-31.—Morton, 1929 (1927-1928). Mont. State Bd. Ent. Bien Rpt. 7: 32-35.—Parker and Butler, 1929 (1927-1928). Mont. State Bd. Ent. Bien. Rpt. 8: 35-38.—Cooley, 1930. Mont. State Bd. Ent. Bien. Rpt. 8: 16-25.—Cooley and Kohls, 1934. Fifth Pacific Sci. Cong. Proc. B 5: 3375-3381.—Bishopp, 1938. U. S. Dept. Agr. Cir. 478: 23.—Smith and Cole, 1943. Jour. Econ. Ent. 36: 569-572.

Taxonomy: Gahan, 1934. Ent. Soc. Wash. Proc. 36: 89-97.

#### Genus PARALEUROCERUS Girault

*Paraleurocerus* Girault, 1915. N. Y. Ent. Soc. Jour. 23: 172.  
Type: *Paraleurocerus bicoloripes* Girault. Monob.

**bicoloripes** Girault. Mass., Tex. Hosts: *Cameraria caryaefoliella* (Clem.); *Lithocelis* sp. mining cherry leaf.

*Paraleurocerus bicoloripes* Girault, 1915. N. Y. Ent. Soc. Jour. 23: 172.  
♂ ♀.

#### Genus EPANUSIA Girault

*Epanusia* Girault, 1913. Arch. f. Naturgesch. 79A (6): 91.  
Type: *Epanusia bifasciatus* Girault. Monob.

**albiclava** Girault. D. C.

*Epanusia albiclava* Girault, 1916. Psyche 23: 44. ♀.

#### Genus FORMICENCYRTUS Girault

*Formicencyrtus* Girault, 1916. Psyche 23: 45.  
Type: *Formicencyrtus thoreauini* Girault. Monob.

**thoreauini** Girault. N. Mex. Host: *Dactylopius confusus* (Ckll.).

*Formicencyrtus thoreauini* Girault, 1916. Psyche 23: 45. ♀.

#### Genus EPICERCHYSIUS Girault

*Epicerchysius* Girault, 1915. N. Y. Ent. Soc. Jour. 23: 167.  
Type: *Epicerchysius xanthipes* Girault. Monob.

**xanthipes** Girault. Tex.

*Epicerchysius xanthipes* Girault, 1915. N. Y. Ent. Soc. Jour. 23: 168. ♀.

#### Genus ZAOMMOENCYRTUS Girault

*Zaommoëncrytus* Girault, 1916. Psyche 23: 46.  
Type: *Zaommoëncrytus submicans* Girault. Monob.

**submicans** Girault. Pa. Host: *Alobates pennsylvanica* (Deg.).

*Zaommoëncrytus submicans* Girault, 1916. Psyche 16: 46. ♀.

#### Genus NEBAOCHARIS Girault

*Nebaocaris* Girault, 1916. Psyche 23: 43.  
Type: *Nebaocaris hemiptera* Girault. Monob.

**hemiptera** Girault. Colo.

*Nebaocaris hemipterus* Girault, 1916. Psyche 23: 43. ♀.

#### Genus COMPERIELLA Howard

*Comperiella* Howard, 1906. Ent. News 17: 121.  
Type: *Comperiella bifasciata* Howard. Monob.

*Pseudanusia* Girault, 1915. Queensland Mus. Mem. 4: 155.  
Type: *Pseudanusia pia* Girault. Monob.

*Habrolepistia* Mercet, 1921. Faune Ibérica. Himen. Encirtidos, p. 668.  
Type: *Habrolepistia cerapterocera* Mercet. Monob.

Revision: Compere, 1926. Calif. Univ. Pubs., Ent. 4: 44.

**bifasciata** Howard. Calif. Hosts: *Aonidiella aurantii* (Mask.); *A. citrina* (Coq.); *Chrysomphalus aonidum* (L.).

**Comperiella bifasciata** Howard, 1906. Ent. News 17: 122. ♀.  
Biology: Flanders, 1942. Jour. Econ. Ent. 35: 834-835.—Smith, 1942. Jour. Econ. Ent. 35: 809-812.—Flanders, 1943. Jour. Econ. Ent. 36: 233-235.—Flanders, 1944. Ann. Ent. Soc. Amer. 37: 365.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 74, 76.—Woglum, LaFollette, Landon, and Lewis, 1947. Jour. Econ. Ent. 40: 820.

#### Genus COCCIDOXENUS Crawford

**Coccidoxenus** Crawford, 1913. U. S. Natl. Mus. Proc. 45: 248.  
Type: *Coccidoxenus portoricensis* Crawford. Monob.

**Tetracnemella** Girault, 1915. Queensland Mus. Mem. 4: 170.

Type: *Tetracnemella australiensis* Girault. Orig. desig.

**Stenoteropsis** Girault, 1915. Queensland Mus. Mem. 4: 176.

Type: *Stenoteropsis abjectus* Girault. Monob.

**mexicanus** Girault. Fla.

**Coccidoxenus mexicanus** Girault, 1917. Descr. Stellarum Nov., p. 21. ♀.

**nubilipennis** (Girault). Ill. Host: *Lecanium nigrofasciatum* Perg.

*Anagyrus nubilipennis* Girault, 1909. Psyche 16: 76. ♂ ♀.

#### Genus QUAYLEA Timberlake

**Quaylea** Timberlake, 1919. Hawaii. Ent. Soc. Proc. 4: 214.

Type: *Cerchysius whittieri* Girault. Orig. desig.

**whittieri** (Girault). Calif. Hosts: *Saissetia oleae* (Bern.); *Aphytus lounsburyi* How.; *Scutellista cyanea* Mots.; *Tomocera californica* How.

**Cerchysius whittieri** Girault, 1918. Ent. News 29: 66. ♀.

**Hemencyrtus cravii** Timberlake, 1919. Hawaii. Ent. Soc. Proc. 4: 216.

Biology: Flanders, 1943. Jour. Econ. Ent. 36: 922-925.—Flanders, 1944. Jour. Econ. Ent. 37: 409.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 61, 113-114.

#### Genus PARASTENOTERYS Girault

**Parastenoterys** Girault, 1915. Queensland Mus. Mem. 4: 165.

Type: *Parastenoterys punctatus* Girault. Orig. desig.

**Parectromoides** Girault, 1915. Queensland Mus. Mem. 4: 171.

Type: *Parectromoides magniscutellum* Girault. Monob.

**niveiclava** Girault. Md.

**Parastenoterys niveiclava** Girault, 1917. Chalcidoidea Nova Marilandensis II, p. 1. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 191.

#### Genus ANARHOPUS Timberlake

**Anarhopus** Timberlake, 1929. Calif. Univ. Pubs., Ent. 5: 15.

Type: *Anarhopus sydneyensis* Timberlake. Monob.

**sydneyensis** Timberlake. Calif. Hosts: *Pseudococcus adonidum* (L.); *P. gahani* Green.

**Anarhopus sydneyensis** Timberlake, 1929. Calif. Univ. Pubs., Ent. 5: 5, 17. ♀.

Biology: Compere and Flanders, 1934. Jour. Econ. Ent. 27: 966-973.—Flanders, 1940. Calif. Citrog. 25: 146, 154-155.—Claney, 1944. Jour. Econ. Ent. 37: 450.—Maple, 1947. Calif. Univ. Pubs., Ent. 8: 59-60.—DeBach, 1949. Ecology 30: 16-25.

#### Genus PSEUDORHOPUS Timberlake

**Pseudorhopus** Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 9.

Type: *Encyrtus testaceus* Ratzeburg. Orig. desig.

**fuscus** (Girault). Ont., Que. Host: Apparently coccid, not *Choristoneura fumiferana* (Clem.).

*Rhopoideus fuscus* Girault, 1912. Canad. Ent. 44: 5. ♀.  
Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 184.

*hartmani* Timberlake. Tex. Host: *Lecanium* sp.

*Pseudorhopus hartmani* Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 10.  
♂ ♀.

#### Genus HEXACNEMUS Timberlake

*Hexacnemus* Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 12.  
Type: *Hexacnemus armitagei* Timberlake. Monob.

*armitagei* Timberlake. Calif. Hosts: *Sympherobius californicus* Banks; *S.* sp.

*Hexacnemus armitagei* Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 15.  
♂ ♀.

#### Genus TACHARDIOBIUS Timberlake

*Tachardiobius* Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 19.  
Type: *Tachardiobius nigricans* Timberlake. Monob.

*nigricans* Timberlake. Ariz., Calif. Host: *Tachardiella larreae* (Comst.).

*Tachardiobius nigricans* Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 23.  
♂ ♀.

#### Genus MAYRIDIA Mercet

*Mayridia* Mercet, 1921. Fauna Ibérica, Himen. Encirtidos, p. 426.  
Type: *Mayridia pulchra* Mercet. Orig. desig.

*americana* Timberlake. N. Dak., S. Dak., Utah. Host: *Trionymus utahensis* (Ckll.).

*Mayridia americana* Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 28.  
♂ ♀.

#### Genus GAHANIELLA Timberlake

*Gahaniella* Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 23.  
Type: *Gahaniella californica* Timberlake. Orig. desig.

*californica* Timberlake. Calif. Host: *Lecanium corni* Bouché.

*Gahaniella californica* Timberlake, 1926. U. S. Natl. Mus. Proc. 69 (3): 26.  
♂ ♀.

#### Genus EPAENASOMYIA Girault

*Epaenasomyia* Girault, 1917. Chalcidoidea Nova Marilandensis III, p. 3.  
Type: *Epaenasomyia varicornis* Girault. Monob.

*varicornis* Girault. Md.

*Epaenasomyia varicornis* Girault, 1917. Chalcidoidea Nova Marilandensis III,  
p. 3. ♀.

#### Genus PHEIDOLOXENUS Ashmead

*Pheidoloxenus* Ashmead, 1904. Carnegie Mus. Mem. 1: 328.

Type: *Pheidoloxenus wheeleri* Ashmead. Monob. and orig. desig.

*Pheidoloxenus* Girault, 1915. Ent. Soc. Amer. Ann. 8: 273. Preocc.

Type: *Pheidoloxenus wheeleri* Girault. Monob.

*Pheidoloxeniscus* Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 369. N.  
name.

*wheeleri* Ashmead. Tex. Host: Nest of *Pheidole kingi instabilis* Emery.

*Pheidoloxenus wheeleri* Ashmead, 1904. Carnegie Mus. Mem. 1: 327, 385. ♀.

*Pheidoloxenus wheeleri* Girault, 1915. Ent. Soc. Amer. Ann. 8: 273. Preocc.

♀.

Taxonomy: Wheeler, 1907. Amer. Mus. Natl. Hist. Bul. 23: 17-18.

### Subfamily ARRHENOPHAGINAE

#### Genus ARRHENOPHAGUS Aurivillius

*Arrhenophagus* Aurivillius, 1888. Ent. Tidskr. 9: 144.

Type: *Arrhenophagus chionaspidis* Aurivillius. Monob.

**chionaspidis** Aurivillius. Cosmopolitan. Hosts: *Aspidiotus forbesi* Johns., *A. perniciosus* Comst., *Aulacaspis rosae* (Bouché).

**Arrhenophagus chionaspidis** Aurivillius, 1888. Ent. Tidskr. 9: 146. ♀.  
Taxonomy: Girault, 1911. N. Y. Ent. Soc. Jour. 19: 177-179.

### Family EUPELMIDAE

Revisions: Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 4-20.—Ruschka, 1921 (1920). Zool.-Bot. Gesell. Wien. Verh. 70: 234-315.

#### Genus METAPELMA Westwood

**Metapelma** Westwood, 1835. Zool. Soc. London Proc. 3: 69.  
Type: **Metapelma spectabilis** Westwood. Monob.

**Halidea** Foerster, 1856. Hym. Stud., v. 2, p. 31. No species.

Type: **Halidea insignis** Foerster. Desig. by Gahan and Fagan, 1923.

**Halidayella** Dalla Torre, 1897. Wien. Ent. Ztg. 16: 85. N. name.

Revision: Ferrière, 1938. Soc. Ent. France Ann. 107: 25-43.

**schwarzi** (Ashmead). Va., Tex.

**Halidea Schwarzi** Ashmead, 1890. Ent. Soc. Wash. Proc. 1: 265. ♀.

**spectabilis** Westwood. N. Y. and Conn. to Fla.; Kans., Ariz., Calif. Hosts: *Agrius angelicus* Horn; *Cylas formicarius elegans* Sum.; *Magdalisa olyra* (Hbst.); *M. pandura* (Say); ? *Scolytus quadrispinosus* Say.

**Metapelma spectabilis** Westwood, 1835. Zool. Soc. London Proc. 3: 69. ♀.  
Biology: Blackman and Stage, 1924. N. Y. State Col. Forestry, Syracuse Univ., Tech. Pub. 17: 25.—Rhoads, 1924. In Blackman and Stage, N. Y. State Col. Forestry, Syracuse Univ., Tech. Pub. 17: 185.

#### Genus EUSANDALUM Ratzeburg

**Eusandalum** Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 199.

Type: **Eusandalum abbreviatum** Ratzeburg. Desig. by Ashmead, 1904.

**Ratzeburgia** Foerster, 1856. Hym. Stud., v. 2, pp. 31, 145.

Type: **Eusandalum abbreviatum** Ratzeburg. Desig. by Gahan and Fagan, 1923.

**Meseusandalum** Girault, 1915. Queensland Mus. Mem. 4: 34.

Type: **Meseusandalum cyaneiventris** Girault. Orig. desig.

Revision: Girault, 1917. Jour. Ent. and Zool. 9: 8-10.

**acmaeoderae** Rohwer. Calif. Hosts: *Acmaeodera* sp. in *Ceanothus integerrimus*; *Amphicerus bicaudatus* (Say).

**Eusandalum acmaeoderiae** (!) Rohwer, 1917. U. S. Natl. Mus. Proc. 53: 171. ♀.

**Eusandalum acmaeoderae** Girault, 1917. Jour. Ent. and Zool. 9: 9. Emend.

**alpinum** Girault. Calif.

**Eusandalum alpinum** Girault, 1917. Jour. Ent. and Zool. 9: 8. ♀.

**amphicerorum** (Ashmead). N. J., Kans.

**Ratzeburgia** (!) **amphicerovora** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. V. “♂”=♀.

**arizonae** Girault, emend. Ariz.

**Eusandalum arizona** Girault, 1917. Jour. Ent. and Zool. 9: 9. ♀.

**californicum** Girault. Calif.

**Eusandalum californicum** Girault, 1917. Jour. Ent. and Zool. 9: 8. ♀.

**coquilletti** (Ashmead). Calif. Hosts: *Amphicerus bicaudatus* (Say); *Oeme gracilis* Lec.

**Ratzeburgia coquilletti** Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 11. ♀.

**cyanum** (Ashmead). Ariz.

**Ratzeburgia cyanea** Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 11. ♀.

**georgiae** Girault, emend. D. C., Ga.

**Eusandalum georgia** Girault, 1917. Jour. Ent. and Zool. 9: 8. ♀.

**hubbardi** (Ashmead). N. J., D. C., Fla., Mont., Wash. Hosts: *Leptostylus biustus* Lec.; ?*Ips latidens* Lec.; ?*Pityophthorus burkei* Blackm.; ?*Pityogenes knecheli* Swaine.

**Ratzeburgia hubbardi** Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 12. ♀.  
Biology: De Leon, 1934. Canad. Ent. 66: 60.

**hyalinipennis** (Ashmead). Calif.

**Ratzeburgia hyalinipennis** Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 12. ♀.

**obscurum** Girault. Wash.

**Eusandalum obscurum** Girault, 1917. Jour. Ent. and Zool. 9: 8. ♀.

#### Genus CALOSOTA Curtis

**Calosota** Curtis, 1836. Brit. Ent. 13: 596.

Type: *Calosota vernalis* Curtis. Orig. desig.

**Calosoter** Walker, 1837. Ent. Mag. 4: 358.

Type: *Calosoter vernalis* Walker. Desig. by Westwood, 1840.

**longiventris** (Ashmead). Calif.

**Calosoter longiventris** Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 12. ♂ ♀.

**metallica** (Gahan). Utah, Calif., Oreg., Wash. Hosts: *Ancylis comptana fragariae* (W. and R.); *Archips rosaceana* (Harr.); *Phytophaga destructor* (Say); *Ditropinotus aureoviridis* Cwfd.; *Eurytoma parva* Phillips; *Harmolita grandis* (Riley); *H. tritici* (Fitch).

**Calosoter metallicus** Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 16. ♂ ♀.  
Biology: Knowlton and Janes, 1933. Utah Agr. Expt. Sta. Bul. 243: 12.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 58–60.—Chamberlain, 1941. U. S. Dept. Agr. Tech. Bul. 784: 38–40.

#### Genus EUPELMUS Dalman

**Eupelmus** Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 136, 180.

Type: *Eupelmus memnonius* Dalman. Desig. by Westwood, 1840.

**Cerambycobius** Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 7, 10, 17. N. syn.

Type: *Eupelmus cleri* Ashmead. Monob. and orig. desig.

Revision. Crawford, 1908. Ent. Soc. Wash. Proc. 9: 157–158. (*Cerambycobius*).

**allynii** (French). Common throughout U. S.; P. E. I., Ont., Man. Hosts: *Oecanthus nigricornis quadripunctatus* Beut.; *Languria mozardi* Latr.; *Apion delta* Buch.; *Coleophora malivorella* Riley; *Epiblema otiosana* (Clem.); *Tischeria malifoliella* Clem.; *Lasiocoptera vernoniae* Beut.; *Phytophaga destructor* (Say); tephritid seed maggot from ironweed; *Meromyza americana* Fitch; *M. saltatrix* (L.); *Cephus cinctus* Nort.; *C. pygmaeus* (L.); *C. tabidus* (F.); *Bracon cephi* (Gahan); *Platygaster hiemalis* Pack.; *P. vernalis* (Myers); *P. sp.*; *Pleurotropis metallica* (Nees); *Tetrastichus carinatus* Forbes; *Ditropinotus aureoviridis* Cwfd.; *Eupteronalus subapterus* (Riley); *habrocytus languriae* Ashm.; *Merisoporus chalcidiphagus* (W. and R.); *Merisus destructor* (Say); *M. febriculosus* Gir.; *Eurytoma parva* Phillips; *E. sp.*; *Harmolita albomaculata* (Ashm.); *H. atlantica* P. and E.; *H. elymi* (French); *H. elymicola* P. and E.; *H. elymivora* P. and E.; *H. elymophaga* P. and E.; *H. grandis* (Riley); ?*H. hesperus* P. and E.; *H. holci* Phillips; *H. hordei* (Harris); *H. maculata* (How.); ?*H. occidentalis* P. and E.; *H. tritici* (Fitch); *H. vaginicola* (Doane).

**Isosoma allynii** French, 1881. Prairie Farmer 52: 418.

Biology: Packard, 1916. Jour. Agr. Res. 6: 370–373.—Phillips and Poos, 1921. Jour. Agr. Res. 21: 405–426.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 41–46. ♂ ♀.—Hill, Pinckney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 3–15.—Chamberlain, 1941. U. S. Dept. Agr. Tech. Bul. 784: 29, 39.

Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 2–3, 7, 11–13.

Taxonomy: Parker, 1924. Soc. Ent. France Ann. 93: 266, 286.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 41–46. ♂ ♀.

**ashmeadi** Melander and Brues. Mass.

**Eupelmus Ashmeadi** Melander and Brues, 1903. Biol. Bul. 5: 21. ♀.

**auratus** Ashmead. Fla., La. Hosts: *Andricus virens* Ashm.; *Callirhytis rugosa* Ashm.

*Eupelmus auratus* Ashmead, 1886. Trans. Amer. Ent. Soc. 12: 128. ♀.

**bardus** Girault. Calif.

*Eupelmus bardus* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum. Observ. V, p. 3. ♀.

**2-guttus** Girault. Md.

*Eupelmus 2-guttus* Girault, 1917. Ent. News 28: 256. ♀. (*biguttus* in Index).

**brevicauda** (Crawford). Tex., Ariz. Host: *Acanthoscelides horni* (Pic).

*Cerambycobius brevicauda* Crawford, 1908 (1907). Ent. Soc. Wash. Proc. 9: 158. ♀. (Not *brevicaudus* Gahan, 1910.)

**bruchivorus** (Crawford). N. C., Tex. Hosts: *Bruchus* sp. on *Vachellia* [probably *Mimosestes sallaei* (Sharp)]; *Mimosestes sallaei* (Sharp); ?*Phloeotribus frontalis* (Oliv.).

*Cerambycobius bruchivorus* Crawford, 1908 (1907). Ent. Soc. Wash. Proc. 9: 158. ♀.

**charitopoides** Girault. W. Va., La.

*Eupelmus charitopoides* Girault, 1916. Canad. Ent. 48: 244. ♀.

**cleri** Ashmead. Va., N. C. Hosts: Clerid in white pine; *Thanasimus trifasciatus* (Say); ?*Melanophila fulvoguttata* Harr.; ?*Pissodes strobi* (Peck); ?*Odon-taulacus abdominalis* Cress.

*Eupelmus cleri* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 339. ♂ ♀.

**coccidis** Girault.

*Eupelmus coccidis* Girault, 1916. Ent. News 27: 223. ♀. (Not *coccidis* Girault, 1917.)

**conigerae** Ashmead. N. J., Fla. Host: Gall of *Callirhytis ventricosa* (O. S.).

*Eupelmus conigerae* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xv. ♀.

**cushmani** (Crawford). Tex., La. Hosts: *Araecerus fasciculatus* (Deg.); *Acanthoscelides ochraceicolor* (Pic); *Mimosestes sallaei* (Sharp); *Anthonomus grandis* Boh.; *Cylindrocopturus adspersus* (Lec.); *C. longulus* (Lec.); *Lixus scrobicollis* Boh.; *Trichobaris texana* Lec.

*Cerambycobius cushmani* Crawford, 1908 (1907). Ent. Soc. Wash. Proc. 9: 158. ♀.

Biology: Pierce, 1910. Jour. Econ. Ent. 3: 455.—Pierce, Cushman, and Hood, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 100: 51–62.—Pierce and Cushman, 1915. Ent. Soc. Wash. Proc. 17: 165.

Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 65.

**cyaniceps amicus** Girault. N. Y. to Ga. and Ill.; Ohio, Ark., N. Mex. and ?Tex. Hosts: *Acanthoscelides alboscutellatus* (Horn); *Bruchus brachialis* Fahr.; *B. pisorum* (L.); *Mimosestes amicus* (Horn); *Anthonomus grandis* Boh.; *Chalcodermus aeneus* Boh.; *Desmoris fulvus* Lec.; *Scolytus multistriatus* (Marsh.); *Ulophora grotei* Rag.; *Grapholitha molesta* (Busck); *Rhyacionia frustrana* (Comst.); *Coleophora malivorella* Riley; *Macrocentrus* sp.

*Eupelmus cyaniceps* var. **amicus** Girault, 1916. Canad. Ent. 48: 244. ♀.

Biology: Fenton and Dunnam, 1929. U. S. Dept. Agr. Tech. Bul. 112: 66.—Beacher, 1947. Ent. Soc. Amer. Ann. 40: 532–544.—Brunson, 1948. Jour. Econ. Ent. 41: 119.

**cyaniceps cyaniceps** Ashmead. Ont. to N. C., Fla., Miss., La., Tex., Ark., Okla., Kans., N. Mex. Hosts: *Anthonomus albopilosus* Dietz; *A. grandis* Boh.; *Apion rostrum* Say; *Conotrachelus crataegi* Walsh; *Cylindrocopturus adspersus* Lec.; *C. longulus* Lec.; *Lixus musculus* Say; *L. scrobicollis* Boh.; *Smicralax tuberculatus* Pierce; *Tachypterellus quadrigibbus* (Say); *Trichobaris compacta* Casey; *T. texana* Lec.; *Tychius sordidus* Lec.; ?*Acanthoscelides bisignatus* (Horn); ?*A. compressicornis* Schaeff.; *A. horni* Pic; *A. obtectus* (Say); *A. ochraceicolor* (Pic); *Amblycerus robiniae* (F.); *Gibbosbruchus mimus* (Say); *Mimosestes sallaei* (Sharp); *Carpocapsa pomonella* (L.); *Grapholitha molesta* (Busck); *Bucculatrix fusicola* Braun; *Thyridopteryx ephemeraeformis* (Haw.); *Bracon* sp.; *Glypta* sp.

*Eupelmus cyaniceps* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 129. ♀.

Biology: Pierce, 1908. U. S. Dept. Agr. Bur. Ent. Bul. 73: 29-48.—Pierce, Cushman, and Hood, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 100: 31-68.—Pierce and Cushman, 1915. Ent. Soc. Wash. Proc. 17: 165-167.—Tucker, 1922. Kans. Acad. Sci. Trans. 30: 144.—Breland, 1948. Ent. News 59: 234.

Morphology: Parker, 1924. Ann. Soc. Ent. France 93: 266.

*cyaniceps utahensis* Girault. Utah.

*Eupelmus cyaniceps* var. *utahensis* Girault, 1916. Canad. Ent. 48: 244. ♀.

*cynipidis* Ashmead. Fla., La. Host: Gall of *Callirhytis batatoides* (Ashm.).

*Eupelmus cynipidis* Ashmead, 1882. Canad. Ent. 14: 36. ♀.

*dryophantae* Ashmead. Fla. Host: Gall of *Dryocosmus laurifoliae* (Ashm.).

*Eupelmus dryophantae* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 130. ♂ ♀.

*ficigerae* (Ashmead), n. comb. Fla. Hosts in galls of: *Andricus femoratus* Ashm.; *Disholcaspis virens* (Ashm.).

*Megastigma* (!) *ficigerae* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 185. ♂.

*flavovariegatus* Ashmead. Kans. Host: Gall of *?Adleria dimorphus* (Beut.).

*Eupelmus flavovariegatus* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. IV. ♂ ♀.

*floridanus* Howard. Fla. Host: Tineid larva on orange.

*Eupelmus Floridanus* Howard, 1880. Canad. Ent. 12: 209. ♂.

*fonteia* Walker. Fla.

*Eupelmus Fonteia* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 19. ♀.

*inyoensis* Girault. Calif. Hosts: *Saissetia oleae* (Bern.); *?Acanthoscelides floridae* (Horn); *A. horni* Pic; *Asphondylia adenostoma* Felt; *Aphytus lounsburyi* How.

*Eupelmus inyoensis* Girault, 1916. Ent. News 27: 223. ♂ ♀.

Biology: Compere, 1925. Calif. Univ. Pubs., Ent. 3: 296.—Flanders, 1940. Ent. Soc. Amer. Ann. 33: 252.

Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 295-297.

*juglandis* Ashmead. N. Y., Va., N. C., Kans. Hosts: *Magdalis* spp.; *Scolytus rugulosus* (Ratz.); *?Stephanoderes dissimilis* (Zimm.).

*Eupelmus juglandis* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 340. ♀.

*lamachus* Walker. Fla.

*Eupelmus Lamachus* Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 20. ♀.

*limneriae* Howard. Conn., Md., D. C., N. C., S. C., Fla. Hosts: *Grapholita molesta* (Busck); *Homaledra sabalella* (Chamb.); *Macrocentrus* sp.; *Campoplex validus* (Cress.); *Spilochalcis debilis* (Say).

*Eupelmus limneriae* Howard, 1897. U. S. Dept. Agr. Div. Ent. Tech. Ser. 5: 39, 56. ♂ ♀.

*macrocarpae* Ashmead. Ill., Kan. Hosts: *Acraspis erinacei* (Beut.); *A. pezomachoides* (O. S.); gall of *Disholcaspis mamma* (Cress.).

*Eupelmus macrocarpae* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. IV. ♀.

Biology: Balduf, 1926. Canad. Ent. 58: 160-163.

*marylandicus* Girault. Md.

*Eupelmus marylandicus* Girault, 1916. Canad. Ent. 48: 242. ♀.

*momphae* Gahan. Conn., Ga., Ala., Tex. Hosts: *?Oeneis melissa semidea* (Say); *?Epiblema scudderiana* (Clem.); *E. tripartitana* (Zell.); *Phalonia cephalanthana* Heinr.; *?Mompha brevivittella* (Clem.).

*Eupelmus momphae* Gahan, 1910. Canad. Ent. 42: 205. ♀.

*neococcidis* Peck, n. name. Md., La., Tex., Ariz. Hosts: *Stagmomantis carolina* (Johan.); *S. limbata* (Hahn); *Mantis* sp.; *Coccus hesperidum* (L.).

*Eupelmus brevicauda* Gahan, 1910. Canad. Ent. 42: 205. ♀. Preocc.

*Eupelmus coccidis* Girault, 1917. Deser. Stellarum Nov., p. 6. N. name. Preocc. by *E. coccidis* Girault, 1916.

Biology: Breland, 1941. Ent. Soc. Amer. Ann. 34: 108.

*neomexicanus* Girault. N. Mex.

*Eupelmus neomexicanus* Girault, 1906. Ent. Soc. Amer. Ann. 9: 307. ♀.

**pini** Taylor. N. Y., Mass., Conn. Host: *Pissodes strobi* (Peck).

**Eupelmus pini** Taylor, 1927. Brooklyn Ent. Soc. Bul. 22: 205. ♀.  
Biology and taxonomy: Taylor, 1929. Ent. Amer. 10: 12-16, 66.

**popa** Girault. Va. to Fla., La., Tex. and Mo. Hosts: *Contarinia caudata* Felt; *C. sorghicola* (Coq.).

**Eupelmus popa** Girault, 1917. Descr. Hym. Chalcidoid. Variorum Cum Observ. V., p. 4. ♀.  
Biology: Woodruff, 1929. Jour. Econ. Ent. 22: 160-167.—Walter, 1941. U. S. Dept. Agr. Tech. Bul. 778: 18-20.

Taxonomy: Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 14.

**quercus** Girault. Fla. Host: Gall of *Disholcaspis virens* (Ashm.).

**Eupelmus quercus** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 130. ♀.

**rhizophelus** Brues. Mass.

**Eupelmus rhizophelus** Brues, 1903. Biol. Bul. 4: 186.

Biology: Melander and Brues, 1903. Biol. Bul. 5: 21.

**rosae** Ashmead. Fla., La., Kans. Hosts: ?*Pyrausta ainsliei* Heinr.; *Diplolepis* gall on rose.

**Eupelmus rosae** Ashmead, 1882. Canad. Ent. 14: 36. ♀.

**rubicola** (Ashmead), n. comb. Fla. Host: Dipterous larva in stem of *Rubus villosus*.

**Xenomerus rubicola** Ashmead, 1887. Ent. Amer. 3: 100. ♂.

Taxonomy: Ashmead, 1893. U. S. Natl. Mus. Bul. 45: 185.

**speciosus** Girault. D. C.

**Eupelmus speciosus** Girault, 1916. Canad. Ent. 48: 243. ♀.

**sphaericephalus** Ashmead. Fla.

**Eupelmus sphaericephalus** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 129. ♀.

**spongipartus** Foerster. N. Y., Conn., Pa., Md., Ohio. Hosts: *Apanteles melanoscelus* (Ratz.); *Macrocentrus ancyliator* Roh.; *Meteorus versicolor* (Wesm.).

**Eupelmus spongipartus** Foerster, 1860. Naturh. Ver. Rheinlande Verh. 17: 123. ♂ ♀.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 21-23.—Proper, 1934. Jour. Agr. Res. 48: 366.—Brunson and Allen, 1948. Jour. Econ. Ent. 41: 447.—Brunson, 1948. Jour. Econ. Ent. 41: 119.

### Genus ARACHNOPHAGA Ashmead

**Arachnophaga** Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 9, 10, 18.

Type: **Eupelmus piceus** Riley. Monob.

Revision: Gahan, 1943. U. S. Natl. Mus. Proc. 94: 339-363.

**abstrusa** Gahan. Tex. Host: *Cyrtarachne* sp.

**Arachnophaga abstrusa** Gahan, 1943. U. S. Natl. Mus. Proc. 94: 362. ♂ ♀.

**aldrichi** Gahan. Mass., N. J., Md., Miss.

**Arachnophaga aldrichi** Gahan, 1943. U. S. Natl. Mus. Proc. 94: 360. ♀.

**aureicorpus** (Girault). S. C., Tex. Host: ?Syrphid.

**Anastatus aureicorpus** Girault, 1916. Ent. Soc. Amer. Ann. 9: 299. ♀.

**costalis** Gahan. N. J., Md. Hosts: *Grapholita molesta* (Busck); *Macrocentrus* sp.

**Arachnophaga costalis** Gahan, 1943. U. S. Natl. Mus. Proc. 94: 346. ♀.

**ferruginea** Gahan. Va. Host: *Epeira pegnia* Walck.

**Arachnophaga ferruginea** Gahan, 1943. U. S. Natl. Mus. Proc. 94: 361. ♀.

**frontalis** Gahan. Conn., N. J., Va., S. C., Ariz., Utah. Hosts: *Thyridopteryx meadii* Hy. Edw.; *Anarsia lineatella* Zell.; *Macrocentrus ancyliator* Roh.

**Arachnophaga frontalis** Gahan, 1943. U. S. Natl. Mus. Proc. 94: 357. ♂ ♀.

**longiceps** (Brues). Tex. Host: *Papilio* sp.

**Anastatus longiceps** Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 108. ♀.

**nocua** Gahan. Tex. Hosts: *Estigmene acrea* (Drury); ?*Apanteles* sp.

**Arachnophaga nocua** Gahan, 1943. U. S. Natl. Mus. Proc. 94: 346, 348.

♂ ♀.

**picea** (Riley). N. J., Ill., Ariz., Calif. Hosts: *Chrysopa californica* Coq.; *Argiope argentata* (F.); *A.* sp.; *Epeira* sp.; *Phidippus opifex* McC.

**Eupelmus piceus** Riley, 1892. In Howard, Ent. Soc. Wash. Proc. 2: 296. ♂ ♀.

Biology: Weese, 1925. Ill. Biol. Monog. 9 (4): 19, 46-52.—Clancy, 1946. Calif. Univ. Publs., Ent. 7: 459-460.

Taxonomy: Clancy, 1946. Calif. Univ. Publs., Ent. 7: 459-460.

**scutata** Gahan. Ill. Host: Spider.

**Arachnophaga scutata** Gahan, 1943. U. S. Natl. Mus. Proc. 94: 353. ♂ ♀.

### Genus EUPELPELLA Masi

**Macroneura** Walker, 1837. Ent. Mag. 4: 353. Preocc.

Type: (*Macroneura maculipes* Walker)=[*Ichneumon*] *vesicularis* (Retzius). Monob.

**Macronevra** Blanchard, 1840. Hist. Nat. Anim. Articules, v. 3, p. 273. Emend. Preocc.

**Eupelmella** Masi, 1919. Mus. Civ. Stor. Nat. Genova Ann. 48: 306.

Type: (*Eupelmus degeeri* Dalman)=[*Ichneumon*] *vesicularis* (Retzius). Monob.

**canadensis** (Provancher), n. comb. Que.

**Theocolax Canadensis** Provancher, 1883. Nat. Canad. 14: 34. ♀.

**dryorhizoxeni** (Ashmead), n. comb. N. Y., Fla., Kans. Hosts: ?*Dasyneura lysi-machiae* Beut.; galls of *Rhabdophaga triticoides* Walsh, *Belonocnema treatae* Mayr.

**Eupelmus dryorhizoxeni** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 129. ♂ ♀.

**epicaste** (Walker), n. comb. Ont., Fla. Host: *Harmolita tritici* (Fitch).

**Eupelmus Epicaste** Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 20. ♀.

**melanderi** (Brues), n. comb. Wash. Host: *Rhodites* gall on *Rosa pisocarpa*.

**Eupelmus melanderi** Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 54. ♀.

**meteori** (Gahan), n. comb. Tex. Host: *Meteorus laphygmae* Vier.

**Eupelminus meteori** Gahan, 1913. U. S. Natl. Mus. Proc. 46: 437. ♀.

Biology: Luginbill, 1928. U. S. Dept. Agr. Tech. Bul. 34: 74-75.—Vickery, 1929. U. S. Dept. Agr. Tech. Bul. 138: 21, 32, 55, 58.

**vesicularis** (Retzius). Ont. and Maine to Va., Tenn., Colo., Utah, Oreg., Wash. Hosts: *Bruchus bruchialis* Fahr.; *Anthonomus signatus* Say; *Ceutorhynchus assimilis* (Payk.); *Cylindrocopturus furnissi* Buch.; *Tachypterellus consors* cerasi List; *Tortrix packardiana* Fern.; *Argyresthia thuiella* (Pack.); *Coleophora pruniella* Clem.; *C. salmani* Heinr.; *Euрукuttarus confederata* (Grote); *Phytophaga destructor* (Say); *Neodiprion banksianae* Roh.; *Cephus cinctus* Nort.; *C. pygmaeus* (L.); *Apanteles melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *Bathyplectes curculionis* (Thoms.); gall of *Aulacidea podagrae* (Bass.); *A. tumida* (Bass.); *Diplolepis* sp.; *Platygaster vernalis* (Myers); *P. zosine* Walkr.; *Dahlbominus fuscipennis* (Zett.); *Eupelmus allynii* (French); *Ditropinotus aureoviridis* Cwf.; *Hemadas nubilipennis* (Ashm.); *Merisoporus chalcidiphagus* W. and R.; *Bruchophagus gibbus* (Boh.); *Eurytoma parva* Phillips; *Harmolita albomaculata* (Ashm.); *H. atlantica* P. and E.; *H. dactylicola* P. and E.; *H. elymi* (French); *H. festucae* P. and E.; *H. grandis grandis* (Riley); *H. hordei* (Harr.); *H. maculata* (How.); *H. tritici* (Fitch); *H. vaginicola* (Doane); *H. sp.* in *Agropyron tenerum*; *H. sp.* in *Agropyron*; *H. sp.* in *Elymus*.

**Ichneumon vesicularis** Retzius, 1783. Genera et Species Insectorum, p. 70.

**Euryscapus saltator** Lindeman, 1887. Soc. Imp. Nat. Moscou Bul. (2) 1: 190. ♂ ♀.

**Eupelminus coleopterophagus** Girault, 1916. Ent. Soc. Amer. Ann. 9: 306. ♀.

Biology: McConnell, 1918. Jour. Econ. Ent. 11: 168.—Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 23-24.—Phillips and Poos, 1927.

Jour. Agr. Res. 34: 473-482.—Morris, 1938. Parasitology 30: 20-32.—

Hill, Pinckney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 4-14.—

Chamberlain, 1941. U. S. Dept. Agr. Tech. Bul. 784: 25, 29, 38-39.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 52-58.—Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 6-7, 11-13.

## Genus ANASTATUS Motschulsky

*Anastatus* Motschulsky, 1860 (1859). Études Ent. 8: 116.

Type: *Anastatus mantoidae* Motschulsky. Monob.

*Antigaster* Walsh and Riley, 1869. Amer. Ent. 1: 156.

Type: *Antigaster mirabilis* Walsh and Riley. Monob.

*Paraguaya* Girault, 1911. Zool. Jahrb., Abt. f. System. 31: 385.

Type: *Paraguaya pulchripennis* Girault. Monob.

*Ooderelloides* Girault, 1913. Roy. Soc. So. Austral. Trans. 37: 6, 9, 10.

Type: *Ooderelloides nigripurpurea* Girault. Orig. desig.

The Nearctic species of *Anastatus* parasitize insect eggs.

**blattidarum** Ferrière. Ariz. Host: *Supella supellecilium* (Serv.).

*Anastatus blattidarum* Ferrière, 1930. Bul. Ent. Res. 21: 33-34. ♀.

Taxonomy: Ferrière, 1935. Stylops 4: 150.

**disparis** Ruschka, (*bifasciatus* of Amer. Authors, *nec Fonseca*). New England, Ariz.

Hosts: *Nygma phaeorrhoea* (Donov.); *Porthetria dispar* L.; *Apanteles melanoscelus* (Ratz.).

*Anastatus bifasciatus* var. *disparis* Ruschka, 1920. Zool.-Bot. Gesell. Wien. Verh. 70:265. ♂ ♀.

Biology: Fiske, 1910. Parasites of Gipsy and Brown-Tail Moths Mass., p. 16-51.—

Howard and Fiske, 1911. U. S. Dept. Agr. Bur. Ent. Bul. 91: 75, 168-176.—Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 24.—

Burgess and Crossman, 1929. U. S. Dept. Agr. Tech. Bul. 86: 23-31.—Felker, 1940. N. H. Dept. Agr. Bien. Rpt. 14: 122.—Brown and Sheals, 1944. Jour. Forestry 42: 400.

Taxonomy: Pieltain, 1934. Eos 10: 286-290.

**drassi** (Riley). Throughout No. Amer. Host: ?*Drassus* sp.

*Eupelmus drassi* Riley, 1892. In Howard, Ent. Soc. Wash. Proc. 2: 297. ♀.

**gemmarii** (Ashmead), n. comb. Fla. Host: Gall of *Callirhytis gemmaria* (Ashm.).

*Eupelmus gemmarii* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 129. ♀.

**hirtus** (Ashmead), n. comb. N. Y., N. J., Fla. Host: *Thyanta custator* (F.).

*Eupelmus hirtus* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiv. ♂ ♀.

**mantis** (Ashmead), n. comb. Fla. Host: *Stagmomantis carolina* (Johan.).

*Eupelmus mantis* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xv. ♂ ♀.

**microcentri** Gahan. D. C., Pa. Host: *Microcentrum* sp.

*Anastatus microcentri* Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 12. ♂ ♀.

**mirabilis** (Walsh and Riley). N. J. to Fla., Tex., and Kans. Hosts: *Mantis* sp.; *Amblycorypha oblongifolia* (Deg.); *Microcentrum retinerve* (Burm.); *M. rhombifolium* (Sauss.); *Oecanthus nigricornis* Walkr.; *Acrosternum hilare* (Say); *Cressonia juglandis* (A. and S.); sphingid eggs on willow.

*Antigaster mirabilis* Walsh and Riley, 1869. Amer. Ent. 1: 156. ♀.

Biology: Howard, 1880. Canad. Ent. 12: 209-210.—Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, pp. 250-251.

Taxonomy: Riley, 1874. Mo. State Bd. Agr. Ann. Rpt. 9: 162-165.

**pearsalli** Ashmead. N. Y., N. J., Va., N. C. Hosts: *Acrosternum hilare* (Say); *Paonias astylus* (Drury); *Apanteles melanoscelus* (Ratz.).

*Anastatus pearsalli* Ashmead, 1898. Ent. News 9: 24. ♀.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 24-25.

**reduvii** (Howard). Md. to Fla. and Tex. Hosts: *Stagmomantis carolina* (Johan.); *Microcentrum* sp.; *Acrosternum hilare* (Say); *Anasa tristis* (Deg.); *Arilus cristatus* (L.).

*Eupelmus reduvii* Howard, 1880. Canad. Ent. 12: 207. ♂ ♀.

Biology: Underhill, 1934. Va. Agr. Expt. Sta. Bul. 294: 17-18.—Breland, 1941. Ent. Soc. Amer. Ann. 34: 110.

Taxonomy: Waterston, 1923. Bul. Ent. Res. 14: 104-108. ♂ ♀.

**ruficollis** (Cameron) (*mirabilis* of Calif. authors, *nec W. and R.*). Calif. Host: *Microcentrum rhombifolium* (Sauss.).

*Brasema ruficollis* Cameron, 1903. Invertebrata Pacifica 1: 125. ♀.

Biology: Essig, 1913. Calif. State Comm. Hort. Monthly Bul. 2: 22, 274.—Isaac, 1905. Calif. State Commr. Hort. Bien. Rpt. 1: 102 (*mirabilis*).  
Taxonomy: Essig, 1926. Insects of West. No. Amer.: 843.

**semiflavidus** Gahan. N. Mex., Ariz. Hosts: *Hemileuca nevadensis* Stretch; *H. oliviae* Ckll.

**Anastatus semiflavidus** Gahan, 1914. U. S. Natl. Mus. Proc. 48: 160. ♂ ♀.  
Biology: Caffrey, 1921. Jour. Agr. Res. 21: 373–384.—Wildermuth, 1933. Jour. Econ. Ent. 26: 796–798.—Frankenfeld and Barnes, 1933. Jour. Econ. Ent. 26: 799–805.

**zeli** (Ashmead), n. comb. Fla. Hosts: *Anasa tristis* (Deg.); *Zelus longipes* (L.).  
**Eupelmus zeli** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 130. ♀.

#### Genus ENCYRTASPIS Ashmead

**Encyrtaspis** Ashmead, 1904. Carnegie Mus. Mem. 1: 290, 492.

Type: **Encyrtaspis brasiliensis** Ashmead. Monob.

Revision: Gahan, 1943. U. S. Natl. Mus. Proc. 94: 363–369.

**californica** (Ashmead). N. Mex., Calif. Hosts: *Anarsia lineatella* Zell.; *Evertria* sp. on *Pinus ponderosa*.

**Tineobius californicus** Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 15. ♀.

**laticeps** (Brues). Tex.

**Anastatus laticeps** Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 107. ♀.

**semirufa** Gahan. N. Y. to Ga., La., Tex. Hosts: *Laetilia coccidivora* (Comst.); *Grapholita molesta* (Busck); *Macrocentrus ancylivorus* Roh.

**Encyrtaspis semirufus** Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 10. ♂ ♀.  
Biology: Haeussler, 1930. Jour. Agr. Res. 41: 366.

#### Genus LECANIOBIUS Ashmead

**Lecaniobius** Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 8, 17.

Type: **Lecaniobius cockerelli** Ashmead. Monob.

**Zalophothrix** Crawford, 1908. Ent. Soc. Wash. Proc. 9: 156.

Type: (**Zalophothrix mirum** Crawford) = **Lecaniobius cockerelli** Ashmead. Monob.

Revision: Compere, 1939. Calif. Univ. Pubs., Ent. 7: 79–83.

**cockerellii** Ashmead. Fla. Hosts: *Saissetia nigra* (Nietn.); *Scutellista cyanea* Mots.

**Lecaniobius cockerellii** Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 17. ♀.

**Zalophothrix mirum** Crawford, 1908. Ent. Soc. Wash. Proc. 9: 157. ♀.

Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 242, 297–301.

**utilis** Compere. Calif. Host: *Saissetia oleae* (Bern.).

**Lecaniobius utilis** Compere, 1939. Calif. Univ. Pubs., Ent. 7: 79. ♂ ♀.  
Biology: Flanders, 1942. Jour. Econ. Ent. 35: 687.—Flanders, 1944. Jour. Econ. Ent. 37: 409.

#### Genus ZAISCHNOPSIS Ashmead

**Ischnopsis** Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 16. Preocc.

Type: **Ischnopsis ophthalmica** Ashmead. Monob.

**Zaischnopsis** Ashmead, 1904. Ent. Soc. Wash. Proc. 6: 126. N. name.

**schorzii** (Ashmead), n. comb. Fla.

**Charitopus schwarzii** Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 11. ♀.

### Family EUCHARITIDAE

Revisions: Ruschka, 1924. Deut. Ent. Ztschr., pp. 82–89.—Gahan, 1940. U. S. Natl. Mus. Proc. 88: 425–458.

Biology: Wheeler and Wheeler, 1937. Ent. Soc. Amer. Ann. 30: 163–175.—Clausen, 1940. Wash. Acad. Sci. Jour. 30: 504–516.

#### Genus PSEUDOCHALCURA Ashmead

**Pseudochalcura** Ashmead, 1904. Carnegie Mus. Mem. 1: 268, 269, 468.

Type: **Eucharis gibbosa** Provancher. Orig. desig.

**arizonensis** (Crawford), n. comb. Ariz.

**Chalcura arizonensis** Crawford, 1914. Ent. Soc. Wash. Proc. 16: 29. ♀.  
Biology: Pierce and Morrill, 1914. Ent. Soc. Wash. Proc. 16: 22.—Clausen, 1940.  
Wash. Acad. Sci. Jour. 30: 505–509.

**californica** (Ashmead), n. comb. Calif.

**Chalcura californica** Ashmead, 1892. Ent. Soc. Wash. Proc. 2: 356. ♂.

**gibbosa** (Provancher). Que., Mich. Host: *Camponotus herculeanus ligniperdus* var.  
*noveboracensis* (Fitch).

**Eucharis gibbosa** Provancher, 1881. Nat. Canad. 12: 292. ♀.  
Biology: Wheeler, 1907. Amer. Mus. Nat. Hist. Bul. 23: 16.

#### Genus STILBULA Spinola

**Stilbula** Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 150.

Type: *Ichneumon cyniformis* Rossi. Monob.

**floridana** (Ashmead). Fla.

**Lophyrocera floridana** Ashmead, 1888. Ent. Amer. 3: 187. ♂.  
Taxonomy: Gahan, 1940. U. S. Natl. Mus. Proc. 88: 435–436.

**montana** Ashmead. Colo.

**Stilbula montana** Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 24, 45. ♀.

**septentrionalis** (Brues). Ariz.

**Schizaspidia septentrionalis** Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 104.  
♀.

#### Genus LOPHYROCERA Cameron

**Lophyrocera** Cameron, 1884. Biol. Cent.-Amer., Hym. 1, pp. 101, 103.

Type: **Lophyrocera stramineipes** Cameron. Desig. by Ashmead,  
1904.

**apicalis** Ashmead. Calif.

**Lophyrocera apicalis** Ashmead, 1892. Ent. Soc. Wash. Proc. 2: 357. ♀.

**nigromaculata** Cameron. Ariz.

**Lophyrocera nigromaculata** Cameron, 1884. Biol. Cent.-Amer., Hym. 1, p.  
104.

#### Genus KAPALA Cameron

**Kapala** Cameron, 1884. Biol. Cent.-Amer., Hym. 1, p. 102.

Type: **Eucharis furcata** Fabricius. Monob.

**Capala** Schulz, 1906. Spolia Hym., p. 150. Emend.

**floridana** (Ashmead). Fla. Host: *Pogonomyrmex badius* (Latr.).

**Thoracantha floridana** Ashmead, 1885. Ent. Amer. 1: 96. ♂.  
Taxonomy: Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xi. ♂ ♀.

**furcata** (Fabricius). Ga., Tex.

**Eucharis furcata** Fabricius, 1804. Systema Piezatorum, p. 158.

#### Genus PSEUDOMETAGEA Ashmead

**Pseudometagea** Ashmead, 1899. Ent. Soc. Wash. Proc. 4: 239, 241 (no species).

Type: **Metagea schwarzi** Ashmead. Included by Ashmead, 1904.

**hillmeadia** Girault. Md.

**Pseudometagea hillmeadia** Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 113.  
♀.

**schwarzii** (Ashmead). N. J., Pa., Md., D. C., Ill., Colo.

**Metagea schwarzii** Ashmead, 1892. Ent. Soc. Wash. Proc. 2: 356. ♂ ♀.

#### Genus ORASEMA Cameron

**Orasema** Cameron, 1884. Biol. Cent.-Amer., Hym. 1, p. 104.

Type: **Orasema stramineipes** Cameron. Monob.

Revision: Gahan, 1940. U. S. Natl. Mus. Proc. 88: 436–458.

**aureoviridis** Gahan. Tex.

*Orasema aureoviridis* Gahan, 1940. U. S. Natl. Mus. Proc. 88: 448. ♂ ♀.

**bakeri** Gahan. Colo., Ariz.

*Orasema bakeri* Gahan, 1940. U. S. Natl. Mus. Proc. 88: 452. ♂ ♀.

**beameri** Gahan. Colo.

*Orasema beameri* Gahan, 1940. U. S. Natl. Mus. Proc. 88: 447. ♂ ♀.

**cockerelli** Gahan. Iowa, Kans., Colo., N. Mex., Ariz.

*Orasema cockerelli* Gahan, 1940. U. S. Natl. Mus. Proc. 88: 453. ♂ ♀.

**coloradensis** Wheeler. Va., Fla., La., Tex., Iowa, Kans., Colo., N. Mex. Hosts: *Pheidole vinelandica* Forel; *Solenopsis molesta* var. *validiuscula* Emery.

*Orasema coloradensis* Wheeler, 1907. Amer. Mus. Nat. Hist. Bul. 23: 12-14. ♂ ♀.

Biology: Clausen, 1940. Jour. Wash. Acad. Sci. 30: 504-507.

**minuta** Ashmead. Fla.

*Orasema minuta* Ashmead, 1888. Ent. Amer. 3: 188. ♂.

**neomexicana** Gahan. N. Mex.

*Orasema neomexicana* Gahan, 1940. U. S. Natl. Mus. Proc. 88: 450. ♀.

**occidentalis** Ashmead. Calif.

*Orasema occidentalis* Ashmead, 1892. Ent. Soc. Wash. Proc. 2: 355. ♀.

**robertsoni** Gahan. Fla.

*Orasema robertsoni* Gahan, 1940. U. S. Natl. Mus. Proc. 88: 451. ♀.

**simulatrix** Gahan. Ariz.

*Orasema simulatrix* Gahan, 1940. U. S. Natl. Mus. Proc. 88: 450. ♀.

**smithi** Howard. Va.

*Orasema Smithi* Howard, 1897. Linn. Soc. London, Jour., Zool. 26: 134. ♀.

**texana** Gahan. Tex.

*Orasema texana* Gahan, 1940. U. S. Natl. Mus. Proc. 88: 440. ♀.

**violacea** Ashmead. N. C., Fla.

*Orasema violacea* Ashmead, 1888. Ent. Amer. 3: 187. ♂.

**viridis** Ashmead. N. C., Ariz.

*Orasema viridis* Ashmead, 1895. Calif. Acad. Sci. Proc. (2) 5: 553.

Biology: Smith, 1912. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 19: 57-59.

**wheeleri** Wheeler. Tex., Colo. Hosts: *Pheidole ceres* Whlr.; *P. kingi instabilis* Emery; *P. sciophila* Whlr.

*Orasema wheeleri* Wheeler, 1907. Amer. Mus. Nat. Hist. Bul. 23: 14. ♀.

## Family PERILAMPIDAE

Revision: Ruschka, 1924. Deut. Ent. Ztschr., pp. 90-96.

### Genus SUPERILAMPUS Walker

**Euperilampus** Walker, 1871. Notes on Chalcid., pt. 4, p. 67.

Type: *Perilampus gloriosus* Walker. Monob.

Revision: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 67.

**lepreos** (Walker). Ga.

*Perilampus Lepreos* Walker, 1846. List Hym. Brit. Mus., v. 1, pp. 22, 89.

**opacus** Ashmead. Colo., Ariz.

*Euperilampus opacus* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 318. ♀.

Taxonomy: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 69.

**triangularis** (Say). Que., Maine, N. J., Md., N. C., Ind., Fla., Kans., Colo.

*Perilampus triangularis* Say, 1828. Contrib. Maclur. Lyc. Phila. 1: 78-79.

## Genus PERILAMPUS Latreille

*Perilampus* Latreille, 1809. Gen. Crust. Ins., v. 4, p. 30.

Type: (*Diplolepis violacea* Fabricius) = [*Cynips ruficornis* (Fabricius)]. Desig. by Latreille, 1810.

*Cinipsillum* Lamarck, 1817. Hist. Nat. Anim. sans Vert., v. 4, p. 156.

Type: (*Chalcis violacea* Panzer) = [*Cynips ruficornis* (Fabricius)]. Desig. by Gahan and Fagan, 1923.

*Cynipsillum* Agassiz, 1845. Nomencl. Zool., Index Univ. p. 325. Emend. Revision: Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 369-412.

*alexinus* Walker. Ga.

*Perilampus alexinus* Walker, 1846. List Hym. Ins. Brit. Mus., v. 1, p. 89. Taxonomy: Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 126.

*anomocerus* Crawford. N. C., Colo., Idaho.

*Perilampus anomocerus* Crawford, 1914. Ent. Soc. Wash. Proc. 16: 72. ♂ ♀.

*canadensis canadensis* Crawford. Canada, Pa., Md., Va., La., Minn. Hosts: *Zenillia* sp.; *Macremphytus* sp.

*Perilampus canadensis* Crawford, 1914. Ent. Soc. Wash. Proc. 16: 74. ♂ ♀.

*canadensis nitidus* Smulyan. Pa., La.

*Perilampus canadensis* var. *nitidus* Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 393. ♂ ♀.

*capitatus* Smulyan. N. Y. to Va., Ky. and Mich. Hosts: *Carpocapsa pomonella* (L.); *Ascogaster quadridentata* Wesm.; *Cremastus* sp.

*Perilampus capitatus* Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 397. ♂ ♀. Biology: Jaynes and Marucci, 1947. Jour. Econ. Ent. 40: 11-12.

*carinifrons* Crawford. Tex.

*Perilampus carinifrons* Crawford, 1914. Ent. Soc. Wash. Proc. 16: 71. ♂ ♀.

*carolinensis* Smulyan. Vt., N. Y., Conn., N. J., Va., N. C. Hosts: *Anisota senatoria* (A. and S.); *Datana integerrima* G. and R.

*Perilampus carolinensis* Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 376. ♂ ♀.

*chrysopae* Crawford. Ont., throughout U. S. Hosts: *Symphebius angustus* (Banks); *Chrysopa californica* Coq.; *C. oculata* Say; *C. rufilabris* Burm.; *C. sp.*; ?*Carpocapsa pomonella* (L.); *Rhyacionia frustrana* (Comst.); probably *Otacutes crassus crassus* (Prov.).

*Perilampus chrysopae* Crawford, 1914. Ent. Soc. Wash. Proc. 16: 73. ♂ ♀.

*Perilampus chrysopae* var. *laeviccephalus* Crawford, 1917. (1916). Insecutor Inscitiae Menstruus 4: 144. ♂ ♀.

Biology: Clancy, 1946. Calif. Univ. Publs., Ent. 7: 440-448.

*crawfordi* Smulyan. N. Y., N. J., Pa., Md., Va.

*Perilampus crawfordi* Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 384. ♂ ♀.

*cyaneus* Brullé. Carolina. Hosts: *Diacrisia virginica* (F.); *Cingilia catenaria* (Drury); *Ancylis comptana* (Froel.); *Sarcophaga rapax* Wlkr.

*Perilampus cyaneus* Brullé, 1846. Hist. Nat. Ins. Hym., v. 4, p. 573.

*entellus* Walker. Ohio.

*Perilampus Entellus* Walker, 1843. Ann. Mag. Nat. Hist. (1) 12: 103. ♂ ♀.

*fulvicornis fulvicornis* Ashmead. Que. to Fla., west to Calif. and B. C. Hosts: *Tetralopha scortealis* (Led.); *Ancylis comptana* (Froel.); *Carpocapsa pomonella* (L.); *Ecdytolopha insiticiana* Zell.; *Epiblema strenuana* (Wlkr.); *Grapholita molesta* (Busck); *G. prunivora* (Walsh); *Rhyacionia frustrana* (Comst.); gall of *Gnorimoschema gallaesolidaginis* Riley; *G. operculella* (Zell.); *Keiferia glochinella* (Zell.); *Zenillia* sp.; *Apanteles epinotiae* Vier.; *A. sp.*; *Macrocentrus pallisteri* DeGant; *Meteorus trachynotus* Vier.; *M. sp.*; *Cremastus cooki* Weed.

*Perilampus* (?) *fulvicornis* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 126. ♂.

*fulvicornis prothoracicicus* Smulyan. N. H., Md., Va., La., Mich., Nebr., Wash. Host: *Carpocapsa pomonella* (L.).

*Perilampus fulvicornis* var. *prothoracicicus* Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 403. ♀.

**gahani** Smulyan. Colo., N. Mex.

*Perilampus gahani* Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 401. ♀.

**granulosus** Crawford. N. J. to Ala., La., Tex., Kans. Host: *Gnorimoschema operculella* (Zell.).

*Perilampus granulosus* Crawford, 1914. Ent. Soc. Wash. Proc. 16: 73. ♂ ♀.

**hyalinus** Say. Sask., Man., Ont., Que.; throughout U. S. Hosts: ?*Chrysopa rufilabris* Burm.; *Lycus striatus* Melsh.; *Euchaetis egle* (Drury); *Hyphantria cunea* (Drury); *Acronycta haustulifera* (A. and S.); *Harrisina americana* (Guér.); *Acrobasis caryaef* Grote; *Dasyphaga alternosquamella* Rag.; *Phlyctaenia extricalis* (Guen.); *Epiblema desertana* (Zell.); *E. scudderiana* (Clem.); ?*Rhyacionia* sp.; *Sarcophaga kellyi* Ald.; *Senotainia trilineata* (Wulp); *Achaetoneura euchaetiae* Web.; *A. frenchii* (Will.); *A. melalophae* Allen; *Compsilura concinnata* (Meig.); *Mericia aldrichi* (Tsn.); ?*M. ampelus* (Wlk.); *Sturmia scutellata* (R. D.); *Neodiprion abbotii* (Leach); *N. lecontei* (Fitch) (probably secondary); *Diprion* sp.; *Apanteles hyphantriae* Riley; *A. melanocelus* (Ratz.); *Apanteles* sp.; *Meteorus hyphantriae* Riley; *Microplitis croceipes* (Cress.); *Campoplex* sp.; *C. validus* (Cress.); *Hypothenemus fugitivus* (Say); *H. fugitivus pacificus* Cush.; *H. pilosulus* (Prov.); *Phobocampe pallipes* (Prov.); *Dibrachys cavus* (Wlk.).

*Perilampus hyalinus* Say, 1828. Contrib. Maclur. Lyc. Phila. 1: 79.

*Perilampus aciculatus* Provancher, 1887. Addit. Corr. Faune Ent. Canad. Hym., p. 199. ♀. N. syn.

Biology: Smith, 1912. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 19: 34-63.—Smith, 1917. Psyche 24: 64-68.

**muesebecki** Smulyan. N. H., N. Y., Pa., D. C., Fla., Kans., Nebr., Colo.

*Perilampus muesebecki* Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 407. ♂ ♀.

**ocellatus** Smulyan. Ga., Mo.

*Perilampus ocellatus* Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 390. ♂ ♀.

**platygaster** Say. Ont., Que.; N. H. to N. C.; Ind., Ill., La., Tex., Kans., Colo. Hosts: *Harrisina americana* (Guér.); *Epiblema scudderiana* (Clem.); *Melittia* sp.; *Meteorus dimidiatus* (Cress.).

*Perilampus platygaster* (!) Say, 1836. Boston Jour. Nat. Hist. 1: 274.

*Perilampus platygaster* Riley, 1870. Mo. State Bd. Agr. Ann. Rpt. 5: 87. Emend. Biology: Strauss, 1916. U. S. Dept. Agr. Bul. 419: 10.

**regalis** Smulyan. N. C., Mo.

*Perilampus regalis* Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 378. ♀.

**robertsoni** Crawford. Canada, Ill., Nebr., Colo.

*Perilampus robertsoni* Crawford, 1914. Ent. Soc. Wash. Proc. 16: 71. ♂ ♀.

**rohweri** Smulyan. Canada, N. J.

*Perilampus rohweri* Smulyan, 1936. U. S. Natl. Mus. Proc. 83: 396. ♂ ♀.

**ruficornis** (Fabricius). Europe; ?N. Y., ?N. J. Host: Larvae vorid on *Crambus vulgivagellus* Clem.

*Cynips ruficornis* Fabricius, 1793. Ent. System., v. 2, p. 103.

*Diplolepis violacea* Fabricius, 1804. Systema Piezatorum, p. 149.

Taxonomy: Lintner, 1883. Injurious Insects N. Y. Ann. Rpt. 1: 146-147.

**similis** Crawford. U. S. west of Mississippi R.; Alta. Hosts: *Acrobasis* sp.; ?*Homoeosoma electellum* (Hulst.); *Loxostege sticticalis* (L.); *Eulophus* sp.

*Perilampus similis* Crawford, 1914. Ent. Soc. Wash. Proc. 16: 73. ♀.

**stygicus** Provancher. Que.; Maine to Va. and Ohio; La., Kans. Hosts: *Epiblema strenuana* (Wlk.); *Macrocentrus* sp.

*Perilampus stygicus* Provancher, 1888. Addit. Corr. Faune Ent. Canada Hym., p. 406. ♀.

**subcarinatus** Crawford. N. Y., Ala., Tex., Nebr., Colo., Idaho, Calif.

*Perilampus subcarinatus* Crawford, 1914. Ent. Soc. Wash. Proc. 16: 70. ♀.

*Perilampus bakeri* Crawford, 1914. Ent. Soc. Wash. Proc. 16: 72. ♂ ♀.

**tassoni** Girault. Australia, ?Conn.

*Perilampus tassoni* Girault, 1922. Insecutor Inscitiae Menstruus 10: 39. ♀.

Taxonomy: Britton, 1938. Conn. State Geol. and Nat. Hist. Survey Bul. 60: 139.

**tristis** Mayr. - Ont. Hosts: *Rhyacionia buoliana* (Schiff.); *Ascogaster quadridentata* Wesm.

**Perilampus tristis** Mayr, 1905. Zool.-Bot. Gesell. Wien. Verh. 55: 564, 566.  
♂ ♀.

Biology: Bergold and Ripper, 1937. Ztschr. f. Parasitenk. 9: 394-417.  
Morphology: Parker, 1924. Soc. Ent. France Ann. 93: 265, 275.

## Family AGAONTIDAE

The members of this family live phytophagously in the flowers and fruits of figs.

Revision: Grandi, 1935. R. Ist. Super. Agr., Lab. Ent. Bol. 7: 214-240 (world cat.).

### Genus BLASTOPHAGUS Gravenhorst

**Blastophagus** Gravenhorst, 1827 (1826). Übers. Arb. Schles. Gesell. f. Vaterland. Kultur, p. 23.

Type: (*Blastophagus grossorum* Gravenhorst)=**B. psenes** (Linnaeus). Monob.

**Blastophaga** Gravenhorst, 1829. Schles. Gesell. f. Vaterland. Kultur Beitr. Ent., p. 27. ?Emend.

**Kradibia** Saunders, 1883. Ent. Soc. London, Trans. pp. 20, 23.  
Type: *Kradibia cowani* Saunders. Monob.

**psenes** (Linnaeus). Ariz., Calif. Host: Fruit of caprifigs.

**Cynips Psenes** Linnaeus, 1758. Syst. Nat., ed. 10, p. 554. *Nom. nud.*

**Cynips Psenes** Linnaeus, 1767. Syst. Nat., ed. 12, tom. 1, pars 2, p. 919.

**Blastophaga grossorum** Gravenhorst, 1829. Beitr. Ent., besonders in Bezug auf die Schles. Fauna, v. 1, pp. 27-29.

Biology: Grandi, 1929. R. Inst. Super. Agr., Lab. Ent. Bol. 2: 1-145.—Quayle, 1938.

Insects of Citrus and Other Subtropical Fruit, pp. 408-416.

Morphology: Grandi, 1929. R. Ist. Super. Agr., Lab. Ent. Bol. 2: 1-145.

### Genus SECUNDEISENIA Schulz

**Eisenia** Ashmead, 1904. Carnegie Mus., Mem. 1: 233. Preocc.

Type: *Eisenia mexicana* Ashmead. Monob.

**Eiseniella** Ashmead, 1906. Ent. Soc. Wash. Proc. 8: 31. N. name. Preocc.

**Secundeisenia** Schulz, 1906. Spolia Hym., p. 146. N. name.

**Allopale** Strand, 1911. Arch. f. Naturgesch. 77: 210. N. name.

**mexicana** (Ashmead). Fla. Hosts: *Ficus aurea* wild sp. of *Ficus*.

**Eisenia mexicana** Ashmead, 1904. Carnegie Mus. Mem. 1: 233. ♀.

Taxonomy: Gahan and Peck, 1946. Jour. Wash. Acad. Sci. 36: 315.

## Family TORYMIDAE

### Subfamily IDARNINAE

#### Genus COLYOSTICHUS Mayr

**Colyostichus** Mayr. 1885. Zool.-Bot. Gesell. Wien Verh. 35: 157-158, 237.

Type: *Colyostichus longicauda* Mayr. Desig. by Ashmead, 1904.

**brevicauda** Mayr. Fla. Host: *Ficus altissimus*.

**Colyostichus brevicaudis** Mayr, 1885. Zool.-Bot. Gesell. Wien, Verh. 35: 239.  
♀.

#### Genus SYCOPHILA Walker

**Sycophila** Walker, 1871. Notes on Chalcid, v. 4, p. 63.

Type: *Sycophila decatomoides* Walker. Desig. by Ashmead, 1904.

**Isanisa** Walker, 1875. Entomologist 8: 15.

Type: *Sycophila decatomoides* Walker. Monob.

**Pseudisa** Walker, 1875. Entomologist 8: 15.

Type: *Pseudisa smicrooides* Walker. Monob.

**bicolor** Ashmead. Fla. Host: *Ficus pedunculata*.

*Sycophila bicolor* Ashmead, 1900. Ent. Soc. London Trans., pp. 252, 335.  
♂ ♀.

**incerta** Ashmead. Fla. Host: *Ficus pedunculata*.

*Sycophila incerta* Ashmead, 1900. Ent. Soc. London Trans., pp. 253, 335. ♀.

### Genus IDARNES Walker

**Idarnes** Walker, 1843. Ann. Mag. Nat. Hist. 12: 47.

Type: *Idarnes carme* Walker. Monob.

**Idarnomorpha** Girault, 1915. Queensland Mus. Mem. 4: 281.

Type: *Idarnomorpha subaenea* Girault. Monob.

**carme** Walker. Fla. Host: *Ficus aurea*.

*Idarnes Carme* Walker, 1843. Ann. Mag. Nat. Hist. 12: 47. ♀.

### Subfamily TORYMINAE

Revisions: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 122-126.—Hoffmeyer, 1930.  
Ent. Meddel. 17: 232-285.

Phylogeny: Breland, 1938. N. Y. Ent. Soc. Jour. 46: 355-399..

### Genus ALLOTORYMUS Huber

**Allotorymus** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 104.

Type: *Syntomaspis splendens* Provancher. Monob.

**splendens** (Provancher). Ont., Colo., B. C.

*Syntomaspis splendens* Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., 196. ♂ ♀.

Taxonomy: Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 105. ♂ ♀.

### Genus TORYMUS Dalman

**Callimome** Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 146, 148. Suppressed by Internat. Comm. Zool. Nomencl. Op. 155, 1944.

**Misocampe** Latreille, 1818. Nouv. Dict. Hist. Nat., ed. 2, pp. 21, 213. Suppressed by Internat. Comm. Zool. Nomencl. Op. 155, 1944.

**Torymus** Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 135, 178.

Type: *Ichneumon bedeguaris* Linnaeus. Desig. by Internat. Comm. Zool. Nomencl. Op. 155, 1944.

**Misocampus** Stephens, 1829. Cat. Brit. Ins. Mandibulata, p. 395. Emend.

**Syntomaspis** Foerster, 1856. Hym. Stud., v. 2, pp. 43, 44.

Type: (*Torymus eurynotus* Foerster)=*Torymus cyaneus* Boheman. Desig. by Gahan and Fagan, 1923.

**Hemitorymus** Ashmead, 1904. Carnegie Mus. Mem. 1: 243, 400.

Type: *Hemitorymus thoracicus* Ashmead. Monob.

Revisions: Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 1-114.—Hobbs, 1948. Pan-Pacific Ent. 24: 95-96.

The species of this genus are usually associated with plant galls.

**advenus** (Osten Sacken). Conn., N. J., N. Y., D. C., N. C., Fla., La. Hosts: *Asphondylia rudbeckiae conspicua* O. S.; itonid gall in blossom of *Vernonia noveboracensis*; *Procecidochares atra* (Loew); ?*Andricus petiolicola* (O. S.); ?*Callirhytis ventricosa* (O. S.); ?*Diastrophus nebulosus* (O. S.).

**Callimome advena** Osten-Sacken, 1870. Amer. Ent. Soc. Trans. 3: 59. ♂ ♀.

**aeneoscapus** (Huber), n. comb. Idaho.

**Callimome aeneoscapum** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 35. ♀.

**aeneus** (Ashmead). Ill., Fla. Hosts: *Belonocnema treatae* Mayr; *Disholcaspis omnivora* (Ashm.); *D. virens* (Ashm.); *Dryocosmus imbricariae* (Ashm.).

**Callimome aenea** Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxiii. ♂ ♀.

**Callimome dryorhizoxeni** Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiii. ♀.

**Torymus omnivoreae** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 188. ♂ ♀.

- aereus** (Huber), n. comb. D. C., Va., Fla., Mo., Tex., Ariz. Hosts: Galls of *Disholcaspis fasciata* Bass. and galls on *Quercus laurifolia*, *Q. macrocarpa*, and *Q. schneckii*.  
**Callimome aereum** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 71. ♂ ♀.
- aeus** (Walker). N. Y., N. J.  
**Callimome Aea** Walker, 1843. Ann. Mag. Nat. Hist. (1) 12: 104. ♀.
- alamedensis** (Huber), n. comb. Conn., Calif., Oreg. Hosts: Galls on currant and *Rubus parviflorus*.  
**Callimome alamedensis** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 28. ♂ ♀.
- alaskensis** (Huber), n. comb. Alaska.  
**Callimome alaskensis** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 31. ♀.
- albitarsis** (Huber), n. comb. Ill., Kans. Hosts: *Desmoris fulvus* (Lec.); *Asphondylia globulus* O. S.; gall on *Oligoneuron rigidum*.  
**Callimome albitarse** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 80. ♀.  
 Biology: Breland, 1939. Ent. Soc. Amer. Ann. 32: 719, 724.
- amelanchieris** (Cushman), n. comb. Pa., W. Va., Minn. Hosts: *Megastigmus amelanchieris* CUSH.; gall on *Amelanchier canadensis*.  
**Syntomaspis amelanchieris** Cushman, 1918 (1917). Ent. Soc. Wash. Proc. 19: 82. ♂ ♀.  
 Biology: Milliron, 1949. Amer. Midland Nat. 41: 393-395.
- anthomyiae** Ashmead. Ga., Fla. Hosts: *Chalcodermus inaequicollis* Horn; ?muscid leaf miner (probably *Pegomya* sp.) of cultivated plant.  
**Torymus anthomyiae** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 189. ♀.
- asteridis** (Huber). N. H., Conn. Host: Itonidid gall on aster.  
**Callimome asteridis** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 43. ♂ ♀.
- atriplicis** (Huber), n. comb. Calif. Host: Itonidid on *Atriplex canescens*.  
**Callimome atriplicis** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 44. ♀.
- aucupariae** (Rodzianko). Minn. Host: Probably *Megastigmus aucupariae* Ratz.  
**Syntomaspis aucupariae** Rodzianko, 1908. Soc. Imp. Nat. Moscou, Bul. (n. s.) 21: 602. ♂ ♀.
- axillaris** Ashmead. W. V., Va.  
**Torymus axillaris** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 333. ♀.
- baccharidis** (Huber), n. comb. Conn., Calif. Host: Itonidid on *Baccharis*.  
**Callimome baccharidis** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 46. ♂ ♀.
- bedeguaris** (Linnaeus). ?Colo. Host: *Diplolepis rosae* (L.).  
*Ichneumon Bedeguaris* Linnaeus, 1758. Syst. Nat., ed. 10, p. 567. ♀.  
 Taxonomy: Hoffmeyer, 1930. Ent. Meddel. 17: 238, 249.
- bicoloratus** (Huber), n. comb. N. Mex., Ariz. Hosts: *Amphibolips trizonata* Ashm.; *Diplolepis bicolor* (Harr.).  
**Callimome bicoloratum** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 73. ♂ ♀.
- brevis** Breland. Tex. Host: *Trichormomyia helianthi* (Brodie).  
? **Torymus helianthi** Brodie, 1894. Biol. Rev. Ontario 1: 45. ♀.  
**Torymus brevis** Breland, 1948. Ent. Soc. Wash. Proc. 50: 57. ♂ ♀.  
 Biology: Breland, 1948. Ent. News 59: 230.
- brodiei** (Ashmead). Ont., Ill. Hosts: *Rhabdophaga cornu* Walsh; *Acraspis pezomachoides* (O. S.).  
**Syntomaspis Brodiei** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 187. ♂ ♀.
- californicus californicus** (Ashmead). Conn., Fla., Calif., Oreg. Hosts: *Andricus californicus* Ashm.; *A. lasius* (Ashm.); *Disholcaspis corallina* (Bass.); *D. plumbella* Kinsey; *D. truceensis* Ashm.; *D. simulata* Kinsey; *D. sp. on Quercus douglasii*; *Besbicus mirabilis* Kinsey; *Callirhytis agrifoliae* (Ashm.); *C. pomiformis* (Ashm.); *C. sp. on Quercus chrysolepis*; *Heteroecus pacificus* (Ashm.); pimply gall on *Quercus douglasii*; ?strawberry gall on *Quercus dumosa*.  
**Syntomaspis californica** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 127. ♀.

- californicus subdolus** (Huber), n. comb. Conn., Calif. Hosts: *Disholcaspis chrysolepidis* (Beut.); *D. corallina* (Bass.); *D. truckeensis* Ashm.  
**Callimome californicum** var. *subdolum* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 85. ♂ ♀.
- capillaceus** (Huber), n. comb. Conn., Ariz. Host: Itonidid gall on *Artemisia* stem.  
**Callimome capillaceum** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 74. ♀.
- capite** (Huber), n. comb. D. C.  
**Callimome capite** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 32. ♂ ♀.
- castanopsisidis** (Huber), n. comb. Conn., Calif. Hosts: ?*Dryocosmus castanopsisidis* (Beut.); galls on *Quercus dumosa* and *Q. lobata*.  
**Callimome castanopsisidis** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 64. ♂ ♀.
- cecidomyiae** (Walker). Ont., Kans. Host: *Itonida spongivora* (Wlkr.).  
**Callimome Cecidomyiae** Walker, 1844. Ann. Mag. Nat. Hist. (1) 14: 15. ♀.
- chrysochlorus** (Osten Sacken). New England, N. J., Ohio, Ill., Colo., N. Mex., Ariz., Calif., Oreg., Sask. Hosts: *Diplolepis arefacta* (Gill.); *D. bassetti* (Beut.); *D. californica* (Beut.); *D. dichlocera* (Harr.); *D. fusiformans* (Ashm.); *D. ignota* (O. S.); *D. multispinosa* (Gill.); *D. radicum* (O. S.); *D. variabilis* (Bass.); cynipid woody rose gall.  
**Callimome chrysochlora** Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 63. ♂ ♀.
- Callimome solitaria** Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 64. ♀.
- cinerosus** (Huber), n. comb. Tex. Hosts: *Amphibolips* sp. on *Quercus virginiana*; *Disholcaspis cinerosa* (Bass.).  
**Callimome cinerosum** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 84. ♀.
- citripes** (Huber), n. comb. Colo. Host: *Euaresta tricolor* Doane.  
**Callimome citripes** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 48. ♂ ♀.
- coccineus** (Huber), n. comb. Maine, Mass., Conn., Va. Hosts: *Amphibolips confluentus* (Harr.); *A. spongifica* (O. S.).  
**Callimome coccineum** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 68. ♀.
- coeruleus** (Ashmead). N. J., Fla., Colo. Hosts: *Amphibolips cinerea* Ashm. galls on *Rubus* sp.  
**Callimome coerulea** Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxiii. ♂ ♀.
- coloradensis** (Huber), n. comb. Conn., Kans., Colo. Hosts: Itonidid on *Artemisia*; *Dasyneura* sp. on *Helianthus*.  
**Callimome coloradensis** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 49. ♂ ♀.
- cruentatus** (Huber), n. comb. Conn. Host: Cynipid gall on leaf of *Quercus virginiana*.  
**Callimome cruentatum** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 50. ♂ ♀.
- dasyneurae** (Huber), n. comb. Ohio. Host: *Dasyneura almea* Felt.  
**Callimome dasyneurae** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 56. ♂ ♀.
- druparum** Boheman. Ont., Que., N. S., Maine, Vt., N. Y., Conn., Pa., Va., Ohio, Mich., B. C. Hosts: Seeds of apple, *Crataegus*, *Malus silvestris*, *M.* sp., *Pyrus* spp., *Sorbus intermedia*, and ?*S. latifolia*.  
**Torymus druparum** Boheman, 1834 (1833). Svenska Vetensk. Acad. Handl. 54: 361. ♀.
- Biology: Crosby, 1909. N. Y. (Cornell) Agr. Expt. Sta. Bul. 265: 369-375.—Cushman, 1916. Jour. Agr. Res. 7: 487.—Knight, 1922. N. Y. (Cornell) Agr. Expt. Sta. Bul. 410: 490.—Lathrop, 1936. Maine Agr. Expt. Sta. Bul. 384: 392.—Hammer, 1939. Jour. Econ. Ent. 32: 259-264.—Lathrop and Dirks, 1944. Jour. Econ. Ent. 37: 199-204.
- dryophanta** (Ashmead), n. comb. Fla. Host: *Bassettia catesbaei* (Ashm.).  
**Syntomaspis dryophantae** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 187. ♂.
- dubiosus** (Huber), n. comb. D. C.  
**Callimome dubiosum** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 24. ♀.

- duplicatus** (Huber), n. comb. Que., Conn., Va., Ohio. Host: *Diastrophus cuscuteformis* O. S.
- Callimome duplicatum** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 27.  
♂ ♀.
- durus** (Osten Sacken). Conn., D. C. Host: *Diplosis caryae* O. S.
- Callimome dura** Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 59. ♂.
- ebrius** (Osten Sacken). Conn., N. J., D. C., Va., Ohio, Tex. Host: *Lasioptera vitis* O. S.
- Callimome ebria** Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 58. ♂ ♀.
- elegantissimus** (Ashmead), n. comb. Ont., Fla. Hosts: *Disholcaspis virens* (Ashm.); ?*Xanthoteras forticorne* (O. S.).
- Callimome elegantissima** Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxiv. ♀.
- fagopyrum** (Provancher). Ont., Que.; Maine to Fla.; Mich., Kans., Colo. Hosts: *Dasyneura serrulatae* O. S.; *Rhabdophaga salicifolia* Felt; *Diastrophus cuscuteformis* O. S.; *D. nebulosus* (O. S.); *D. turgidus* Bass.; *Disholcaspis virens* (Ashm.).
- Callimome brevicauda** Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 62.  
♂ ♀. Preocc.
- Callimome (!) fagopirum** Provancher, 1881 (Sept.). Nat. Canad. 12: 291.  
♂ ♀.
- Callimome Sackenii** Ashmead, 1881 (Oct.). Amer. Ent. Soc. Trans. 9: Proc. p. xxii. N. name.
- Callimome virentis** Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxiv. ♀.
- Callimome brevissimicauda** Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxiii. ♀.
- Callimome fagopyrum** Provancher, 1883. Petite Faune Ent. Canada 2, index only. Emend.
- Torymus ostensackenii** Dalla Torre, 1898. Cat. Hym. v. 5, p. 311. N. name.
- ferrugineipes** (Huber), n. comb. Conn., Fla.
- Callimome ferrugineipes** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 33.  
♂ ♀.
- flavicoxa** (Osten Sacken). Ont., Que., Maine, N. H., Mass., Conn., N. J., Va. Hosts: *Belonocnema treatae* Mayr; *Diastrophus nebulosus* (O. S.); *Diplolepis radicum* (O. S.); *Liposthenes gelechomae* (L.).
- Callimome flavicoxa** Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 61. ♀.
- flaviventris** Ashmead. Conn., Kans.
- Torymus flaviventris** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. IV, ♀.
- floridensis** Peck, n. name. Fla. Hosts: *Amphibolips fuliginosa* Ashm.; gall on *Quercus phellos* or *Q. laurifolia*.
- Callimome robustum** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 72. ♀. Preoccupied by *T. robustus* Ratzeburg, 1852.
- fullawayi** (Huber), n. comb. Calif., Oreg. Hosts: *Andricus californicus* Ashm.; *Callirhytis agrifoliae* (Ashm.); *Dryocosmus bicornis* (McC. and Egb.); gall on *Quercus douglasii*.
- Syntomaspis caerulea** Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 275. ♀. Preocc.
- Callimome fullawayi** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 19. N. name.
- Taxonomy: Breland, 1939. Brooklyn Ent. Soc. Bul. 34: 87.
- fulvus** (Huber), n. comb. Nebr.
- Callimome fulvum** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 26. ♀.
- gahani** (Huber), n. comb. Oreg. Host: Cynipid on *Quercus garryana*.
- Callimome gahani** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 69. ♂ ♀.
- giganticus** (Huber). Calif., Oreg. Hosts: ?*Besbicus mirabilis* (Kinsey).
- Callimome giganticum** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 65.  
♂ ♀.

- hainesi** Ashmead. Tex., Ariz., Calif. Host: *Asphondylia websteri* Felt.  
*Torymus hainesi* Ashmead, 1893. Ent. News 4: 278. ♀.  
*Callimome asphondyliae* Gahan, 1919. Preocc.
- helianthi** Brodie. Ont. Host: *Diplosis helianthi* Brodie.  
*Torymus helianthi* Brodie, 1894. Biol. Rev. Ontario 1: 45. ♀.  
? *Torymus brevis* Breland, 1948. Ent. Soc. Wash. Proc. 50: 57. ♂ ♀.  
Taxonomy: Breland, 1948. Ent. Soc. Wash. Proc. 50: 58.
- hircinus** Ashmead. W. Va., Va. Host: Twig gall on willow.  
*Torymus hircinus* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 333. ♂ ♀.
- hirsutus** (Huber), n. comb. Ariz. Host: Twig gall on *Quercus* sp.  
*Callimome hirsutum* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 74. ♂ ♀.
- holcaspoideus** (Ashmead), n. comb. Brazil; ?Conn.  
*Syntomaspis holcaspoidea* Ashmead, 1904. Carnegie Mus. Mem. 1: 397.  
♂ ♀.
- huberi** (Hoffmeyer), n. comb. Tex. Host: ?Itonidid gall on *Celtis* sp.  
*Callimome tarsale* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 76. ♂ ♀.  
Preocc.
- Callimome huberi* Hoffmeyer, 1929. Ent. Meddel. 16: 333. N. name.
- kinseyi** (Huber), n. comb. Utah, Calif. Hosts: *Trypeta* sp. on *Chrysothamnus viscidiflorus*; dipteron on *Artemisia* sp.  
*Callimome kinseyi* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 44. ♂ ♀.
- koebelei** (Huber), n. comb. Calif. Host: Itonidid gall on *Baccharis pilularis*.  
*Callimome koebelei* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 52. ♂ ♀.
- lissus** (Walker), n. comb. Fla.  
*Callimome lissus* Walker, 1843. Soc. Ent. France Ann. (2) 1: 150. ♂.
- lividus** (Ashmead). Fla., La.  
*Callimome lividus* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiii. ♀.
- longicauda** (Provancher). Ont., Que.  
*Callimome longicauda* Provancher, 1883. Nat. Canad. 14: 34. ♀.
- longior** Brodie. Ont. Host: *Diplosis helianthi* Brodie.  
*Torymus longior* Brodie, 1894. Biol. Rev. Ontario 1: 45. ♀.
- longistigma** (Huber), n. comb. Calif. Host: Woody itonidid gall on willow.  
*Callimome longistigmum* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 47.  
♂ ♀.
- magnificus** (Osten Sacken). N. H., N. Y., Conn., N. J., D. C., Fla., Kans., Colo.  
Host: *Diplolepis radicum* (O. S.).  
*Callimome magnifica* Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 62.  
♂ ♀.
- melanocerae** (Ashmead), n. comb. D. C., Va., Ga., Fla., Kans. Hosts: *Amphibolips citriformis* Ashm.; *A. globulus* Beut.; *A. inanis* (O. S.); *A. melanocera* Ashm.; *A. spongifica* (O. S.); *Andricus flocci* (O. S.); *Disholcaspis quercus-globulus* (Fitch); *D. terrestris* Weld; *Xanthoteras politum* (Bass.).  
*Callimome melanocerae* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiii. ♀.  
*Callimome citriformi* (!) Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiii. ♀.  
*Syntomaspis citriformis* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 187. Emend.
- mellipes** (Huber), n. comb. Mass., Conn. Host: Itonidid on *Populus* sp.  
*Callimome mellipes* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 23. ♂ ♀.
- mexicanus** Ashmead. Ariz. Host: Cynipid gall.  
*Torymus Mexicanus* Ashmead, 1899. Ent. News 10: 195. ♂ ♀.
- minutissimus** (Huber), n. comb. Calif. Host: Twig gall on *Quercus* sp.  
*Callimome minutissimum* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 78.  
♀.
- missouriensis** (Huber), n. comb. N. C., Ind., Mo. Hosts: Itonidid stem gall on *Rubus*; cynipid gall.

- Callimome missouriensis** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 42.  
 $\sigma$  ♀.
- multicolor** (Huber), n. comb. Calif. Host: Gall on *Ephedra* sp.
- Callimome multicolor** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 51. ♀.
- neuroterus** Ashmead. Fla. Host: *Neuroterus minutissimus* Ashm.
- Torymus neuroterus** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 188. ♂.
- obscurus** (Breland), n. comb. Ill., Ind., Ky., Tenn., Ala., Miss., Tex., Mo. Host: *Lasioglossum murtfeldtiana* Felt.
- Callimome obscura** Breland, 1939. Ent. Soc. Amer. Ann. 32: 719, 721. ♂ ♀.
- Biology: Satterthwait, 1948. Jour. Econ. Ent. 41: 729-730.
- occidentalis** (Huber), n. comb. Calif. Host: Dipterous galls on *Juniperus occidentalis*.
- Callimome occidentale** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 79.  
 $\sigma$  ♀.
- ochreatus** Say. Ind. Host: In *Liatris* receptacle.
- Torymus ochreatus** Say, 1836 (1835). Boston Jour. Nat. Hist. 1: 275. ♂ ♀.
- osborni** (Huber), n. comb. Wyo. Host: Cynipid on *Rosa* sp.
- Callimome osborni** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 93. ♂ ♀.
- oviperditor** (Gahan), n. comb. Kans. Hosts: *Melampsalta calliope* (Wlkr.); *Tibicen aurifera* Say.
- Syntomaspis oviperditor** Gahan, 1927. Ent. Soc. Wash. Proc. 29: 99-100.  
 $\sigma$  ♀.
- pachypsyliae** (Ashmead), n. comb. Presumably Kans. Host: *Pachypsyllea venusta* O. S.
- Monodontomerus pachypsyliae** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. III. ♂ ♀.
- pavidus** Say. Ind.
- Torymus pavidus** Say, 1836. Boston Jour. Nat. Hist. 1: 275. ♂.
- perplexus** (Huber). Oreg. Host: *Besbus mirabilis* (Kinsey).
- Callimome perplexum** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 49. ♀.
- persimilis** Ashmead. W. Va., Va. Host: Itonidid on willow.
- Torymus persimilis** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 334. ♀.
- pilularidis** (Huber), n. comb. Conn., Calif. Host: *Prosoma* sp. on *Baccharis pilularis*.
- Callimome pilularidis** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 45. ♂ ♀.
- prunicola** (Huber), n. comb. N. Mex.
- Callimome prunicola** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 91. ♀.
- racemariae** (Ashmead), n. comb. N. Y. to Fla., Ala., Tex., Colo., Ill. Hosts: *Amphibolips confluenta* (Harr.); *A. fuliginosa* Ashm.; *A. gainesi* Bass.; *A. inanis* (O. S.); *A. prunus* Cress.; *A. racemaria* Ashm.; *Disholcaspis cinerosa* (Bass.); *D. quercus-globulus* (Fitch); *D. terrestris* Weld; *Dryocosmus imbricariae* (Ashm.).
- Callimome racemareae** Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxiii. ♂ ♀.
- Syntomaspis racemariae** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 187. Emend.
- Biology: Balduf, 1926. Canad. Ent. 58: 137-143, 163.
- Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 65.
- rhoditidis** (Huber), n. comb. Mass. Host: *Diplolepis* sp. on *Rosa*.
- Callimome rhoditidis** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 34. ♂ ♀.
- rohweri** (Huber), n. comb. Conn., Calif. Hosts: ? *Harmolita* in *Lolium multiflorum* and *L. temulentum*.
- Callimome rohweri** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 58. ♂ ♀.
- rosae** (Huber), n. comb. Colo. *Diplolepis* sp. on *Rosa fendleri*.
- Callimome rosae** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 35. ♀.
- rubenidis** (Huber), n. comb. Colo. Host: *Disholcaspis rubens* (Gill.).
- Callimome rubenidis** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 78. ♂ ♀.
- rudbeckiae** Ashmead. Ont., Colo. Hosts: Itonidid on *Desmodium grandiflorum*

(Walt.); gall on *Rudbeckia* sp.

**Torymus rudbeckiae** Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 26, 45. ♂ ♀.

**sativae** (Huber), n. comb. Ariz. Hosts: *Asphondylia websteri* Felt; *Rhabdophaga siliqua* Walsh.

**Syntomaspis medicaginis** Gahan, 1919. Ent. Soc. Amer. Ann. 12: 162. Preocc.

**Callimome sativae** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 77. ♂ ♀. N. name.

**scalaris** (Huber), n. comb. Ariz., Calif. Host: *Pachypsylla celtidisgemma* Riley. *Callimome scalaris* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 21. ♂ ♀.

**solidaginis** (Huber), n. comb. N. Y., Conn., N. C. Host: Itonidid.

*Callimome solidaginis* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 92. ♂ ♀.

**splendidulus** Dalla Torre. Ont., Colo. Hosts: *Rhabdophaga cornu* Walsh; *R. siliqua* Walsh.

*Callimome splendidus* Walker, 1844. Ann. Mag. Nat. Hist. (1) 14: 14. ♀. Preocc.

**Torymus splendidulus** Dalla Torre, 1898. Cat. Hym., v. 5, p. 313. N. name.

**strobilooides** (Huber), n. comb. Ohio. Hosts: *Rhabdophaga strobilooides* (Walsh); *Salix* gall.

*Callimome strobilooides* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 40. ♀.

**sulcatus** (Huber), n. comb. Calif. Host: Cynipid gall on *Quercus pumila*.

*Callimome sulcatum* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 22. ♀.

**superbus** (Provancher), n. comb. Que.

*Cleonymus superbus* Provancher, 1888. Addit. Corr. Faune Ent. Canada Hym., p. 407. ♀.

**texanus** (Hoffmeyer), n. comb. Tex., Ariz. Host: *Atrusca aggregata* (Weld); *A. bella* (Bass.); *A. simulatrix* Kinsey; *A. vanescens* Kinsey; *Disholcaspis colorado* (Gill.).

*Callimome texanum* Hoffmeyer, 1930. Ent. Meddel. 17: 213. ♂ ♀.

Taxonomy: Breland, 1939. Brooklyn Ent. Soc. Bul. 34: 87.

**thalassinus** (Crosby), n. comb. N. Y., Conn., Ohio, Minn. Host: *Harmolita* sp. "from timothy and orchard grass."

*Syntomaspis thalassinus* Crosby, 1908. Canad. Ent. 40: 43. ♂ ♀.

**theon** (Walker). Fla.

*Callimome theon* Walker, 1843. Soc. Ent. France Ann. (2) 1: 149. ♀.

**thompsoni** Fyles. Que. Host: Plum fruit.

*Torymus Thompsoni* Fyles, 1904 (1903). Ent. Soc. Ontario Ann. Rpt. 34: 10.

*Torymus thompsoni* Fyles, 1916 (1915). Ent. Soc. Ontario Ann. Rpt. 46: 55. Emend.

**tricolor** (Huber), n. comb. Tex. Host: *Asphondylia* sp.

*Callimome tricolor* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 96. ♂ ♀.

**tubalaris** (Huber), n. comb. Colo.

*Callimome tubularis* Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 39. ♂ ♀.

**tubicola** (Osten Sacken). Que., Mass. to N. C. and Ohio; Mo., La., Tex., Calif. Hosts: *Amphibolips spongifica* (O. S.); *Andricus californicus* Ashm.; *A. flocci* (O. S.); *A. petiolicola* (O. S.); *Atrusca simulatrix* (Kinsey); *Callirhytis operator* (O. S.); *C. seminator* (Harr.); *C. tubicola* (O. S.); *Disholcaspis colorado* (Gill.) var.; *D. corallina* (Bass.); *D. plumbella* Kinsey; *D. quercus-globulus* (Fitch); *D. simulata* Kinsey; *D. simulata vancouverensis* Kinsey.

*Callimome tubicola* Osten Sacken, 1870. Amer. Ent. Soc. Trans. 3: 60. ♂ ♀.

**umbilicatus** (Gahan), n. comb. Conn., Ariz., Fla. Hosts: Itonidid galls on *Atriplex canescens* and on *Suaeda* sp.

*Syntomaspis umbilicata* Gahan, 1919. Ent. Soc. Amer. Ann. 12: 163. ♂ ♀.

**warreni** (Cockerell), n. comb. N. Y., N. C., Tex., Colo., Ariz. Hosts: *Antron dumosae* (Kinsey); *Disholcaspis cinerosa* (Bass.); *D. colorado* (Gill.); *D. mamma* (Cress.); *D. quercus-globulus* (Fitch); *D. rubens* (Gill.); *D. spongiosa* (Karsch).

*Syntomaspis warreni* Cockerell, 1911. Ent. News 22: 82. ♀.

**xanthopodus** (Schulz), n. comb. Kans. Host: Itonidid on cedar.

*Megastigmus?* *flavipes* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. III. ♂. Preocc.

*Megalostigmus xanthopodus* Schulz, 1906. Spolia Hym., p. 147. N. name.

*Torymus abortus* Crosby, 1914. Ent. News 25: 27. ♂. N. name.

#### Genus DIOMORUS Walker

**Diomorus** Walker, 1834. Ent. Mag. 2: 159.

Type: (*Diomorus nobilis* Walker)=*Torymus armatus* Boheman. Monob.

*Dihomerus* Schulz, 1906. Spolia Hym., p. 148. Emend.

**biorhizae** Ashmead. Ont. Host: *Xanthoteras forticorne* (O. S.).

*Diomorus biorhizae* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 186. ♀.

**viridis** (Provancher), n. comb. Que.

*Haltichella viridis* Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 192. ♀.

**zabriskieei** Cresson, emend. N. Y., N. J., W. Va., Kans., Calif., B. C. Hosts: *Ectemnius lapidarius* (Panz.); *E. stirpicola* (Pack.); *Ceratina dupla* Say.

*Diomorus zabriskii* (!) Cresson, 1878. Psyche 2: 189. ♀.

#### Genus PHYSOTHORAX Mayr

**Physothorax** Mayr, 1885. Zool.-Bot. Gesell. Wien, Verh. 35: 159, 196.

Type: *Physothorax disciger* Mayr. Desig. by Gahan and Fagan, 1923.

**pallidus** Ashmead. Fla. Host: *Ficus laevigata*.

*Physothorax pallidus* Ashmead, 1900. Ent. Soc. London Trans., p. 254. ♂ ♀.

**russelli** Crawford. Fla. Host: *Ficus aurea*.

*Physothorax russelli* Crawford, 1910 (1909). Ent. Soc. Wash. Proc. 11: 204. ♀.

#### Subfamily ERIMERINAE

##### Genus ERIMERUS Crawford

**Erimerus** Crawford, 1914. Ent. Soc. Wash. Proc. 16: 123.

Type: *Torymus wickhami* Ashmead. Monob.

**wickhami** (Ashmead). Utah. Host: Galls on *Hilaria*.

*Torymus wickhami* Ashmead, 1904. Ent. News 15: 302. ♀.

Taxonomy: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 123.

##### Genus PSEUDERIMERUS Gahan

**Pseuderimerus** Gahan, 1919. U. S. Natl. Mus. Proc. 55: 124.

Type: *Pseuderimerus mayetiola* Gahan. Monob.

**femoratus** Gahan. Calif. Host: *Phytophaga destructor* (Say).

*Pseuderimerus femoratus* Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 32-33. ♀.

**mayetiola** Gahan. Calif. Host: *Phytophaga destructor* (Say).

*Pseuderimerus mayetiola* Gahan, 1919. U. S. Natl. Mus. Proc. 55: 125. ♂ ♀.

Biology: Packard, 1928. U. S. Dept. Agr. Tech. Bul. 81: 14.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 30-32.

Taxonomy: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 10-13.

**semiflavus** Gahan. Calif. Host: *Phytophaga destructor* (Say).

*Pseuderimerus semiflavus* Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 33 ♀.

#### Subfamily MONODONTOMERINAE

Revision: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 123-124.

### Genus LIODONTOMERUS Gahan

**Lochites** Foerster, 1856. Hym. Stud., v. 2, pp. 43, 44, 120. Preocc.

Type: **Lochites papaveris** Foerster. Monob.

**Liodontomerus** Gahan, 1914. U. S. Natl. Mus. Proc. 48: 159. N. syn.

Type: **Liodontomerus perplexus** Gahan. Monob.

**Lochitisca** Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 368. N. name.  
N. syn.

**insuetus** Gahan. Kans., N. Mex., Ariz. Host: *Bruchophagus gibbus* (Boh.).

**Liodontomerus insuetus** Gahan, 1917. U. S. Natl. Mus. Proc. 53: 208. ♀.

**longfellowi** (Girault), n. comb. Minn., S. Dak., Idaho, Oreg. Host: *Bruchophagus gibbus* (Boh.).

**Idiomacromerus longfellowi** Girault, 1917 (May 14). Descr. Hym. Chalcidoid.  
Variorum cum Observ. III, p. 8. ♂ ♀.

**Liodontomerus secundus** Gahan, 1917 (May 26). U. S. Natl. Mus. Proc. 53: 208. ♂ ♀. N. syn.

Biology: Urbahns, 1919. Jour. Agr. Res. 16: 169-170.

**perplexus** Gahan. Iowa, S. Dak., Utah, Ariz., Calif. Host: *Bruchophagus gibbus* (Boh.).

**Liodontomerus perplexus** Gahan, 1914. U. S. Natl. Mus. Proc. 48: 159. ♂ ♀.

Biology: Urbahns, 1920. U. S. Dept. Agr. Bul. 812: 17-18.—Sorenson, 1930. Utah Agr. Expt. Sta. Bul. 218: 27-32.

**punctatus** (Ashmead), n. comb. Fla.

**Lochites punctata** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 185. ♂.

### Genus IDIOMACROMERUS Crawford

**Idiomacromerus** Crawford, 1914. Ent. Soc. Wash. Proc. 16: 124.

Type: **Idiomacromerus bimaculipennis** Crawford. Monob.

**bimaculipennis** Crawford. Kans., Utah. Host: *Eurytoma seminis* Bugbee.

**Idiomacromerus bimaculipennis** Crawford, 1914. Ent. Soc. Wash. Proc. 16: 124. ♀.

### Genus PLATYKULA Huber

**Platykula** Huber, 1927. U. S. Natl. Mus. Proc. 70 (14): 106.

Type: **Syntomaspis albihirta** Ashmead. Monob.

**albihirta** (Ashmead). Fla.

**Syntomaspis albihirta** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 187. ♀.

### Genus DIMEROMICRUS Crawford

**Dimeromicrus** Crawford, 1910. U. S. Natl. Mus. Proc. 38: 127.

Type: **Dimeromicrus ashmeadi** Crawford. Monob.

**cecidomyiae** (Ashmead). Fla., Tex. Host: Itonidid on *Baccharis halimifolia*.

**Megastigma** (!) **cecidomyiae** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 185. ♂ ♀.

**Lochites auriceps** Ashmead, 1894. Linn. Soc. London, Jour. Zool. 25: 153. ♂ ♀.

Taxonomy: Milliron, 1949. Amer. Midland Nat. 41: 347.

**smithi** (Schread), n. comb. Conn. Host: Gall on *Caryomyia*.

**Lochites smithi** Schread, 1937. Brooklyn Ent. Soc. Bul. 32: 102. ♂ ♀.

### Genus MONODONTOMERUS Westwood

**Monodontomerus** Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 2: 443.

Type: **Monodontomerus obscurus** Westwood. Monob.

**Paroligosthenus** Cameron, 1913 (1912). Indian Forest Rec. 4: 94.

Type: **Paroligosthenus trichioptthalmus** Cameron. Monob.

Revision: Gahan, 1941. U. S. Natl. Mus. Proc. 90: 461-482.

**aereus** Walker. ?N. B., New England. Hosts: *Hemerocampa leucostigma* (A. and S.); *Nygma phaeorrhoea* (Donov.); *Porthetria dispar* (L.); *Malacosoma americanum* (F.); *Archips argyrosipa* (Wlk.); *Carcelia laxifrons* Vill.; *Compsilura concinnata* (Meig.); *Exorista larvarum* (L.); *Sturmia nidicola* Tns.; *S. scutellata* (R.-D.); *Apanteles lacteicolor* Vier.; *A. melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *Meteorus versicolor* (Wesm.); *Phobocampe disparis* (Vier.); *Iseropus coelebs* (Walsh).

**Monodontomerus aereus** Walker, 1834. Ent. Mag. 2: 158. ♀.

Biology: Howard and Fiske, 1911. U. S. Dept. Agr. Bur. Ent. Bul. 91: 86-308.—Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 19-20.—Burgess and Crossman, 1929. U. S. Dept. Agr. Tech. Bul. 86: 77-80.—Proper, 1934. Jour. Agr. Res. 48: 361-376.

Taxonomy: Muesebeck, 1931. Jour. Agr. Res. 43: 445-460.

**bakeri** Gahan. Colo.

**Monodontomerus bakeri** Gahan, 1941. U. S. Natl. Mus. Proc. 90: 475. ♀.

**dentipes** (Dalman). Ont., Que., Maine, N. Y., Conn., N. J., Pa., Ohio, Mich., Idaho. Hosts: *Hemerocampa pseudotsugata* McD.; larvaevorid puparia; *Diprion hercyniae* (Htg.); *D. similis* (Htg.); *D. sp.*; *Rogas unicolor* (Wesm.).

**Torymus dentipes** Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 173, 178. ♂ ♀.

Biology: Morris, Cameron, and Jepson. Bul. Ent. Res. 28: 377-380, 389, 391.

Morphology: Bucher, 1948. Canad. Jour. Res. 26D: 230-281.

**dianthidii** Gahan. Calif. Host: *Dianthidium* sp.

**Monodontomerus dianthidii** Gahan, 1941. U. S. Natl. Mus. Proc. 90: 464. ♂ ♀.

**emarginatus** Gahan. Colo. Host: ?*Megachile* sp.

**Monodontomerus emarginatus** Gahan, 1941. U. S. Natl. Mus. Proc. 90: 476. ♀.

**indiscretus** Gahan. Maine. Host: *Heterarthrus nemoratus* (Fall.).

**Monodontomerus indiscretus** Gahan, 1941. U. S. Natl. Mus. Proc. 90: 469. ♀.

**mandibularis** Gahan. N. Y., D. C., Ohio, Ill., Mo., La. Hosts: *Osmia cordata* Rob.; *Anthophora abrupta* Say; *A. bombooides* Kirby; *Melitoma taurea* (Say).

**Monodontomerus mandibularis** Gahan, 1941. U. S. Natl. Mus. Proc. 90: 474. ♂ ♀.

Biology: Rau, 1947. Ent. Soc. Amer. Ann. 40: 221-226.

**montivagus** Ashmead. Ont., Del., Ill., Mo., Colo., N. Mex., Calif., Mont., B. C. Hosts: *Choristoneura fumiferana* (Clem.); *Anthidium emarginatum* (Say); *Dianthidium pudicum* (Cress.); *D. pudicum consimile* (Ashm.); *Osmia cordata* Robertson; *Anthophora abrupta* Say; *Anthophora linsleyi* Timb.; *A. occidentalis* Cress.; ?*Melissodes* sp.; *Xylocopa orpifex* Smith.

**Monodontomerus montivagus** Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 25, 45. ♀.

**Monodontomerus americanus** Girault, 1917. Deser. Stellarum Nov., p. 11. ♀.

Biology: Linsley and McSwain, 1942. Amer. Midland Nat. 27: 403, 409-412.

**obscurus** Westwood. N. Y., D. C., Mo., Iowa. Hosts: *Osmia cordata* Robt.; *O. lignaria* Say.

**Monodontomerus obscurus** Westwood, 1833. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 2: 443.

**subobsoletus** Gahan. N. Y., N. J., Del. Hosts: *Malacosoma americanum* (F.); *Grapholita molesta* (Busck); ?*Choristoneura fumiferana* (Clem.); *Gambrus extrematis* (Cress.).

**Monodontomerus subobsoletus** Gahan, 1941. U. S. Natl. Mus. Proc. 90: 480. ♂ ♀.

#### Genus ZAGLYPTONOTUS Crawford

**Zaglyptonotus** Crawford, 1914. Ent. Soc. Wash. Proc. 16: 124, 125.

Type: *Zaglyptonotus schicarzi* Crawford. Monob.

**mississippiensis** Breland. Ala., Miss. Host: *Tephritis finalis* (Loew).

**Zaglyptonotus mississippiensis** Breland, 1938. Ent. Soc. Amer. Ann. 31: 205. ♂ ♀.

**schwarzii** Crawford. Fla., Tex., Kans., Colo. Hosts: ?*Desmoris fulvus* Lec.; *Iso-phrictis similiella* (Chamb.); tephritid seed maggot from ironweed.  
**Zaglyptonotus schwarzii** Crawford, 1914. Ent. Soc. Wash. Proc. 16: 126. ♀.  
 Biology: Brandhorst, 1943. Kans. Acad. Sci. Trans. 46: 168.—Needham, 1948. Ecol. Monog. 18: 446.

### Genus GLYPHOMERUS Foerster

**Glyphomerus** Foerster, 1856. Hym. Stud., v. 2, pp. 43, 44, 145.

Type: *Ichneumon stigma* Fabricius. Orig. desig.

**Oligosthenus** Foerster, 1856. Hym. Stud., v. 2, p. 145. N. name.

**stigma** (Fabricius). Que., to Fla.; Calif., Oreg. Hosts: *Diplolepis rosae* (L.); *Melitoma taurea* Say.

*Ichneumon stigma* Fabricius, 1793. Ent. System. 2: 188.

**Monodontomerus viridaeneus** Provancher, 1881. Nat. Canad. 12: 290. ♀.

**Oligosthenus bimaculatus** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 196. ♀. N. syn.

Taxonomy: Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 186.

### Genus ERIDONTOMERUS Crawford

**Eridontomerus** Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 178–179.

Type: (*Eridontomerus primus* Crawford)=*Stictonotus isosomatis* Riley. Monob.

**isosomatis** Riley. N. Y. to Tenn., Ill. and Mich.; Ariz., Utah. Hosts: *Phytophaga destructor* (Say); *Harmolita albomaculata* (Ashm.); *H. atlantica* P. and E.; *H. dactylicola* P. and E.; *H. festucae* P. and E.; *H. grandis* (Riley); *H. hordei* (Harris); *H. maculata* (How.); *H. secale* (Fitch); *H. tritici* (Fitch); *H. vaginicola* (Doane); *H. websteri* (How.).

*Stictonotus isosomatis* Riley, 1882. U. S. Dept. Agr. Ann. Rpt. for 1881–1882: 186. ♂ ♀.

**Eridontomerus primus** Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 179. ♂ ♀.  
 Biology: Phillips and Poos, 1927. Jour. Agr. Res. 34: 483–488.—Knowlton and Janes, 1933. Utah. Agr. Expt. Sta. Bul. 243: 11–12.

Taxonomy: Gahan, 1921 (1920). Ent. Soc. Wash. Proc. 22: 235.

### Genus PSEUDOTORYMUS Masi

**Holaspis** Mayr, 1874. Zool.-Bot. Gesell Wien, Verh. 24: 83. Preocc.

Type: *Torymus militaris* Boheman. Desig. by Ashmead, 1904.

**Pseudotorymus** Masi, 1922. Mus. Civ. Stor. Nat. Genova Ann. 49: 235. N. name.

**lazulellus** (Ashmead), n. comb. Ont., Conn., Colo. Hosts: *Harmolita* in rye stems; *H. sp.* in timothy stems, clover heads, oak galls.

**Syntomaspis lazulella** Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 26, 45. ♀.  
 Biology: Webster, 1906 (1905). Ent. Soc. Wash. Proc. 7: 116.

### Genus CRYPTOPRISTUS Foerster

**Cryptopristus** Foerster, 1856. Hym. Stud., v. 2, pp. 43, 44.

Type: *Torymus caliginosus* Walker. Monob.

**Websterellus** Ashmead, 1893. Ohio Agr. Exp. Sta. Tech. Bul. 1: 164.  
 Type: (*Websterellus tritici* Ashmead)= [*Torymus harrisii*] (Fitch). Monob.

**harrisii** (Fitch), n. comb. N. Y., Va., Ohio, Ky., Kans. Hosts: *Harmolita grandis* (Riley); ?*H. hordei* (Harr.); *H. tritici* (Fitch); *H. sp.*

**Torymus Harrisii** Fitch, 1862 (1861). N. Y. State Agr. Soc. Trans. 21: 152.

**Websterellus tritici** Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser. Bul. 1: 164. ♂ ♀.

**Cryptopristus americanus** Girault, 1917. Descr. Stellarum Nov., p. 8. ♀.  
 Biology: Webster, 1893. U. S. Dept. Agr. Insect Life 6: 151.—Gahan 1921 (1920). Ent. Soc. Wash. Proc. 22: 237.

### Genus DITROPINOTUS Crawford

*Ditropinotus* Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 178.  
Type: *Ditropinotus aureoviridis* Crawford. Monob.

**aureoviridis** Crawford, N. Y. to Ala. and Kans.; Utah, Oreg. Hosts: *Phytophaga destructor* (Say); *Eurytoma parva* Phillips; *Harmolita atlantica* P. and E.; *H. elymicola* P. and E.; *H. grandis* (Riley); *H. secale* (Fitch); *H. tritic* (Fitch); *H. vaginicola* (Doane); *Eurytoma* spp.; *Merisoporus chalcidiphagus* (W. and R.).

*Ditropinotus aureoviridis* Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 178.  
♂ ♀.

*Ditropinotus flavicoxus* (!) Gahan, 1912. Ent. Soc. Wash. Proc. 14: 5. ♂ ♀.  
Biology: Hill Pinckney and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 5, 10, 13.—  
Chamberlain, 1941. U. S. Dept. Agr. Tech. Bul. 784: 25–28, 35–38.

Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 6, 11–13.  
Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 25–30.

### Genus ANTISTROPHOPLEX Crawford

*Antistrophoplex* Crawford, 1914. Ent. Soc. Wash. Proc. 16: 122–125.  
Type: *Antistrophoplex bicoloripes* Crawford. Monob.

**bicoloripes** Crawford. Kans. Host: *Antistrophus* sp.

*Antistrophoplex bicoloripes* Crawford, 1914. Ent. Soc. Wash. Proc. 16: 125.  
♀.

### Genus MICRODONTOMERUS Crawford

*Microdontomerus* Crawford, 1907. N. Y. Ent. Soc. Jour. 15: 178, 179.  
Type: *Torymus anthonomi* Crawford. Monob.

**anthidii** (Ashmead). Calif. Host: *Dianthidium pudicum consimile* (Ashm.).  
*Torymus anthidii* Ashmead, 1896. Ent. News 7: 24. ♀.

**anthonomi** (Crawford). N. J., Va., Mo., La., Tex., Utah, Idaho, Oreg., Wash.  
Hosts: *Acanthoscelides horni* (Pic); *Bruchus brachialis* Fahr.; *B. pisorum* (L.); *Brachylarsoidea alternatus* (Say); *Anthonomus grandis* Boh.; *Ancylus comptana fragariae* (W. and R.); *Coleophora malivorella* Riley; *Bracon mellitor* Say.

*Torymus anthonomi* Crawford, 1907. Canad. Ent. 39: 133. ♂ ♀.  
Biology: Pierce, Cushman, and Hood, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 100: 1, 31, 49, 57–62.

**fumipennis** Crawford. N. Mex., Utah. Hosts: *Malacosoma fragile* Stretch; *Archips rosaceana* (Harr.).

*Microdontomerus fumipennis* Crawford, 1917 (1916). Insecutor Inscitiae Menstruus 4: 141–142. ♂ ♀.

### Subfamily MEGASTIGMINAE

#### Genus MEGASTIGMUS Dalman

*Megastigmus* Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 178.  
Type: *Pteromalus bipunctatus* Swederus. Desig. by Crosby, 1913.

**Trogocarpus** Rondani, 1877. Soc. Ent. Ital. Bol. 9: 204.  
Type: *Torymus ballesterrii* Rondani. Monob.

**Megalostigmus** Schulz, 1906. Spolia Hym., p. 147. Emend.  
**Xanthosomoides** Girault, 1913. Canad. Ent. 45: 220.

Type: *Xanthosomoides maculatipennis* Girault. Orig. desig.

Revision: Milliron, 1949. Amer. Midland Nat. 41: 257–420.

Species of this genus are phytophagous. They develop in the seeds of plants.

**aculeatus aculeatus** (Swederus). Mass., N. Y. Host: *Rosa* spp.

*Pteromalus Aculeatus* Swederus, 1795. Svenska Vetensk. Akad. Handl. 16: 221–222.

- aculeatus nigroflavus** Hoffmeyer. N. J., Va. Host: *Rosa multiflora* Thunb.  
*Megastigmus aculeatus* var. *nigroflavus* Hoffmeyer, 1931. Ent. Meddel. 16: 324-326. ♂ ♀.
- albifrons** Walker. Ariz., Calif. Host: *Pinus ponderosa*.  
*Megastigmus albifrons* Walker, 1869. Roy. Ent. Soc. London, Trans., p. 314. ♂.
- amelanchieris** Cushman. N. H., N. Y., Vt., W. Va., Pa., Minn. Hosts: *Amelanchier canadensis*; *A. leavis* × *humilis*; *A. sanguineae*; *Sorbus aucuparia*.  
*Megastigmus amelanchieris* Cushman, 1918 (1917). Ent. Soc. Wash. Proc. 19: 81. ♂ ♀.
- Biology: Milliron, 1949. Amer. Midland Nat. 41: 363.
- brevicauda** Ratzeburg. Emend. Minn. Host: *Sorbus aucuparia*.  
*Megastigmus brevicaudis* Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 225. ♀.
- Biology: Milliron, 1949. Amer. Midland Nat. 41: 363-365, 393, 402.
- caperatus** Milliron. Ont. Host: ?*Picea* sp.  
*Megastigmus caperatus* Milliron, 1949. Amer. Midland Nat. 41: 306, 347, 350. ♀.
- flavipes** Ashmead. Fla.  
*Megastigmus flavipes* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 128. ♂.
- floridanus** Milliron. Fla.  
*Megastigmus floridanus* Milliron, 1949. Amer. Midland Nat. 41: 342, 348, 350. ♀.
- formosus** Milliron. Ont., Que. Hosts: ?*Crataegus* sp.; ?*Rosa* sp.  
*Megastigmus formosus* Milliron, 1949. Amer. Midland Nat. 41: 339, 348, 350. ♀.
- gahani** Milliron. Minn., Mo., Colo. Hosts: *Physocarpus opulifolius* var. *intermedius* and *P. opulifolius* var. *lutens*.  
*Megastigmus gahani* Milliron, 1949. Amer. Midland Nat. 41: 275, 347, 351, 365. ♂ ♀.
- hoffmeyeri** Walley. Ont., Que., N. Y. Hosts: ?*Abies amabilis*; *Tsuga canadensis*.  
*Megastigmus spermotrophus* var. *canadensis* Hoffmeyer, 1930. Ent. Meddel. 17: 218. ♂ ♀. Preocc.  
*Megastigmus spermotrophus* var. *hoffmeyeri* Walley, 1932. Canad. Ent. 64: 188. N. name.
- Biology: Miller, 1916. Jour. Agr. Res. 6: 65.
- laricis** Marcovitch. N. Y. Host: *Larix laricina*.  
*Megastigmus laricis* Marcovitch, 1914. Canad. Ent. 46: 435. ♂ ♀.
- lasiocarpae** Crosby. Conn., Colo. Hosts: *Abies amabilis*; *A. lasiocarpa*.  
*Megastigmus lasiocarpae* Crosby, 1913. Ent. Soc. Amer. Ann. 6: 163. ♂ ♀.
- melanus** Milliron. ?Mich.  
*Megastigmus melanus* Milliron, 1949. Amer. Midland Nat. 41: 302, 347, 351. ♀.
- milleri** Milliron. Calif., B. C. Hosts: *Abies grandis*; *A. magnifica* var. *shastensis*.  
*Megastigmus milleri* Milliron, 1949. Amer. Midland Nat. 41: 323, 344, 347, 352. ♂ ♀.
- nigrovariegatus** Ashmead. N. S. to Va. to Calif. to Alaska. Hosts: *Rosa acicularis*; *R. acicularis* var. *engelmannii*; *R. blanda*; *R. californica*; *R. canina*; *R. palustris*; *R. rugosa* and *R. virginiana*.  
*Megastigmus nigrovariegatus* Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 26, 45. ♀.
- Biology: Balduf, 1945. Ent. Soc. Wash. Proc. 47: 185-198.—Milliron, 1949. Amer. Midland Nat. 41: 373-390.
- physocarpi** Crosby. Que., Ont., Minn., Mich., Ind., Mo., Idaho. Hosts: *Physocarpus opulifolius*; *P. opulifolius* var. *intermedius*.  
*Megastigmus physocarpi* Crosby, 1913. Ent. Soc. Amer. Ann. 6: 158. ♂ ♀.
- Biology: Milliron, 1949. Amer. Midland Nat. 41: 365-366.
- piceae montana** Milliron, n. status. Mont. Host: *Picea engelmannii*.  
*Megastigmus piceae* var. *montana* Milliron, 1949. Amer. Midland Nat. 41: 305, 347, 352. ♂ ♀.

**piceae piceae** Rohwer. Colo., Calif. Hosts: ?*Abies arizonica*; ?*Picea engelmannii*; *P. pungens*; *P. sitchensis*.

*Megastigmus piceae* Rohwer, 1915. Canad. Ent. 47: 97. ♂ ♀.

**pinus marginatus** Hoffmeyer. Oreg. Host: *Abies grandis*.

*Megastigmus pinus* var. **marginatus** Hoffmeyer, 1930. Ent. Meddel. 17: 216. ♂.

**pinus pinus** Parfitt. Conn., Colo., Nev., Calif., Oreg., Wash. Hosts: *Abies amabilis*; *A. concolor*; *A. grandis*; *A. lasiocarpa*; *A. magnifica*; *A. magnifica* var. *shastensis*; *A. nobilis*; *A. venusta*; ?*Picea sitchensis*; ?*Thuja plicata*, and ?*Tsuga* sp.

*Megastigmus Pinus* Parfitt, 1857. Zoologist 15: 5543. ♀.

*Megastigmus pinus* var. **crosbyi** Hoffmeyer, 1930. Ent. Meddel. 17: 215. ♀. Biology: Laidlaw, 1931. Scot. Forestry Jour. 45: 179-184.

**rafni** Hoffmeyer. Colo., N. Mex., Calif., Idaho, Oreg., B. C. Hosts: *Abies concolor*; *A. grandis*; *A. magnifica*; *A. magnifica* var. *shastensis*; ?*Pseudotsuga taxifolia*.

*Megastigmus rafni* Hoffmeyer, 1928. Ent. Meddel. 16: 331. ♀.

Taxonomy: Hoffmeyer, 1930. Ent. Meddel. 17: 216-217.

**slossonae** Crosby. N. Y., Ont. Host: *Sorbus* sp.

*Megastigmus slossonae* Crosby, 1913. Ent. Soc. Amer. Ann. 6: 157. ♀.

*Megastigmus americanus* Milliron, 1949. Amer. Midland Nat. 41: 285, 347, 349, 365. ♂ ♀. N. syn.

**specularis** Walley. N. B., N. H., ?Mass., ?Conn., Minn. Host: *Abies balsamea*.

*Megastigmus specularis* Walley, 1932. Canad. Ent. 64: 187. ♂ ♀.

**spermotrophus nigrodorsatus** Milliron. Calif. Host: *Pseudotsuga macrocarpa*.

*Megastigmus spermotrophus* var. **nigrodorsatus** Milliron, 1949. Amer. Midland Nat. 41: 316, 346, 353. ♂ ♀.

**spermotrophus spermotrophus** Wachtl. Calif., N. Mex., Colo., Oreg., Wash., B. C. Host: *Pseudotsuga taxifolia*.

*Megastigmus spermotrophus* Wachtl, 1893. Wien. Ent. Ztg. 12: 25. ♂ ♀.

*Megastigmus spermatocephalus* Dalla Torre, 1898. Cat. Hym., v. 5, p. 287. Emend.

Biology: Crosby, 1909. N. Y. (Cornell) Agr. Expt. Sta. Bul. 265: 379-380.—Miller 1916. Jour. Agr. Res. 6: 65-68.—Milliron, 1949. Amer. Midland Nat. 41: 367-368, 390-391.

**tsugae heterophyllae** Milliron. B. C. Host: *Tsuga heterophylla*.

*Megastigmus tsugae* var. **heterophyllae** Milliron, 1949. Amer. Midland Nat. 41: 309, 347, 353. ♂ ♀.

**tsugae tsugae** Crosby. West. U. S. Hosts: ?*Abies amabilis*; *Tsuga mertensiana*.

*Megastigmus tsugae* Crosby, 1913. Ent. Soc. Amer. Ann. 6: 162. ♀.

## Family ORMYRIDAE

### Genus MONOBAEUS Foerster

**Monobaeus** Foerster, 1860. Naturh. Ver. Rheinlande Verh. 17: 95.

Type: *Monobaeus cingulatus* Foerster. Desig. by Ashmead, 1904.

**hegeli** Girault. Mich.

*Monobaeus hegeli* Girault, 1917. Ent. News 28: 106. ♀.

### Genus ORMYRUS Westwood

**Ormyrus** Westwood, 1832. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 1: 127.

Type: *Ormyrus punctiger* Westwood. Monob.

**Periglyphus** Boheman, 1833. Svenska Vetensk. Akad. Handl. 54: 378.

Type: (*Periglyphus gastris* Boheman)=*Ormyrus punctiger* Westwood. Monob.

**Siphonura** Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 81.

Type: *Siphonura variolosa* Nees. Desig. by Gahan and Fagan, 1923.

*Cyrtosoma* Perris, 1840. Soc. Ent. France Ann. 9: 96.

Type: *Cyrtosoma papaveris* Perris. Monob.

*andricus* Ashmead. Fla. Host: *Callirhytis dificilis* (Ashm.).

*Ormyrus andricus* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 128. ♀.

*brunneipes* Provancher. Que., Pa.

*Ormyrus brunneipes* Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 198. ♀.

*Ormyrus brunneipes* Dalla Torre, 1898. Cat. Hym., v. 5, p. 282. Emend.

*distinctus* Fullaway. Conn., Calif. Host: Strawberry gall on *Quercus dumosa*.

*Ormyrus distinctus* Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 276. ♀.

*dryorhizoxeni* Ashmead. Conn., Fla. Host: Gall of *Belonocnema treatae* Mayr.

*Ormyrus dryorhizoxeni* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiv. ♀.

*labotus* Walker. Md., Fla., Kans. Hosts: Galls of *Diastrophus nebulosus* (O. S.) and *Disholcaspis virens* (Ashm.).

*Ormyrus labotus* Walker, 1843. Soc. Ent. France Ann. (2) 1: 148. ♂ ♀.

*minutus* Ashmead. Mich., N. J., Fla. Hosts: *Neuroterus noxiosus* (Bass.); cynipid gall on *Quercus laurifolia*.

*Ormyrus minutus* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 189. ♂ ♀.

*querici-pilulae* (Fitch). Maine, N. Y., N. J. Hosts: *Acraspis pezomachoides* (O. S.); gall on *Quercus borealis*.

*Pteromalus Querci-pilulae* Fitch, 1859 (1858). Trans. N. Y. State Agr. Soc. 18: 819.

*quercus* Ashmead. Fla. Host: Gall of *Callirhytis batatoides* (Ashm.).

*Ormyrus quercus* Ashmead, 1886. Amer. Ent. Soc. Trans. 14: 128. ♂ ♀.

*rosae* Ashmead. N. J., Fla., Kans., Colo. Host: Gall of *Diplolepis ignota* (O. S.).

*Ormyrus rosae* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiv. ♀.

*thymus* Girault. Calif.

*Ormyrus thymus* Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 87. ♀.

*tubulosus* (Fonscolombe). Europe; ?Mass.

*Cinips* (!) *tubulosa* Fonscolombe, 1832. Ann. des Sci. Nat. [Paris] 26: 290.

*unifasciatipennis* Girault, emend. Calif.

*Ormyrus unifasciatipennis* (!) Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 87. ♀.

*unimaculatipennis* Girault. La.

*Ormyrus unimaculatipennis* Girault, 1916. Canad. Ent. 48: 342. ♀.

*vacciniicola* Ashmead. Ont., Maine, N. J. Host: *Hemadas nubilipennis* (Ashm.).

*Ormyrus vacciniicola* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 189. ♀. Biology: Driggers, 1927. N. Y. Ent. Soc. Jour. 35: 254-258.

*ventricosus* Ashmead. Ont., Que., N. H., N. Y., Conn., N. J., Mich., Ill., Fla., Kans. Hosts: Galls of *Acraspis erinacei* (Beut.); *Aulacidea podagrae* (Bass.); *Callirhytis ventricosa* (O. S.); *Diastrophus nebulosus* (O. S.); *Disholcaspis mamma* (Cress.).

*Ormyrus ventricosus* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 189. ♂.

Biology: Triggerson, 1914. Ent. Soc. Amer. Ann. 7: 8-9.

#### Genus MEGORMYRUS Cockerell

*Megormyrus* Cockerell, 1926. Psyche 33: 36.

Type: *Megormyrus amabilis* Cockerell. Monob.

*amabilis* Cockerell. Colo. Host: *Stelis* sp.

*Megormyrus amabilis* Cockerell, 1926. Psyche 33: 37. ♀.

#### Family PTEROMALIDAE

##### Subfamily SPHEGIGASTERINAE

##### Tribe SPALANGIINI

Revisions: Ashmead, 1894. Ent. Soc. Wash. Proc. 3: 27-37.—Masi, 1917. Novitates Zool. 24: 188-189.

### Genus SPALANGIA Latreille

**Spalangia** Latreille, 1805. Hist. Nat. Crust. Ins., v. 13, p. 227.

Type: *Spalangia nigra* Latreille. Monob.

Revision: Richardson, 1913. Jour. Morph. 24: 515.

**drosophilae** Ashmead. N. J., Md., N. C., Ga., Fla., Ill., Tex. Hosts: *Drosophila melanogaster* Meig.; *Oscinella* sp.; *Siphona irritans* (L.); *Alysia ridibunda* Say; *Eucocula rufocincta* (Kieff.).

**Spalangia drosophilae** Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 199. ♀.  
Biology: Lindquist, 1936. Jour. Econ. Ent. 29: 1154-1158.—Simmonds, 1944. Bul. Ent. Res. 35: 222.

**haematobiae** Ashmead. N. J., Va. Host: *Siphona irritans* (L.).

**Spalangia haematobiae** Ashmead, 1894. Ent. Soc. Wash. Proc. 3: 37. ♀.

**muscae** Howard. La., Tex., Kans. Hosts: *Musca domestica* L.; *Stomoxys calcitrans* (L.); *S. sp.*; *Siphona irritans* (L.).

**Spalangia muscae** Girault (!) Howard, 1911. The House Fly, p. 90.

**muscarum** Girault. Ill. Host: Muscid.

**Spalangia muscarum** Girault, 1920. U. S. Natl. Mus. Proc. 58: 213. ♀.

**muscicidarum** Richardson. Mass., N. J., Md., D. C., La., Tex., Kans. Hosts: *Musca domestica* L.; *Stomoxys calcitrans* (L.); *?Lucilia sericata* (Meig.); *?Megaselia iroquoiana* Mall.

**Spalangia muscicidarum** Richardson, 1913. Psyche 20: 38. ♂ ♀.  
Biology: Pinkus, 1913. Psyche 20: 148-158.—Richardson, 1913. Jour. Morph. 24: 513-549.

**nigra** Latreille. Europe; ?N. Amer. Host: *?Musca domestica* L.

**Spalangia nigra** Latreille, 1805. Hist. Nat. Crust. Ins. v. 13, p. 228.

**rugosicollis** Ashmead. Conn., N. J., D. C., Ill., Mo., Kans., La., Tex. Hosts: *Pyralis farinalis* (L.); *Stomoxys calcitrans* (L.).

**Spalangia rugosicollis** Ashmead, 1894. Ent. Soc. Wash. Proc. 3: 36. ♀.  
Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 213.

**stomoxysiae** Girault, n. status. Tex. Hosts: *Musca domestica* L.; *Orthellia* sp.; *Stomoxys calcitrans* (L.); *Sarcophaga effrenata* Wlkr.; *S. impar* Aldrich; *S. sueta* Wulp; *Siphona irritans* (L.).

**Spalangia muscicidarum** var. **stomoxysiae** Girault, 1916. Soc. Ent. 31: 57. ♀.

**Spalangia muscicidarum** var. **texensis** Girault, 1920. U. S. Natl. Mus. Proc. 58: 213. ♂. N. syn.

Biology: Lindquist, 1936. Jour. Econ. Ent. 29: 1154-1158.

### Tribe CEROCEPHALINI

Revision: Gahan, 1946. U. S. Natl. Mus. Proc. 96: 349-376 (Cerocephalinae).

### Genus CHOETOSPILA Westwood

**Choetospila** Westwood, 1874. Thesaurus Ent. Oxon., p. 137, pl. 25.

Type: *Choetospila elegans* Westwood. Monob.

**Chaetospila** Dalla Torre, 1898. Cat. Hym., v. 5, p. 207. Emend.

**Spalangiomorpha** Girault, 1913. Queensland Mus. Mem. 2: 333.

Type: *Spalangiomorpha fasciatipennis* Girault. Orig. desig.

Revision: Gahan, 1946. U. S. Natl. Mus. Proc. 96: 350-355.

**elegans** Westwood. Cosmopolitan. Hosts: *Lasioderma serricorne* (F.); *Stegobium paniceum* (L.); *?Rhyzopertha dominica* (F.); *Callosobruchus chinensis* (L.); *C. maculatus* (F.); *Caulophilus latinasus* (Say); *Sitophilus granarius* (L.); *S. linearis* (Hbst.); *S. oryza* (L.); *?Sitotroga cerealella* (Oliv.).

**Choetospila elegans** Westwood, 1874. Thesaurus Ent. Oxon., p. 137.

Biology: Bare, 1942. Jour. Econ. Ent. 35: 186.

Taxonomy: Waterston, 1921. Rpt. Grain Pests (War) Com. [Gt. Brit.], no. 9, p. 25.

**tabida** Gahan. Md. Host: ?Cossonine beetle.

**Choetospila tabida** Gahan, 1946. U. S. Natl. Mus. Proc. 96: 354. ♂ ♀.

### Genus ACEROCEPHALA Gahan

*Acerocephala* Gahan, 1946. U. S. Natl. Mus. Proc. 96: 369.

Type: *Cerocephala atroviolacea* Crawford. Orig. desig.

**aenigma** Gahan. Calif., Oreg.

*Acerocephala aenigma* Gahan, 1946. U. S. Natl. Mus. Proc. 96: 371. ♂ ♀.

**atroviolacea** (Crawford). N. Mex. Hosts: *Conophthorus edulis* Hopkins; scolytid infesting cones of *Pinus edulis*.

*Cerocephala* (!) *atroviolacea* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 315. ♀.

### Genus THEOCOLAXIA Girault

*Theocolaxia* Girault, 1924. Lese Majeste, New Insecta and Robbery, p. 1.

Type: *Theocolaxia lessingi* Girault. Monob.

Revision: Gahan, 1946. U. S. Natl. Mus. Proc. 96: 363-368.

**pityophthori** (Ashmead). N. C. Fla. Hosts: *Pityophthorus consimilis* Lec.; *Thysanoes fimbicornis* Lec.

*Cerocephala pityophthori* Ashmead, 1894. Ent. Soc. Wash. Proc. 3: 32. ♀.

**scolytivora** (Ashmead). Fla. Host: *Logania ficus* Schwarz.

*Cerocephala scolytivora* Ashmead, 1894. Ent. Soc. Wash. Proc. 3: 33. ♂ ♀.

### Tribe ASAPHINI

#### Genus ASAPHES Walker

*Asaphes* Walker, 1834. Ent. Mag. 2: 151.

Type: *Asaphes vulgaris* Walker. Monob.

*Isocratus* Foerster, 1856. Hym. Stud., v. 2, pp. 53, 58. N. name.

**americanus** Girault. N. Y. to N. C. and Ky.; Iowa, Wis. Hosts: *Anuraphis bakeri* (Cowen); *Aphis rumicis* L.; *Eriosoma lanigerum* (Hausm.); *Kakimia houghtonensis* (Troop); *Macrosiphum cornelli* Patch; *Myzus persicae* Sulz.; *Periphyllus negundinis* (Thos.); *Aphidius phorodontis* Ashm.; *A. polygonaphis* Fitch; *A. testaceipes* Cress.; *Diaeetus rapae* (Curt.); *Praon simulans* (Prov.); *Aphelinus jucundus* Gahan; *A. semiflavus* How.; *Aphidencyrtus aphidivorus* (Mayr).

*Asaphes americana* Girault, 1914. Ent. Soc. Wash. Proc. 16: 114. ♂ ♀.  
Biology: Spencer, 1926. Ent. Soc. Amer. Ann. 19: 145.—Griswold, 1929. Ent. Soc. Amer. Ann. 22: 449.

**californicus** Girault. Utah, Calif. Host: *Macrosiphum escalantis* (Knowl.).

*Asaphes californicus* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 1. ♀.

**fletcheri** (Crawford), n. comb. Ont., Que., Conn. Hosts: *Anuraphis roseus* Baker; *Aphis sorbi* Kltb.; *Macrosiphum pisi* (Kltb.).

*Megorismus Fletcheri* Crawford, 1909. Canad. Ent. 41: 98. ♂ ♀.

**lucens** (Provancher), n. comb. Ont., Que.

*Euplectrus lucens* Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 207. ♀.

**rufipes** Brues. N. Y., Mass., Wash. Hosts: *Brevicoryne brassicae* (L.); *Hyalopterus* sp., probably *atricapillus* (L.).

*Asaphes rufipes* Brues, 1908. Wis. Nat. Hist. Soc. Bul. 6: 160. ♀.  
Biology: Cardiff, 1915. Wash. Agr. Expt. Sta. Bul. 127: 32.

**vulgaris** Walker. Europe; ?Ont. to Va. Hosts: *Aphis rumicis* L.; *Brevicoryne brassicae* (L.); *Macrosiphum destructor* Johns.; *M. granarium* (Kby.); *M. rosae* (L.); aphid on *Euonymus atropurpureus*; *Pseudococcus adonidum* (L.); probably *Aphicoletes cumeris* Lintn.; *Agromyza lutea* Meig.; *Diplazon laetatorius* (F.).

*Asaphes vulgaris* Walker, 1834. Ent. Mag. 2: 152. ♂ ♀.

### Genus HYPERIMERUS Girault

*Hyperimerus* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III., p. 5.

Type: *Hyperimerus corvus* Girault. Monob.

*corvus* Girault. Calif.

*Hyperimerus corvus* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III., p. 5. ♀.

### Tribe DIPARINI

#### Genus DIPARA Walker

*Dipara* Walker, 1833. Ent. Mag. 1: 371, 373.

Type: *Dipara petiolata* Walker. Monob.

*latipennis* Ashmead. Colo.

*Dipara latipennis* Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 26, 45. ♂.

#### Genus APTEROLELAPS Ashmead

*Apterolelaps* Ashmead, 1901. Fauna Hawaii. v. 1, p. 312.

Type: *Apterolelaps nigriceps* Ashmead. Monob.

*Apterolaelaps* Schulz, 1906. Spolia Hym., p. 144. Emend.

*Apterolaelaps* Girault, 1916. Canad. Ent. 48: 264. Preocc.

Type: (*Apterolaelaps nigricutum* Girault)=*Apterolelaps nigriceps* Ashmead. Monob.

*nigriceps* Ashmead. W. Va.

*Apterolelaps nigriceps* Ashmead, 1904. Carnegie Mus. Mem. 1: xi, 279. ♀.

*Apterolaelaps nigricutum* Girault, 1916. Canad. Ent. 48: 264. ♀.

Taxonomy: Gahan and Fagan, 1923. U. S. Natl. Mus. Bul. 124: 16.

#### Genus SPALANGIOLAELAPS Girault

*Spalangiolaelaps* Girault, 1916. Ent. News 28: 22.

Type: *Spalangiolaelaps argenticoxa* Girault. Monob.

*argenticoxa* Girault. Md.

*Spalangiolaelaps argenticoxa* Girault, 1917. Ent. News 28: 23. ♀.

### Tribe LAMPROTATINI

#### Genus LAMPROTATUS Westwood

*Lamprotatus* Westwood, 1833. Mag. Nat. Hist. 6: 121.

Type: *Lamprotatus splendens* Westwood. Monob.

*Miscogaster* Walker, 1833. Ent. Mag. 1: 371, 458.

Type: *Halticoptera hortensis* Walker. Desig. by Ashmead, 1904.

*Lampretatus* (!) Walker, 1843. Soc. Ent. France Ann. (2) 1: 155.

*Mischogaster* Howard, 1886. Ent. Amer. 2: 33. Emend.

*abnormicolor* (Girault), n. comb. Fla.

*Miscogaster abnormicolor* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 8. ♀.

*auratus* (Ashmead), n. comb. Ill.

*Stictomischus auratus* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 221. ♀.

*biguttatus* (Girault), n. comb. Fla.

*Miscogaster biguttata* Girault, 1917. Psyche 24: 97. ♂ ♀.

*canadensis* Girault. Alta.

*Lamprostatus* (!) *canadensis* Girault, 1917. Psyche 24: 96. ♀.

*conicus* Girault. Alaska.

*Lamprostatus* (!) *conicus* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 11. ♀.

*cyrnus* Walker. Fla.

*Lampretatus (?) cyrnus* Walker, 1843. Soc. Ent. France Ann. (2) 1: 157.

*diaeus* Walker. Ont. Host: *Vanessa cardui* (L.).

*Lamprotatus Diaeus* Walker, 1844. Ann. Mag. Nat. Hist. (1) 14: 16. ♀.

*discoloripes* (Girault), n. comb. Fla.

*Miscogaster discoloripes* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 9. ♀.

*flora* (Girault), n. comb. Fla.

*Miscogaster flora* Girault, 1917. Psyche 24: 96. ♀.

*habis* Walker. Fla.

*Lampretatus (?) habis* Walker, 1843. Soc. Ent. France Ann. (2) 1: 155. ♀.

*keatsi* (Girault), n. comb. Md.

*Miscogaster keatsi* Girault, 1917. Chalcidoid. Nova Marilandensis III, p. 5. ♀.

*marylandicus* (Girault), emend., n. comb. Md., Fla.

*Miscogaster marilandica* Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 87. ♀.

*pilicornis* Thomson. ?Greenland.

*Lamprotatus pilicornis* Thomson, 1876. Hym. Scand., v. 4, p. 229. ♂ ♀.

*salemus* Walker. Fla.

*Lampretatus (?) salemus* Walker, 1843. Soc. Ent. France Ann. (2) 1: 156. ♀.

*trypherus* Walker. Fla.

*Lampretatus (?) trypherus* Walker, 1843. Soc. Ent. France Ann. (2) 1: 158. ♀.

*unguttus* (Girault), n. comb. Md.

*Miscogaster unguitta* Girault, 1917. Ent. News 28: 23. ♀.

#### Genus SELADERMA Walker

*Seladerma* Walker, 1834. Ent. Mag. 2: 288.

Type: *Seladerma laetum* Walker. Desig. by Westwood, 1840.

*salicis* (Nees). Europe; ?N. Y. Host: *Rhabdophaga salicis* Schrank.

*Pteromalus salicis* Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, pp. 105, 424.

♂ ♀.

Taxonomy: Felt, 1902. N. Y. State Mus. Bul. 53: 744.

#### Genus SYNTOMOPUS Walker

*Syntomopus* Walker, 1833. Ent. Mag. 1: 371, 372.

Type: *Syntomopus thoracicus* Walker. Desig. by Westwood, 1840.

*affinis* Ashmead. D. C., Ill.

*Syntomopus affinis* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 228. ♀.

*americanus* Ashmead. N. Y., Conn., Ohio. Ill., La. Hosts: *Anthomyza angelicae* Frost; *Agromyza virens* Loew.

*Syntomopus americanus* Ashmead, 1894. Cincinnati Soc. Nat. His. Jour. 17: 51. ♂ ♀.

Biology: Lange, 1944. Jour. Econ. Ent. 37: 394-395.

#### Genus BUBEKIA Dalla Torre

*Brachycrepis* Ashmead, 1888. Canad. Ent. 20: 174, 176. Preocc.

Type: *Brachycrepis tricarinatus* Ashmead. Monob.

*Bubekia* Dalla Torre, 1897. Wien Ent. Ztg. 16: 84. N. name.

Revision: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 114.

*carolinensis* (Ashmead), n. comb. N. C.

*Acroclisis carolinensis* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 228. ♂.

*fallax* Gahan. Ind., Tenn., Okla., Kans., Iowa. Hosts: *Meromyza americana* Fitch; *Phytophaga destructor* (Say).

*Bubekia fallax* Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 114-116. ♂ ♀.

**lasiopterae** (Ashmead), n. comb. Ohio. Host: *Lasioptera muhlenbergiae* Mart.  
*Megorismus lasiopterae* Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser. Bul. 1: 160. ♂.

**tricarinata** (Ashmead). Kans.  
*Brachycrepis tricarinatus* Ashmead, 1888. Canad. Ent. 20: 176. ♀.

#### Genus BRACHYCAUDONIA Ashmead

**Brachycaudonia** Ashmead, 1904. Carnegie Mus. Mem. 1: 283, 285.  
 Type: *Brachycaudonia californica* Ashmead. Monob.

**californica** Ashmead. Calif.

**Brachycaudonia californica** Ashmead, 1904. Carnegie Mus. Mem. 1: 282, 368. ♀.

Taxonomy: Gahan and Peck, 1946. Jour. Wash. Acad. Sci. 36: 315.

#### Genus CHRYSOLAMPUS Spinola

**Chrysolampus** Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 147.

Type: (*Diplolepis splendicula* Spinola) = *Chrysolampus cyaneus* (Fabricius). Monob.

**Lamprostylus** Foerster, 1856. Hym. Stud., v. 2, p. 42 (no species).

Type: *Lamprostylus punctatus* Foerster. Included by Foerster, 1859.

Revision: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 74.

The Nearctic species in this genus parasitize insect eggs.

**lycti** Crawford. W. Va.

**Chrysolampus lycti** Crawford, 1914. Ent. Soc. Wash. Proc. 16: 75. ♂ ♀.

**spinolae** (Ratzeburg). ?Conn.

**Pteromalus Spinolae** Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 189. ♂ ♀.

#### Genus ELATUS Walker

**Elatus** Walker, 1848. List Hym. Brit. Mus., v. 2, pp. 104, 153.

Type: *Elatus thenae* Walker. Monob.

Revision: Crawford, 1914. Ent. Soc. Wash. Proc. 16: 74.

**parcipunctatus** (Crawford), n. comb. Calif.

**Chrysolampus parcipunctatus** Crawford, 1914. Ent. Soc. Wash. Proc. 16: 75. ♀.

**schwarzi** (Crawford), n. comb. Utah.

**Chrysolampus schwarzi** Crawford, 1914. Ent. Soc. Wash. Proc. 16: 76. ♀.

**sisymbrii** Ashmead. N. Mex.

**Elatus sisymbrii** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 218. ♂.

#### Genus PARACAROTOMUS Ashmead

**Paracarotomus** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 335.

Type: *Paracarotomus cephalotes* Ashmead. Monob.

**cephalotes** Ashmead. Va.

**Paracarotomus cephalotes** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 336. ♂.

#### Tribe PACHYNEURINI

##### Genus PACHYNEURON Walker

**Pachyneuron** Walker, 1833. Ent. Mag. 1: 371, 380.

Type: *Pachyneuron formosum* Walker. Monob.

**Pachynevron** Blanchard, 1840. Hist. Nat. Anim. Articules, v. 3, pp. 260, 266. Emend.

**Pachynevrum** Agassiz, 1846. Nomencl. Zool., Index Univ., p. 778. Emend.

**Propachyneuronia** Girault, 1917. Psyche 24: 102.

Type: *Encyrtus siphonophorae* Ashmead. Monob.

Revision: Girault, 1917. Psyche 24: 88-90.

**albutius** (Walker). Fla.

*Pachyneuron albutius* Walker, 1843. Soc. Ent. France Ann. (2) 1: 158. ♀.

**altiscutum** Howard. Ont., N. H., N. Y., Conn., N. J., Mich., Ohio, Va., La., Kans. Hosts: *Lecanium corni* Bouché; *L. nigrofasciatum* Perg.; *Pseudococcus comstocki* (Kuw.); *P. juniperi* Ehrh.; *Pulvinaria acericola* (W. and R.); *Saissetia oleae* (Bern.); *Coleophora laricella* (Hbn.); ?*Aphytus lounsburyi* How.; *Clausenia purpurea* Ishii; ?*Quaylea whittieri* (Gir.); ?*Scutellista cyanea* Mots.

*Pachyneuron altiscuta* (!) Howard, 1885 (1884). In Cook, Mich. State Hort. Soc. Ann. Rpt. 14: 91. ♂ ♀.

**anthomyiae** Howard. Fla. Host: Muscid puparium.

*Pachyneuron anthomyiae* Howard, 1885. In Hubbard, Insects Affecting the Orange, p. 217. ♂ ♀.

**californicum** Girault. Calif. Hosts: *Chrysopa californica* Coq.; *C. majuscula* Banks; *Gelis tenellus* (Say); *Chrysoprophagus compressicornis* Ashm.; *Isodromus iceryae* How.; *I. niger* Ashm.; *Dibrachys cavus* (Wlkr.).

*Pachyneuron californicum* Girault, 1917. Psyche 24: 90. ♂ ♀.

Biology: Clancy, 1946. Calif. Univ. Pubs., Ent. 7: 454-456.

**eros** Girault. Calif. Hosts: *Lecanium corni* Bouché; *Pseudococcus adenostomae* Ferris; *P. aurilanatus* (Mask.); *Leucopis bella* Loew; *L. sp. ex Aphid atriplicis* L.

*Pachyneuron eros* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 1. ♀.

**groenlandicum** (Holmgren). Greenland.

*Pteromalus groenlandicus* Holmgren, 1872. Öfvers. K. Vetensk. Akad. Förh. 29: 100. ♂ ♀.

**hammarri** Crawford. N. Mex. Host: ?*Carpocapsa pomonella* (L.).

*Pachyneuron hammarri* Crawford, 1914. Insecutor Inscitiae Menstruus 2: 36. ♂ ♀.

**mucronatum** Girault. Kans.

*Pachyneuron mucronatum* Girault, 1917 (1916). Insecutor Inscitiae Mens- struus 4: 116. ♀.

Biology: Brandhorst, 1943. Kans. Acad. Sci. Trans. 46: 168. -

**siphonophorae** (Ashmead). N. Y. to N. C., Tenn., and Ill.; Minn., Fla., La., Utah, Calif., Wash. Hosts: *Aphis gossypii* Glov.; *A. maidis* Fitch; *A. pomii* Deg.; *A. nigragregalis* Knowl.; *Brevicoryne brassicae* (L.); *Capitophorus bitrichus* K. and S.; *C. ribis* (L.); *Kakimia houghtonensis* (Troop); *Lachnus pini* (L.); *Macrosiphum granarium* Kby.; *M. solanifolii* Ashm.; *Rhopalosiphum pseudobrassicae* (Davis); *Toxoptera graminum* (Rond.); *Kermes pubescens* Bogue; *Lecanium* sp. on mulberry; *Baccha clavata* (F.); *Aphidius testaceipes* (Cress.); *Diaretus rapae* (Curt.).

*Encyrtus siphonophorae* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 131. ♀.

*Pachyneuron aphidivora* Ashmead, 1887. U. S. Dept. Agr. Div. Ent. Bul. 14: 14. ♀.

*Pachyneuron maidaphidis* Ashmead, 1888. Fla. Agr. Expt. Sta. Bul. 2: 23-24. ♀.

*Pachyneuron micans* Howard, 1890. U. S. Dept. Agr. Insect Life 2: 246. ♂ ♀.

Biology: Folsom and Bondy, 1930. U. S. Dept. Agr. Cir. 116: 8.

Taxonomy: Gahan, 1924 (1923). Ent. Soc. Wash. Proc. 25: 187.

**syrphi** (Ashmead). Ill., N. C., S. C., Fla., La., Idaho, Calif. Hosts: ?*Carpocapsa pomonella* (L.); *Allograpta fracia* O. S.; *A. obliqua* Say; *Baccha clavata* (F.); *Eupeodes volucris* O. S.; *Mesograpta polita* Say; *Paragus tibialis* Fall.; *Scaeva pyrastri* (L.); *Sphaerophoria cylindrica* (Say); *Syrphus nitens* Zett.; *S. opinator* (O. S.); *S. philadelphicus* Macq.; *S. rectus* O. S.; *Phaeogenes* sp.

*Spalangia? syrphi* Ashmead, 1881. Canad. Ent. 13: 171. ♂ ♀.

*Pachyneuron allograptae* Ashmead, 1887. U. S. Dept. Agr. Div. Ent. Bul. 14: 15. ♂ ♀.

Biology: Kamal, 1939. Egypt Min. Agr. Tech. and Sci. Serv. Bul. Ent. Sect. 207: 36, 46, 47.

**syrphicola** Ashmead. Fla.

*Pachyneuron syrphi* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 131. ♂ ♀.

Preocc.

*Pachyneuron syrphicola* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 193. N. name.

**texanum** Girault. Ohio, La., Tex. Host: Syrphid pupae.

*Pachyneuron texanum* Girault, 1917. Psyche 24: 90. ♀.

**validum** Waterston. Calif. Host: *Euphyllura arbuti* Schwarz.

*Pachyneuron validum* Waterston, 1923. Bul. Ent. Res. 14: 110. ♂ ♀.

**virginicum** Girault. Va. Host: *Aphis sorbi* Klth.

*Pachyneuron virginicum* Girault, 1917. Psyche 24: 89. ♂ ♀.

### Genus PACHYCREPOIDEUS Ashmead

*Pachycrepoideus* Ashmead, 1904. Carnegie Mus. Mem. 1: 329.

Type: *Pachycrepoideus dubius* Ashmead. Monob.

Revision: Girault and Sanders, 1910. Psyche 17: 110.

**dubius** Ashmead. Ont., N. Y., D. C., Ohio, Ill., Mich. Hosts: *Piophila casei* (L.); *Ceratitis capitata* (Wied.); *Rhagoletis fausta* O. S.; *Hylemya brassicae* (Bouché); *Musca domestica* L. ?*Muscidifurax raptor* G. and S.

*Pachycrepoideus dubius* Ashmead, 1904. Carnegie Mus. Mem. 1: 329, 383. ♀.

Biology: Girault and Sanders, 1910. Psyche 17: 108-117.—Crandall, 1939. Ent. Soc. Amer. Ann. 32: 632-654.

### Genus EUNEURA Walker

*Euneura* Walker, 1844. Ann. Mag. Nat. Hist. 14: 331.

Type: *Euneura auguris* Walker. Monob.

*Euneura* Agassiz, 1846. Nomencl. Zool., Index Univ., p. 427. Emend.

*Hypsicamara* Foerster, 1856. Hym. Stud., 2: 52, 54 (no species). N. syn.  
Type: *Hypsicamara ratzeburgi* Reinhard. Included by Reinhard, 1859.

*Hypsicamera* Dalla Torre, 1898. Cat. Hym., v. 5, p. 168. Emend.

**lachni** (Ashmead), n. comb. N. B., Maine, Ohio, Fla., Utah, Idaho. Host: *Lachnus australis* Ashm.

*Pachycrepis lachni* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 193. ♀.

Taxonomy: Gahan, 1942. U. S. Natl. Mus. Proc. 92: 46.

### Tribe CRATOMINI

#### Genus CRATOMUS Dalman

*Cratomus* Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 173, 177.

Type: *Cynips megacephalus* Fabricius. Monob.

*Caratomus* Dalman, 1822. Svenska Vetensk. Akad. Handl. 43: 403. Emend.

**cancellatus** Cockerell. Colo.

*Cratomus cancellatus* Cockerell, 1916. Ent. News 27: 417. ♂.

**leucophthalmus** Ashmead. Ont.

*Caratomus leucophthalmus* Ashmead, 1888. Canad. Ent. 20: 55. ♂.

**megacephalus** (Fabricius). N. J., Ill.

*Cynips megacephala* Fabricius, 1793. Ent. System., v. 2, p. 103.

*Caratomus megalcephalus* Schulz, 1906. Spolia Hym., p. 144. Emend.

### Tribe HALTICOPTERINI

#### Genus HALTICOPTERA Spinola

*Halticoptera* Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 148.

Type: *Diplolepis flavigornis* Spinola. Desig. by Ashmead, 1904.

*Phagonia* Curtis, 1832. Brit. Ent., v. 9, p. 427.

Type: *Diplolepis flavigornis* Spinola. Orig. desig.

*Dicyclus* Walker, 1833. Ent. Mag. 1: 371, 455.

Type: *Dicyclus aeneus* Walker. Desig. by Westwood, 1840.

*Megorismus* Walker, 1846. List Hym. Brit. Mus., v. 1, p. 29. N. syn.

Type: *Miscogaster daiphron* Walker. Monob.

*Megalorismus* Schulz, 1906. Spolia Hym., p. 147. Emend. N. syn.

*aenea* (Walker). Throughout East. and Cent. U. S.; Ariz., Calif., Ont. Hosts: *Phloeosinus dentatus* (Say); *Phytophaga destructor* (Say); *Agromyza angulata* Loew; *A. citreifrons* Mall.; *A. coquilletti* Mall.; *A. melampygia* Loew; *A. parvicornis* Loew; *A. pusilla* Meig.; *A. virens* Loew; *Cerodonta dorsalis* Loew; *C. femoralis* (Meig.); *Phytomyza delphiniae* Frost; *Meromyza americana* Fitch; *Oscinella* sp.

*Dicyclus aeneus* Walker, 1833. Ent. Mag. 1: 456. ♀.

*Cyrtogaster liqueatus* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 336. ♂.

*Cyrtogaster occidentalis* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 230. ♂ ♀.

*Cyrtogaster citripes* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 230. ♂.

*Polycyrtus* (!) *floridanus* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 230. ♂.

*Polycystus foersteri* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 313. ♂ ♀. Biology: Lange, 1944. Jour. Econ. Ent. 37: 394-395.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 116-121.

*brodiei* Ashmead. Ont., Conn., N. J.

*Halticoptera Brodiei* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 192. ♀.

*goodi* Crawford. N. S.

*Halticoptera goodi* Crawford, 1915. Insecutor Inscitiae Menstruus 3: 107. ♂ ♀.

*stella* Girault. Calif.

*Halticoptera stella* Girault, 1917 (May). Descr. Hym. Chalcidoid. Variorum cum Observ. III, p. 1. ♀.

*Megorismus poloni* Girault, 1917 (June). Psyche 24: 27. ♀.

### Tribe SPHEGIGASTERINI

#### Genus TRIGONOGASTRA Ashmead

*Trigonogastra* Ashmead, 1904. Carnegie Mus. Mem. 1: 330.

Type: *Trigonogastra aurata* Ashmead. Monob.

*aurata* Ashmead. Mich.

*Trigonogastra aurata* Ashmead, 1904. Carnegie Mus. Mem. 1: 330, 392. ♀. Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 317.

#### Genus CYRTOGASTER Walker

*Cyrtogaster* Walker, 1833. Ent. Mag. 1: 371, 381.

Type: *Cyrtogaster rufipes* Walker. Desig. by Westwood, 1840.

*glasgovi* Crawford. Ill. Host: *Brachydeutera argentata* (Wlkr.).

*Cyrtogaster glasgovi* Crawford, 1914. Insecutor Inscitiae Menstruus 2: 36. ♂ ♀.

*vulgaris* Walker. B. C. Host: *Phytomyza ilicis* Curt.

*Cyrtogaster vulgaris* Walker, 1833. Ent. Mag. 1: 382. ♂ ♀. Biology: Cameron, 1939. Bul. Ent. Res. 30: 178-180, 197-199.

#### Genus GYRINOPHAGUS Ruschka

*Gyrinophagus* Ruschka, 1914. Zool.-Bot. Gesell. Wien, Verh. 64: 208.

Type: *Gyrinophagus luteipes* Ruschka. Monob

*dineutis* (Ashmead) n. comb. N. J., Mich., Iowa. Hosts: *Dineutes assimilis* (Kby.); *Gyrinus* sp.

*Cyrtogaster dineutis* Ashmead, 1894. Canad. Ent. 26: 26. ♀.

Biology: Butcher, 1933. Ent. Soc. Amer. Ann. 26: 83.—Galtsoff, Lutz, Welch, and Needham, 1937. Culture Methods for Invertebrate Animals, pp. 496-497.

### Genus EURYDINOTA Foerster

**Eurydinota** Foerster, 1878. Naturh. Ver. Rheinlande Verh. 35: 42.

Type: *Eurydinota leptomera* Foerster. Monob.

**lividicorpus** Girault. Que., Maine, Conn., Pa., Va., Wis., Calif., Oreg., Wash.  
Hosts: *Coleophora malivorella* Riley; *C. pruniella* Clem.; *C. sacramento*  
Heinr.; *C. salmani* Heinr.

**Eurydinota lividicorpus** Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 86. ♂  
♀.

Biology: [Christensen] 1934. Wis. Agr. Expt. Sta. Bul. 428: 101.—Beacher, 1947.  
Ent. Soc. Amer. Ann. 40: 532—544.

**rufiventris** Girault. Ga.

**Eurydinota rufiventris** Girault, 1920. U. S. Natl. Mus. Proc. 58: 212. ♀.

### Genus HETEROSCHEMA Gahan

**Heteroschema** Gahan, 1919. U. S. Natl. Mus. Proc. 55: 126.

Type: (*Heteroschema prima* Gahan) = *Pteromalus rugosopunctata* Ashmead. Monob.

Revision: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 222—224.

**aeneiventris** (Ashmead), n. comb. Kans.

**Sphegigaster aeneiventris** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3:  
App. p. VI. ♂.

**punctata** (Ashmead). Fla., Ariz. Hosts: *Paroxyna piccicola* Bigot; *Agromyza*  
*virens* Loew.

**Glyphe punctata** Ashmead, 1894. Linn. Soc. London, Jour., Zool. 25: 162. ♀.

**rugosopunctata** (Ashmead) Ariz.; St Vincent Isl. Host: *Agromyza gibsoni* Mall.  
**Pteromalus rugosopunctatus** Ashmead, 1894. Linn. Soc. London, Jour.  
Zool. 25: 165. ♂ ♀.

**Heteroschema prima** Gahan, 1919. U. S. Natl. Mus. Proc. 55: 126. ♂ ♀.

### Genus PANSTENON Walker

**Panstenon** Walker 1846. List Hym. Brit. Mus. v. 1, p. 29.

Type: *Miscogaster oxylus* Walker. Monob.

**columbianum** Ashmead. D. C.

**Panstenon columbiana** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 231. ♀.

### Subfamily PTEROMALINAE

Revision: Kurdjumov, 1913. Rev. Russe d'Ent. 13: 1—24.

#### Tribe EUNOTINI

Revision: Masi, 1931. Eos 7: 411—459. (Eunotinae).

### Genus TOMOCERA Howard

**Tomocera** Howard, 1881. In Comstock, U. S. Dept. Agr. Ann Rpt. for 1880,  
p. 368.

Type: *Tomocera californica* Howard. Monob.

**Dilophogaster** Howard, 1886. Ent. Amer. 2: 98. N. name.

**Eunotomyia** Masi, 1917. Nov. Zool. 24: 297.

Type: *Eunotomyia festiva* Masi. Monob.

Revision: Mercet, 1924. Soc. Espa  . Hist. Nat. Bol. 24: 422—426.

**californica** Howard. Calif. Hosts: ?*Sympherobius californicus* Banks; *Coccus*  
*hesperidum* L.; *Saissetia oleae* (Bern.); *Microterys flavus* (How.).

**Tomocera californica** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880,  
pp. 252, 368. ♀.

Biology: Smith and Compere, 1928. Calif. Univ. Publs., Ent. 4: 242, 317—321.—  
Essig, 1931. A Hist. of Ent., pp. 139—143, 334—335, 366, 387.

### Genus EUNOTUS Walker

*Eunotus* Walker, 1834. Ent. Mag. 2: 297.

Type: *Eunotus cretaceus* Walker. Monob.

*Megapeltis* Foerster, 1856. Hym. Stud., v. 2, p. 63. N. name.

*americanus* Girault. Maine. Host: *Eriopeltis festucae* Fonsc.

*Eunotus americanus* Girault, 1915. Ent. Soc. Amer. Ann. 8: 273. ♂ ♀.

*lividus* Ashmead. Ont., N. Y., N. J., Ohio, N. C., Ga., Colo. Hosts: *Lecanium corni* Bouché; *L. nigrofasciatum* Perg.; *Pulvinaria vitis* (L.).

*Eunotus lividus* Ashmead, 1892. Ent. Soc. Wash. Proc. 2: 288. ♀.

Biology: Smith, 1906. N. J. Agr. Expt. Sta. Ann. Rpt. 26: 606-607.—Johnson, 1906. Colo. Agr. Expt. Sta. Bul. 116: 11.

### Genus SCUTELLISTA Motschulsky

*Scutellista* Motschulsky, 1859. Études Ent. 8: 172, 177.

Type: *Scutellista cyanea* Motschulsky. Monob.

*Aspidocoris* Costa, 1863. Ann. Accad. Aspiranti Nat. Napoli (3) 2: Bol. p. 25.

Type: *Aspidocoris cyaneus* Costa. Monob.

Revision: Masi, 1931. Eos 7: 456-459.

*cyanea* Motchulsky. D. C., Fla., La., Calif. Hosts: ?*Ceroplastes floridensis* Comst.; *Coccus hesperidum* L.; *Lecanium corni* Bouché; *Phenacoccus artemisiae* Ehrh.; *Saissetia hemisphaerica* (Targ.); *S. nigra* (Nietn.); *S. oleae* (Bern.).

*Scutellista cyanea* Motschulsky, 1859. Études Ent. 8: 172. ♂ ♀.

Biology: Essig, 1931. A Hist. of Ent., pp. 335-337, 360, 388.—Woglum, LaFollette, Landon, and Lewis, 1947. Jour. Econ. Ent. 40: 818-819.

Taxonomy: Smith and Compere, 1928. Calif. Univ. Pubs., Ent. 4: 242, 322-332.

### Tribe PIRENINI

Revision: Ferrière, 1934. Schweiz. Ent. Gesell. Mitt. 16: 83-92. (Pireninae.)

### Genus PIRENE Haliday

*Pirene* Haliday, 1833. Ent. Mag. 1: 336.

Type: *Pirene varicornis* Haliday. Desig. by Westwood, 1840.

*Corynocere* Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 123.

Type: *Corynocere deplana* Nees. Desig. by Gahan and Fagan, 1923.

*Phocion* Girault, 1925. Insecutor Inscitiae Menstruus 13: 91.

Type: *Phocion ipswichi* Girault. Orig. desig.

*Pirenisca* Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 369. N. name.

*marylandensis* Girault. Md.

*Pirene marylandensis* Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 88. ♀.

*marylandica* Girault. Md.

*Pirene marylandica* Girault, 1916. Canad. Ent. 48: 116. ♀.

### Genus SPATHOPUS Ashmead

*Spathopus* Ashmead, 1904. Carnegie Mus. Mem. 1: 272.

Type: *Spathopus anomalipes* Ashmead. Monob.

Revision: Ferrière, 1934. Schweiz. Ent. Gesell. Mitt. 16: 86, 88.

*anomalipes* Ashmead. Fla.

*Spathopus anomalipes* Ashmead, 1904. Carnegie Mus. Mem. 1: 272. ♀.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.

### Genus MORODORA Gahan

*Morodora* Gahan, 1933. Canad. Ent. 65: 31.

Type: *Morodora armata* Gahan. Monob.

*armata* Gahan. Mont. Host: *A paulina avium* (Shan. and Dobr.).

*Morodora armata* Gahan, 1933. Canad. Ent. 65: 32. ♂ ♀.

### Genus PARECRIZOTES Girault

*Parecrizotes* Girault, 1916. Ent. Soc. Amer. Ann. 9: 304.

Type: *Parecrizotes marylandensis* Girault. Monob.

*marylandensis* Girault. Md.

*Parecrizotes marylandensis* Girault, 1916. Ent. Soc. Amer. Ann. 9: 305. ♂.  
♀.

### Genus STIGMATOCREPIS Ashmead

*Stigmatocrepis* Ashmead, 1904. Carnegie Mus. Mem. 1: 273, 274.

Type: *Stigmatocrepis americana* Ashmead. Monob.

*americana* Ashmead. Fla.

*Stigmatocrepis americana* Ashmead, 1904. Carnegie Mus. Mem. 1: 273, 389.  
♂. ♀.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.

### Genus DIPACHYSTIGMA Crawford

*Dipachystigma* Crawford, 1911. U. S. Natl. Mus. Proc. 39: 618.

Type: *Dipachystigma cushmani* Crawford. Monob.

*cushmani* Crawford. La. Host: *Stephanoderes* sp.

*Dipachystigma cushmani* Crawford, 1911. U. S. Natl. Mus. Proc. 39: 619.  
♀.

*secundum* Girault. D. C.

*Dipachystigma secunda* Girault, 1917. Deser. Stellarum Nov., p. 15. ♀.

### Tribe BRACHYSCELIDIPHAGINI

#### Genus HEMADAS Crawford

*Hemadas* Crawford, 1909. Canad. Ent. 41: 98.

Type: *Megorismus nubilipennis* Ashmead. Monob.

*Parhabritys* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 2.

Revision: Gahan and Ferrière, 1947. Ent. Soc. Amer. Ann. 40: 292.

*nubilipennis* (Ashmead). Ont., Maine, Conn., N. J., Ind., Fla. Hosts: Galls on *Vaccinium* spp.

*Megorismus nubilipennis* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 192.  
♀.

Biology: Driggers, 1927. N. Y. Ent. Soc. Jour. 35: 253-259.—McAlister and Anderson, 1932. Jour. Econ. Ent. 25: 1164-1169.

Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 65.

### Tribe TRIDYMINI

#### Genus TRIGONODERUS Westwood

*Trigonoderus* Westwood, 1832. London, Edinb. and Dublin Phil. Mag. and Jour. Sci. (3) 1: 127.

Type: *Trigonoderus princeps* Westwood. Monob.

Revision: Girault, 1917. Ent. News 28: 396-397.

*aegeriae* Ashmead. Fla. Host: ?*Melitta cucurbitae* (Harr.).

*Trigonoderus aegeriae* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 192. ♀.

*algonquiniae* Girault, emend. Conn., Ill.

*Trigonoderus algonquinia* Girault, 1917. Ent. News 28: 396. ♀.

*conicus* Girault. Ariz.

*Trigonoderus conicus* Girault, 1917. Ent. News 28: 396. ♀.

*irvingi* Girault. Colo.

*Trigonoderus irvingi* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 15. ♀.

**nonstylatus** Girault. East. U. S. Host: Itonidid.

*Trigonoderus nonstylatus* Girault, 1917. Ent. News 28: 396. ♀.

**unguttus** Girault. Md.

*Trigonoderus unguittus* Girault, 1917. Ent. News 28: 396. ♀.

### Genus ELACHERTODOMYIA Girault

**Elachertodomyia** Girault, 1917. Canad. Ent. 49: 110.

Type: *Secodes phloeotribi* Ashmead. Monob.

**phloeotribi** (Ashmead). Conn., N. J., Va. Hosts: *Lixus musculus* Say; *Chramesus hectoriae* Lec.; *Phloeotribus frontalis* (Oliv.); *Pseudopityophthorus minutissimus* (Zimm.).

*Secodes phloeotribi* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 233. ♂ ♀. Biology: Chittenden, 1898. Ent. Soc. Wash. Proc. 4: 78. Taxonomy: Girault, 1917. Canad. Ent. 49: 110.

### Genus TRIDYMUS Ratzeburg

**Tridymus** Ratzeburg, 1848. Ichn. d. Forstins., v. 2, p. 183.

Type: *Tridymus aphidum* Ratzeburg. Desig. by Ashmead, 1904.

**Trydymus** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 8. Emend.

**aeneicornis** Girault. N. Y.

*Trydymus aeneicornis* Girault, 1917. Psyche 24: 98. ♀.

**americensis** Girault. Mich.

*Trydymus americensis* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 8. ♀.

**aphidis** Girault. N. Y., Conn. Host: *Lasioptera vitis* O. S.

*Trydymus aphidis* Girault, 1917. U. S. Natl. Mus. Proc. 54: 450. ♀.

**aureipes** Girault. Fla.

*Trydymus aureipes* Girault, 1917. U. S. Natl. Mus. Proc. 53: 449. ♀.

**biguttatipennis** Girault. Conn., Fla.

*Trydymus biguttatipennis* Girault, 1917. U. S. Natl. Mus. Proc. 53: 449. ♀.

**clavicornis** Girault. Sask.

*Trydymus clavicornis* Girault, 1917. Deser. Hym. Chalcidoid. Variorum Cum Observ. V, p. 15. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 214.

**gargantua** Girault. Conn., N. Y.

*Trydymus gargantua* Girault, 1917. Psyche 24: 98. ♀.

**metallicus** Ashmead. N. Y., N. J., Kans. Host: *Rhabdophaga salicis* Schrank.

*Tridymus metallicus* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. V. ♂ ♀.

**nigriclava** Girault, emend. Md.

*Trydymus nigriclavus* Girault, 1917. Chalcidoidea Nova Marilandensis, p. 2, ♀.

**poloni** Girault. N. H.

*Trydymus poloni* Girault, 1917. Psyche 24: 98. ♀.

**robiniaecola** Ashmead. W. Va., Va.

*Tridymus robiniaecola* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 334. ♂ ♀.

### Genus PARASYNTOMOCERA Girault

**Parasyntomocera** Girault, 1917. Chalcidoidea Nova Marilandensis II, p. 2.

Type: *Parasyntomocera hillmeadia* Girault. Monob.

**hillmeadia** Girault. Md.

*Parasyntomocera hillmeadia* Girault, 1917. Chalcidoidea Nova Marilandensis II, p. 2. ♀.

### Genus SYSTASIS Walker

*Systasis* Walker, 1834. Ent. Mag. 2: 288, 296.

Type: *Systasis encyrtoides* Walker. Desig. by Westwood, 1840.

**diplosidis** Eckel. Mass., Calif. Hosts: *Retinodiplosis resinicoloides* (Will.); *R. resinicola* (O. S.).

*Syntasis* (!) *diplosidis* Eckel, 1903. Ent. News 14: 283. ♀.

### Genus TEROBIA Foerster

*Terobia* Foerster, 1878. Naturh. Ver. Rheinlande Verh. 35: 64.

Type: *Terobia dispila* Foerster. Monob.

**flora** Girault. Fla.

*Terobia flora* Girault, 1920. U. S. Natl. Mus. Proc. 58: 216. ♂ ♀.

**vulgaris** Ashmead. Alaska.

*Terobia vulgaris* Ashmead, 1902. Wash. Acad. Sci. Proc. 4: 144. ♂ ♀.

### Genus ERIXESTUS Crawford

*Erixestus* Crawford, 1910. U. S. Natl. Mus. Proc. 38: 87.

Type: *Erixestus winnemana* Crawford. Monob.

**winnemana** Crawford. Que., Md., Va. Hosts: Eggs of *Calligrapha bigsbyana* (Kby.); *C. scalaris* (Lec.).

*Erixestus winnemana* Crawford, 1910. U. S. Natl. Mus. Proc. 38: 88. ♂ ♀. Biology: Daviault, 1941. Nat. Canad. 68: 106-107.

### Tribe MERISINI

#### Genus MERISUS Walker

*Merisus* Walker, 1834. Ent. Mag. 2: 166.

Type: *Merisus splendidus* Walker. Monob.

*Parapteromalus* Ashmead, 1904. Carnegie Mus. Mem. 1: 320. N. syn.

Type: *Parapteromalus isosomatis* Ashmead. Monob.

**atriscapus** Gahan. N. Dak. Host: *Stipa comata*.

*Merisus atriscapus* Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 4. ♂ ♀.

**cognatus** Gahan. Calif. Host: *Phytophaga destructor* (Say).

*Merisus cognatus* Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 102. ♀.

**cupraeus** (Provancher), n. comb. "Canada," Ont. Hosts: *Megachile albifarsis* Cress.; *M. centricularis* (L.).

*Semiotellus cupraeus* Provancher, 1881. Nat. Canad. 12: 295. ♂.

**destructor** (Say). Man., Ont., P. E. I.; N. Y. to N. C., Kans. and Minn.; Calif., Oreg., Wash. Hosts: ? *Hemerocampa leucostigma* (A. and S.); *Phytophaga destructor* (Say); *Platygaster hiemalis* Pack.; *P. vernalis* (Myers).

*Ceraphron destructor* Say, 1817. Acad. Nat. Sci. Phila. Jour. (1) 1: 47, 63. Biology: Packard, 1916. Jour. Agr. Res. 6: 367.—McCulloch, 1923. Kans. Agr. Expt. Sta. Tech. Bul. 11: 64.—Hill, Pinekney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 4-15.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 89-95.

**febriculosus** Girault. Vt. to N. C., Tenn., Kans. and N. Dak. Hosts: *Phytophaga destructor* (Say); *Platygaster hiemalis* Pack.; *P. vernalis* (Myers); *Harmolita grandis* (Riley); *H. hordei* (Harr.); *H. tritici* (Fitch).

*Merisus febriculosus* Girault, 1917. Descr. Stellarum Nov., p. 17. ♀.

Biology: Hill, Pinekney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 4-7, 11-15. Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 95-99.

**flaviventris** Girault. Md.

*Merisus flaviventris* Girault, 1915. Ent. Soc. Amer. Ann. 8: 282. ♀.

**harmolitae** Gahan. Calif. Host: *Harmolita grandis* (Riley).

*Merisus harmolitae* Gahan, 1928. U. S. Natl. Mus. Proc. 71 (4): 2. ♂ ♀.

**isosomatis** (Ashmead), n. comb. Ind., Ill. Hosts: *Harmolita hordei* (Harr.); *H.* spp.

**Parapteromalus isosomatis** Ashmead, 1904. Carnegie Mus. Mem. 1: 318, 384.  
♀.

**Merisus carinatus** Girault, 1916. Soc. Ent. 31: 57. ♂ ♀.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.

**mordellistena** Crawford. Pa., D. C., Va., Ohio, Ind., Kans., Tex. Hosts: *Mordellista andreae* var. *pustulata* Melsch.; ?*Mordellista* sp. in *Phleum pratense*; *Phytophaga destructor* (Say); *Harmolita* sp. ex wheat straw.

**Merisus mordellistena** Crawford, 1910. Ent. Soc. Wash. Proc. 12: 145. ♀.  
Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 9, 11-13.  
Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 99-102.

**octoguttatus** Girault. Md.

**Merisus octoguttata** (!) Girault, 1915. N. Y. Ent. Soc. Jour. 23: 166. ♀.

**semilongifasciatus** Girault. Md.

**Merisus semilongifasciata** (!) Girault, 1915. Ent. Soc. Amer. Ann. 8: 282. ♀.

**texensis** Girault. Tex.

**Merisus texensis** Girault, 1917. Descr. Stellarum Nov., p. 17. ♀.

#### Genus MERISOPORUS Masi

**Merisoporus** Masi, 1926. Mus. Civ. Stor. Nat. Genova Ann. 50: 226.

Type: *Homoporus luniger* Nees. Orig. desig.

**chalcidiphagus** (Walsh and Riley). Ont., N. Y. to S. C., Tenn., Kans., Nebr., and N. Dak.; Mont., Oreg. Hosts: *Phytophaga destructor* (Say); *Ditropinotus aureoviridis* (Cwfd.); *Harmolita atlantica* P. and E.; *H. elymicola* P. and E.; *H. grandis* (Riley); *H. hordei* (Harr.); *H. secale* (Fitch); *H. tritici* (Fitch); *H. vaginicola* (Doane).

**Semiotellus chalcidiphagus** Walsh and Riley, 1869. Amer. Ent. 1: 152.  
♂ ♀.

Biology: Phillips and Poos, 1921. Jour. Agr. Res. 21: 405-406.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 104-109.

#### Genus CALLITULA Spinola

**Callitula** Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 151.

Type: *Callitula bicolor* Spinola. Monob.

**Micromelus** Walker, 1833. Ent. Mag. 1: 371, 464.

Type: (*Micromelus rufomaculatus* Walker)=*Callitula bicolor* Spinola. Desig. by Westwood, 1840.

**Baeotomus** Foerster, 1856. Hym. Stud., v. 2, p. 145. N. name.

**bicolor** Spinola. N. Y. to Va., Ind. and Mich.; Kans., N. Dak. Hosts: *Phytophaga destructor* (Say); *Meromyza americana* Fitch; *Oscinella frit* (L.); *Platygaster vernalis* (Myers); *P. zosine* Wlkr.

**Callitula bicolor** Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 151.

Biology: Hill and Smith, 1928. Jour. Agr. Res. 36: 153-155.—Hill, Pinckney, and Udine, 1939. U. S. Dept. Agr. Tech. Bul. 689: 13.

Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 5, 11-13.

**cyrene** (Walker), n. comb. Fla.

**Micromelus cyrene** Walker, 1843. Soc. Ent. France Ann. 2 (1): 154. ♀.

**illinoensis** (Ashmead). Ill.

**Cryptopymnus illinoensis** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 228.  
♀.

#### Tribe RHAPHITELINI

##### Genus RHAPHITELUS Walker

**Rhaphitelus** Walker, 1834. Ent. Mag. 2: 168, 178.

Type: *Rhaphitelus maculatus* Walker. Monob.

**Styloceras** Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 207.

Type: (*Styloceras ladenbergii* Ratzeburg)=*Rhaphitelus maculatus* Walker. Desig. by Gahan and Fagan, 1923.

**Rhaphidotelus** Agassiz, 1846. Nomencl. Zool., Index Univ., p. 932. Emend.  
**Storthyocerus** Ratzeburg, 1848 Ichn. d. Forstins., v. 2, p. 208. N. name.  
 Revision: Ferrière, 1948. Schweiz. Ent. Gesell. Mitt. 21: 526-528.

**maculatus** Walker. N. Y., Conn., N. J., Ohio, N. C., Calif. Hosts: *Magdalis armicollis* (Say); *M. barbita* (Say); *Magdalis* spp.; *Pissodes strobi* (Peck); *Scoylus rugulosus* (Ratz.).

**Rhaphitelus maculatus** Walker, 1834. Ent. Mag. 2: 179. ♂.  
 Biology: morphology: Russo, 1938: R. Lab. Ent. Agr. Portici Bol. 2: 216-225.

### Tribe PTEROMALINI

#### Genus PACHYCERAS Ratzeburg

**Pachyceras** Ratzeburg, 1844. Ichn. d. Forstins., v. 1, table facing p. 40; p. 217.  
 Type: *Pachyceras xylophagorum* Ratzeburg. Autob.

**Roptrocerus** Ratzeburg, 1848. Ichn. d. Forstins., v. 2, p. 209. N. name.  
 Unnecessarily proposed.

Type: *Pachyceras xylophagorum* Ratzeburg. Desig. by Ashmead, 1904.

**Rhoptrocerus** Dalla Torre, 1898. Cat. Hym., v. 5, p. 98. Emend.

**ecoptogastri** Ratzeburg. N. Y., Va., N. C., Mont.; Idaho, Wash. Hosts: *Dendroctonus frontalis* Zimm.; *D. monticolae* Hopk.; *D. pseudotsugae* Hopk.; *Ips calligraphus* (Germ.); ?*I. grandicollis* (Eichh.); *I. pini* (Say); *Orthotomicus caelatus* (Eichh.).

**Pachyceras Ecoopogastrai** Ratzeburg, 1844. Ichn. d. Forstins. v. 1, p. 218 ♀.

Biology: Evenden, 1943. U. S. Dept. Agr. Cir. 664: 17.

**rectus** (Provancher). Que., N. Y., Mich., Calif.

**Roptrocerus rectus** Provancher 1887. Addit. Corr. Faune Ent. Canada Hym., p. 202. ♀.

**xylophagorum** Ratzeburg. N. H. to N. C., La. Hosts: ?*Orthotomicus caelatus* (Eichh.); ?*Phloeosinus dentatus* (Say); *Polygraphus rufipennis* (Kby.); *Scoylus rugulosus* (Ratz.).

**Pachyceras Xylophagorum** Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 218. ♀.

**Platygerrhus** (?) *scolyti* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 335.  
 "♀" = ♂. N. syn.

#### Genus METACOLUS Foerster

**Metacolus** Foerster, 1856. Hym. Stud., v. 2, pp. 65, 70.

Type: *Metacolus unifasciatus* Foerster. Monob.

**bifasciatus** Girault. ?W. Va.

**Metacolus bifasciatus** Girault, 1917. Descr. Stellarum Nov., p. 14. ♂ ♀.

**fasciatus** Girault. N. Mex.

**Metacolus fasciatus** Girault, 1917. Descr. Stellarum Nov., p. 14. ♀.

#### Genus DINOTISCUS Ghesquière

**Dinotus** Foerster, 1856. Hym. Stud., v. 2, pp. 66, 70. No species. Preocc.  
 Type: *Dinotus bidentulus* Thomson. Desig. by Ashmead, 1904.

**Dinotiscus** Ghesquière, 1946. Rev. Zool. Bot. Africaines 34: 370. N. name.

**agrili** (Rohwer), n. comb. Calif. Host: *Agrilus angelicus* Horn.

**Dinotus agrili** Rohwer, 1919. Ent. Soc. Wash. Proc. 21: 6. ♀.

**elongatus** (Ashmead), n. comb. ?Fla.

**Dinotus elongatus** Ashmead, 1888. Canad. Ent. 20: 175. ♀.

#### Genus RHOPALICUS Foerster

**Rhopalicus** Foerster, 1856. Hym. Stud., v. 2, pp. 66, 70.

Type: (*Cleonymus maculifer* Foerster) = *Cheiropachus tutela* Walker. Monob.

**pallipes** Provancher. Que.

**Rhopalicus pallipes** (!) Provancher, 1888. Addit. Corr. Faune Ent. Canada Hym., p. 407. ♀. (*R. pallipes* in index.)

**Rhopalicus pallidipes** Dalla Torre, 1898. Cat. Hym., v. 5, p. 177. Emend.

**pulchripennis** (Crawford). Maine, N. H., Mass., N. Y., Mich., Mont., Calif., Wash. Hosts: *Cylindrocopturus eatoni* Buch.; *C. furnissi* Buch.; *Dendroctonus monticolae* Hopk.; *Pissodes strobi* Peck; *P. sp.*; ?*Polygraphus rufipennis* (Kby.); ?*Scolytus piceae* (Swaine); ?*Coeloides dendroctoni* Cush.

**Spintherus pulchripennis** Crawford, 1912. U. S. Natl. Mus. Proc. 43: 168. ♀.

**Rhopalicus americanus** Girault, 1916. Ent. Soc. Amer. Ann. 9: 296. ♀.

Biology: Taylor, 1929. Ent. Amer. 10: 17-22, 66-67. ♂ ♀.

Taxonomy: Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 16.

**tutela** (Walker). N. H., Conn. Hosts: *Pissodes notatus* (F.); *P. strobi* (Peck).

**Cheiropachus tutela** Walker, 1836. Ent. Mag. 4: 14. ♂ ♀.

**Pteromalus suspensus** Ratzeburg, 1844. Ichn. d. Forstins., v. 1 p. 189.

Taxonomy: Ferrière, 1948. Schweiz. Ent. Gesell. Mitt. 21: 519-521.

### Genus AMBLYMERUS Walker

**Amblymerus** Walker, 1834. Ent. Mag. 2: 303, 306.

Type: **Amblymerus amoenus** Walker. Desig. by Westwood, 1840.

**Eutelus** Walker, 1834. Ent. Mag. 2: 351, 356.

Type: (*Eutelus dilectus* Walker)=**Amblymerus amoenus** Walker. Desig. by Westwood, 1840.

**betulae** (Girault), n. comb. N. Y. Host: *Semudobia betulae* Winnertz.

**Eutelus betulae** Girault, 1917. Psyche 24: 93. ♂ ♀.

**bruchophagi** (Gahan). Wyo., Utah, Calif., Idaho. Hosts: *Bruchophagus gibbus* (Boh.); ?*B. mexicanus* Ashm.

**Eutelus bruchophagi** Gahan, 1917. U. S. Natl. Mus. Proc. 53: 212. ♂ ♀.

Biology: Sorenson, 1934. Utah Agr. Expt. Sta. Bul. 250: 50.

Biology and morphology: Urbahns, 1919. Jour. Agr. Res. 16: 171-172.

**confusus** (Ashmead), n. comb. Alaska, Mont. Host: ?*Ips oregonis* (Eichh.).

**Eutelus confusus** Ashmead, 1902. Wash. Acad. Sci. Proc. 4: 145. ♂ ♀.

**flavipes** (Walker). Oreg., Wash. Host: *Cheiilosia alaskensis* Hunter.

**Eutelus flavipes** Walker, 1834. Ent. Mag. 2: 364. ♀.

**justicia** Girault. N. Mex., Calif. Host: *Diarthronomyia hypogaea* Loew.

**Amblymerus justicia** Girault, 1917. Descr. Stellarum Nov., p. 21. ♂ ♀.

**mayetiola** (Gahan). Calif., Oreg., Wash. Hosts: *Phytophaga destructor* (Say); *Harmolita* sp. on canary grass.

**Eutelus mayetiola** Gahan, 1919. U. S. Natl. Mus. Proc. 55: 128. ♂ ♀.

Biology: Packard, 1928. U. S. Dept. Agr. Tech. Bul. 81: 14.—Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 65-67.

**ruskini** (Girault), n. comb. Colo.

**Eutelus ruskini** Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 113. ♀.

**salicis** (Girault), n. comb. Mass. Host: Itoniid gall on *Salix longifolia*.

**Eutelus salicis** Girault, 1917. Psyche 24: 94. ♀.

**verditer** (Norton). Ont. to N. J.; Man., Idaho, Oreg., B. C. Hosts: *Camptylochila aemula* (Hbn.); *Barbara colfaxiana colfaxiana* (Kearf.); *Taniva abolineana* (Kearf.); *Choristoneura fumiferana* (Clem.); *Tortrix packardiana* Fern.; *Diprion hercyniae* (Htg.); *D. similis* (Htg.); *Neodiprion abietis* (Harr.); *N. tsugae* Middl.; *Phytodictes fumiferanae* Roh.

**Pteromalus verditer** Norton, 1869. Amer. Ent. Soc. Trans. 2: 327. ♂ ♀.

Biology: Dowden, Buchanan, and Carolin, 1948. Jour. Econ. Ent. 41: 459.

Taxonomy: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 222.

### Genus ZACALOCHLORA Crawford

**Zacalochlora** Crawford, 1913. U. S. Natl. Mus. Proc. 45: 251.

Type: **Zacalochlora milleri** Crawford. Monob.

**milleri** Crawford. Calif. Host: *Laspeyresia* spp. in cones of *Pinus jeffreyi*.  
**Zacalochlora milleri** Crawford, 1913. U. S. Natl. Mus. Proc. 45: 251. ♀.

### Genus PLATYTERMA Walker

**Platyterma** Walker, 1834. Ent. Mag. 2: 303.

Type: **Platyterma nobile** Walker. Desig. by Westwood, 1840.

**Platytermus** Thomson, 1878. Hym. Scand., v. 5, p. 75. Emend.

**citripes** Ashmead. Colo., Wyo.

**Platyterma citripes** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 223. ♀.

**fuscipes** Ashmead. Mich.

**Platyterma fuscipes** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 223. ♀.

### Genus COELOPISTHIA Foerster

**Coelopisthia** Foerster, 1856. Hym. Stud., v. 2, p. 65 (no species).

Type: **Pteromalus cephalotes** Walker. Desig. by Ashmead, 1904.

**Coelopisthus** Thomson, 1878. Hym. Scand., v. 5, p. 162. Emend.

**bicarinata** Girault. No. Amer.

**Coelopisthia bicarinata** Girault, 1916. Soc. Ent. 31: 57. ♂ ♀.

**forbesii** (Dalla Torre). N. J., Ill., La. Hosts: *Apantesis nais* (Drury); *Catocala* sp. on hickory.

**Pteromalus pallipes** Forbes, 1885. Ill. State Dept. Agr. Trans. 22: App. pp. 46, 49. Preocc.

**Pteromalus forbesii** Dalla Torre, 1898. Cat. Hym., v. 5, p. 125. N. name.  
 Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 145-146.

**fumosipennis** Gahan. Md. Host: Lepidopterous pupa.

**Coelopisthia fumosipennis** Gahan, 1909. Canad. Ent. 41: 431. ♀.

**intermedia** Girault. D. C.

**Coelopisthia intermedia** Girault, 1916. Soc. Ent. 31: 57. ♀.

**smithii** Gahan. N. J.

**Coelopisthia smithii** Gahan, 1913. Canad. Ent. 45: 179.

**suborbicularis** (Provancher). Que., N. H., Md., Ill. Host: ?*Pissodes strobi* (Peck);  
*Agrotis* sp.; caterpillar in *Solidago* gall; *Itopleclis conquisitor* (Say).

**Semiotellus suborbicularis** Provancher, 1881. Nat. Canad. 12: 296. ♀.  
 Biology: Fiske, 1903. N. H. Agr. Expt. Sta. Tech. Bul. 6: 182, 197, 228.

### Genus DIBRACHOIDES Kurdjumov

**Dibrachoides** Kurdjumov, 1913. Rev. Russe d'Ent. 13: 12.

Type: **Pteromalus dynastes** Foerster. Monob.

**dynastes** (Foerster). Utah, Oreg., Wash. Hosts: *Hypera nigrirostris* (F.); *H. postica* (Gyll.); *H. rumicis* (L.).

**Pteromalus dynastes** Foerster, 1840. Beitr. Monog. Pteromalidae, p. 24. ♀.  
 Biology: Smith, 1930. Ent. Soc. Amer. Ann. 23: 577-593.

### Genus BELONURA Ashmead

**Belonura** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 224.

Type: **Belonura singularis** Ashmead. Monob.

**singularis** Ashmead. Maine, Mass., Va., Ga.

**Belonura singularis** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 225. ♀.

### Genus UROLEPIS Walker

**Urolepis** Walker, 1846. List Hym. Brit. Mus., v. 1, p. 26.

Type: **Ormocerus maritimus** Walker. Monob.

**Halizoa** Foerster, 1856. Hym. Stud., v. 2, p. 145. N. name.

**rufipes** (Ashmead). Calif. Host: *Ephydria hians* Say.

**Halizoa rufipes** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 225. ♂ ♀.

### Genus EPIPTEROMALUS Ashmead

*Epipteronalus* Ashmead, 1904. Carnegie Mus. Mem. 1: 319.  
Type: *Epipteronalus algonquinensis* Ashmead. Monob.

*algonquinensis* Ashmead. Ill.

*Epipteronalus algonquinensis* Ashmead, 1904. Carnegie Mus. Mem. 1: 318-319. ♀.

*Polycystus gibbus* Girault, 1920. U. S. Natl. Mus. Proc. 58: 212. ♀.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 315.

### Genus TRICHOMALUS Thomson

*Trichomalus* Thomson, 1878. Hym. Scand., v. 5, pp. 131, 134.

Type: *Trichomalus punctinucha* Thomson. Desig. by Ashmead, 1904.

*fasciatus* (Thomson). Wash. Host: *Ceutorhynchus assimilis* (Paykull).

*Isocyrus (Trichomalus) fasciatus* Thomson, 1878. Hym. Scand., v. 5, p. 139. ♂ ♀.

Biology: Heymons, 1921. Ztschr. f. Angew. Ent. 8: 108-111.

### Genus DIGLOCHIS Foerster

*Diglochis* Foerster, 1856. Hym. Stud., v. 2, p. 65 (no species).

Type: *Pteromalus complanatus* Ratzeburg. Included by Mayr, 1904.

*Trichoglenus* Thomson, 1878. Hym. Scand., v. 5, p. 146, 149.

Type: *Pteromalus complanatus* Ratzeburg. Monob.

*occidentalis* (Ashmead). Conn., Minn., Sask., Alta., Wash. Hosts: *Chrysops aestuans* Wulp; *C. excilians* Wlkr.; *C. milis* O. S.

*Trichoglenes* (!) *occidentalis* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 225. ♀.

### Genus TRITNEPTIS Girault

*Tritneptis* Girault, 1908. Psyche, 15: 92.

Type: *Tritneptis hemerocampae* Girault. Monob.

Revision: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 213-214.

*diprionis* Gahan. Maine, Mass., Minn. Host: *Neodiprion sertifer* (Geof.).

*Tritneptis diprionis* Gahan, 1938. Ent. Soc. Wash. Proc. 40: 217. ♂ ♀.

*hemerocampae* Girault. Que. to W. Va., Ill., Colo., B. C. Hosts: *Papilio ajax* L.; *Diacrisia virginica* (F.); *Estigmene acrea* (Drury); *Hemerocampa leucostigma* (A. and S.); *Stilpnoptilia salicis* (L.); *Carpocapsa pomonella* (L.); *Grapholita molesta* (Busck); *Coleophora malivorella* Riley; *Diprion hercyniae* (Htg.).

*Tritneptis hemerocampae* Girault, 1908. Psyche 15: 90, 92. ♂ ♀.

*Coelopisthia diacrisiae* Crawford, 1910. Ent. Soc. Wash. Proc. 12: 145. ♀.

*Amblymerus lipardis* (!) Viereck, 1924. Canad. Ent. 56: 69. ♂ ♀.

Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 6, 153.

*Klugii* (Ratzeburg). Maine, Ont., Wis., Minn., Mont., Idaho, Oreg., B. C. Hosts: *Diprion hercyniae* (Htg.); *Neodiprion banksianae* Roh.; *N. tsugae* Midd.; *Pristiphora erichsonii* (Htg.).

*Pteromalus Klugii* Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 198. ♀.

*Pteromalus nematicida* Packard, 1883. U. S. Dept. Agr. Ann. Rpt. for 1883, p. 146.

Biology: Hewitt, 1912. Canad. Dept. Agr. Div. Ent. Bul. 5: 28.—Finlayson and Reeks, 1936. Canad. Ent. 68: 163.—Finlayson, 1938. Ent. Soc. Ontario Ann. Rpt. 69: 34-35.

*koebelei* Gahan. Calif. Host: *?Caliroa cerasi* (L.).

*Tritneptis koebelei* Gahan, 1938. Ent. Soc. Wash. Proc. 40: 218. ♂ ♀.

*scutellata* (Muesebeck). New England. Host: *Apanteles melanoscelus* (Ratz.).

*Coelopisthia scutellata* Muesebeck, 1927. Jour. Agr. Res. 34: 331. ♂ ♀.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 27.

**Genus PSEUDOMICROMELUS Gahan and Fagan**

*Micromelus* Dalla Torre, 1898. Cat. Hym., v. 5, p. 184. Preocc.

Type: *Micromelus silvanus* Walker. Desig. by Gahan and Fagan, 1923.

*Pseudomicromelus* Gahan and Fagan, 1923. U. S. Natl. Mus. Bul. 124: 124. N. name.

*deplanatus* (Nees). Calif. Host: *Anarsia lineatella* Zell.

*Pteromalus deplanatus* Nees, 1834. Hym. Ichn. Aff. Monog., v. 2, p. 110. ♂ ♀.

Taxonomy: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 226.

**Genus DIBRACHYS Foerster**

*Dibrachys* Foerster, 1856. Hym. Stud., v. 2, p. 65. No species.

Type: (*Pteromalus bouchéanus* Ratzeburg)=*Pteromalus cavus* Walker. Desig. by Thomson, 1878.

*Coelopisthoidea* Gahan, 1913. Canad. Ent. 45: 179.

Type: (*Coelopisthoidea cladiae* Gahan)=*Pteromalus saltans* Ratzeburg. Orig. desig.

**cavus** (Walker). East. U. S. and Canada, Colo., Utah, Calif., Oreg., Idaho, B. C. Hosts: *Symphebius californicus* Banks; *Chrysopa californica* Coq.; *C. lateralis* Guer.; *C. majuscula* Banks; *Stegobium paniceum* (L.); *Sitophilus granarius* (L.); *S. oryza* (L.); ?*Pieris rapae* (L.); *Oeneis melissa semidea* (Say); *Samia cecropia* (L.); *Acronycta populi* Riley; *Camptylochila aemula* (Hbn.); *Peridroma margaritosa* (Haw.); *Hemerocampa leucostigma* (A. and S.); *H. vetusta* (Bdyl.); *Notolophus antiqua* (L.); *Porthetria dispar* L.; *Malacosoma americanum* (F.); *M. californicum* (Pack.); *M. constrictum* (Stretch); *M. disstria* Hbn.; *Lambdina fiscellaria somniaria* (Hulst); *Phlyctaenia rubigalis* (Guen.); *Dicyclomolia pegasalis* (Wlk.); *Galleria mellonella* (L.); *Plodia interpunctella* (Hbn.); *Barbara colfaxeana colfaxeana* (Kearf.); *Carpocapsa pomonella* (L.); *Epiblema scudderiana* (Clem.); *Grapholita molesta* (Busck); *Taniva albolineana* (Kearf.); *Archips cerasivorana* (Fitch); *A. semiherana* (Wlk.); *Argyrotaenia velutinana* (Wlk.); *Tortrix packardiana* Fern.; *Anarsia lineatella* Zell.; *Dichomeris marginella* (F.); *Gnorimoschema gallaesolidaginis* (Riley); *G. operculella* (Zell.); *Sitotroga cerealella* (Oliv.); *Anthophila pariana* (Clerck); *Eurukuttarus confederata* (Grote); *Thyridopteryx ephemeraeformis* (Haw.); *Nemapogon granella* (L.); *Bigonicheta setipennis* (Fall.); *Compsilura concinnata* (Meig.); *Mericia aldrichi* (Tns.); *Nemorilla floralis* (Fall.); *Phorocera tortricis* Coq.; *Diprion hercyniae* (Htg.); *D. similis* (Htg.); *Neodiprion abietis* (Harr.); ?*Nematus ribesii* (Scop.); *Apanteles clisiocampae* Ashm.; *A. hyphantriae* Riley; *A. lacteicolor* Vier.; *A. melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *Ascogaster quadridentata* Wesm.; *Bracon gelechiae* Ashm.; *B. johannseni* (Vier.); *B. sp.*; *Chelonus shoshoneanorum* Vier.; *Macrocentrus aenylivorus* Roh.; *M. sp.*; *Meteorus acronyctae* Mues.; *M. communis* (Cress.); *M. hyphantriae* Riley; *M. versicolor* (Wesm.); *Perilitus coccineliae* (Schrantz); *Rogas stigmator* (Say); *Sphaeropyx bicolor* Cress.; *braconid*; *Bathyplectes curculionis* (Thoms.); *Bathythrix pimpiae* (How.); *Campoplex validus* (Cress.); *Coccyonimus aequalis* (Prov.); *C. sanguinipes* (Cress.); *Erigorgus* sp.; *Gambrus extrematis* (Cress.); *Horogenes acutus* (Vier.); *Hyposoter fugitivus fugitivus* (Say); *H. fugitivus pacificus* Cush.; *H. pilosulus* (Prov.); *Iseropus coelebs* Walsh; *Itoplectis conquisitor* (Say); *Mastrus carpocapsae* (Cush.); *Phaeogenes walshiae* Ashm.; *Phobocampe clisiocampae* (Weed); *Polistiphaga fulva* (Cress.); *Theronia alalantae* (Poda); *Eurydinota lividicornis* Gir.; *Habrocytus phycidis* Ashm.; ?*Pteromalus puparum* (L.); ?*Ceratosmicra debilis* (Say); *Epeira foliata* (Fourc.); *Philodromus aureolus* (Oliv.).

*Pteromalus cavus* Walker, 1835. Ent. Mag. 2: 477. ♂ ♀.

*Pteromalus Bouchéanus* Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 196. ♀.

*Cleonymus Clisiocampae* Fitch, 1855. N. Y. State Agr. Soc. Trans. 15: 431. ♂ ♀.

*Cheiropachus nigro-cyanus* Norton, 1869. Amer. Ent. Soc. Trans. 2: 327. ♀.

*Pteromalus gelechiae* Webster, 1883. Ill. State Dept. Agr. Trans. (n. s.) 12: 151. ♂ ♀.

***Chiropachys nigrocyaneus*** Cresson, 1887. Amer. Ent. Soc. Trans. (sup. vol.), p. 242. Emend.

***Pteromalus chionobae*** Howard, 1889. In Scudder, Butterflies of Eastern U. S. and Canada, pp. 1872, 1889. ♀

***Arthrolytus apatela*** Ashmead, 1893 Ohio Agr. Expt. Sta. Tech. Ser. Bul. 1: 162. ♀.

***Arthrolytus pimpiae*** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 339. ♂ ♀. Biology: Fiske, 1903. N. H. Agr. Expt. Sta. Tech. Bul. 6: 182, 197, 205-206, 213, 220, 224-227.—Morris, Cameron, and Jepson, 1937. Bul. Ent. Res. 28: 383, 390-391.—Gontarski, 1939. Ztschr. f. Morph. u. Ökol. der Tiere 35: 203-220.—Boyce, 1941. Ent. Soc. Ontario Ann. Rpt. 71: 41.

Taxonomy: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 211.

***confusus*** (Girault), n. comb. D. C.

***Coelopisthia confusa*** Girault, 1916. Canad. Ent. 48: 246. ♀.

***daphne*** Girault. Calif. Hosts: *Sympherobius barberi* (Banks); *S. californicus* Banks.

***Dibrachys daphne*** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 9. ♀.

***saltans*** (Ratzeburg). Md., N. Dak., Wash. Hosts: *Cladius isomerus* Nort.; in stem of *Stipa comata*.

***Pteromalus saltans*** Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 232. ♂ ♀.

***Coelopisthoidea cladiae*** Gahan, 1913. Canad. Ent. 45: 179. ♂ ♀.

Taxonomy: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 212.

### Genus EUPTEROMALUS Kurdjumov

***Eupteromalus*** Kurdjumov, 1913. Rev. Russe d'Ent. 13: 12.

Type: ***Pteromalus nidulans*** Thomson. Orig. desig.

***Nemicromelus*** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 4.

Type: ***Merisus subapterus*** Riley. Monob.

***americanus*** Gahan. Mich., Iowa, N. Dak., Wash., Oreg., Calif. Host: *Phytophaga destructor* (Say).

***Eupteromalus americanus*** Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 82. ♂ ♀.

***cognatus*** Gahan. Ohio. Hosts: *Epeira foliata* (Fourc.); *E. undata* (Oliv.); *Philodromus aureolus* (Oliv.).

***Eupteromalus cognatus*** Gahan, 1924. U. S. Natl. Mus. Proc. 65 (4): 16. ♂ ♀.

Biology: Auten, 1925. Ent. Soc. Amer. Ann. 18: 242.

***dubius*** (Ashmead). D. C., Ohio, Ill., Iowa, Wis. Hosts: *Toxomerus polita* (Say); *Masicera myoidea* Desv.; *M. senilis* Meig.; dipterous puparium in *Ambrosia* stem; *Microplitis gortynae* Riley; *Lissonota* sp.

***Meraporus dubius*** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 219. ♂ ♀.

Biology: Breakey, 1930. Ent. Soc. Amer. Ann. 23: 186.

***leguminis*** Gahan. Wyo., Utah, Idaho, Nev., Oreg. Hosts: *Bruchus pisorum* (L.); *Bathyplectes curculionis* (Thoms.); *B. sp.*

***Eupteromalus leguminis*** Gahan, 1937. Ent. Soc. Wash. Proc. 39: 63. ♂ ♀.

***nidulans*** (Thomson) (*Pteromalus egregius* American authors, not Foerster). New England, east and west coasts of Canada. Hosts: *Nygma phaeorrhoea* (Donov.); *Porthetria dispar* (L.); *Stilpnobia salicis* (L.); *Ceromasia senilis* Meig.; *Apanteles lacteicolor* Vier.; *A. melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *Meteorus versicolor* (Wesm.); *Rogas unicolor* (Wesm.).

***Pteromalus nidulans*** Thomson, 1878. Hym. Scand., v. 5, p. 155. ♂ ♀.

Biology: Howard and Fiske, 1911. U. S. Dept. Agr. Bur. Ent. Bul. 91: 61, 65, 69, 88, 262, 268-278, 309.—Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 28-29.—Proper, 1934. Jour. Agr. Res. 48: 360-375.—Jones, Webber, and Dowden, 1938. U. S. Dept. Agr. Cir. 459: 7-8, 14-24.

***sarcophagae*** Gahan. Mich., Kans. Hosts: Mine of *Nepticula* sp. in *Scirpus occidentalis*; *Sarcophaga kellyi* Ald.

***Eupteromalus sarcophagae*** Gahan, 1914. U. S. Natl. Mus. Proc. 48: 163. ♂ ♀.

**subapterus** (Riley). Ont. and N. Y. to N. C., Okla., and Minn.; Oreg. Hosts: *Phytophaga destructor* (Say); *Meromyza americana* Fitch; *Platygaster vernalis* (Myers).

**Pteromalus? fulvipes** Forbes, 1885. Ill. State Dept. Agr. Trans. 22: App. p. 47. ♂ ♀. Preocc.

**Merisus (Homoporus) subapterus** Riley, 1885. U. S. Natl. Mus. Proc. 8: 416. ♂ ♀.

Biology: Packard, 1916. Jour. Agr. Res. 6: 377-381.—McColloch, 1923. Kans. Agr. Expt. Sta. Tech. Bul. 11: 63, 67-69.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 75-82.

**tachinae** Gahan. Ont., Tenn., La. Hosts: *Cirphis unipuncta* (Haw.); *Archytas analis* (F.).

**Eupteromalus tachinae** Gahan, 1917. U. S. Natl. Mus. Proc. 53: 211. ♀.

**viridescens** (Walsh). N. H. to Va., Mo. and Iowa; La., Tex., Colo., Calif. Hosts: *Ampelocca myron* (Cram.); *Ceratomia catalpae* (Bdvl.); *Protoparce quinquemaculata* (Haw.); *Smerinthus jamaicensis* (Drury); *Sphecodina abbotii* (Swains.); *Cirphis unipuncta* (Haw.); *Papaipema nebris* (Guen.); *Hemerocampa leucostigma* (A. and S.); *Apanteles congregatus* (Say); *A. limenitidis* (Riley); *A. marginiventris* (Cress.); *A. militaris* (Walsh); *A. papaipemae* Mues.; *A. smerinthi* Riley; *A. spp.*; *Bracon caulicola* (Gahan); *B. latus* Prov.; *Macrocentrus pallisteri* DeGant; *Microplitis catalpae* (Riley); *M. gortynae* Riley; *Bathyplectes curculionis* (Thoms.); *Ichneumon astutus* (Holmg.); *Horogenes insularis* (Cress.).

**Glyphe viridascens** Walsh, 1861. Ill. State Agr. Soc. Trans. 4: 264, 370. ♀.

**Glyphe viridescens** Walsh, 1865. Ill. State Agr. Soc. Trans. 5: 11, 483. Emend. Biology: Balduf, 1929. Ohio Jour. Sci. 29: 226-227, 237.—Decker, 1935. Iowa State Coll. Jour. Sci. 9: 572, 575-576.

Taxonomy: Gahan, 1921 (1920). Ent. Soc. Wash. Proc. 22: 240.

### Genus LARIOPHAGUS Crawford

**Lariophagus** Crawford, 1909. Ent. Soc. Wash. Proc. 11: 52.

Type: **Lariophagus texanus** Crawford. Monob.

Revision: Gahan, 1927. U. S. Natl. Mus. Proc. 71 (4): 7.

**distinguendus** (Foerster). N. Y., Va., N. C., Tex. Hosts: *Lasioderma serricorne* (F.); *Stegobium panicea* (L.); *Rhyzopertha dominica* (F.); *Bruchus brachialis* Fahr.; *Sitophilus granarius* (L.); *S. oryza* (L.).

**Pteromalus distinguendus** Foerster, 1840. Beitr. Monog. Pteromalidae, p. 17. ♂.

**Meraporus utibilis** Tucker, 1910. Canad. Ent. 42: 341. ♀.

Taxonomy: Gahan, 1921 (1920). Ent. Soc. Wash. Proc. 22: 239.—Waterston, 1921. Grain Pests (War) Com. [Gt. Brit.] Rpt. 9: 15, 19-24.

Biology: Hase, 1920 (1919). Gesell. f. Naturf. Freunde Sitzber., pp. 402-432.

**dryorhizoxeni** (Ashmead), n. comb. Fla. Host: Gall of *Belonocnema treatae* Mayr.

**Macroglenes dryorhizoxeni** Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 133. ♀.

**texanus** Crawford. Ga., Tex. Hosts: *Algarobius prosopis* (Lec.); *Callosobruchus maculatus* (F.); *Mimosestes fallaei* (Sharp); *Anthonomus grandis* Boh.

**Lariophagus texanus** Crawford, 1909. Ent. Soc. Wash. Proc. 11: 51. ♂ ♀. Biology: Pierce, Cushman, and Hood, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 100: 42, 52-62.

### Genus SCHIZONOTUS Ratzeburg

**Schizonotus** Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 230.

Type: **Pteromalus sieboldi** Ratzeburg. Desig. by Ashmead, 1904.

Revision: Ferrière and Faure, 1925. Ann. des Epiphyt., v. 11, p. 233.

**rotundiventris** (Girault), n. comb. N. J., Va. Host: *Plagiodes versicolora* (Laich.).

**Coelopisthia rotundiventris** Girault, 1917 (1916). Insecutor Inscitiae Mensstruus 4: 113. ♀.

**sieboldi** (Ratzeburg). Maine to Va.; Fla., Minn. Hosts: *Chrysomela interrupta* (F.); *C. scripta* (F.); *Plagiodes versicolora* (Laich.).

**Pteromalus (Schizonotus) sieboldi** Ratzeburg, 1852. Ichn. d. Forstins., v. 3, p. 230. ♀.

Biology: Dowden, 1939. Jour. Agr. Res. 58: 581-592.

### Genus PSILOCERA Walker

- Psilocera** Walker, 1833. Ent. Mag. 1: 371, 373.  
 Type: *Psilocera obscura* Walker. Monob.  
**Metopon** Walker, 1834. Ent. Mag. 2: 302.  
 Type: (*Metopon atrum* Walker)=*Psilocera obscura* Walker.  
 Monob.  
**Eupsilocera** Westwood, 1839. Introduct. Mod. Class. Insects 2, Synopsis, p. 69.  
 N. name.

**Metopum** Agassiz, 1846. Nomencl. Zool., p. 670. Emend.

**Dichalyysis** Foerster, 1856. Hym. Stud., v. 2, pp. 52, 56. N. name.

**californica** (Ashmead), n. comb. Ga., Kans., Calif.

**Metapon** (!) *californicum* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 229.  
 ♂ ♀.

**deiphon** (Walker). Fla.

**Metopon deiphon** Walker, 1843. Soc. Ent. France Ann. (2) 1: 161. ♀.

**rufipes** (Ashmead). N. H., D. C., Ga., Fla., Kans., S. Dak. Host: *Chlamisus plicata* (F.).

**Metapon** (!) *rufipes* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 229. ♂ ♀.

### Genus SCYMNOPHAGUS Ashmead

- Scymnophagus** Ashmead, 1904. Carnegie Mus. Mem. 1: 319, 321.  
 Type: *Scymnophagus townsendi* Ashmead. Monob.

**townsendi** Ashmead. Ill. or Ind., Calif. Host: *Scymnus guttulatus* Lec.

**Scymnophagus townsendi** Ashmead, 1904. Carnegie Mus. Mem. 1: 319, 321.  
 ♂ ♀.

### Genus XENOCREPIS Foerster

- Xenocrepis** Foerster, 1856. Hym. Stud., v. 2, p. 64 (no species).  
 Type: *Caenocrepis arenicola* Thomson. Included by Ashmead, 1904.

**Caenocrepis** Thomson, 1878. Hym. Scand., v. 5, p. 50.

Type: *Caenocrepis arenicola* Thomson. Monob.

**pura** Mayr. Idaho, Wash. Host: *Ceutorhynchus assimilis* (Payk.).

**Xenocrepis pura** Mayr, 1904. Zool.-Bot. Gesell. Wien, Verh. 54: 584. ♂.

### Genus MERAPORUS Walker

**Meraporus** Walker, 1834. Ent. Mag. 2: 298.

Type: *Meraporus graminicola* Walker. Desig. by Westwood, 1840.

**Parmicromelus** Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 4.

Type: (*Parmicromelus europaeus* Girault)=*Meraporus graminicola* Walker. N. syn. Monob.

**requisitus** Tucker. La. Host: *Sitophilus oryzae* (L.).

**Meraporus requisitus** Tucker, 1910. Canad. Ent. 42: 344. ♂.

### Genus NEOPOLYCELIS Hincks

**Polycelis** Thomson, 1878. Hym. Scand., v. 5, pp. 131, 143. Preocc.

Type: *Pteromalus consperus* Walker. Desig. by Ashmead, 1904.

**Polyscelis** Dalla Torre, 1897. Wien. Ent. Ztg. 16: 87. N. name. Preocc.

**Neopolycelis** Hincks, 1944. Roy. Ent. Soc., London, Proc. Ser. B: Taxonomy 13: 38. N. name.

Revision: Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 10-12.

**modesta** (Gahan), n. comb. Ont., Pa., Md., Va. Hosts: *Phytophaga destructor* (Say); *Platygaster vernalis* (Myers); *P. zosine* Wlkr.

**Polyscelis modestus** Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 11. ♂ ♀.

Biology: Myers, 1925 (1924). Jour. Agr. Res. 29: 289-295.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 67-70.

Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 9-13.

**websteri** (Ashmead). Ind. Host: Gall on *Lactuca canadensis*.

*Polyscelis Websteri* Ashmead, 1894. Cincinnati Soc. Nat. Hist. Jour. 17: 52.  
♂ ♀.

Biology: Webster, 1894. Cincinnati Soc. Nat. Hist. Jour. 17: 36.

### Genus PSYCHOPHAGUS Mayr

*Diglochis* Thomson, 1878. Hym. Scand., v. 5, p. 156. Preocc.

Type: *Pteromalus omnivorus* Walker. Monob.

*Psychophagus* Mayr, 1904. Zool.-Bot. Gesell. Wien, Verh. 54: 598. N. name.

**omnivorus** (Walker). Ont., Que., New England, N. Y., N. J., Wis., Ohio. Hosts: *Vanessa atalanta* (L.); *Samia cecropia* (L.); *Diacrisia virginica* (F.); *Estigmene acraea* (Drury); *Uteheisa bella* (L.); *Achatodes zae* (Harr.); *Catocala* sp.; *Macronoctua onusta* Grote; *Datana ministra* (Drury); *Ichthyura inclusa* (Hbn.); *Hemerocampa leucostigma* (A. and S.); *Nygma phaeorrhoea* (Donov.); *Porthetria dispar* L.; *Stilpnota salicis* (L.); *Malacosoma americanum* (F.); *M. disstria* (Hbn.); *Cnidocampa flavescens* (Wlkr.); *Grapholita molesta* (Busck); *G. packardi* Zell.; *Tortrix packardiana* Fern.; *Compsilura concinnata* Meig.; *Diprion hercyniae* (Htg.).

*Pteromalus omnivorus* Walker, 1835. Ent. Mag. 3: 204. ♂ ♀.

*Pteromalus Processioneae* Ratzeburg, 1844. Ichn. d. Forstins., v. 1, p. 194.  
♀.

**tortricis** (Brues), n. comb. Que., N. Y. Hosts: *Choristoneura fumiferana* (Clem.); *Apechthis ontario* (Cress.); *Itoplectis conquisitor* (Say).

*Nasonia tortricis* Brues, 1910. Canad. Ent. 42: 259. ♂ ♀.

Biology: Dowden, Buchanan, and Carolin, 1948. Jour. Econ. Ent. 41: 459.  
Taxonomy: Gahan, 1932. Ent. Soc. Amer. Ann. 25: 738.

### Genus CECIDOSTIBA Thomson

*Cecidostiba* Thomson, 1878. Hym. Scand., v. 5, pp. 87, 92.

Type: *Cecidostiba rugifrons* Thomson. Desig. by Ashmead, 1904.

Revision: Crawford, 1912. U. S. Natl. Mus. Proc. 43: 169.

**acuta** (Provancher). Que., N. B., W. Va., Wash. Hosts: *Dendroctonus monticolae* Hopk.; *Polygraphus rufipennis* (Kby.).

*Dinotus acutus* Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 201. ♀.

*Cecidostiba ashmeadi* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 170. ♀.

**burkei** Crawford. Calif., Wash. Host: *Dendroctonus brevicornis* Lec.

*Cecidostiba burkei* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 170. ♀.

**dendroctoni** Ashmead. W. Va., Mont., Idaho, Wash. Hosts: *Cylindrocopturus furnissi* Buch.; *Dendroctonus frontalis* Zimm.; *D. monticolae* Hopk.; *D. pseudotsugae* Hopk.; *Ips grandicollis* (Eichh.); *Polygraphus rufipennis* (Kby.).

*Cecidostiba dendroctoni* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 337.  
♀.

**polygraphi** Ashmead. Va. Host: *Polygraphus rufipennis* (Kby.).

*Cecidostiba polygraphi* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 338. ♂  
♀.

**thomsoni** Crawford. Mont., Calif. Hosts: *Pissodes* sp.; *Scolytus ventralis* Lec.

*Cecidostiba thomsoni* Crawford, 1912. U. S. Natl. Mus. Proc. 43: 171. ♂ ♀.

### Genus CATOLACCUS Thomson

*Catolaccus* Thomson, 1878. Hym. Scand., v. 5, pp. 146, 152.

Type: (*Catolaccus cavigena* Thomson)=*Pteromalus ater* Ratzeburg. Monob.

Revision: Crawford, 1908. Ent. Soc. Wash. Proc. 9: 160.

**aeneoviridis** (Girault). Mass. to Fla., Tex., Utah and Calif., north to Wis. Hosts: *Celama sorghiella* (Riley); *Laphygma frugiperda* (A. and S.); *Oidaematophorus paleaceus* (Zell.); *Ancylis comptana* (Froel.); *A. comptana fragariae* (W. and R.); *Rhyacionia frustrana* (Comst.); *Acleris minuta* (Rob.);

*Archips rosaceana* (Harr.); *Dichomeris marginella* (F.); ?*Keiferia lycopersicella* (Busck); *Coleophora malivorella* Riley; *C. pruniella* Clem.; *Callisto geminatella* (Pack.); *Bedellia somnulentella* (Zell.); *Bucculatrix thurberiella* Busck; *Apantheles aristoteliae* Vier.; *A. congregatus* (Say); *A. marginiventris* (Cress.); *Hormius basalis* (Prov.); *Meteorus acronyctae* Mues.; *M. sp.*; *Rogas laphygmae* Vier.; *Bathyplectes curculionis* (Thoms.); *Campolethis argentifrons* (Cress.); *Casinaria limenitidis* (How.); *Hypsotera pilosulus* (Prov.).

*Arthrolytus aeneoviridis* Girault, 1911. Canad. Ent. 43: 351. ♂ ♀.

*Dibrachys meteori* Gahan, 1913. U. S. Natl. Mus. Proc. 46: 436. ♂ ♀.  
Biology: Vickery, 1929. U. S. Dept. Agr. Tech. Bul. 138: 21, 32-35, 38, 53-54.  
Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 212.

**fragariae** Rohwer. Tenn., Ga. Hosts: *Anthonomus signatus* Say; *Apion decoloratum* Smith.

*Catolaccus fragariae* Rohwer, 1934. Ent. Soc. Wash. Proc. 36: 44. ♂ ♀.

**hunteri** Crawford. N. C., S. C., Miss., La., Tex., Ark. Hosts: *Acanthoscelides compressicornis* (Schaef.); *Anthonomus aeneolus* Dietz; *A. albopilosus* Dietz; *A. eugenii* Cano; *A. grandis* Boh.; *A. heterothecae* Pierce; *A. nebulosus* Lec.; *A. signatus* Say; *A. squamosus* Lec.; *Gerstaeckeria nobilis* (Lec.); *Smicraulax tuberculatus* Pierce; *Tachypterus quadrigibbus* (Say); *Zygaris xanthoxyli* Pierce.

*Catolaccus hunteri* Crawford, 1908 (1907). Ent. Soc. Wash. Proc. 9: 160. ♂ ♀.

Biology: Pierce, Cushman, and Hood, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 100: 42, 51, 54-66.

**kansensis** (Girault). Kans. Hosts: ?*Chrysopid*; ?*Psorosina hammondi* (Riley); tephritid seed maggot from ironweed.

*Habrocytus kansensis* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 3. ♀.

### Genus ZATROPIS Crawford

**Zatropis** Crawford, 1908. Ent. Soc. Wash. Proc. 9: 159.

Type: *Zatropis catalpae* Crawford. Monob.

Revision: Crawford, 1921. Ent. Soc. Wash. Proc. 23: 171-172.

**bruchivorus** (Ashmead). Iowa, Ill., Kans. Host: *Acanthoscelides horni* (Pic).

*Meraporus bruchivorus* Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser. Bul. 1: 161. ♂ ♀.

**catalpae** Crawford. Ohio. Hosts: *Contarinia johnsoni* Sling.; *Itonida catalpae* (Comst.).

*Zatropis catalpae* Crawford, 1908 (1907). Ent. Soc. Wash. Proc. 9: 159. ♂ ♀.  
Biology: Quaintance and Shear, 1921. U. S. Dept. Agr. Farmers' Bul. 1220: 11.

**coelioidis** (Ashmead). Conn., N. J., Va., Ga. Hosts: *Acanthoscelis acephalus* (Say); *Chalcodermus inaequicollis* Horn.

*Catolaccus coelioidis* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 226. ♂ ♀.

**incertus** (Ashmead). N. Y. to Ga., N. Mex. and Colo. Hosts: *Acanthoscelides horni* (Pic); ?*A. longistilus* (Horn); *Bruchus brachialis* Fahr.; *Anthonomus aeneolus* Dietz; *A. albopilosus* Dietz; *A. aphanostephi* Pierce; *A. disjunctus* Lec.; *A. eugenii* Cano, *A. fulvus* Lec.; *A. grandis* Boh.; *A. nigrinus* Boh.; *A. signatus* Say; *Apion crassum* Fall; *A. decoloratum* Smith; *A. griseum* Smith; *A. nigrum* Smith; *Auleutes tenuipes* Lec.; *Baris cuneipennis* Casey; *Ceutorhynchus* sp.; *Chalcodermus aeneus* Boh.; *C. inaequicollis* Horn; *Desmoris fulvus* (Lee.); *Rhynchaenus pallicornis* (Say); *Sitophilus oryzae* (L.); *Smicraulax tuberculatus* Pierce; *Tachypterus consors* cerasi List; *T. quadrigibbus* (Say); *Zygaris xanthoxyli* Pierce.

*Catolaccus incertus* Ashmead, 1893. In Chittenden, U. S. Dept. Agr. Insect Life 5: 186. ♂ ♀.

Biology: Pierce, Cushman, and Hood, 1912. U. S. Dept. Agr. Bur. Ent. Bul. 100: 42, 51-67, 91-92.

Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 65.

**nigroaeneus** (Ashmead). Conn., Va., Kans. Hosts: ?*Auleutes tenuipes* (Lec.); dipterous gall on box elder.

*Catolaccus nigroaeneus* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 338.

♂ ♀.

Biology: Brandhorst, 1943. Kans. Acad. Sci. Trans. 46: 169.

*perdubius* (Girault). Minn. Host: *Anthonomus signatus* Say.

*Catolaccus perdubius* Girault, 1916. Canad. Ent. 48: 114. ♂ ♀.

*tortricidis* Crawford. Pa., Calif. Hosts: *Etiella zinckenella* (Treit.); *Polychrosis viteana* (Clem.).

*Zatropis tortricidis* Crawford, 1921. Ent. Soc. Wash. Proc. 23: 172. ♂ ♀.

#### Genus CAENACIS Foerster

*Caenacis* Foerster, 1856. Hym. Stud., v. 2, p. 64. No species.

Type: *Caenacis grandiclava* Thomson. Desig. by Ashmead, 1904.

*asinus* Girault. Calif.

*Caenacis asinus* Girault, 1917. New Chalcid Flies, p. 3. ♀.

#### Genus PSEUDOCATOLACCUS Masi

*Pseudocatolaccus* Masi, 1908. Lab. Zool. Gen. e. Agr. Portici Bol. 3: 138.

Type: *Pseudocatolaccus asphondyliae* Masi. Monob.

*americanus* Gahan. Ariz. Host: *Asphondylia websteri* Felt.

*Pseudocatolaccus americanus* Gahan, 1919. Ent. Soc. Amer. Ann. 12: 164.

♂ ♀.

#### Genus MUSCIDIFURAX Girault and Sanders

*Muscidifurax* Girault and Sanders, 1910. Psyche 17: 146.

Type: *Muscidifurax raptor* Girault and Sanders. Monob.

*raptor* Girault and Sanders. Ill., Tex. Hosts: *Callitroga macellaria* (F.); *Musca domestica* L.; *Phormia regina* (Meig.).

*Muscidifurax raptor* Girault and Sanders, 1910. Psyche 17: 145. ♂ ♀.

Biology: Crandall, 1939. Ent. Soc. Amer. Ann. 32: 652.—DeBach and Smith, 1941. Jour. Econ. Ent. 34: 741-745.—DeBach, 1943. Pan-Pacific Ent. 19: 112-118.

#### Genus NASONIA Ashmead

*Nasonia* Ashmead, 1904. Carnegie Mus. Mem. 1: 317.

Type: *Nasonia brevicornis* Ashmead. Monob.

*Mormoniella* Ashmead, 1904. Carnegie Mus. Mem. 1: 316, 317.

Type: (*Mormoniella brevicornis* Ashmead)=*Nasonia brevicornis* Ashmead. Monob.

Revision: Brues, 1910. Canad. Ent. 42: 260.

The first reviser of this genus (Brues, 1910) selected the name *Nasonia*, although *Mormoniella* has page priority. Brues' selection is valid according to article 28 of the Zoological Code.

*peratripes* Girault. N. C.

*Nasonia peratripes* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 1. ♀.

*vitripennis* (Walker). Cosmopolitan. Hosts: *Piophila casei* (L.); *Fannia femoralis* (Stein); *Musca domestica* L.; *M. sp.*; *Ophyra aenescens* (Wd.); *O. leucostoma* (Wd.); *Synthesiomyia nudiseta* V. d. W.; *A paulina avium* (Shan. and Dobr.); *A. metallica* (Tns.); *A. sialia* (Shan. and Dobr.); *Calliphora* spp.; *Callitroga macellaria* (F.); *Phaenicia caesar* (L.); *P. eximia* (Wd.); *P. mexicana* (Macq.); *P. sericata* (Mg.); *Phormia regina* (Meig.); *Sarcophaga* spp.; *Hypoderma* sp.

*Pteromalus vitripennis* Walker, 1836. Ent. Mag. 3: 492. ♀.

*Pteromalus abnormis* Boheman, 1858. Öfvers. Svenska Vetensk. Akad. Forh. 15: 58. ♂ ♀.

*Mormoniella brevicornis* Ashmead, 1904. Carnegie Mus. Mem. 1: 315, 382. ♀.

*Nasonia brevicornis* Ashmead, 1904. Carnegie Mus. Mem. 1: 317. ♀,

Biology: Girault and Sanders, 1910. *Psyche* 17: 9-28.—Tiegs, 1922. *Roy. Soc. So. Austral. Trans. and Proc.* 46: 319-527.—Roberts, 1933. *Ecology* 14: 307.—Roberts, 1935. *Jour. Agr. Res.* 50: 481, 491-492.—Jacobi, 1939. *Arch. Néerland. de Zool.* 3: 197-282.—DeBach and Smith, 1941. *Ecology*, v. 22, pp. 365-368.—Van der Merwe, 1943. *Ent. Soc. So. Africa Jour.* 6: 48-64.—Moursi, 1946. *Soc. Fouad 1er Ent.* [Soc. Roy. Ent. d'Egypte] Bul. 30: 39-59.

Taxonomy: Gahan, 1927. *U. S. Natl. Mus. Proc.* 71 (4): 5.—Gahan and Peck, 1946. *Wash. Acad. Sci. Jour.* 36: 316.

Morphology: Evans, 1933. *Bul. Ent. Res.* 24: 400-403.

### Genus BRUCHOBIUS Ashmead

*Bruchobius* Ashmead, 1904. *Carnegie Mus. Mem.* 1: 314, 315.

Type: *Bruchobius laticeps* Ashmead. Monob.

*Sphaerakis* Masi, 1924. *Mus. Civ. Stor. Nat. Genova Ann.* 51: 157.

Type: *Sphaerakis mayri* Masi. Monob.

*laticeps* Ashmead. Cosmopolitan. Hosts: *Acanthoscelides obtectus* (Say); *Bruchus pisorum* (L.); *Callosobruchus maculatus* (F.).

*Bruchobius laticeps* Ashmead, 1904. *Carnegie Mus. Mem.* 1: xi, 313. ♀.

Biology: Paddock and Reinhard, 1919. *Tex. Agr. Expt. Sta. Bul.* 256: 80-81.

Taxonomy: Waterston, 1921. *Grain Pests (War) Com. [Gt. Brit.] Rpt.* 9: 14-16.

*mayri* (Masi). N. C. Host: *Bruchus brachialis* Fahr.

*Sphaerakis Mayri* Masi, 1924. *Mus. Civ. Stor. Nat. Genova Ann.* 51: 157.

♂ ♀.

### Genus PTEROMALUS Swederus

*Pteromalus* Swederus, 1795. *Svenska Vetensk. Akad. Handl.* 16: 201.

Type: *Ichneumon puparum* Linnaeus. Desig. by Westwood, 1840.

*archippi* Howard, ?Mich., Vt., N. H., N. J., N. C., La. Hosts: *Papilio ajax* L.; *Danaus plexippus* (L.); *Basilarchia archippus* (Cram.); *B. arthemis astyanax* (F.).

*Pteromalus archippi* Howard, 1889. In Scudder, Butterflies of Eastern U. S. and Canada, pp. 1872, 1891. ♀.

Biology: Schaffner and Griswold, 1934. *U. S. Dept. Agr. Misc. Pub.* 188: 6, 153.

*cassotis* Walker. Fla.

*Pteromalus Cassotis* Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 393. ♀.

*coeruleiventris* (Ashmead), n. comb. N. Y., Mass., D. C., Kans., Ill. Host: *Hemerocampa leucostigma* (A. and S').

*Sphegigaster coeruleiventris* Ashmead, 1888. *Kans. Agr. Expt. Sta. Bul.* 3: App. p. VI. ♀.

*Pteromalus cuproideus* Howard, 1897. *U. S. Dept. Agr. Div. Ent. Tech. Ser.* 5: 28, 55. ♂ ♀. N. syn.

Biology: Girault, 1908. *Psyche* 15: 89-90, 94-96.

*cratylus* Walker. Fla.

*Pteromalus Cratylus* Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 392. ♀.

*damo* Walker. Fla.

*Pteromalus Damo* Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 395. ♀.

*dipsas* Walker. Fla.

*Pteromalus Dipsas* Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 394. ♀.

*doryssus* Walker. Fla.

*Pteromalus Doryssus* Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 395. ♂ ♀.

*dymnus* Walker. Fla.

*Pteromalus Dymnus* Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 397. ♀.

*epicles* Walker. Fla.

*Pteromalus Epicles* Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 394. ♀.

*eryx* Walker. Fla.

*Pteromalus Eryx* Walker, 1847. *Ann. Mag. Nat. Hist.* (1) 19: 397. ♂.

**eurymi** Gahan. Tenn., Kans., Utah, Ariz., Calif. Host: *Colias philodice eurytheme* Bdvl.

*Pteromalus eurymi* Gahan, 1913. U. S. Natl. Mus. Proc. 46: 435. ♂ ♀.  
Biology: Wildermuth, 1914. U. S. Dept. Agr. Bul. 124: 21-23.

**europion** Walker. Fla.

*Pteromalus Eurypon* Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 398. ♀.

**euthymus** Walker. Fla.

*Pteromalus Euthymus* Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 393.

♂.

**fuscipes** (Provancher). Canada, N. H., N. Y., ?N. J. Host: *Nymphalis antiopa* (L.).

*Semiotellus fuscipes* Provancher, 1881. Nat. Canad. 12: 295. ♀.

**hemileucae** Gahan. N. Mex. Host: *Hemileuca oliviae* Ckll.

*Pteromalus hemileucae* Gahan, 1917. U. S. Natl. Mus. Proc. 53: 210. ♀.

**hermeas** Walker. Fla.

*Pteromalus Hermeas* Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 394. ♀.

**hybreas** Walker. Fla.

*Pteromalus Hybreas* Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 397. ♀.

**lausus** Walker. Fla.

*Pteromalus Lausus* Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 392 ♀.

**oeax** Walker. Fla.

*Pteromalus Oeax* Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 395. ♀.

**orontas** Walker. Fla.

*Pteromalus Orontas* Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 396. ♀.

**puparum** (Linnaeus). Throughout Canada and U. S. Hosts: *Papilio ajax* L.; *Colias philodice* (Gdt.); *Eurema lisa* (Bdvl. and Lee.); *Pieris protodice* (Bdvl. and Lee.); *P. rapae* (L.); *Agraulis vanillae* (L.); *Basilarchia archippus* (Cram.); *Nymphalis antiopa* (L.); *Polygonia satyrus* (Edw.); *Vanessa atalanta* (L.); *V. cardui* (L.); *V. caryae* (Hbn.); *Proteides clarus* (Cram.); *Lambdina fiscellaria* (Guen.); *Coleophora salmani* Heinr.; *Thyridopteryx ephemeraeformis* (Haw.); *Bracon gelechiae* Ashm.; *B. spp.*; *Rogas stigmator* (Say); *R. sp.*; *Hyposoter fugitivus* (Say); *Phobocampe clisiocampae* (Weed); *Dibrachys cavus* (Wlkr.); *Sceliphron* sp.

*Ichneumon puparum* Linnaeus, 1758. Syst. Nat., ed. 10, v. 1, p. 567.

*Pteromalus brassicae* Packard, 1877. U. S. Geol. and Geog. Survey Rpt. 9: 747. ♀.

*Pteromalus pieridis* Provancher, 1881. Nat. Canad. 12: 296. ♂ ♀. N. syn.

Biology: Essig, 1931. A Hist. of Ent., pp. 331-333, 390.—Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 7, 153.—Whiting, 1940. Amer. Nat. 74: 377-379.

Taxonomy: Masi, 1908. Lab. Zool. Gen. e Agr. Portici Bol. 3: 119-122.

**vanessae** Howard. Ont., Maine, N. Y., Mass., Conn., R. I., N. J., W. Va., Ill. Colo. Hosts: *Papilio ajax* L.; *P. cresphontes* Cram; *P. palamedes* (Drury); *P. thoas* L.; *Ascia monuste* (L.); *Nymphalis antiopa* (L.); *Polygonia comma* (Harr.); *P. interrogationis* (F.); *Malacosoma disstria* Hbn.

*Pteromalus puparum* var. *vanessae* Howard, 1889. In Scudder, Butterflies of Eastern U. S. and Canada, pp. 1872, 1890, 1891. ♀.

Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 6, 154.

#### Genus HABROCYTUS Thomson

*Habrocytus* Thomson, 1878. Hym. Scand., v. 5, pp. 88, 109.

Type: *Pteromalus albipennis* Walker. Desig. by Ashmead, 1904.

Revision: Girault, 1917. Canad. Ent. 49: 178-181.

**acutiventris** Peck, n. name. Canada.

*Pteromalus acutus* Provancher, 1881. Nat. Canad. 12: 297. ♀. Preocc.

*Pteromalus canadensis* Dalla Torre, 1898. Cat. Hym., v. 5, p. 115. N. name. Preocc. by Ashmead, 1887.

*americus* Girault. U. S.

*Habrocytus americanus* Girault, 1917. Descr. Hym. Chalcidoid. Variorum  
cum Observ. V, p. 3. ♂ ♀.

*analisis* (Ashmead), n. comb. Calif. Host: *Hylaeus varifrons* (Cress.).

*Aetroxys analisis* Ashmead, 1895. In Davidson, Psyche 7: 316. ♂ ♀.

*anthonomi* (Ashmead), n. comb. Conn., N. J., D. C., Tex. Hosts: ?*Lasioderma*  
*serricorne* (F.); ?*Anthonomus grandis* Boh.; *A. nigrinus* Boh.; *A. signatus*  
Say.

*Catolaccus anthonomi* Ashmead, 1893. In Chittenden, U. S. Dept. Agr.  
Insect Life 5: 185. ♂ ♀.

*arkansensis* Girault. Ark.

*Habrocytus arkansensis* Girault, 1917. Canad. Ent. 49: 180, 182. ♂ ♀.

*aulacis* Girault. Ohio. Hosts: ?*Aulacidea* gall; stem of *Lactuca canadensis*.

*Habrocytus aulacis* Girault, 1917. Canad. Ent. 49: 180, 181. ♀.

*bedeguaris* (Thomson). Ont., Colo., B. C. Host: *Diplolepis rosae* (L.).

*Etxoys (Habrocytus) Bedeguaris* Thomson, 1878. Hym. Scand., v. 5, p.  
123. ♂ ♀.

Taxonomy: Callan, 1944. Roy. Ent. Soc. London, Proc. Ser. B. Taxonomy 13:  
90.

*borrowi* Girault. Conn., Colo.

*Habrocytus borrowi* Girault, 1917. Canad. Ent. 49: 178, 179, 182. ♀.

*britannicus* Girault, emend. B. C.

*Habrocytus britannicus* (?) Girault, 1926. Insecutor Inscitiae Menstruus  
14: 132. ♀.

*canadensis* (Ashmead), n. comb. Ont., N. H., N. J. Host: Gall of *Xanthoteras*  
*forticorne* (O. S.).

*Megastigma* (?) *canadensis* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 186.  
♂.

*capreae* (Linnaeus). Europe; ?Alaska.

*Cynips Capreae* Linnaeus, 1761. Fauna Suecica, Ed. 2, p. 388.

*cerealellae* (Ashmead). Cosmopolitan. Host: *Sitotroga cerealella* (Oliv.).

*Catolaccus cerealellae* Ashmead, 1902. Psyche 9: 345. ♂ ♀.

Biology: Noble, 1932. Calif. Univ. Ent. Pubs. 5: 311-354.—Fulton, 1933. Ent.  
Soc. Amer. Ann. 26: 536.

Taxonomy: Crawford, 1908 (1907). Ent. Soc. Wash. Proc. 9: 160.

*coloradensis* (Ashmead), n. comb. Colo.

*Rhopalicus coloradensis* Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 27, 45. ♀.

*franciscanus* Girault. Calif.

*Habrocytus franciscanus* Girault, 1917. Canad. Ent. 49: 180, 181. ♀.

*giraulti* Peck, n. name. Ont.

*Habrocytus canadensis* Girault, 1917. Canad. Ent. 49: 179, 181, 182. ♀.  
Proc. by Ashmead, 1887.

*languriae* Ashmead. Conn., N. J., Va., La., Ariz. Hosts: *Languria angustata*  
(Beauv.); *L. mozardi* Latr.; *Dirabius rectirostris* (Lec.); *Epiblema strenuana*  
(Wlk.); larva ex *Ambrosia artemisiaefolia* stem.

*Habrocytus languriae* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 220. ♂ ♀.

Biology: Wildermuth and Gates, 1920. U. S. Dept. Agr. Bul. 889: 19.

Taxonomy: Gahan, 1919. U. S. Natl. Mus. Proc. 55: 127.

*lividus* Gahan. Colo. Host: *Tachypteryllus consors cerasi* List.

*Habrocytus lividus* Gahan, 1931. Wash. Acad. Sci. Jour. 21: 37. ♂ ♀.

Biology: List, 1932. Colo. Agr. Expt. Sta. Bul. 385: 63.

*medicaginis* Gahan. Conn., Man., Minn., S. Dak., Kans., N. Mex., Ariz., Utah,  
Nev., Calif., Idaho, Oreg. Host: *Bruchophagus gibbus* (Boh.).

*Habrocytus medicaginis* Gahan, 1914. U. S. Natl. Mus. Proc. 48: 163. ♀.

Biology: Urbahns, 1916. Jour. Agr. Res. 7: 147-153.—Urbahns, 1920. U. S. Dept.  
Agr. Bul. 812: 18.—Sorenson, 1934. Utah Agr. Expt. Sta. Bul. 250: 50  
(*bruchophagi*).

*melanicrus* (Provancher), n. comb. Canada.

*Semiotellus melanicrus* Provancher, 1881. Nat. Canad. 12: 294. ♂ ♀.

**obscuripes** Ashmead. Minn., Colo. Hosts: *Anthonomus signatus* Say: *Diplolepis* spp.; various rose galls.

**Habrocytus obscuripes** Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 26, 45. ♀. Taxonomy: Girault, 1917. Canad. Ent. 49: 182.

**onerati** (Fitch). N. Y., N. J. Hosts: ?*Disholcaspis quercus-globulus* (Fitch); ?*Synergus oneratus* Harr.

**Pteromalus onerati** Fitch, 1859. N. Y. State Agr. Soc. Trans. 18: 812.

**phycidis** Ashmead. Ont., Que., New England, N. Y., Pa., Del., Wis., B. C. Hosts: *Acrobasis rubrifasciella* (Pack.); *Dioryctria reniculella* (Grote); *Choristoneura fumiferana* (Clem.); *Tortrix packardiana* Kearf.; *Coleophora laticella* (Hbn.); *C. malivorella* Riley; *C. pruniella* Clem.; *Apanteles melanoscelus* (Ratz.); *Macrocentrus cerasivoranae* Vier.; *Meteorus versicolor* (Wesm.); *Hyposoter fugitivus* (Say).

**Habrocytus phycidis** Ashmead, 1898. Ent. Soc. Wash. Proc. 4: 157. ♀.

**Habrocytus dux** Girault, 1917. Canad. Ent. 49: 181, 182. ♀.

Biology: Beacher, 1947. Ent. Soc. Amer. Ann. 40: 532-544.

Taxonomy: Gahan, 1930. U. S. Natl. Mus. Proc. 77 (8): 8.

**piercei** Crawford. N. Y., Conn., W. Va., La., Tex., Colo. Hosts: *Acanthoscelides bisignatus* (Horn); *A. compressicornis* (Schaeff.); *Anthonomus grandis* Boh.; *A. nebulosus* Lec.; *Tachypyrillus consors cerasi* List; *T. quadrigibbus* (Say); *Coleophora malivorella* Riley; larva ex fruit of *Rhus*.

**Habrocytus piercei** Crawford, 1911. U. S. Natl. Mus. Proc. 40: 443. ♀.

Biology: List, 1932. Colo. Agr. Expt. Sta. Bul. 385: 59-61.—Hammer, 1936. N. Y. State Agr. Expt. Sta. Tech. Bul. 240: 45.

**purpureiventris** (Ashmead). Kans. Host: Tephritid seed maggot from ironweed.

**Syntaxis** (!) **purpureiventris** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VI. ♂ ♀.

**quinquefasciatus** Girault. "East. U. S."

**Habrocytus quinquefasciatus** Girault, 1916. Ent. Soc. Amer. Ann. 9: 298. ♂ ♀.

Taxonomy: Girault, 1917. Descr. Hym. Chalcidoid. Variorum eum Observ. V, p. 5.

**rhodobaeni** Ashmead. Va., Kans. Host: *Rhodobaenus tredecimpunctatus* (Ill.).

**Habrocytus rhodobaeni** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 220. ♀.

**rosae** Girault. N. Y., Conn., Colo., B. C. Hosts: Galls of *Diplolepis fusiformans* (Ashm.); *D. ignota* (O. S.).

**Habrocytus rhodobaenii** var. **rosae** Girault, 1917. Canad. Ent. 49: 180, 181. ♀.

**simillimus** Gahan. Ariz. Host: *Agromyza gibsoni* Mall.

**Habrocytus simillimus** Gahan, 1919. U. S. Natl. Mus. Proc. 55: 127. ♂ ♀.

**thyridopterigis** Howard. Maine, N. H., Conn., Va., N. C., Mo., Ill., Wisc. Hosts: *Hemerocampa leucostigma* (A. and S.); *Rhyacionia buoliana* (Schiff.); *R. frustrana* (Comst.); *Coleophora malivorella* Riley; *C. pruniella* Clem.; *C. salmani* Heinr.; *Thyridopteryx ephemeraeformis* (Haw.); *Xyela* sp. on loblolly pine; *Campoplex frustranae* Cush.; *Hyposoter fugitivus* (Say); *Itoplectis conquisitor* (Say); *Phobetes thyridopteryx* Riley; *Spilochalcis maria* (Riley).

**Habrocytus thyridopterigis** Howard, 1897. U. S. Dept. Agr. Div. Ent. Tech. Ser. 5: 34. ♀.

Biology: Cushman, 1927. Jour. Agr. Res. 34: 617.—Doner, 1936. Ent. Soc. Amer. Ann. 29: 230, 234.

**timaea** (Walker), n. comb. Fla.

**Pteromalus Timaea** Walker, 1847. Ann. Mag. Nat. Hist. (1) 19: 396. ♀.

### Genus ANISOPTEROMALUS Ruschka

**Anisopteromalus** Ruschka, 1912. Zool.-Bot. Gesell. Wien, Verh. 42: 243.

Type: (*Anisopteromalus mollis* Ruschka)=**Pteromalus calandreae** Howard. Monob.

**Aplastomorpha** Crawford, 1913. U. S. Natl. Mus. Proc. 45: 252. N. syn.

Type: (*Aplastomorpha pratti* Crawford)=**Pteromalus calandreae** Howard. Monob.

**calandrae** (Howard), n. comb. Cosmopolitan. Hosts: *Lasioderma serricorne* (F.); *Stegobium paniceum* (L.); *Callosobruchus maculatus* (F.); *Caulophilus latinasus* (Say); *Sitophilus granarius* (L.); *S. oryza* (L.); *Ephestia elutella* (Hbn.).

**Pteromalus calandrae** Howard, 1881. U. S. Dept. Agr. Ann. Rpt. for 1880, p. 273. ♂.

**Meraporus Vandinei** Tucker, 1910. Canad. Ent. 42: 342. ♂ ♀.

**Aplastomorpha pratti** Crawford, 1913. U. S. Natl. Mus. Proc. 45: 252. ♂ ♀. Biology: Cotton, 1923. Jour. Agr. Res. 23: 549-556.—Back and Cotton, 1938. U. S. Dept. Agr. Farmers' Bul. 1260 (rev.): 41-42.—Reed and Vinzant, 1942. U. S. Dept. Agr. Cir. 635: 12. Taxonomy: Waterston, 1921. Grain Pests (War) Com. [Gt. Brit.] Rpt. 9, pp. 14, 17.—Gahan, 1923. Ent. Soc. Wash. Proc. 25: 188.

#### Genus TRIMEROMICRUS Gahan

**Trimeromicrus** Gahan, 1914. U. S. Natl. Mus. Proc. 48: 161.

Type: *Trimeromicrus maculatus* Gahan. Monob.

**maculatus** Gahan. Ill., S. Dak., Kans., N. Mex., Ariz., Calif. Hosts: *Desmoris fulvus* (Lec.); *Asphondylia websteri* Felt; *Bruchophagus gibbus* (Boh.).

**Trimeromicrus maculatus** Gahan, 1914. U. S. Natl. Mus. Proc. 48: 162. ♂ ♀.

Biology: Gahan, 1919. Ent. Soc. Amer. Ann. 12: 165.—Urbahns, 1919. Jour. Agr. Res. 16: 172-173.—Urbahns, 1920. U. S. Dept. Agr. Bul. 812: 18.

#### Genus SYSTELLOGASTER Gahan

**Systellogaster** Gahan, 1917. U. S. Natl. Mus. Proc. 53: 209.

Type: *Systellogaster ovivora* Gahan. Monob.

**ovivora** Gahan. Md., Ill. Host: *Blatta orientalis* L.

**Systellogaster ovivora** Gahan, 1917. U. S. Natl. Mus. Proc. 53: 209. ♂ ♀.

#### Genus PARADIBRACHYS Girault

**Paradibrachys** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 1.

Type: *Paradibrachys guizoti* Girault. Monob.

**guizoti** Girault. Calif.

**Paradibrachys guizoti** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 1. ♀.

#### Genus ENDOMYCHOBIUS Ashmead

**Endomychobius** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 227.

Type: *Endomychobius flavipes* Ashmead. Monob.

**flavipes** Ashmead. D. C. Host: *Endomychus biguttatus* Say.

**Endomychobius flavipes** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 227. ♂ ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 212.

#### Genus HYPOPTEROMALUS Ashmead

**Hypopteromalus** Ashmead, 1900. In Smith, Ins. of N. J., sup., p. 559.

Type: *Pteromalus tabacum* Fitch. Monob.

**inimicus** Muesebeck. Ont., New England, W. Va., Wis. Hosts: *Coleophora malivorella* Riley; *C. pruniella* Clem.; *Epinotia nanana* (Treit.); *Exartema punctanum* Wlsm.; *Apanteles lacteicolor* Vier.; *A. melanoscelus* (Ratz.).

**Hypopteromalus inimicus** Muesebeck, 1927. Jour. Agr. Res. 34: 332. ♂ ♀.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 28.—Proper, 1934. Jour. Agr. Res. 48: 361.—Doner, 1936. Ent. Soc. Amer. Ann. 29: 226.

**percussor** Girault. Colo., Calif., Wash. Hosts: *Zotheca tranquilla* (Grote); *Apanteles smerinthii* Riley; *Meteorus acronyctae* Mues.; *Hyposoter pilosulus* (Prov.).

*Hypopteromalus percussor* Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 118.  
♀.

*Hypopteromalus percursor* Girault. Essig, 1926. Ins. of West. No. Amer., p. 823. Emend.

**tabacum** (Fitch). Que., New England, N. J., Ohio, W. Va., N. C., Fla., Ill., Iowa, Kans. Hosts: *Ampelocea myron* (Cram.); *Ceratomia catalpae* (Bdvl.); *Protoparce* sp.; *P. sexta* (Johan.); *Hyphantria cunea* (Drury); *Coleophora malivorella* Riley; larvaevorid; *Pikonema alaskensis* (Roh.); *Apanteles congregatus* (Say); *A. melanoscelus* (Ratz.); *Microplitis ceratomiae* Riley.

**Pteromalus Tabacum** Fitch, 1864. N. Y. State Agr. Soc. Trans. 23: 792. ♀.  
Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 28.—  
Fulton, 1940. Ent. Soc. Amer. Ann. 32: 231–244.

Taxonomy: Gahan, 1921 (1920). Ent. Soc. Wash. Proc. 22: 241.

### Tribe METASTENINI

#### Genus HEMITRICHUS Thomson

**Hemitrichus** Thomson, 1878. Hym. Scand., v. 5, pp. 50, 54.  
Type: *Hemitrichus rufipes* Thomson. Monob.

**Uriella** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 221.  
Type: *Uriella rufipes* Ashmead. Monob.

**rufipes** Thomson. Pa., D. C., Ohio, Ind., Ill., Mich. Hosts: Beetle feeding in rat dung; ?*Pyrausta futilalis* (Led.).

**Dimachus** (*Hemitrichus*) *rufipes* Thomson, 1878. Hym. Scand., v. 5, p. 54.  
♀.

**Uriella rufipes** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 222. ♂ ♀.  
Taxonomy: Girault, 1916. Canad. Ent. 48: 408.

#### Genus NORBANUS Walker

**Norbanus** Walker, 1843. Soc. Ent. France Ann. (2) 1: 159.  
Type: *Norbanus dysaules* Walker. Desig. by Ashmead, 1904.

**Arthrolysis** Foerster, 1856. Hym. Stud., v. 2, p. 52. No species. N. syn.  
Type: *Pteromalus scabriculus* Nees. Desig. by Ashmead, 1904.

**Picroscytus** Thomson, 1878. Hym. Scand., v. 5, p. 50, 58. N. syn.  
Type: *Pteromalus scabriculus* Nees. Monob.

**Stylophorella** Ashmead, 1904. Carnegie Mus. Mem. 1: 275. N. syn.  
Type: *Stylophorella perplexa* Ashmead. Monob.

**dysaules** Walker. Fla.

**Norbanus dysaules** Walker, 1843. Soc. Ent. France Ann. (2) 1: 158. ♂.

**perplexus** (Ashmead), n. comb. Tex.

**Stylophorella perplexa** Ashmead, 1904. Carnegie Mus. Mem. 1: 275, 389. ♀.  
Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.

**pisius** Walker. Fla.

**Norbanus pisius** Walker, 1843. Soc. Ent. France Ann. (2) 1: 160. ♀.

#### Genus METASTENUS Walker

**Metastenus** Walker, 1834. Ent. Mag. 2: 301.

Type: *Metastenus concinnus* Walker. Monob.

**acanthocini** Ashmead. W. Va., Fla. Host: *Acanthocinus obsoletus* (Oliv.).

**Metastenus** (?) *acanthocini* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 198.  
♂ ♀.

Biology: Hopkins, 1893. W. Va. Agr. Expt. Sta. Bul. 32: 226.

Taxonomy: Crawford, 1909. Canad. Ent. 41: 99.

**callidii** (Ashmead), n. comb. N. J., Va. Host: *Callidium antennatum* Newm.

**Aetroxys callidii** Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 223. ♀.

**coeruleus** Ashmead. Kans.

**Metastenus coeruleus** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VI. ♀.

*facialis* (Provancher), n. comb. Ont.

*Charitopus facialis* Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 203. ♂.

#### Genus NEOCATOLACCUS Ashmead

*Neocatolaccus* Ashmead, 1904. Carnegie Mus. Mem. 1: 320, 322.  
Type: *Catolaccus tylodermae* Ashmead. Monob.

*moneilemae* Gahan. Tex. Host: *Moneilema ulkei* Horn.

*Neocatolaccus moneilemae* Gahan, 1936. U. S. Natl. Mus. Proc. 83: 484.  
♂ ♀.

*tylodermae* (Ashmead). N. Y., N. H., Mass., Conn., N. J., D. C., W. Va., Ohio, Ind., Ill., Kans., Tex. Hosts: *Ampeloglypter sesostris* (Lec.); *Cylindrocapturus longulus* (Lec.); *Lixus musculus* Say; *L. parcus* Lec.; *L. scrobicollis* Boh.; *Trichobaris texana* Lee.; *Tyloderma foveolata* Say; larva ex stem of *Ambrosia artemisiæfolia*.

*Catolaccus tylodermae* Ashmead, 1893. Ohio Agr. Expt. Sta. Tech. Ser. Bul. 1: 161. ♂ ♀.

#### Genus EURYDINOTELOIDES Girault

*Eurydinoteloides* Girault, 1913. Arch. f. Naturgesch. 79A (6): 55.  
Type: *Eurydinoteloides americana* Girault. Monob.

*albiclava* Girault, emend. Md.

*Eurydinoteloides albicularis* Girault, 1917. Chalcidoidea Nova Marilandensis III, p. 5. ♀.

#### Genus MEGATRYDYMUS Girault

*Megatrydymus* Girault, 1917. New Chalcid Flies, p. la.  
Type: *Megatrydymus taciti* Girault. Monob.

*taciti* Girault. West. U. S. Ex gall.

*Megatrydymus taciti* Girault, 1917. New Chalcid Flies, p. la. ♂.

#### Genus ACAENACIS Girault

*Acaenacis* Girault, 1917. New Chalcid Flies, p. la.  
Type: *Semiotellus ficigerae* Ashmead. Monob.

*ficigerae* (Ashmead). Fla. Host: Gall of *Disholcaspis virens* (Ashm.).

*Semiotellus ficigerae* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xvii. ♂ ♀.

#### Tribe CLEONYMINI

##### Genus TOMICOBIA Ashmead

*Tomicobia* Ashmead, 1899. Ent. Soc. Wash. Proc. 4: 203 (no species).

Type: *Tomicobia tibialis* Ashmead. Included by Ashmead, 1904.

*Ipocoelius* Ruschka, 1924. Ent. Tidskr. 45: 6.

Type: *Ipocoelius seitneri* Ruschka. Orig. desig.

*tibialis* Ashmead. W. Va., N. C., N. Dak., Idaho, Calif. Hosts: *Ips calligraphus* (Germ.); *I. confusus* (Lec.); *I. grandicollis* (Eichh.); *I. oregonis* (Eichh.); *I. pini* (Say); *Orthotomicus caelatus* (Eichh.); ?*Pityophthorus puberulus* Lec.; ?*P. pulchellus* (Eichh.).

*Tomicobia tibialis* Ashmead, 1904. Carnegie Mus. Mem. 1: 283. ♀.  
Taxonomy: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 221-222.

#### Genus HEYDENIA Foerster

*Heydenia* Foerster, 1856. Hym. Stud., v. 2, pp. 46, 48, 49.  
Type: *Heydenia pretiosa* Foerster. Monob.

*unica* Cook and Davis. Mont., Mich., W. Va., Va., N. C. Hosts: *Dendroctonus frontalis* Zimm.; ?*Ips avulsus* (Eichh.); ?*I. latidens* (Lec.); ?*Dendroctonus obesus* (Mann.); ?*Phloeosinus dentatus* (Say); ?*P. tazodii* Blackm.; ?*Pityophthorus burkei* Blackm.; ?*P. knechteli* Swaine; ?*Polygraphus rufipennis* (Kby.); *Scolytus rugulosus* (Ratz.); ?*Pissodes strobi* (Peck).

*Heydenia unica* Cook and Davis, 1891. Mich. Agr. Expt. Sta. Bul. 73: 15.  
♂ ♀.

### Genus EPISTENIA Westwood

**Epistenia** Westwood, 1832. In Griffith, Cuvier's Animal Kingdom 15 (Insecta 2), p. 432.

Type: *Epistenia coeruleata* Westwood. Monob.

**Dasyglenes** Ashmead, 1888. Canad. Ent. 20: 173-174.

Type: *Dasyglenes osmiae* Ashmead. Monob.

**coeruleata** Westwood. Ga.

*Epistenia coeruleata* Westwood, 1832. In Griffith, Cuvier's Animal Kingdom 15 (Insecta 2), p. 432.

**odyneri** Ashmead. Calif. Host: *Leptochilus rufobasilaris* (Ashm.).

*Epistenia odyneri* Ashmead, 1896. In Davidson, Psyche 7: 336. ♀.

**osmiae** (Ashmead). N. J., ?Fla. Host: *Osmia* sp. in *Catalpa* twigs.

*Dasyglenes osmiae* Ashmead, 1888. Canad. Ent. 20: 174. ♀.

**polita** (Say), n. comb. Va.

*Spalangius* (!) *politus* Say, 1828. Contrib. Maclur. Lyc. Phila. 1: 79. ♀.

**regalis** Cockerell. Colo. Host: Eumenid.

*Epistenia regalis* Cockerell, 1934. Psyche 39: 228. ♀.

### Genus CLEONYMUS Latreille

**Cleonymus** Latreille, 1809. Gen. Crust. Ins., v. 4, p. 29.

Type: *Diplopis depressa* Fabricius. Desig. by Latreille, 1810.

**californicus** Girault. Calif.

*Cleonymus californicus* Girault, 1917. Jour. Ent. and Zool. 9: 11. ♀.

**nigriclavus** Girault. Fla.

*Cleonymus nigriclavus* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. III, p. 6. ♀.

### Genus PTINOBIUS Ashmead

**Ptinobius** Ashmead, 1896. Ent. Soc. Wash. Proc. 4: 11.

Type: *Charitopus magnificus* Ashmead. Monob.

Revision: Rohwer, 1919. Ent. Soc. Wash. Proc. 21: 4-6.

**agrili** Rohwer. Calif. Host: *Agrilus angelicus* Horn.

*Ptinobius agrili* Rohwer, 1919. Ent. Soc. Wash. Proc. 21: 5. ♂ ♀.

**californicus** Crawford. Calif.

*Ptinobius californicus* Crawford, 1917 (1916). Insecutor Inscitiae Menstruus 4: 142. ♀.

**magnificus** (Ashmead). N. J., W. Va., Va., Kans., Tex. Hosts: *Agrius ruficollis* (F.); *Amphicerus bicaudatus* (Say); *Tessaropa tenuipes* (Hald.); *Lixus scrobicollis* Boh.

*Charitopus magnificus* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. IV. ♀.

*Ptinobius dysphagae* Girault, 1915. Ent. News 26: 130. ♂.

Biology: Hopkins, 1891. W. Va. Agr. Expt. Sta. Bul. 15: 84.

Taxonomy: Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 142, 144.

**texanus** Crawford. Tex. Host: *Araecerus fasciculatus* (Deg.).

*Ptinobius texanus* Crawford, 1917 (1916). Insecutor Inscitiae Menstruus 4: 142. ♂ ♀.

### Genus CHEIROPACHUS Westwood

**Cheiropachus** Westwood, 1828. Zool. Jour. 4: 23.

Type: (*Diplopis quadrum* Fabricius)=*Sphex colon* Linnaeus. Monob.

**Cheiropachys** Haliday, 1833. Ent. Mag. 1: 268. Emend.

**Pachychirus** Agassiz, 1846. Nomencl. Zool., Index Univ., p. 777. Emend. Preocc.

**Cheiropachys** Vollenhoven, 1871. Schetsen Hym., v. 3, pl. 10. Emend.

**Tropidogastra** Ashmead, 1904. Carnegie Mus. Mem. 1: 323.

Type: *Tropidogastra arizonensis* Ashmead. Monob.

Revision: Gahan, 1938. Ent. Soc. Wash. Proc. 40: 219-220.

**arizonensis** (Ashmead). N. C., Tex., N. Mex., Ariz., Calif., Oreg. Host: *Phloeosinus* sp. reared from red cedar, juniper, and *Cercocarpus ledifolius*.

**Tropidogastra arizonensis** Ashmead, 1904. Carnegie Mus. Mem. 1: 323, 392. ♂.

**Dinarmus arizonicus** Girault, 1917 (1916). Insecutor Inscitiae Menstruus 4: 109. ♀.

**brunneri** Crawford. Mont. Host: *Pissodes* sp.

**Cheiropachus brunneri** Crawford, 1912. U. S. Natl. Mus. Proc. 43: 165. ♂ ♀.

**colon** (Linnaeus). Ont. and N. H. to Ala.; Calif., Oreg., Wash., B. C. Hosts: *Magdalis aenescens* Lec.; *Phloeosinus canadensis* Swaine; *Scolytus multistriatus* (Marsh.); *S. rugulosus* (Ratz.).

**Sphex Colon** Linnaeus, 1858. Syst. Nat., ed. 10, p. 571.

Biology: Russo, 1930. R. Lab. Ent. Agr. Portici Bol. 2: 181-195.

Taxonomy: Ferrière, 1948. Schweiz. Ent. Gesell. Mitt. 21: 522-523.

**obscuripes** Brues. Ont. to N. C. and Ill. Hosts: *Phloeotribus liminaris* (Harr.); *Scolytus rugulosus* (Ratz.).

**Cheiropachys obscuripes** Brues, 1910. Wis. Nat. Hist. Soc. Bul. 8: 80. ♀.

## Family EURYTOMIDAE

Phylogeny: Bugbee, 1936. Ent. Amer. 16: 169-222.

### Genus ISOSOMODES Ashmead

**Isosomodes** Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species).

Type: *Isosoma gigantea* Ashmead. Included by Ashmead, 1894.

**giganteus** (Ashmead). D. C., Va., Fla.

*Isosoma gigantea* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 127. ♂.

### Genus HARMOLITA Motschulsky

**Isosoma** Walker, 1832. Ent. Mag. 1: 13, 14. Preocc.

Type: *Eurytoma longula* Dalman. Desig. by Westwood, 1840.

**Harmolita** Motschulsky, 1863. Soc. Imp. Nat. Moscou Bul. 36 (2): 58.

Type: *Harmolita longicornis* Motschulsky. Monob.

**Xanthosoma** Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species). N. syn.

Type: *Xanthosoma nigricornis* Ashmead. Included by Ashmead, 1894.

**Isosomocharis** Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species). N. syn.

Type: *Isosomocharis sulcata* Ashmead. Included by Ashmead, 1894.

**Harmolyta** Dalla Torre, 1898. Cat. Hym., v. 5, p. 154. Emend.

**Urios** Girault, 1911. N. Y. Ent. Soc. Jour. 19: 175. N. syn.

Type: (*Urios vestali* Girault)=*Harmolita grande* form *minutum* (Howard).

**Isthmosoma** Hedicke, 1920. Arch. f. Naturgesch. 86A (11): 165. N. name.

Revisions: Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 433-471.—Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 7-8 (generic characters).—Gahan, 1922. Ent. Soc. Wash. Proc. 24: 33-58 (world hosts).—Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 1-25.

The members of this genus are commonly called joint worms. Their larvae are gall-formers, feeding in the stems of grains and grasses.

**agropyrocola** Phillips and Emery. *Agropyron* spp.

**Harmolita agropyrocola** Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 458. ♀.

**agropyrophila** Phillips and Emery. From Atlantic west to Kans. Host: *Agropyron repens*.

**Harmolita agropyrophila** Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 450. ♂ ♀.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 20.

**agrostidis** (Howard). Calif. Host: *Agrostis* sp.

*Isosoma agrostidis* Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 12. ♂.

**ainsliei** Phillips. S. Dak. Host: *Elymus* sp.

*Harmolita ainsliei* Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 4, 10. ♂.

**albomaculata** (Ashmead). N. H. to Tenn. and Mich.; Kans., Nebr., and N. Dak. Host: *Phleum pratense*.

*Isosoma albomaculatum* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 329. ♂.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 15-16.—Phillips and Poos, 1921. Jour. Agr. Res. 21: 421.—Phillips and Poos, 1927. Jour. Agr. Res. 34: 475, 483.

**atlantica** Phillips and Emery. N. Y., Mich., Ind. Host: *Agropyron* sp.

*Harmolita atlantica* Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 461. ♂.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 19-20.—Phillips and Poos, 1921. Jour. Agr. Res. 21: 409, 416, 421.—Phillips and Poos, 1927. Jour. Agr. Res. 34: 475, 483.

**bambusae** Phillips. Ga. Host: Bamboo.

*Harmolita bambusae* Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 20. ♀.

**bromi** (Howard). Calif. Host: *Bromus ciliatus*.

*Isosoma bromi* Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 11. ♂.

**bromicola** (Howard). Conn., Calif. Host: *Bromus ciliatus*.

*Isosoma bromicola* Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 17. ♂.

**californica** (Howard). Calif. Hosts: ?*Eriocoma hymenoides*; wild grass stems.

*Isosoma californicum* Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 10. ♂.

**captiva** (Lintner). N. Y. Host: ?Wheat.

*Isosoma captivum* Lintner, 1888. N. Y. State Mus. Nat. Hist. Rpt. 41: 34. ♂.

Taxonomy: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 16.

**cinnae** Phillips and Poos. Ohio. Host: *Cinna arundinacea*.

*Harmolita cinnae* Phillips and Poos, 1922. Kans. Univ. Sci. Bul. 14: 352. ♂.

**comatae** Phillips. N. Dak. Host: *Stipa comata*.

*Harmolita comatae* Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 9. ♀.

**dactylicola** Phillips and Emery. N. Y. and Mass. to Va. and Mich.; Tenn., Utah. Host: *Dactylis glomerata*.

*Harmolita dactylicola* Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 446. ♂.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 16.—Phillips and Poos, 1927. Jour. Agr. Res. 34: 475, 483.

**dakotae** Phillips, emend. N. Dak. Host: *Elymus* sp.

*Harmolita dakota* Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 14. ♂.

**danthoniae** Phillips. Mich. Host: *Danthonia spicata*.

*Harmolita danthoniae* Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 18. ♀.

**elymi** (French). N. Y., Mich., Va., Ohio, Ind., Ill., Utah. Hosts: *Elymus canadensis*; *E. glaucus*; *E. virginicus*.

*Isosoma Elymi* French, 1882. Canad. Ent. 14: 10. ♀.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 20.—Phillips and Poos, 1927. Jour. Agr. Res. 34: 475.

**elymicola** Phillips and Emery. N. Y., Va., Ohio, Ind., Ill., Mich., Mo. Hosts: *Elymus* spp.

*Harmolita elymicola* Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 460. ♂.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 21.—Phillips and Poos, 1921. Jour. Agr. Res. 21: 409, 416, 421.

**elymivora** Phillips and Emery. Va., Ohio, Ind., Ill., Ark., Kans. Hosts: *Elymus* spp.

**Harmolita elymivora** Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 464. ♂ ♀.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 21.—Phillips and Poos, 1921. Jour. Agr. Res. 21: 421.

**elymophaga** Phillips and Emery. Calif., Wash. Hosts: *Elymus condensatus*; *E. triticoides*.

**Harmolita elymophaga** Phillips, 1927. Ent. Soc. Wash. Proc. 29: 127. ♂ ♀.

**elymophila** Phillips and Emery. Calif. Hosts: *Elymus* spp.

**Harmolita elymophila** Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 462. ♂ ♀.

**elymophthora** Phillips and Emery. Nebr., N. Dak. Hosts: *Elymus* spp.

**Harmolita elymophthora** Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 465. ♂ ♀.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 22–23.

**elymoxena** Phillips and Emery. Calif. Host: *Elymus glaucus*.

**Harmolita elymoxena** Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 459. ♂ ♀.

**festuceae** Phillips and Emery. N. Y., N. J., Pa., Ohio, Va. Hosts: *Festuca elatior*; *F. sp.*

**Harmolita festuceae** Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 454. ♂ ♀.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 18–19.—Phillips and Poos, 1927. Jour. Agr. Res. 34: 475, 483.

**flavicoxa** Phillips. N. Mex. Host: *Elymus* sp.

**Harmolita flavicoxa** Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 13. ♂ ♀.

**gahani** Phillips. S. Dak. Host: *Elymus* sp.

**Harmolita gahani** Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 18. ♀.

**gillettei** Phillips and Emery. Colo.

**Harmolita gillettei** Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 467. ♀.

**grandis** form **grandis** (Riley). Wherever wheat is grown in No. Amer. The species is commonly known as the wheat strawworm. Host: Wheat.

**Isosoma grande** Riley, 1884. Brooklyn Ent. Soc. Bul. 7: III, errata. ♀.

Biology: Webster and Reeves, 1909. U. S. Dept. Agr. Bur. Ent. Cir. 106: 1–11.—Gossard, 1911. Ohio Agr. Expt. Sta. Bul. 233: 66.—Doane, 1916. Calif. State Comm. Hort. Monthly Bul. 5: 69–72.—Phillips and Poos, 1921. Jour. Agr. Res. 21: 409, 421.—Knowlton, 1931. Jour. Econ. Ent. 24: 414–416.—Knowlton, 1932. Jour. Econ. Ent. 25: 1169–1170.—Knowlton and Janes, 1933. Utah Agr. Expt. Sta. Bul. 243: 1–8.

**grandis** form **minuta** (Howard). Wherever wheat is grown in No. Amer. This is the vernal, apterous form. Host: Wheat.

**Isosoma tritici** Riley, 1882. Amer. Nat. 16: 247. ♀. Preocc.

**Isosoma grande** form **minutum** Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 10. N. name.

**Urios vestali** Girault, 1911. N. Y. Ent. Soc. Jour. 19: 176. ♂. N. syn. Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 6–8.—Knowlton and Janes, 1933. Utah Agr. Expt. Sta. Bul. 243: 3.

**hageni** (Howard). Mass. Host: *Agropyron repens*.

**Isosoma hageni** Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 12. ♀.

**hesperus** Phillips and Emery. N. Dak., S. Dak., Nebr., Kans., Utah. Hosts: *Elymus* spp.

**Harmolita hesperus** Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 457. ♂ ♀.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 22–23.

**holci** Phillips. Oreg. Host: *Holcus* sp.

**Harmolita holci** Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 19. ♂ ♀.

**hordei** (Harris). Ont., Que. to N. C. and Ill.; Kans., Colo. Host: Barley.

**Eurytoma Hordei** Harris, 1830. New England Farmer 9: 2 (including foot-note).

**Pteromalus? fulvipes** Fitch, 1859. N. Y. State Agr. Soc. Jour. 10: 114.

**Eurytoma flavipes** Fitch, 1862 (1861). N. Y. State Agr. Soc. Trans. 21: 845.

♂ ♀. Preocc.

Biology: Gossard, 1911. Ohio Agr. Expt. Sta. Bul. 233: 70.—Phillips, 1920. U. S. Dept. Agr. Bul. 808: 11–13.

**jonesi** Phillips. Calif. Host: *Elymus* sp.

**Harmolita jonesi** Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 15. ♂ ♀.

**kingi** Phillips. Sask. Host: *Hordeum jubatum*.

**Harmolita kingi** Phillips, 1927. Ent. Soc. Wash. Proc. 29: 128. ♂ ♀.

**koebelei** Phillips. Calif.

**Harmolita koebelei** Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 11. ♀.

**lolii** Gahan. Calif. Hosts: *Lolium multiflorum*; *L. temulentum*.

**Harmolita lolii** Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 9. ♂ ♀.

**longipetiolata** Phillips. N. Dak. Host: *Stipa comata*.

**Harmolita longipetiolata** Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 16. ♀.

**maculata** (Howard). N. Y. and Mass. to Va., Ky., Ill., and Mich. Host: *Bromus secalinus*.

**Isosoma maculatum** Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 15. ♀.

Biology: McConnell, 1918. Jour. Econ. Ent. 11: 170.—Phillips and Poos, 1921. Jour. Agr. Res. 21: 421.—Phillips, 1920. U. S. Dept. Agr. Bul. 808: 19.—Phillips and Poos, 1927. Jour. Agr. Res. 34: 475, 483–484.

**minuenda** Phillips. N. Dak. Host: *Elymus* sp.

**Harmolita minuenda** Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 6. ♀.

**montana** (Ashmead), n. comb. Colo., Mont.

**Isosoma montanum** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 329. ♀.

**neocaptiva** Peck, n. name. N. Y., Ind., Ill. Host: *Poa pratensis*.

**Isosoma captivum** Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 13. ♂ ♀. Preocc. by Lintner, 1888.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 16–17, 23.

**nigricornis** (Ashmead), n. comb. Fla.

**Xanthosoma nigricornis** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 320. ♀.

**occidentalis** Phillips and Emery. N. Mex. Host: *Agropyron* sp.

**Harmolita occidentalis** Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 465. ♂ ♀.

Biology: Phillips and Poos, 1921. Jour. Agr. Res. 21: 421.

**opuntiae** Muesebeck. Ariz. Host: *Hilaria mutica*.

**Harmolita opuntiae** Muesebeck, 1932. Ent. Soc. Wash. Proc. 34: 110. ♂ ♀.

Biology: Muesebeck, 1933 (1932). Ent. Soc. Wash. Proc. 34: 158.

**oregonensis** Phillips, emend. Oreg. Host: *Elymus* sp.

**Harmolita oregon** Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 14. ♀.

**ovata** Phillips and Emery. Kans. Host: *Elymus* sp.

**Harmolita ovata** Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 458. ♂ ♀.

Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 22–23.

**pacifica** Phillips. Calif.

**Harmolita pacifica** Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 12. ♂ ♀.

**panici** Phillips and Poos. Va. Host: *Panicum clandestinum*.

**Harmolita panici** Phillips and Poos, 1922. Kansas Univ. Sci. Bul. 14: 351. ♂ ♀.

Biology: Phillips and Poos, 1921. Jour. Agr. Res. 21: 421.

- phalaridis** Phillips and Poos. N. Y., S. Dak. Host: *Phalaris arundinacea*; *P.* sp.  
*Harmolita phalaridis* Phillips and Poos, 1922. Kans. Univ. Sci. Bul. 14: 351.  
 $\sigma^{\circ}$  ♀.
- phyllostachitis** Gahan. Fla. Host: *Phyllostachys bambusoides*.  
*Harmolita phyllostachitis* Gahan, 1922. Ent. Soc. Wash. Proc. 24: 55. ♀.
- poacola** Gahan. Conn., Ind. Host: *Poa pratensis*.  
*Harmolita poae* Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 445.  
 $\sigma^{\circ}$  ♀. Preocc.
- Harmolita poacola* Gahan, 1922. Ent. Soc. Wash. Proc. 24: 46, 52. N. name.  
Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 17-18.
- poaphila** Phillips and Emery, emend. Colo. Hosts: *Poa lucida*; *P.* sp.  
*Harmolita poophila* Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 463.  
 $\sigma^{\circ}$  ♀.
- poosi** Phillips. Va.  
*Harmolita poosi* Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 10. ♀.
- rufipes** Phillips and Emery. Ill., Nebr., Kans., N. Mex., Utah. Host: *Elymus* spp.  
*Harmolita rufipes* Phillips and Emery, 1919. U. S. Natl. Mus. Proc. 55: 453.  
 $\sigma^{\circ}$  ♀.  
Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 21-23.
- sativi** Phillips. Ill. Host: Wheat.  
*Harmolita sativi* Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 7. ♀.
- secale** (Fitch). N. Y., Pa., Va., Ohio, Ind., Mich., Kans., Nebr., Utah. Host: Rye.  
*Eurytoma Secale* Fitch, 1861. Amer. Agr. 20: 235-236.  
Biology: Phillips, 1920. U. S. Dept. Agr. Bul. 808: 13.
- stipicola** Phillips. N. Dak. Host: *Stipa comata*.  
*Harmolita stipicola* Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 8. ♀.
- stipiphaga** Phillips. N. Dak. Host: *Stipa comata*.  
*Harmolita stipiphaga* Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 17. ♀.
- stipiphila** Phillips. N. Dak.  
*Harmolita stipiphila* Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 16. ♀.
- sulcata** (Ashmead), n. comb. Fla.  
*Isosomocharis sulcata* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 331. ♀.
- tibialis** (Ashmead), n. comb. S. Dak., Mont., Oreg. Hosts: *Phalaris arundinacea*; *P.* sp.  
*Isosomorpha tibialis* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 331. ♂ ♀.  
*Harmolita phalaricola* Phillips and Poos, 1922. Kans. Univ. Sci. Bul. 14: 353.  
 $\sigma^{\circ}$  ♀. N. syn.
- tritici** (Fitch). East. No. Amer., Nebr., Kans., Utah, Calif., Oreg. This species  
is commonly known as the wheat jointworm. Host: Wheat.  
*Pteromalus? tritici* Fitch, 1859. N. Y. State Agr. Soc. Jour. 10: 115.  
*Decatoma basilaris* Provancher, 1881. Nat. Canad. 12: 290. ♂ ♀.
- Isosoma nigrum* Cook, 1885. Rural New Yorker 44: 314. ♂ ♀.  
Biology: Pettit, 1907. Mich. Agr. Expt. Sta. Bul. 244: 106-109.—Phillips and Poos,  
1940. U. S. Dept. Agr. Farmers' Bul. (rev.) 1006: 1-12.—Chamberlain,  
1941. U. S. Dept. Agr. Tech. Bul. 784: 1-46.
- utahensis** Phillips. Utah. Host: ?Wheat.  
*Harmolita utahensis* Phillips, 1936. U. S. Dept. Agr. Tech. Bul. 518: 11. ♀.
- vaginicola** (Doane). Que., Ont. to Va., Ohio and Mich; Utah, Oreg., Wash. Host:  
Wheat.  
*Isosoma vaginicola* Doane, 1916. Jour. Econ. Ent. 9: 399. ♀.  
Biology: Knowlton and Janes, 1933. Utah Agr. Expt. Sta. Bul. 243: 9.
- websteri** (Howard). Mass., N. Y., Pa., Va., Ohio, Ind., Ill., La., Utah, Calif. Host:  
Rye.  
*Isosoma websteri* Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2:  
15. ♀.  
*Isosoma hirtifrons* Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2:  
16. ♀.  
*Isosoma fitchi* Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 20.  
 $\sigma^{\circ}$  ♀.

Biology: Phillips and Poos, 1927. Jour. Agr. Res. 34: 483.—Knowlton, 1932. Jour. Econ. Ent. 25: 1171–1172.—Knowlton and Janes, 1933. Utah Agr. Exp. Sta. Bul. 243: 9–10.

#### Genus AXIMA Walker

*Axima* Walker, 1862. Ent. Soc. London Trans. (3) 1 (pt. 4): 373.  
Type: *Axima spinifrons* Walker. Monob.

*zabriskieei* Howard. N. Y., N. J., Mich., Mo. Hosts: *Ceratina calcarata* Rob.; nest of *C. dupla* Say.

*Axima zabriskieei* Howard, 1890. U. S. Dept. Agr. Insect Life 2: 365. ♂ ♀.

#### Genus MACRORILEYA Ashmead

*Macrorileya* Ashmead, 1900. In Smith, N. J. State Bd. Agr. Ann. Rpt. 27 (sup.); 555.

Type: *Rileya oecanthi* Ashmead. Monob.

*oecanthi* (Riley). N. J., Va., N. C., Nebr., Calif. Hosts: *Oecanthus californicus* Sauss.; *O. nigricornis quadripunctatus* Beut.; *O. niveus* (Deg.); *O.* sp.

*Rileya oecanthi* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 321. ♂ ♀.  
Biology: Smith, 1930. Calif. Univ. Pubs., Ent. 5: 165–172.

#### Genus RILEYA Ashmead

*Rileya* Ashmead, 1888. Ent. Amer. 4: 42 (no species).

Type: *Rileya cecidomyiae* Ashmead. Included by Ashmead, 1888.

*Ashmeadia* Howard, 1889. Canad. Ent. 21: 59. N. name.

*Tragiicola* Brèthes, 1918. Soc. Ent. France Bul., p. 83. N. syn.

Type: *Tragiicola haumani* Brèthes. Monob.

Revision: Gahan, 1918. Ent. Soc. Wash. Proc. 20: 136.

*americana* Girault. Mo. Host: Itonidid gall on *Helenium autumnale*.

*Rileya americana* Girault, 1916. Canad. Ent. 48: 339. ♀.

*cecidomyiae* Ashmead. Conn., N. J., N. C., Fla., Ill., Kans. Hosts: *Dasyneura* sp. on *Helianthus*; itonidid gall on *Baccharis halimifolia*; itonidid in *Crataegus* seeds.

 *Rileya cecidomyiae* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. III. ♂ ♀.

*compressiventris* Gahan. Tex. Host: Gall of *Asphondylia* sp. on *Mimosa*.

*Rileya compressiventris* Gahan, 1918. Ent. Soc. Wash. Proc. 20: 143. ♂ ♀.

*hegeli* Girault. Fla.

*Rileya hegeli* Girault, 1916. Canad. Ent. 48: 340. ♀.

*heterogaster* Gahan. Tex. Host: Gall of *Asphondylia* sp. on *Mimosa*.

*Rileya heterogaster* Gahan, 1918. Ent. Soc. Wash. Proc. 20: 141. ♂ ♀.  
Morphology: Bugbee, 1936. Ent. Amer. 16: 179.

*mellea* Ashmead. Fla. Host: Itonidid on skunk bush.

*Rileya mellea* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 321. ♀.

*opuntiae* Gahan. Tex. Host: *Asphondylia opuntiae* Felt.

*Rileya opuntiae* Gahan, 1936. U. S. Natl. Mus. Proc. 83: 482. ♀.

*piercei* Crawford. Ariz.

*Rileya piercei* Crawford, 1914. Ent. Soc. Wash. Proc. 16: 29. ♂.

*similaris* Gahan. Tex. Host: Gall of *Asphondylia* sp. on "Mimosa tree" (possibly *Leucaena pulvifera* or *Mimosa Lindheimeri*).

*Rileya similaris* Gahan, 1918. Ent. Soc. Wash. Proc. 20: 148. ♂ ♀.

*tegularis* Gahan. Ariz. Host: *Asphondylia* sp. ex stem galls on *Pluchea borealis* and on *Suaeda* sp.

*Rileya tegularis* Gahan, 1918. Ent. Soc. Wash. Proc. 20: 147. ♂ ♀.

#### Genus BEPHRATOIDES Brues

*Bephratoides* Brues, 1908. Wis. Nat. Hist. Soc. Bul. 6: 158.

Type: *Bephratoides maculatus* Brues. Monob.

*agrili* (Ashmead), n. comb. N. J., Va. Host: *Agrilus otiosus* Say.  
*Eurytoma agrili* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 325. ♀.

*maculatus* Brues. Tex.

*Bephratoides maculatus* Brues, 1909 (1908). Wis. Nat. Hist. Soc. Bul. 6: 158.  
 ♀.

#### Genus BEPHRATA Cameron

*Bephrata* Cameron, 1884. Biol. Cent.-Amer. Hym., v. 1, p. 109.

Type: *Bephrata ruficollis* Cameron. Monob.

*Bephratoides* Girault, 1913. Arch. f. Naturgesch. 79A (6): 60. Preocc. N. syn.

Type: *Bephrata paraguayensis* Crawford. Monob.

*Bephratelloides* Girault, 1913. Ent. News 24: 459. N. name. N. syn.

*cubensis* Ashmead. So. Fla.

*Bephrata cubensis* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 321. ♀.

#### Genus PRODECATOMA Ashmead

*Prodecatoma* Ashmead, 1904. Carnegie Mus. Mem. 1: 261, 263, 463.

Type: *Prodecatoma flavescens* Ashmead. Orig. desig.

*cooki* (Howard), n. comb. N. Y., Conn., Ohio, Mich., Calif. Seed hosts: *Psedera quinquefolia*; *Vitis californica*; wild and cultivated grapes.

*Decatomidea cooki* Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 23. ♂ ♀.

*Prodecatoma phytophaga* Crosby, 1909. Canad. Ent. 41: 50. ♂ ♀. N. syn. Biology: Crosby, 1909. N. Y. (Cornell) Agr. Expt. Sta. Bul. 265: 382. Morphology: Bugbee, 1936. Ent. Amer. 16: 178.

#### Genus PHYLLOXEROXENUS Ashmead

*Phylloxeroxenus* Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species).

Type: *Eurytoma phylloxerae* Ashmead. Included by Ashmead, 1894.

*phylloxerae* (Ashmead). Fla. Host: Orange-colored dipterous larva in gall of *Phylloxera caryaec-sciissa* Riley.

*Eurytoma phylloxerae* Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. XXX. ♀.

#### Genus CHRYSEIDA Spinola

*Chryseida* Spinola, 1840. Rev. Zool. 3: 18.

Type: *Chryseida superciliosa* Spinola. Monob.

*inopinata* Brues. Tex. Host: *Oncideres putator* Thoms.

*Chryseida inopinata* Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 103. ♀.

#### Genus EURYTOMA Illiger

*Eurytoma* Illiger, 1807. Mag. Insektenk, v. 6, 192.—Illiger, 1807. In Rossi, Fauna Etrusca, ed. 2, v. 2, p. 128.

Type: (*Chalcis abrotani* Panzer) = *Pteromalus appendigaster* Swederus. Desig. by Westwood, 1840.

*Decatoma* Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 151.

Type: *Diplolepis adonidum* Rossi. Desig. by Ashmead, 1904.

*Tetramesa* Walker, 1848. List Hym. Brit. Mus., v. 2, pp. 104, 154.

Type: *Tetramesa iarbæ* Walker. Monob.

*Ennetoma* Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Forh. 14: 292.

Type: (*Chalcis abrotani* Panzer) = *Pteromalus appendigaster* Swederus. Desig. by Gahan and Fagan, 1923.

*Eurytomocharis* Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species). N. syn.

Type: *Eurytomocharis minuta* Ashmead. Included by Ashmead, 1894.

*Eroxysoma* Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species). N. syn.

Type: *Systole brachyptera* Ashmead. Included by Ashmead, 1894.

*Enneatoma* Dalla Torre, 1898. Cat. Hym., v. 5, p. 332. Emend.

*Euxoxysoma* Dalla Torre, 1898. Cat. Hym., v. 5, p. 345. Emend.

*Bephratella* Girault, 1913. Arch. f. Naturgesch. 79 (6): 95.

Type: *Bephratella nymphæ* Girault. Orig. desig.

**abatos** Walker. Fla.

*Eurytoma abatos* Walker, 1843. Soc. Ent. France Ann. (2) 1: 152. ♀.

**abnormicornis** Walsh. Fla., Ill., Kans.

*Eurytoma abnormicornis* Walsh, 1870. Amer. Ent. and Bot. 2: 299. ♀.

**abnormis** (Ashmead). N. Y., N. C., Tex., Kans. Host: ?*Stephanoderes dissimilis* (Zimm.).

*Isosoma abnormis* Ashmead, 1896. Amer. Soc. Ent. Trans. 23: 219. ♀.

**albipes** Ashmead. N. C., Fla., Miss. Host: *Asphondylia globulus* O. S.

*Eurytoma albipes* Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxi. ♂ ♀.

**appendigaster** (Swederus). Ont., New England, N. J., Pa. Wis. Hosts: *Blastodacna curvilineella* Chamb.; *Grapholitha molesta* (Busck); *Rhyacionia buoliana* (Schiff.); *Coleophora pruniella* Clem.; *Compsilura concinnata* (Meig.); *Apanteles glomeratus* (L.); *A. lacteicolor* Vier.; *A. melanoscelus* (Ratz.); *A. solitarius* (Ratz.); *Macrocentrus ancylivorus* Roh.; *Meteorus versicolor* (Wesm.); *Glypta* sp.; *Phobocampe disparis* (Vier.).

*Pteromalus Appendigaster* Swederus, 1795. Svenska Vetensk. Akad. Handl. 16: 217.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 12, 20-21.—Rosenberg, 1934. Bul. Ent. Res. 25: 244-246.

**ashmeadi** Peck, n. name. Fla.

*Eurytomocharis minuta* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 327.

♂ ♀. Preocc. by Walker, 1832.

Taxonomy: Girault, 1916. Canad. Ent. 48: 337-338.

**atripes** Gahan. N. Y., Pa., N. J., Ohio, Tenn., N. Dak., Oreg., Wash. Hosts: *Phytophaga destructor* (Say); *Cephus cinctus* Nort.

*Eurytoma atripes* Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 36. ♂ ♀.

Morphology: Hill and Pinckney, 1940. U. S. Dept. Agr. Tech. Bul. 715: 8, 11-13.

**auriceps** *auriceps* Walsh. N. Y., N. J., Va., Fla., Ill., Kans. Hosts: *Acraspis erinacei* (Beut.); gall of *A. hirta* (O. S.); gall of *Amphibolips spongistica* (O. S.); gall of *Callirhytis rugosa* (Ashm.); gall of *Diplolepis radicum* (O. S.).

*Eurytoma auriceps* Walsh, 1870. Amer. Ent. and Bot. 2: 299. ♂ ♀.

Biology: Triggerson, 1914. Ent. Soc. Amer. Ann. 7: 9-11.

**auriceps seminatrix** Walsh. Kans. Host gall: *Callirhytis seminator* (Harr.).

*Eurytoma auriceps* var. *seminatrix* Walsh, 1870. Amer. Ent. and Bot. 2: 299. ♂ ♀.

**bicolor** Walsh. N. J., W. Va., Mich., Ill., Mo. Hosts: *Scolytus rugulosus* (Ratz.); *Sphex (Isodontia) harrisii* (Fern.); stem gall of *Typha latifolia*; twig galls of black oak.

*Eurytoma bicolor* Walsh, 1870. Amer. Ent. and Bot. 2: 298. ♂ ♀.

**bigeloviae** Ashmead. Colo. Host: *Tephrella bigeloviae* Ckll.

*Eurytoma bigeloviae* Ashmead, 1890. Colo. Biol. Assoc. Bul. 1: 25, 45. ♀.

**bolteri bolteri** Riley. Vt. south to N. C. and west to Kans. Hosts: *Gnorimoschema gallaesolidaginis* (Riley); *Solidago* sp.

*Eurytoma Bolteri* Riley, 1869. Mo. State Bd. Agr. Ann. Rpt. 4: 177. ♂ ♀.

Biology: Leiby, 1922. N. Y. Ent. Soc. Jour. 30: 93.

Morphology: Shodgrass, 1910. U. S. Natl. Mus. Proc. 39: 65.

**bolteri parva** Phillips. N. Y., Va., Ohio, Ind., Mo., Utah, Oreg. Hosts: Lepidopterous galls on *Solidago*; *Harmolita tritici* (Fitch).

*Eurytoma bolteri* var. *parva* Phillips, 1918. U. S. Dept. Agr. Farmers' Bul. 1006: 11, 14. ♀.

Biology: Phillips, 1927. Jour. Agr. Res. 34: 743-758.—Chamberlain, 1941. U. S. Dept. Agr. Tech. Bul. 784: 25-29, 32-35.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 207-208.

**brachyptera** (Ashmead), n. comb. Fla.

*Systole brachyptera* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 126. ♀.

**californica** Ashmead. Calif. Host: Gall of *Callirhytis pomiformis* (Ashm.).

*Eurytoma californica* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 195. ♂ ♀.

**chalcidiformis** Girault. Calif.

*Eurytoma chalcidiformis* Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 3. ♀.

*cleri* Ashmead. W. Va.

*Eurytoma cleri* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 323. ♀.

*conica* Provancher. Ont.

*Eurytoma conica* Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 192. ♀.

Taxonomy: Provancher, 1888. Addit Corr. Faune Ent. Canada Hym., p. 438.

*crassineura* Ashmead. Ont., Conn., N. J., W. Va., Colo. Hosts: *Scolytus rugulosus* (Ratz.); scolytids.

*Eurytoma crassineura* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 324, 326, 327. ♂ ♀.

*cretheis* Walker. Fla.

*Eurytoma cretheis* Walker, 1843. Soc. Ent. France Ann. 2 (1): 150. ♀.

*diastrophi* Walsh. Que. south to N. J. and west to Colo. Hosts: Galls of *Callachna gibba* (Loew); *Diastrophus cuscuteformis* (O. S.); *D. nebulosus* (O. S.).

*Eurytoma diastrophi* Walsh, 1870. Amer. Ent. and Bot. 2: 299. ♂ ♀.

*dorcaschema* Ashmead. Conn., N. C., Kans. Hosts: *Dorcaschema alternatum* (Say); ?*Phloeotribus frontalis* (Oliv.).

*Eurytoma dorcaschemae* Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. II. ♂ ♀.

*eragrostidis* (Howard), n. comb. Ind., Ill. Hosts: Insects in *Agrostis alba*; *Eragrostis poaeoides*.

*Eurytomocharis eragrostidis* Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 21. ♂ ♀.

*floridana* (Ashmead). Fla.

*Lamprostylus*(?) *floridanus* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 193. ♂.

*gigantea* Walsh. N. W. T., Ont., Que., Maine, N. H., N. Y., Ill., Minn., Kans., Colo. Hosts: ?*Eurosta solidaginis* (Fitch); inquiline in *E. solidaginis* gall.

*Eurytoma gigantea* Walsh, 1870. Amer. Ent. and Bot. 2: 300. ♀.

*Callimome Duckeri* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 194.

*Ormyrus elongatus* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 194.

*Ormyrus prolongatus* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 194.

Biology: Hughes, 1934. Ent. News 45: 119-122.

Taxonomy: Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 194, 198.

*hecale* Walker. Fla.

*Eurytoma hecale* Walker, 1843. Soc. Ent. France Ann. (2) 1: 151. ♀.

*illinoensis* Girault. Ill., S. Dak. Host: *Elymus* sp.

*Eurytoma illinoensis* Girault, 1920. U. S. Natl. Mus. Proc. 58: 206. ♀.

*incerta* Fullaway. Calif. Host: Large, pointed rose gall.

*Eurytoma incerta* Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 277. ♂ ♀.

*iphis* Walker. Fla.

*Eurytoma Iphis* Walker, 1846. List Hym. Brit. Mus., v. 1, p. 85. ♀.

*juniperina crosbyi* Marcovitch. N. Y. Host: Berry of *Juniperus virginiana*.

*Eurytoma juniperinus* (!) var. *Crosbyi* Marcovitch, 1915. Ent. Soc. Amer. Ann. 8: 168. ♀.

*juniperina juniperina* Marcovitch. N. H., N. Y., Conn., Del., Minn. Host: Berry of *Juniperus virginiana*.

*Eurytoma juniperinus* (!) Marcovitch, 1915. Ent. Soc. Amer. Ann. 8: 166. ♂ ♀.

*lanulae* Fitch. N. Y., N. J. Hosts: *Andricus flocci* (O.S.); galls on willows; woolly galls on oak leaves.

*Eurytoma lanulae* Fitch, 1859. N. Y. State Agr. Soc. Trans. 18: 817.

*lycti* Ashmead. Va. Host: *Lyctus striatus* Melsh.

*Eurytoma lycti* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 325. ♀.

*maculipes* (Ashmead). Canada, Fla. Host: Gall of *Belonocnema treatae* Mayr.

*Decatoma maculipes* Ashmead, 1886. Amer. Ent. Soc. Trans. 13: 126. ♀.

**maga** Girault. ?Nearctic.

**Eurytoma hegeli** var. **maga** Girault, 1920. U. S. Natl. Mus. Proc. 58: 207.  
♀. *E. hegeli* appears to be a *nomen nudum*.

**magdalidis** Ashmead. N. J., Va., Colo. Host: *Magdalis armicollis* (Say).

**Eurytoma magdalidis** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 326. ♀.

**medicaginis** Gahan. Ariz. Host: *Asphondylia websteri* Felt.

**Eurytoma medicaginis** Gahan, 1919. Ent. Soc. Amer. Ann. 12: 159. ♂ ♀.

**minnesotae** Girault, emend. Minn. Host: In *Agropyron* sp.

**Eurytoma minnesota** Girault, 1916. Canad. Ent. 48: 338. ♂ ♀.

**muhlenbergiae** (Howard), n. comb. Mo., Mont. Host: *Muhlenbergia diffusa*.

**Isosomorpha muhlenbergiae** Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 20. ♀.

**neomexicana** Girault. Kans., N. Mex. Hosts: Grain-infesting insect; seed of *Sideranthus spinulosus*.

**Eurytoma neomexicana** Girault, 1920. U. S. Natl. Mus. Proc. 58: 205. ♂ ♀.

**nevadensis** (Ashmead), n. comb. Nev.

**Isosoma nevadense** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 330. ♂.

**nigricoxa** Provancher. Ont.

**Eurytoma nigricoxa** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 192. ♀.

**obtusilobae** Ashmead. Fla. Host: *Cynips* gall on *Quercus stellata*.

**Eurytoma obtusilobae** Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xii. ♂ ♀.

**obtusiventris** Gahan. Ont., N. Y., Mass., N. C., Miss., La., Kans. Hosts: *Eurosta solidaginis* Fitch; *Tephritis finalis* (Loew).

**Eurytoma obtusiventris** Gahan, 1934. Ent. News 45: 117. ♂ ♀.

Biology: Hughes, 1934. Ent. News 45: 119-122.

**orchidearum** (Westwood). Cosmopolitan. Hosts: Bulbs, stems, leaves and buds of many kinds of orchids.

**Isosoma Orchidearum** Westwood, 1869. Gardeners' Chron., p. 1230. ♂ ♀.  
Biology: Moore, 1916. N. J. Agr. Expt. Sta. Bul. 308: 3-12.

**pachyneuron** Girault. N. C., Calif. Hosts: *Scolytus rugulosus* (Ratz.); *Harmolita elymophaga* P. and E.; *H. sp.*

**Eurytoma pachyneuron** Girault, 1916. Canad. Ent. 48: 337. ♀.

**pater** Girault. N. Y., Va., Ohio, Okla., Kans. Host: *Harmolita tritici* (Fitch).

**Eurytoma pater** Girault, 1920. U. S. Natl. Mus. Proc. 58: 207. ♀.

Biology: Brandhorst, 1943. Kans. Acad. Sci. Trans. 46: 174.

**phloeosini** Ashmead. N. J., W. Va., N. C. Host: *Phloeosinus dentatus* (Say).

**Eurytoma phloeosini** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 327. ♂.

**phloeotribi** Ashmead. N. J., W. Va., N. C. Hosts: ?*Phloeotribus dentifrons* (Blackm.); *P. frontalis* (Oliv.); *Pityophthorus liquidambarus* Blackm.; ?*Pseudopityophthorus minutissimus* (Zimm.); ?*P. pruinosis* (Eichh.); ?*Scolytus muticus* Say; ?*Stephanoderes dissimilis* (Zimm.).

**Eurytoma phloeotribi** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 326. ♀.

**phoebus** Girault. Pa., Md., Va., Kans., S. Dak., Oreg., Wash. Hosts: *Phytophaga destructor* (Say); *Harmolita tritici* (Fitch); *H. sp. ex Elymus canadensis*; *Elymus canadensis*.

**Eurytoma phoebus** Girault, 1920. U. S. Natl. Mus. Proc. 58: 204. ♀.

Biology: Chambers, 1941. U. S. Dept. Agr. Tech. Bul. 784: 40.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 33-36.

**phoenix** Girault. Calif.

**Eurytoma phoenix** Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 11. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 204.

**pissodis** Girault. N. S. to Va., to Minn. and to Ont.; Idaho Hosts: *Pissodes strobi* (Peck); *Coeloides* sp.

**Eurytoma pissodis** Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 88. ♂ ♀.

Biology: Taylor, 1929. Ent. Amer. 9: 208, 228-237.—Taylor, 1929. Ent. Amer. 10: 46-50, 60-62.

**polygraphi** (Ashmead), n. comb. Va. Hosts: ?*Polygraphus rufipennis* (Kby.).  
*Decatomidea polygraphi* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 322. ♀.

**prunicola globulicola** Walsh. Ill. Hosts: *Amphibolips prunus* (Walsh); *Disholcaspis quercus-globulus* (Fitch).

*Eurytoma prunicola* var. *globulicola* Walsh, 1870. Amer. Ent. and Bot. 2: 299. ♀.

**prunicola prunicola** Walsh. D. C., Ill., Ont.

*Eurytoma prunicola* Walsh, 1870. Amer. Ent. and Bot. 2: 298. ♂ ♀.

**punctiventris** Walsh. Mich., Ill. Hosts: Galls of *Callirhytis batatoides* (Ashm.); *Disholcaspis mamma* (Cress.); *D. quercus-globulus* (Fitch).

\* *Eurytoma punctiventris* Walsh, 1870. Amer. Ent. and Bot. 2: 299. ♀.

**pythes** Walker. Fla.

*Eurytoma pythes* Walker, 1843. Soc. Ent. France Ann. 2 (1): 154. ♀.

**querci** Fullaway. Calif. Hosts: Galls of *Acraspis guadalopensis* (Full.); *Andricus lasius* (Ashm.).

*Eurytoma querci* Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 278. ♂ ♀.

**querci-globuli** (Fitch). N. Y., N. J. Host: *Disholcaspis quercus-globulus* (Fitch).

*Macroglenes Querci-globuli* Fitch, 1859. N. Y. State Agr. Soc. Trans. 18: 812.

**querci-pisi** (Fitch). N. Y., N. J., Fla. Hosts: *Acraspis pezomachoides* (O. S.); *Disholcaspis spongiosa* (Karsch).

*Macroglenes Querci-pisi* Fitch, 1859. N. Y. State Agr. Soc. Trans. 18: 819.

**rhois** Crosby. N. Y., Conn., Pa., D. C., Ohio to La. and Kans.; Fla. Hosts: Seeds of *Rhus copallina*; *R. glabra*; *R. hirta*; *R. spp.*

*Eurytoma rhois* Crosby, 1909. Canad. Ent. 41: 52. ♂ ♀.

Biology: Crosby, 1909. N. Y. (Cornell) Agr. Expt. Sta. Bul. 265: 385-388.

**sculpta** Ashmead. Fla.

*Eurytoma sculpta* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 195. ♀.

**seminis** Bugbee. Okla., Kans. Host: Seeds of *Rhus trilobata*.

*Eurytoma seminis* Bugbee, 1941. Kans. Ent. Soc. Jour. 14: 98. ♂ ♀.

**solenozopheriae** Ashmead. Maine, Conn., N. J., Ont. Host: *Hemadas nubilipennis* (Ashm.).

*Eurytoma solenozopheriae* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 196. ♂ ♀.

Biology: Driggers 1927. N. Y. Ent. Soc. Jour. 35: 254-258.

**stigmi** Ashmead. Conn., Calif. Host: *Stigmus inordinatus* Fox.

*Eurytoma stigmi* Ashmead, 1895. In Davidson, Psyche 3: 271. ♂ ♀.

**studiosa** Say. Ont., Que., N. Y., N. J., Conn., Ind., Ill., Kans., Colo., N. Mex. Hosts: *Mordellistena nigricans* (Melsh.) in galls of *Eurosta solidaginis* Fitch; *Euura orbitalis* Nort.; *E. salicicola* Smith; *Acraspis erinacei* (Beut.); galls of *Phylloxera caryaefallax* Riley, *P. caryaef-globuli* Walsh, *Lasioptera solidaginis* O. S., *Rhabdophaga batatas* Walsh, *R. brassicoides* O. S., *R. cornuta* Walsh, and *R. strobilooides* Walsh; dipterous gall on *Leptilon canadense*; galls of *Euura nodus* Walsh, *E. salicis-ovulum* (D. T.), *E. perturbans* (Walsh), *Nematus hospes* (Walsh), *Acraspis hirta* (O. S.), *Amphibolips spongifica* (O. S.), *Callirhytis seminator* (Harr.), *Diastrophus fragariae* Beut., *Dryocosmus palustris* (O. S.), and *Xanthoteras forticorne* (Walsh).

*Eurytoma studiosa* Say, 1836. Boston Jour. Nat. Hist. 1: 272. ♀.

Biology: Walsh, 1870. Amer. Ent. and Bot. 2: 299.

Morphology: Triggerson, 1914. Ent. Soc. Amer. Ann. 7: 9.

**succinipedis** Ashmead. Fla., La., Kans. Host: Gall of *Disholcaspis succinipes* (Ashm.).

*Eurytoma succinipedis* Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxi. ♂ ♀.

**teredon** Walker. Fla.

*Eurytoma teredon* Walker, 1843. Soc. Ent. France Ann. (2) 1: 153. ♂ ♀.

**tomici** Ashmead. Conn., N. Y., W. Va., Fla., Calif., Wash. Hosts: *Cylindrocopturus eatoni* Buch.; *C. furnissi* Buch.; ?*Pityogenes plagiatus* (Lec.); *Epiblema strenuana* (Wlkr.).

*Eurytoma tomici* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 325. ♂.

**triodiae** (Howard), n. comb. N. Y., D. C., Va. Hosts: *Agrostis alba*; *A. sp.*; *Tridens flavus*

*Eurytomocharis triodiae* Howard, 1896. U. S. Dept. Agr. Div. Ent. Tech. Ser. 2: 21. ♂ ♀.

**tylodermatis** Ashmead. Ont., east. U. S.; Wis. to La., Tex. and Colo. Hosts: *Araecerus fasciculatus* (Deg.); *Ambylycerus robiniae* (F.); *Bruchus brachialis* Fahr.; *Mimosestes sallaei* (Sharp); *Anthonomus disjunctus* Lec.; *A. grandis* Boh.; *A. heterothecae* Pierce; *A. squamosus* Lec.; *Apion segnipes* Say; *Chalcodermus aeneus* Boh.; *Conotrachelus elegans* Boh.; *Cylindrocopturus longulus* Lee.; *Lixus musculus* Say; *L. scrobicollis* Boh.; *Macrorhopalus sphaeralciae* Pierce; *Orthoris crotchii* Lee.; *Tachypterellus cisors* cerasi List; *T. quadrigibbus* (Say); *T. quadrigibbus magnus* List; *Trichobaris texana* Lec.; *T. trinotata* (Say); *Tyloderma foveolata* Say; *Epiblema strenuana* (Wlkr.); *Grapholitha molesta* (Busck); *G. packardi* (Zell.); *G. prunivora* (Walsh); *Laspeyresia caryana* (Fitch); *Rhyacionia buoliana* (Schiff.); *R. frustrana* (Comst.); *Mompha eloisella* (Clem.); *Coleophora malivorella* Riley; *Bucculatrix fusicola* Braun; *Meromyza americana* Fitch; *Xyela* sp. on loblolly pine; *Bracon mellitor* Say; *Glypta* sp.; *Aulacidea podagrae* (Bassett); *Entedon tachypterelli* Gahan; *Cracca virginiana* L.

*Eurytoma tylodermatis* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 218. ♂ ♀.

Biology: List, 1932. Colo. Agr. Expt. Sta. Bul. 385: 54-59.—Hammar, 1936. N. Y. State Agr. Expt. Sta. Tech. Bul. 240: 44-45.

**vagabunda** Ashmead. Fla.

*Eurytoma vagabunda* Ashmead, 1881. Canad. Ent. 13: 134. ♀.

**vitis** (Saunders), n. comb. Ont., N. Y., Conn., N. J., N. C., Ohio, Mo., Iowa. Host: Grape seeds.

*Isosoma vitis* Saunders, 1869. Canad. Ent. 2: 25. ♂ ♀.

Biology: Crosby, 1909. N. Y. (Cornell) Agr. Expt. Sta. Bul. 265: 380.

### Genus EUDECATOMA Ashmead

**Decatoma** Auct., nec Spinola.

**Eudecatoma** Ashmead, 1888. Ent. Amer. 4: 42, 43 (no species).

Type: *Decatoma batatoides* Ashmead. Included by Ashmead, 1894.

**Decatomidea** Ashmead, 1888. Ent. Amer. 4: 42, 43.

Type: *Decatomidea xanthochroa* Ashmead. Desig. by Ashmead, 1894.

Revision: Balduf, 1932. U. S. Natl. Mus. Proc. 79: 1-95 (*Decatoma*).

Nomenclature: Hincks, 1944. Roy. Ent. Soc. London, Proc., Ser. B, 13 (3-4): 37.

**amsterdamensis** (Girault), n. comb. Que., N. Y., Oreg. Hosts: *Kermes* sp. on rose; *Phytophaga destructor* (Say); *Ditropinotus aureoviridis* Cwfd.; *Eurytoma parva* Phill.; *Harmolita atlantica* P. and E.; *H. hordei* (Harr.); *H. tritici* (Fitch).

*Decatoma amsterdamensis* Girault, 1917. Deser. Stellarum Nov., p. 10. ♂ ♀.

Biology: Chamberlain, 1941. U. S. Dept. Agr. Tech. Bul. 784: 29, 40.

Taxonomy: Gahan, 1933. U. S. Dept. Agr. Misc. Pub. 174: 38-41.

**arizonica** (Balduf), n. comb. Ariz. Host: Gall of *Andricus ruginosus* Bass.

*Decatoma foliatae* var. *arizonica* Balduf, 1932. U. S. Natl. Mus. Proc. 79 (29): 82. ♂ ♀.

**autumnalis** (Girault), n. comb. Calif.

*Decatoma autumnalis* Girault, 1920. U. S. Natl. Mus. Proc. 58: 209. ♀.

**batatoides** (Ashmead). N. J., Fla. Host: Gall of *Callirhytis batatoides* (Ashm.).

*Decatoma batatoides* Ashmead, 1881. Canad. Ent. 13: 136.

**bicolor** (Ashmead), n. comb. Fla., La. Host: Gall of *Belonocnema treatae* Mayr.

- Decatoma bicolor** Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxii. ♂.
- catesbaei** (Ashmead), n. comb. Fla. Host: Gall of *Bassettia catesbaei* (Ashm.).
- Decatoma catesbaei** Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxxii. ♀.
- Decatoma catesbii** Dalla Torre, 1898. Cat. Hym., v. 5, p. 327. Emend.
- compressa** (Girault), n. comb. Calif.
- Decatoma compressa** Girault, 1920. U. S. Natl. Mus. Proc. 58: 209. ♀.
- disholcaspis** (Balduf), n. comb. Tex., Colo., N. Mex., Ariz. Host galls: *Adleria* sp.; *Andricus ruginosus* Bass.; *Disholcaspis cinerosa* (Bass.); *D.* sp.
- Decatoma disholcaspis** Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 23. ♂ ♀.
- dorsalis** (Fitch). Mass., N. Y. to D. C. and Kans., Fla., La., Tex. Gall hosts: *Acraspis erinacei* (Beut.); *Andricus aciculatus* Beut.; *A. flocci* (O. S.); *A. petiolicola* (O. S.); *Callirhytis tumifica* (O. S.); *Disholcaspis mamma* (Cress.); *D. quercus-globulus* (Fitch); *Neuroterus majalis* (O. S.); *Xanthoteras forticorne* (O. S.).
- Spalangia Querci-lanae** var. **dorsalis** Fitch, 1859. N. Y. State Agr. Soc. Trans. 18: 816.
- dubia doanei** (Fullaway), n. comb. Colo., Utah, Calif. Host galls: *Disholcaspis canescens* (Bass.); *D. chrysolepidis* (Beut.); *D. corallina* (Bass.); *D. eldoradensis* (Beut.); *D. plumbella* Kinsey.
- Decatoma doanei** Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 279. ♀.
- dubia dubia** (Walsh), n. comb. Ont., Mass., R. I., Conn., N. J., Mich., N. C., Ga., Ala., Mo., Tex., Ariz., Utah. Hosts: Galls of *Belonocnema fossoria* Weld; *Callirhytis punctata* O. S.; *Disholcaspis mamma* (Cress.); *D. quercus-globulus* (Fitch); *D. spongiosa* (Karsch); *Dryocosmus imbricariae* (Ashm.).
- Decatoma varians** var. **dubia** Walsh, 1870. Amer. Ent. and Bot. 2: 300. ♂ ♀.
- dubia rufosa** (Balduf), n. comb. N. Y., Va., S. C., Ga., Fla., Ala., Ill., Tex. Host galls: *Belonocnema fossoria* Weld; *Disholcaspis mamma* (Cress.); *D. quercus-globulus* (Fitch); *D. spongiosa* (Karsch).
- Decatoma dubia rufosa** Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 41. ♂ ♀.
- flammineiventris** (Girault), n. comb. Colo., N. Mex. Hosts: *Prodoxus quinquepunctellus* (Chamb.); *P. y-inversus* Riley.
- Decatoma flammineiventris** Girault, 1920. U. S. Natl. Mus. Proc. 58: 208. ♂ ♀.
- flava** (Ashmead), n. comb. Mass. and N. Y. to N. C. and Mo.; Tex., N. Mex. Hosts: *Acraspis erinacei* (Beut.); *A. macrocarpae* Bass.; *A. pezomachoides* (O. S.); *Andricus aciculatus* Beut.; *A. murfeldiae* Ashm.; *A. petiolicola* O. S.; *A. tubularius* Weld; *Callirhytis seminator* (Harr.); *Dryocosmus floridensis* (Beut.); *Lozaulus humilis* (Weld); *Neuroterus noxiosus* (Bass.); *N. quercusbatatus* (Fitch).
- Decatoma flava** Ashmead, 1881. Canad. Ent. 13: 134. ♂ ♀.
- Biology: Triggerson, 1914. Ent. Soc. Amer. Ann. 7: 8-9.
- flavipes** (Balduf), n. comb. Ariz. Host: Gall of *Dryocosmus coxii* (Bass.).
- Decatoma flavipes** Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 52. ♂ ♀.
- floridae** (Girault), emend.; n. comb. Fla. Host: ?*Andricus flocci* (O. S.).
- Decatoma florida** Girault, 1917. Descr. Hym. Chalcidoid. Variorum cum Observ. V, p. 6. ♀.
- Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 208.
- foliatae** (Ashmead), n. comb. Va., Fla., Mo., Ill. Hosts: Galls of *Andricus foliatus* Ashm.; *Callirhytis flavipes* (Gill.); *Disholcaspis quercus-globulus* (Fitch); *Dryocosmus imbricariae* (Ashm.).
- Decatoma foliatae** Ashmead, 1881. Canad. Ent. 13: 136. ♂ ♀.
- globuli** (Balduf), n. comb. Ill. Hosts: Galls of *Andricus ruginosus* Bass.; *A. tecumseharum* Kinsey; *Disholcaspis eldoradensis* (Beut.); *D. quercus-globulus* (Fitch); *D. spongiosa* (Karsch); *D. sp.*; *Xanthoteras forticorne* (O. S.).
- Decatoma globuli** Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 47. ♂ ♀.

- gracilis** (Fullaway), n. comb. Calif. Host: Gall of *Andricus californicus* Ashm.  
**Decatoma gracilis** Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 280. ♂.
- isis** (Girault), n. comb. Calif. Hosts: Galls of *Andricus californicus* Ashm.; *A. chrysolepidicola* (Ashm.); *A. spectabilis* Kinsey; *Callirhytis pomiformis* (Ashm.); *C. suttoni* (Ashm.).  
**Decatoma isis** Girault, 1917. Descr. Stellarum Nov., p. 10. ♀.
- lanae** (Ashmead), n. comb. Fla. Host: Gall of *Callirhytis turnerii* (Ashm.).  
**Decatoma lanae** Ashmead, 1881. Canad. Ent. 13: 135. ♂ ♀.
- lobatae** (Balduf), n. comb. Calif. Hosts: Galls of *Andricus wiltzae* Full.; *Neuroterus varians* Kinsey.  
**Decatoma lobatae** Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 45. ♀.
- marylandica** (Girault), n. comb. N. S., Md., D. C. Host: Gall of *Neuroterus quercus-batatus* (Fitch).  
**Decatoma marylandica** Girault, 1916. Brooklyn Ent. Soc. Bul. 11: 112. ♀.
- michiganica** (Girault), n. comb. Mich.  
**Decatoma michiganica** Girault, 1920. U. S. Natl. Mus. Proc. 58: 209. ♀.
- mimosae** (Balduf), n. comb. Ariz. Host: Stem gall on *Mimosa biuncifera*.  
**Decatoma mimosae** Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 25. ♂ ♀.
- nigriceps excrucians** (Walsh), n. comb. Ill. Host: Gall of *Callirhytis seminator* (Harr.).  
**Decatoma nigriceps** var. *excrucians* Walsh, 1870. Amer. Ent. and Bot. 2: 301. ♂ ♀.
- nigriceps nigriceps** (Walsh), n. comb. Mass., Conn., Va., Ill., Mo., Kans. Hosts: Galls of *Callirhytis tumifica* (O. S.); *Disholcaspis mamma* (Cress.); *Xanthoteras forticorne* (O. S.).  
**Decatoma nigriceps** Walsh, 1870. Amer. Ent. and Bot. 2: 300. ♂ ♀.
- novascotiae** (Balduf), n. comb. N. S., Va. Hosts: Galls of *Callirhytis cornigera* (O. S.); *Neuroterus quercus-batatus* (Fitch).  
**Decatoma novascotiae** Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 50. ♂ ♀.
- nubilistigma** (Walsh), n. comb. Que., N. Y., Mass., N. J., Ill., Kans. Host: ?*Rhabdophaga batatas* Walsh.  
**Decatoma nubilistigma** Walsh, 1870. Amer. Ent. and Bot. 2: 301. ♂ ♀.
- occidentalis flavifrons** (Balduf), n. comb. Ariz. Host: Gall on an evergreen oak.  
**Decatoma occidentalis** var. *flavifrons* Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 61. ♂.
- occidentalis occidentalis** (Balduf), n. comb. Conn., Colo., N. Mex., Ariz., Calif. Hosts: Galls of *Adleria weldi* (Beut.); *A. sp.*; *Andricus chrysolepidicola* (Ashm.); *A. lasius* (Ashm.); *A. lasius areolaris* Kinsey; *A. ruginosus* Bass.; *A. sp.*, *Antron echinus* (Ashm.); *Disholcaspis canescens* (Bass.); *D. corallina* (Bass.); *D. trukeensis* (Ashm.).  
**Decatoma occidentalis** Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 58. ♂ ♀.
- pezomachoides** (Balduf), n. comb. Ohio. Host: Gall of *Acraspis pezomachoides* (O. S.).  
**Decatoma pezomachoides** Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 69. ♀.
- pomiformis** (Balduf), n. comb. Calif. Host: Gall of *Callirhytis pomiformis* (Ashm.).  
**Decatoma pomiformis** Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 70. ♂ ♀.
- querci** (Ashmead), n. comb. Fla. Host: Dipterous gall on *Quercus catesbeiae*.  
**Decatoma querci** Ashmead, 1881. Canad. Ent. 13: 135. ♂.
- querci-lanae** (Fitch). Canada, N. Y. to Fla.; Ariz., Tex., Colo. Host galls: ?*Acraspis erinacei* (Beut.); *A. inflata* (Kinsey); ?*A. pezomachoides* (O. S.); *Andricus aciculatus* Beut.; *A. flocci* (O. S.); *A. murtfeldtae* Ashm.; *A. pattoni* (Bass.); *A. petiolicola* (O. S.); *Callirhytis flavipes* (Gill.); *C. scitula* (O. S.); *C. seminator* (Harr.); *C. tumifica* (O. S.); *Disholcaspis mamma* (Cress.); *D. quercus-globulus* (Fitch); *Neuroterus majalis* (O. S.); *N. quercus-batatus* (Fitch); *N. saltarius* Weld; *Xanthoteras forticorne* (O. S.).

- Spalangia Querci-lanae* Fitch, 1859. N. Y. State Agr. Soc. Trans. 18: 816.
- Decatoma hyalipennis* Walsh, 1870. Amer. Ent. and Bot. 2: 301. ♂ ♀.
- Decatoma flavicollis* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xiii. ♂ ♀. Preocc.
- Decatoma floridana* Smith, 1886. Ent. Amer. 2: 19. N. name.
- quinquesetae* (Balduf), n. comb. Calif. Host: Gall of *Andricus petiolicola* (O. S.).
- Decatoma quinquesetae* Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 78. ♂ ♀.
- salutaris* (Crosby), n. comb. N. Y. Host: *Nepticula slingerlandella* Kearf.
- Derostenus salutaris* Crosby, 1911. Canad. Ent. 43: 414. ♂.
- Biology: Crosby, 1911. N. Y. (Cornell) Agr. Expt. Sta. Bul. 308: 222-223.
- simplicistigma* (Walsh), n. comb. Ill., Kans., Colo. Hosts: Galls of *Acraspis erinacei* (Beut.); *Andricus petiolicola* (O. S.).
- Decatoma simplicistigma* Walsh, 1870. Amer. Ent. and Bot. 2: 301. ♂ ♀.
- subimmaculata* (Girault), n. comb. Calif. Host galls: *Andricus lasius* (Ashm.); *A. lasius sublasius* Kinsey; *A. spectabilis* Kinsey; *Callirhytis pomiformis* (Ashm.); *C. sp.*; *Disholcaspis trucekensis* (Ashm.); ?*Heteroecus dasydactylus* (Ashm.); ?*H. melanoderma* Kinsey; *H. pacificus* (Ashm.).
- Decatoma subimmaculata* Girault, 1917. Jour. Ent. and Zool. 9: 11. ♀.
- texana* (Balduf), n. comb. Tex.
- Decatoma texana* Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 22. ♂ ♀.
- vacciniicola* (Balduf), n. comb. Ont., Que. to Va. and Ill., La. Host: Gall of *Hemadas nubilipennis* (Cwf.).
- Decatoma vacciniicola* Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 12. ♂ ♀.
- Biology: Glick, 1939. U. S. Dept. Agr. Tech. Bul. 673: 45.
- varians* (Walsh) n. comb. Ont. to Va.; Ill., Mo., Fla., La., Tex., Colo., Calif. Hosts: Galls of ?*Acraspis erinacei* (Beut.); ?*Amphibolips inanis* (O. S.); ?*A. spongifica* (O. S.); *Andricus chrysolepidicola* Ashm.; *A. chrysolepidicola* var. *pugnus* Kinsey; *Callirhytis frequens* (Gill.); *C. gemmaria* (Ashm.); *C. punctata* (O. S.); ?*Disholcaspis bassetti* (Gill.); *D. eldoradensis* (Beut.); ?*D. mamma* (Cress.); *D. quercus-globulus* (Fitch); *Dryocosmus imbricariae* (Ashm.); ?*D. palustris* (Ashm.); *Sphaeroteras caepuliforme* (Beut.).
- Decatoma varians* Walsh, 1870. Amer. Ent. and Bot. 2: 300. ♂ ♀.
- Decatoma phellos* Ashmead, 1881. Canad. Ent. 13: 136. ♂.
- Decatoma kelloggi* Fullaway, 1912. N. Y. Ent. Soc. Jour. 20: 278. ♂ ♀.
- wiltzae* (Balduf), n. comb. Conn., Ariz., Calif. Hosts: Galls of *Andricus wiltzae* Full.; ?*Rhodites fusiformans* Ashm.
- Decatoma wiltzae* Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 83. ♂ ♀.
- xanthochroa* (Ashmead), n. comb. Fla., Tex. Hosts: Galls of *Andricus murtfeldae* Ashm.; *Callirhytis flavipes* (Gill.).
- Decatomidea xanthochroa* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 322. ♀.
- Decatoma brevirobæ* Balduf, 1932. U. S. Natl. Mus. Proc. 79 (28): 56. ♂ ♀.
- N. syn.
- Genus SYSTOLE Walker**
- Systole* Walker, 1832. Ent. Mag. 1: 13, 22.
- Type: *Systole albipennis* Walker. Monob.
- minuta* Ashmead. Fla.
- Systole minuta* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 319. ♂ ♀.
- Genus BRUCHOPHAGUS Ashmead**
- Bruchophagus* Ashmead, 1888. Ent. Amer. 4: 42, 43. No species.
- Type: *Bruchophagus borealis* Ashmead. Desig. by Ashmead, 1894.
- Systolodes* Ashmead, 1888. Ent. Amer. 4: 42, 43. No species.
- Type: *Systolodes brevicornis* Ashmead. Included by Ashmead, 1894.

**borealis** Ashmead. Ont. Host: *Bruchus* sp.

**Bruchophagus borealis** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 328.  
♂ ♀.

Taxonomy: Girault, 1916. Canad. Ent. 48: 338.

**gibbus** (Bohemian). Commonly known as the clover seed chalcid. Cosmopolitan; common throughout North America. Seed hosts: ?*Astragalus douglasii*; ?*Hosackia puberula*; *Medicago arabica*; *M. hispida denticulata*; ?*Oxytropis lamberti*; alfalfa; burr clover; crimson clover; mammoth red clover; red clover.

**Eurytoma gibba** Boheman, 1836 (1835). Svenska Vetensk. Akad. Handl. 56: 244. ♀.

**Eurytoma funebris** Howard, 1880. U. S. Dept. Agr. Ann. Rpt. for 1879, p. 196. ♂ ♀.

**Systolodes brevicornis** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 320. ♂ ♀.

Biology: Wildermuth, 1931. U. S. Dept. Agr. Farmers' Bul. 1642: 1-14.—Smith, 1943. Kans. State Bd. Agr. Rpt. 62 (255); 395.—Sorenson, 1944. Jour. Econ. Ent. 37: 373.—Schull, 1944. Idaho Agr. Expt. Sta. Bul. 252: 15, 56.

**mexicanus** Ashmead. N. Mex. Hosts: *Acanthoscelides alboscutellatus* (Horn); *Bruchus* sp. on *Lotus* pods; *Callosobruchus chinensis* (L.).

**Bruchophagus mexicanus** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 328.  
♂ ♀.

**noctua** Girault. Ariz.

**Bruchophagus noctua** Girault, 1917. New Chalcid Flies, p. la.

## Family PODAGRIONIDAE Peck, New Family

### Subfamily PODAGRIONINAE

#### Genus PODAGRION Spinola

**Podagrion** Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 147.

Type: **Podagrion splendens** Spinola. Monob.

**Palmon** Dalman, 1825. Svenska Vetensk. Akad. Handl. 46: 388.

Type: **Palmon bellator** Dalman. Desig. by Gahan and Fagan, 1923.

**Priomerus** Walker, 1833. Ent. Mag. 1: 116, 118

Type: (**Priomerus pachymerus** Walker)=**Podagrion splendens** Walker. Monob.

**Pachytomus** Westwood, 1847. Ent. Soc. London Trans. 4 (4): 260.

Type: **Pachytomus klugianus** Westwood. Monob.

**Notopodion** Dahlbom, 1857. Öfvers. Svenska Vetensk. Akad. Forh. 14: 295.

Type: **Podagrion splendens** Spinola. Desig. by Gahan and Fagan, 1923.

**Bactrischion** A. Costa, 1857. Accad. delle Sci. Fis. e Mat. Napoli Mem. (A) 2: 223.

Type: (**Bactrischion bicoloratum** Costa)=**Podagrion splendens** Spinola. Monob.

**Notopodium** Schulz, 1906. Spolia Hym., p. 144. Emend.

**Podagrion** Schulz, 1906. Spolia Hym., p. 150. Emend.

The members of this genus parasitize the eggs of mantids.

**crassiclava** Gahan. Tex., Ariz. Hosts: *Mantis* sp.; *Stagmomantis limbata* (Hahn).

**Podagrion crassiclava** Gahan, 1922. U. S. Natl. Mus. Proc. 61 (24): 6. ♂ ♀.

**mantis** Ashmead. N. J. to Fla., La., Tex., Mo., Kans., Ariz. Hosts: *Mantis* eggs, *Stagmomantis carolina* (Johan.), ?*S. limbata* (Hahn), *Tenodera angustipennis* Sauss., *T. aridifolia sinensis* Sauss.

**Podagrion mantis** Ashmead, 1886. Canad. Ent. 18: 57. ♀.

Biology: Breland, 1941. Ent. Soc. Amer. Ann. 34: 99-133.

## Subfamily CHALCEDECTINAE

## Genus CHALCEDECTUS Walker

*Chalcedectus* Walker, 1852. Ann. Mag. Nat. Hist. (2) 10: 47.

Type: *Chalcedectus maculicornis* Walker. Monob.

*Chalcodectus* Dalla Torre, 1898. Cat. Hym., v. 5, pp. 186, 569. Emend.

*texanus* Brues Tex.

*Chalcedectes* (!) *texanus* Brues, 1907. Wis. Nat. Hist. Soc. Bul. 5: 106. ♂.

## Genus EUCHRYSIA Westwood

*Euchrysia* Westwood, 1874. Thesaurus Ent. Oxon., p. 139.

Type: *Euchrysia cleptidea* Westwood. Desig. by Ashmead, 1904.

Revision: Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 14-15.

*hyalinipennis* Ashmead. N. C., Mo., Tex., Calif. Hosts: *Chrysobothris deleta* Lec.; *?Phloeotribus frontalis* (Oliv.).

*Euchrysia hyalinipennis* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 231. ♀.

*maculipennis* Ashmead. Calif.

*Euchrysia maculipennis* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 232. ♂.

*similis* Girault. Kans.

*Euchrysia similis* Girault, 1917. Brooklyn Ent. Soc. Bul. 12: 15. ♀.

## Family CHALCIDIDAE

## Subfamily HALTICELLINAE

See comment under *Halticella*.

## Genus HALTICELLA Spinola

*Halticella* Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 148.

Type: *Chalcis pusilla* Fabricius. Desig. by Westwood, 1840.

*Halticella* Stephens, 1829. Nomencl. Brit. Ins., p. 36. Emend.

Revision: Gahan, 1927. Jour. Agr. Res. 34: 545.

Kerrich and Menon (1949, Ent. Monthly Mag. 85: 207-211) have questioned the identity of *Chalcis pusilla* F. and its status as genotype of *Halticella*. Their findings may affect the current usage of the names *Halticella*, *Halticellinae*, *Brachymeria*, and *Brachymeriinae*.

*americana* Howard. D. C.

*Halticella americana* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 9, 36. ♀.

*longicornis* Ashmead. S. C., Fla. Host: *Grapholitha molesta* (Busck).

*Halticella longicornis* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 185. ♀. Biology: Nettles, 1934. Jour. Econ. Ent. 27: 815-816.

*onatas* (Walker). Fla., Kans. Host gall: *Xanthoteras politum* (Bass.).

*Hockeria onatas* Walker, 1843. Soc. Ent. France Ann. (2) 1: 146. ♀.

*perpulchra* (Walsh). N. Y., Ill., Mo. Host: *Apanteles militaris* (Walsh).

*Hockeria perpulchra* Walsh, 1861. Prairie Farmer (n. s.) 8: 258.

*rhyacioniae* Gahan. Mass., Va., Nebr. Hosts: *Rhyacionia frustrana* (Comst.); *R. frustrana bushnelli* (Busck).

*Halticella rhyacioniae* Gahan, 1927. Jour. Agr. Res. 34: 545. ♂ ♀.

Biology: Underhill, 1943. Va. Agr. Expt. Sta. Bul. 349: 12.

*xanticles* (Walker). Que. to Fla., Ill., Ohio, Kans., Nebr. Hosts: *Rhyacionia buoliana* (Schiff.); *Bucculatrix canadensisella* Chamb.; *Solenobia walshella* Clem.; *Apanteles melanoscelus* (Ratz.).

*Hockeria xanticles* Walker, 1843. Soc. Ent. France Ann. (2) 1: 147. ♀.

Biology: Muesebeck and Dohanian, 1927. U. S. Dept. Agr. Bul. 1487: 18.—Swenk, 1927. Nebr. Agr. Expt. Sta. Res. Bul. 40: 45-46.

### Genus STOMATOCERAS Kirby

*Stomatoceras* Kirby, 1883. Linn. Soc. London, Jour., Zool. 17: 54, 62.

Type: *Halticella liberator* Walker. Monob.

*Irichohaltichella* Girault, 1912. Linn. Soc. N. S. Wales Proc. 36: 637.

Type: *Irichohaltichella pilosella* Cameron. Monob.

*Stomatoceroides* Girault, 1913. Canad. Ent. 45: 140.

Type: *Stomatoceroides bicolor* Girault. Orig. desig.

**rubrum eriense** Wallace. N. J., N. C., Tex., Okla., Kans., N. Dak. Hosts: *Myrmeleon immaculatus* Deg.; myrmeleonid.

*Stomatoceras rubra* var. *eriensis* Wallace, 1942. Carnegie Mus. Ann. 29: 31. ♂ ♀.

**rubrum rubrum** Ashmead. Tex., Ariz.

*Stomatocera* (?) *rubra* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 332. ♀.

**tenuicornis** Girault. Ariz.

*Stomatoceras tenuicornis* Girault, 1918. Ent. News 29: 127. ♀.

**unipunctatipennis americense** Girault. N. J.

*Stomatoceras unipunctatipennis americensis* Girault, 1918. Ent. News 29: 127. ♀.

**unipunctatipennis unipunctatipennis** Girault. W. Va.

*Stomatoceras unipunctatipennis* Girault, 1918. Ent. News 29: 127. ♀.

### Genus SCHWARZELLA Ashmead

*Schwarzella* Ashmead, 1904. Carnegie Mus. Mem. 1: 256.

Type: *Schwarzella arizonensis* Ashmead. Monob.

**arizonensis** Ashmead. Ariz.

*Schwarzella arizonensis* Ashmead, 1904. Carnegie Mus. Mem. 1: 256, 388. ♂.

Taxonomy: Gahan and Peck, 1946. Wash. Acad. Sci. Jour. 36: 316.

### Subfamily BRACHYMERIINAE

See comment under *Halticella*, p. 584.

### Genus ACANTHOCHALCIS Cameron

*Acanthochalcis* Cameron, 1884. Biol. Cent.-Amer., Hym., v. 1, p. 100.

Type: *Acanthochalcis nigricans* Cameron. Monob.

**nigricans** Cameron. N. Mex., Ariz. Host: ?*Chrysobothris femorata* (Oliv.).

*Acanthochalcis nigricans* Cameron, 1884. Biol. Cent.-Amer., Hym., v. 1, p. 100. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 193.

**unispinosa** Girault. Tex.

*Acanthochalcis unispinosa* Girault, 1917. New Chalcid Flies, p. 5.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 194.

### Genus PHASGONOPHORA Westwood

*Phasgonophora* Westwood, 1832. In Griffith, Cuvier's Animal Kingdom 15 (Insecta 2), p. 432, pl. 77, fig. 2.

Type: *Phasgonophora sulcata* Westwood. Monob.

*Phasganophora* Dalla Torre, 1898. Cat. Hym., v. 5, p. 371. Emend.

**sulcata** Westwood. N. Y. to Fla., Ariz., Calif., and Oreg. Hosts: *Agrius anxius* Gory; *Chrysobothris femorata* (Oliv.); ?*C. sexsignata* (Say); ?*Papilio* sp.; ?*Telea polyphemus* (Cram.).

*Phasgonophora sulcata* Westwood, 1832. In Griffith, Cuvier's Animal Kingdom 15 (Insecta 2), p. 432. ♀.

*Smicra gigantea* Ashmead, 1881. Canad. Ent. 13: 90. ♀.

Biology: Blackman and Stage, 1924. N. Y. State Col. Forestry, Syracuse Univ., Tech. Pub. 17: 19, 22, 25.—Rhoads, 1924. In Blackman and Stage, N. Y.

State Col. Forestry, Syracuse Univ., Tech. Pub. 17: 188.  
 Taxonomy: Burks, 1940. U. S. Natl. Mus. Proc. 88: 351.

### Genus TRIGONURA Sichel

*Trigonura* Sichel, 1865. Soc. Ent. France Ann. (4) 5: 376.

Type: *Trigonura crassicauda* Sichel. Monob.

*Centrochalcis* Cameron, 1913. Indian Forest Rec. 4: 92. Preocc.

Type: *Centrochalcis ruficaudis* Cameron. Monob.

*Centrochalcidea* Gahan and Fagan, 1923. U. S. Natl. Mus. Bul. 124: 28. N. name.

*californica* Rohwer. Calif. Host: *Chrysobothris mali* Horn.

*Trigonura californica* Rohwer, 1917. U. S. Natl. Mus. Proc. 53: 171. ♂ ♀.

*elegans* (Provancher), n. comb. Que., Ill.

*Phasgonophora elegans* Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 191. ♀.

*hicoriae* Rohwer. N. Y., Conn. Hosts: *Chrysobothris femorata* (Oliv.); *C. sexsignata* (Say); *Magdalisa armicollis* (Say); *M. barbita* (Say); ?*Scolytus multistriatus* (Marsh.).

*Trigonura hicoriae* Rohwer, 1919. Canad. Ent. 51: 160. ♂ ♀.

Biology: Kaston, 1937. Conn. Agr. Expt. Sta. Bul. 396: 358.

*tarsata* (Dalla Torre). Que., N. H., N. Y., W. Va., Va. Host: *Pissodes strobi* (Peck).

*Chalcis tarsalis* Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 332. ♂. Preocc.

*Chalcis tarsata* Dalla Torre, 1898. Cat. Hym., v. 5, p. 393. N. name.

### Genus BRACHYMERIA Westwood

See comment under *Haltichella*, p. 584.

*Brachymeria* Westwood, 1829. In Stephens, Nomencl. Brit. Ins., v. 1, p. 36.

Type: *Chalcis minuta* Fabricius. Desig. by Westwood, 1840.

*Tumidicoxa* Girault, 1911. Zool. Jahrb. Abt. f. System. 31: 378.

Type: *Tumidicoxa nigra* Girault. Orig. desig.

*Ceyxia* Girault, 1911. Zool. Jahrb. Abt. f. System. 31: 382.

Type: *Ceyxia fumipennis* Girault. Orig. desig.

*Bracheptelia* Girault, 1913. Canad. Ent. 45: 106.

Type: *Bracheptelia rubripes* Girault. Monob.

*Pseudepitelia* Girault, 1913. Canad. Ent. 45: 104.

Type: *Pseudepitelia rubrifemur* Girault. Orig. desig.

*Tumidicoxella* Girault, 1913. Roy. Soc. So. Austral. Trans. 37: 74.

Type: *Tumidicoxella nigricoxa* Girault. Orig. desig.

*Tumidicoxoides* Girault, 1913. Arch. f. Naturgesch. 79A (6): 86.

Type: *Tumidicoxoides kurandaensis* Girault. Monob.

Revisions: Crawford, 1910. U. S. Dept. Agr. Bur. Ent. Tech. Ser. 19: 14 (*Chalcis*).—Burks, 1936. Ill. State Acad. Sci. Trans. 29: 251–254 (Ill.).

*belfragei* (Crawford), n. comb. Tex.

*Chalcis belfragei* Crawford, 1910 (1909). Ent. Soc. Wash. Proc. 11: 205. ♀.

*coloradensis* (Cresson). Ont., N. C. to Fla., Tex. and Sask. Hosts: *Melanoplus bivittatus* (Say); *M. femur-rubrum* (Deg.); *M. mexicanus* (Sauss.); *Sarcophaga kellyi* Ald.

*Chalcis femorata* Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 143. ♀. Preocc.

*Chalcis coloradensis* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 60. ♂.

*Chalcis Dalmanni* (!) Thomson, 1875. Hym. Scand., v. 4, p. 17. ♂ ♀. N. name.

Biology: Burks, 1941. Ill. State Acad. Sci. Trans. 33: 208.—Smith, 1944. Canad. Ent. 76: 29–32.

*columbiana* (Howard). D. C.

*Chalcis columbiana* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 8, 36. ♀.

**compsilurae** (Crawford). New England, Ill., Wis. Hosts: *Nygma phaeorrhoea* (Donov.); *Ennomos subsignarius* (Hbn.); *Achaetoneura aletia* (Riley); *A. frenchii* (Will.); *Carcelia amplexa* (Coq.); *C. laxifrons* Vill.; *Compsilura concinna* (Meig.); *Exorista larvarum* (L.); *Pelatachina pellucida* Coq.; *Phorocera agilis* R.-D.; *P. claripennis* Macq.; *Sturmia nidicola* Tns.; *S. scutellata* (R.-D.); *Pikonema alaskensis* (Roh.).

**Chalcis compsilurae** Crawford, 1911. U. S. Natl. Mus. Proc. 41: 272. ♂ ♀. Biology: Dowden, 1935. Jour. Agr. Res. 50: 495-523.—Flanders, 1944. Jour. Econ. Ent. 37: 409-410.

**fonscolombei** (Dufour). Throughout south. U. S.; Md., Ill., Kans. Hosts: Tephritisid seed maggot from ironweed; *Synthesiomyia nudiseta* Wulp; *Calliphora coloradensis* Hough; *Callitroga macellaria* (F.); *Phaenicia mexicana* (Macq.); *P. sericata* (Meig.); *Phormia regina* (Meig.); *Sarcophaga carnaria* (L.); *S. haemorrhoidalis* (Fall.); *S. impar* Ald.; *S. plinthopyga* Wied.

**Chalcis Fonscolombei** Dufour, 1841. Soc. Ent. France Ann. 10: 12.

Biology: Roberts, 1933. U. S. Dept. Agr. Tech. Bul. 365: 1-22.

Morphology: Parker, 1924. Soc. Ent. France Ann. 93: 264, 297.

**hammari** (Crawford). S. C., Mo., Tex., N. Mex. Hosts: *Ancylis comptana fragariae* W. and R.; *Grapholitha molesta* (Busck); *Archips argyrosipa* (Wlkr.); *Filatima monotaeniella* (Bott.).

**Chalcis hammari** Crawford, 1915. Insecutor Inscitiae Menstruus 3: 89. ♂ ♀. Biology: Nettles, 1934. Jour. Econ. Ent. 27: 815-816.

**incerta** (Cresson). Fla.

**Chalcis incerta** Cresson, 1865. Ent. Soc. Phila. Proc. 4: 101.

Biology: Needham, 1948. Ecol. Monog. 18: 446.

**louisianae** (Girault), emend; n. comb. La. Host: *Pseudococcus citri* (Risso).

**Chalcis louisiana** Girault, 1917. Deser. Stellarum Nov., p. 6. ♀.

**ovata abiesae** (Girault). Calif. Hosts: *Phryganidia californica* Pack.; *Malacosoma californicum* (Pack.).

**Chalcis ovata** var. **abiesae** Girault, 1917. Deser. Stellarum Nov., p. 19. ♂ ♀. Taxonomy: Rohwer, 1918. Ent. Soc. Wash. Proc. 20: 18.

**ovata ovata** (Say). Que. to Fla., Tex., and Nebr.; N. Mex. to Calif. and Oreg. Hosts: *Papilio zelicaon* Lucas; *Colias philodice eurytheme* (Bdvl.); *Agraulis vanillae* (L.); *Asterocampa clyton* (Bdvl. and Lee.); *Nymphalis antiopa* (L.); *N. californica* (Bdvl.); *Hemileuca oliviae* Ckll.; *Alabama argillacea* (Hbn.); *Anomis erosa* Hbn.; *Anticarsia gemmatalis* Hbn.; *Heliothis armigera* (Hbn.); *Phryganidia californica* Pack.; *Hemerocampa leucostigma* (A. and S.); *H. oslari* (Barnes); *H. vetusta* (Bdvl.); *Nygma phaeorrhoea* (Donov.); ?*Porthetria dispar* L.; ?*Cingilia catenaria* (Drury); *Deuteronomos magnarius* (Guen.); *Lambdina fiscellaria* (Hulst); *Philtraea elegantaria* (Hy. Edw.); *Desmia funeralis* (Hbn.); *Diaphania hyalinata* (L.); *D. nitidalis* (Stoll); *Pyrausta penitalis* (Grote); *Ancylis comptana* (Froel.); *Grapholitha molesta* (Busck); *Acleris minuta* (Rob.); *Archips argyrosipa* (Wlkr.); *A. rosaceana* (Harr.); *Homona fervidana* (Wlkr.); *Anacampsis fragariella* Busck; *Gnorimoschema gallae-solidaginis* (Riley); *Thyridopteryx ephemeraeformis* (Haw.); pomegranate bagworm; *Exorista larvarum* (L.).

**Chalcis ovata** Say, 1824. In Keating, Narr. Long's 2nd Exped., App., p. 326. Biology: Howard, 1897. U. S. Dept. Agr. Div. Ent. Tech. Ser. 5: 25-28.—Snodgrass, 1917. Ind. State Ent. Ann. Rpt. 9: 180, 188-189.

**pedalis** (Cresson). Tex., Fla. Hosts: *Olycella junctolineella* (Hulst); *Melitara prodenialis* Wlkr.

**Chalcis pedestris** Cresson, 1872. Amer. Ent. Soc. Trans. 4: 60. ♀.

**robustus** (Cresson). Fla. Hosts: *Papilio cresphontes* Cram.; *Lymire edwardsi* (Grote); *Megalopyge opercularis* (A. and S.).

**Chalcis robusta** Cresson, 1865. Ent. Soc. Phila. Proc. 4: 101.

**slossonae** (Crawford), n. comb. Fla.

**Chalcis slossonae** Crawford, 1910 (1909). Ent. Soc. Wash. Proc. 11: 205. ♂ ♀.

**tachinae** (Howard), n. comb. N. H., N. J. Host: *Melanoplus mexicanus mexicanus* (Sauss.).

*Chalcis tachinae* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 8, 32, 36.  
♀.

*tegularis* (Cresson). Ill., Tex., Wyo. Host: *Ceracia dentata* (Coq.).  
*Chalcis tegularis* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 60. ♀.

### Subfamily DIRHININAE

Revision: Burks, 1936. Natl. Acad. Sci. Proc. 22: 284-286.

#### Genus DIRHINUS Dalman

*Dirhinus* Dalman, 1818. Svenska Vetensk. Akad. Handl. 39: 75.

Type: *Dirhinus excavatus* Dalman. Monob.

*Dirrhinus* Dalman, 1823. Analecta Ent., p. 29. Emend.

*Eniaca* Kirby, 1883. Linn. Soc. London, Jour., Zool. 17: 54, 57.

Type: (*Chrysis? hesperidum* Rossi) = *Chalcis cornigera* Jurine.  
Monob.

*Hontalia* Cameron, 1884. Biol. Cent.-Amer., Hym., v. 1, p. 112.

Type: *Hontalia caerulea* Cameron. Orig. desig.

*Pareniaca* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 312.

Type: *Pareniaca schwarzi* Crawford. Orig. desig.

Revision: Burks, 1947. Ent. Soc. Wash. Proc. 49: 136-140.

**paolii** Burks, emend. Ind.

*Dirhinus paoli* Burks, 1947. Ent. Soc. Wash. Proc. 49: 137. ♂.

**perideus** Burks. Ill.

*Dirhinus perideus* Burks, 1947. Ent. Soc. Wash. Proc. 49: 138. ♂.

**schwarzi** (Crawford). Tex., Ariz., Calif. Hosts: *Olycella junctolineella* (Hulst);  
*Melitara* sp.; dipterous larvae.

*Pareniaca schwarzi* Crawford, 1913. U. S. Natl. Mus. Proc. 45: 312. ♀.

**texanus** (Ashmead). N. C., Tenn., Ala., Tex., Kans. Hosts: Dipterous larvae;  
*Sarcophaga plinthopyga* Wied.

*Eniaca texana* Ashmead, 1896. Amer. Ent. Soc. Trans. 23: 217. ♀.  
Biology: Roberts, 1935. Jour. Agr. Res. 50: 481, 490-491.

### Subfamily CHALCIDINAE

Revision: Burks, 1940. U. S. Natl. Mus. Proc. 88: 237-354.

#### Genus METADONTIA Ashmead

*Metadontia* Ashmead, 1888. Ent. Amer. 4: 87 (no species).

Type: (*Smicra montana* Ashmead) = *Chalcis amoena* Say. Included by Ashmead, 1904.

*Plagiosmicra* Cameron, 1904. Invertebrata Pacifica, v. 1, p. 56.

Type: (*Plagiosmicra ashmeadi* Cameron) = *Chalcis amoena* Say. Monob.

Revision: Burks, 1940. U. S. Natl. Mus. Proc. 88: 260-263.

**amoena** (Say). D. C. to Fla., Tex., and Kans.; Ariz., Calif. Hosts: *Strymon cecrops* (F.); *S. melinus* (Hbn.).

*Chalcis amoena* Say, 1836. Boston Jour. Nat. Hist. 1: 270.

*Smicra montana* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 183. ♂.

#### Genus CHALCIS Fabricius

*Chalcis* Fabricius, 1789 (1787). Mantissa Insectorum, v. 1, p. 272.

Type: (*Chalcis sisipes* Fabricius) = *Sphex myrifex* Sulzer. Desig. by Latreille, 1810.

*Smiera* Spinola, 1811. Paris Mus. Hist. Nat. Ann. 17: 147.

Type: (*Chalcis sisipes* Fabricius) = *Sphex myrifex* Sulzer. Desig. by Ashmead, 1904.

*Smicra* Spinola, 1837. Mag. Zool. 7 Cl. IX, explan. pl. 180. Emend.

Revision: Burks, 1940. U. S. Natl. Mus. Proc. 88: 243-260.

**barbara** (Cresson). N. H., Conn., Mass., N. J.; Fla., Tex.; Ill. to N. Dak., Colo., Wyo. Host: *Odontomyia* sp.

*Smicra barbara* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 47. ♂.

*Smicra rufofemorata* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 39, 191. ♂.

**canadensis** (Cresson). Ont., N. Y., W. Va., Ill., Mich. Hosts: ?*Magdalis olyra* (Hbst.); *Odontomyia vertebrata* Say; *O.* sp.

*Smicra canadensis* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 39. ♂.

**divisa** (Walker). Kans., Okla., Ariz., Oreg.

*Smiera divisa* Walker, 1861. Jour. Ent. 1: 178. ♂ ♀.

**flebilis** (Cresson). Maine to N. J.; Ont., Ill., Minn.

*Smicra flebilis* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 39, 40. ♂.

**lasia** Burks. Calif.

*Chalcis lasia* Burks, 1940. U. S. Natl. Mus. Proc. 88: 248. ♂ ♀.

**megalomis** Burks. Ill., Colo.

*Chalcis megalomis* Burks, 1940. U. S. Natl. Mus. Proc. 88: 250. ♀.

**microgaster** Say. Ont., Pa., Ohio, Ill., Okla., Tex., Minn., Wis.

*Chalcis microgaster* Say, 1824. In Keating, Narr. Long's 2nd Exped., App. p. 326. ♂.

**neptis** Burks. Colo., N. Mex., Utah, Oreg., Wash.

*Chalcis neptis* Burks, 1940. U. S. Natl. Mus. Proc. 88: 251. ♂ ♀.

**phoenicapoda** Burks. Canada, Ga., Fla., Colo.

*Smicra rufipes* Kirby, 1883. Linn. Soc. London, Jour., Zool. 17: 70. Preocc.  
*Chalcis phoenicapoda* Burks, 1940. U. S. Natl. Mus. Proc. 88: 257. ♀.  
N. name.

#### Genus SPILOCHALCIS Thomson

**Spilochalcis** Thomson, 1876 (1875). Hym. Scand., v. 4, p. 15.

Type: *Chalcis xanthostigma* Dalman. Monob.

**Diplodontia** Ashmead, 1888. Ent. Amer. 4: 87.

Type: (*Smicra carolina* Ashmead)=*Chalcis nigricornis* Fabricius.  
Desig. by Ashmead, 1904.

**Eustypiura** Ashmead, 1904. Carnegie Mus. Mem. 1: 251, 253, 412.

Type: *Eustypiura bicolor* Ashmead. Orig. desig.

**Enneasmicra** Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 253, 449.

Type: *Smicra exinaniens* Walker. Orig. desig.

**Octosmicra** Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 253, 450.

Type: *Octosmicra laticeps* Ashmead. Orig. desig.

**Heptasmicra** Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 253, 451.

Type: *Smicra oblitterans* Walker. Orig. desig.

**Hexasmicra** Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 254, 454.

Type: *Smicra transversa* Walker. Orig. desig.

**Pentasmicra** Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 254, 455.

Type: *Pentasmicra brasiliensis* Ashmead. Orig. desig.

**Tetrasmicra** Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 254, 456.

Type: *Smicra concitata* Walker. Orig. desig.

**Trismicra** Ashmead, 1904. Carnegie Mus. Mem. 1: 252, 254, 456.

Type: *Smicra contracta* Walker. Monob.

Revision: Burks, 1940. U. S. Natl. Mus. Proc. 88: 243, 263-343.

**albifrons** (Walsh). Common throughout U. S.; Ont., B. C. Hosts: *Chalepus dorsalis* Thunb.; *Exema dispar* Lac.; *Hemerocampa leucostigma* (A. and S.); *Ancylis comptana* (Froel.); *A. comptana fragariae* (W. and R.); *A. divisana* Wlkr.; *Arogalea cristifasciella* (Chamb.); *Cremona cotoneaster* Busck; *Plutella maculipennis* (Curt.); *Argyresthia thuiella* (Pack.); *Coleophora fletcherella* Fern.; *C. laricella* (Hbn.); *C. malivorella* Riley; *C. pruniella* Clem.; *C. salmani* Heinr.; ?*Bedellia somnuleutella* Zell.; *Apanteles marginiventris* (Cress.); *A. militaris* (Walsh); *Gelis minimus* Walsh; borer in ragged stem.

*Chalcis albifrons* Walsh, 1861. Ill. State Agr. Soc. Trans. 4: 364, 369.

*Spilochalcis torvina aencyiae* Girault, 1920. U. S. Natl. Mus. Proc. 58: 192.  
♂ ♀.

Biology: Beacher, 1947. Ent. Soc. Amer. Ann. 40: 533-544.

*apaiis* Burks. Tex. Host: *Microlepidopteron* on *Lantana horrida*.

*Spilochalcis apaiis* Burks, 1940. U. S. Natl. Mus. Proc. 83: 315. ♀.

*arcana* (Cresson). Mass., Del., N. Dak., Colo.

*Smicra arcana* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 44. ♂.

*Smicra enausta* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 46. ♂.

*bioculata* (Cresson). Fla., Tex., Kans., Colo.

*Smicra bioculata* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 43. ♂.

*Smicra bioculata* var. *faceta* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 43. ♂.

*clora* Burks. Tex., Ark.

*Spilochalcis clora* Burks, 1940. U. S. Natl. Mus. Proc. 88: 306. ♂.

*coxalis* (Cresson). N. Y. to Ga.; Mo., Iowa.

*Smicra coxalis* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 45. ♂.

*Spilochalcis virens* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 6 ♂.

*delicata* (Cresson). La., Tex.

*Smicra delicata* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 54. ♀.

*delumbis* (Cresson). Widespread throughout U. S. and Canada. Hosts: *Ancylis comptana* (Froel.); *A. comptana fragariae* (W. and R.); *Anacampsis fragariella* Busck; *Chlamisus plicata* (F.); *Lema nigrovittata* (Guér.); *L. trilineata* (Oliv.).

*Smicra delumbis* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 40. ♂ ♀.

Biology: Chamberlin, 1933. Ent. Soc. Wash. Proc. 35: 106-107.

*dema* Burks. Ind., Mo., N. Mex. Host: *Frumenta nundinella* (Zell.).

*Spilochalcis dema* Burks, 1940. U. S. Natl. Mus. Proc. 88: 330. ♂ ♀.

*dorsata* (Cresson). N. C., Fla., Ill., Mo., Kans., Tex.

*Smicra dorsata* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 49. ♀.

*Spilochalcis missouriensis* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 6. ♀.

*elachis* Burks. Fla.

*Spilochalcis elachis* Burks, 1940. U. S. Natl. Mus. Proc. 88: 294. ♀.

*enocki* Ashmead. La.

*Spilochalcis enocki* Ashmead, 1904. Carnegie Mus. Mem. 1: 439. ♀.

*eubule* (Cresson). Ga.

*Smicra Eubule* Cresson, 1865. Ent. Soc. Phila. Proc. 4: 93.

*exornata* (Cresson). Tex. Host: ?*Mimorista flavidissimalis* (Grote).

*Smicra exornata* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 50. ♂.

*femorata* (Fabricius). Ga., Fla., Tex.

*Crabro femoratus* Fabricius, 1775. Systema Ent., p. 375.

*Smicra ignea* Cresson, 1865. Ent. Soc. Phila. Proc. 4: 92.

*Smicra mirabilis* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 53. ♂.

*flammeola* (Cresson). Tex.

*Smicra flammeola* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 48. ♂ ♀.

*flavopicta* (Cresson). N. Y. to Fla., Tex., Kans. and Ill.; Colo., N. Mex., Ariz., Calif., Oreg. Hosts: *Anthonus grandis* Boh.; *Celama sorghiella* (Riley); *Phalonia* sp.; *Acrobasis* sp.; *Homoeosoma electellum* (Hulst); *Eurukuttarus confederata* (Grote); *Ancylis comptana* (Froel.); ?*Epiblema scudderiana* (Clem.); ?*E. tripartitana* (Zell.); *Rhyacionia frustrana* (Comst.); *Argyrotaenia velutinana* (Wlkr.); *Sparganothis sulfuriana* (Clem.); *Anacampsis fragariella* Busck.; *Meteorus laphygmae* Vier.

*Smicra flavopicta* Cresson, 1865. Ent. Soc. Phila. Proc. 4: 99.

*Smicra delira* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 41. ♂.

*Smicra decem-punctata* Ashmead, 1881. Amer. Ent. Soc. Trans. 9: Proc. p. xxix. ♀.

*Smicra mendica* Cresson. 1872. Amer. Ent. Soc. Trans. 4: 41. ♂.

Biology: Reinhard, 1938. Tex. Agr. Expt. Sta. Bul. 559: 31-32.—Underhill, 1943. Va. Agr. Expt. Sta. Bul. 349: 12.—Needham, 1948. Ecol. Monog. 18: 446.

*hirtifemora* (Ashmead). D. C., N. C., Ga., Fla., Tenn., Ohio, Ill., Tex. Hosts: *Mesogramma polita* (Say); *M. polygonastyla* (Mete.); *Platychirus* sp.;

*Apanteles marginiventris* (Cress.); *A.* sp.

*Smicra hirtifemora* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. x.  
♂.

**igneoides** (Kirby). N. H. to Fla.; Ind., Ill., S. Dak., Kans., Okla., Tex., N. Mex. Calif., Mont., Alta. Hosts: *Heliothis armigera* (Hbn.); *Laphyrgma frugiperda* (A. and S.); *Mineola indigenella* (Zell.); *Gretchenia deludana* (Clem.); *Eurukutatarus confederata* (Grote).

*Smicra igneoides* Kirby, 1883. Linn. Soc. London Jour., Zool. 17: 71.

*Smicra vittata* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. x. ♀.

*Spilochalcis mesillae* Cockerell, 1897. Ann. Mag. Nat. Hist. (6) 19: 403. ♀.

**juxta** (Cresson). Md., Ill., Kans., Tex.

*Smicra juxta* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 54. ♀.

**lanieri** (Guérin). Fla.

*Chalcis Lasnierii* Guérin, 1845. Iconogr. Règne Anim. Ins., p. 412.

*Chalcis lanieri* Guérin, 1857. In de la Sagra, Hist. Fis. Polit. y Nat. Cuba v. 7, p. 753. Emend.

**lecta** (Cresson). Tex.

*Smicra lecta* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 44. ♂ ♀.

**leptis** Burks. Calif., Nev., Idaho. Hosts: *Ancylis comptana* (Froel.); *Spilonota ocellana* (D. and S.); *Archips argyrospila* (Wlkr.); *Zelleria haimbachii* Busck

*Spilochalcis leptis* Burks, 1940. U. S. Natl. Mus. Proc. 88: 340. ♂ ♀.

**maria** (Riley). East. and Cent. U. S.; Ariz. Hosts: *Callosamia promethea* (Drury); *Philosamia cynthia* (Drury); *Rothschildia* sp.; *Samia cecropia* (L.); *Telea polyphemus* (Cram.); *Thyridopteryx ephemeraeformis* (Haw.).

*Chalcis maria* Riley, 1870. Amer. Ent. 2: 101. ♂ ♀.

*Chalcis mariae* Riley, 1872. Mo. State Bd. of Agr. Ann. Rpt. 7: 109. 123. Emend.

Biology: Schaffner and Griswold, 1934. U. S. Dept. Agr. Misc. Pub. 188: 26, 152.

**melana** Burks. Ill.

*Spilochalcis melana* Burks, 1940. U. S. Natl. Mus. Proc. 88: 316. ♂ ♀.

**nigricornis** (Fabricius). N. H. to S. C.; Ind., Ill., La., Tex., Nebr., S. Dak., N. Dak. Hosts: *Adoneta spinuloides* (H.-S.); *Limacodes* sp.; *Parasa indetermina* (Bdvl.).

*Chalcis nigricornis* Fabricius, 1798. Sup. Ent. System. p. 243.

*Chalcis bracata* Sanborn, 1863 (1862). Mass. Bd. Agr. Rpt. 10: 172. ♀.

*Smicra bracata coaequalis* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 46. ♂.

*Smicra carolina* Ashmead, 1887. Amer. Ent. Soc. Trans. 14: 183. ♂.

*Diplodontia secunda* Girault, 1917. Deser. Hym. Chalcidoid. Variorum cum Observ. V, p. 10. ♀.

Taxonomy: Girault, 1920. U. S. Natl. Mus. Proc. 58: 194. ♀.

**nortonii** (Cresson). N. Y. to N. C., Ill., Tex. Hosts: *Limacodes* sp.; *Phobetron pithecium* (A. and S.); *Prolimacodes badia* (Hbn.).

*Smicra Nortonii* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 45. ♂.

**odontotae** Howard. N. J., D. C., N. C. Host: *Chalepus dorsalis* Thunb.

*Spilochalcis odontotae* Howard, 1885. U. S. Dept. Agr. Bur. Ent. Bul. 5: 7, 32. ♂.

Biology: Chittenden, 1902. U. S. Dept. Agr. Div. Ent. Bul. 38: 82.

**pallens** (Cresson). S. C., Tex. Hosts: *Apanteles marginiventris* (Cress.); *Meteorus laphygmae* Vier.; *Rogas laphygmae* Vier.

*Smiera palens* Cresson, 1865. Ent. Soc. Phila. Proc. 4: 96.

*Smiera pallens* Cresson, 1865. Ent. Soc. Phila. Proc. 4: 196. Emend.

Biology: Vickery, 1929. U. S. Dept. Agr. Tech. Bul. 138: 21, 32-35, 50-52, 58.

**pallipes** (Smith). Fla., Minn. Host: *Archips semiferana* (Wlkr.).

*Chalcis flavipes* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. xi. ♂. Preocc.

*Chalcis pallipes* Smith, 1886. Ent. Amer. 2: 19. N. name.

*Chalcis pallidipes* Dalla Torre, 1898. Cat. Hym., v. 5, p. 391. Emend.

**phais** Burks. Tex. Host: ?Citheroniid.

*Spilochalcis phais* Burks, 1940. U. S. Natl. Mus. Proc. 88: 307. ♂ ♀.

**phoenica** Burks. Tex. Host: *Chlosyne lacinia crocale* (Edw.).

*Spilochalcis phoenica* Burks, 1940. U. S. Natl. Mus. Proc. 88: 278. ♂ ♀.

**sanguiniventris** (Cresson). Va., N. C., Ga., Fla., Tex. Hosts: *Exema conspera* (Mann.); ?*Prodenia eridania* (Cram.).

*Smicra sanguiniventris* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 36, 43. ♀.

*Smicra sanguineiventris* Dalla Torre, 1898. Cat. Hym., v. 5, p. 381. Emend.

**side** (Walker). Throughout U. S. and Canada. Hosts: *Hypera nigrirostris* (F.); *H. ruminis* (L.); *Rhynchaenus pallicornis* (Say); *Laphygrma frugiperda* (A. and S.); *Hulstia undulatella* (Clem.); *Ancylis compiana* (Frcl.); *A. divisana* (Wlk.); *Grapholita molesta* (Busck); *Argyrotaenia velutinana* (Wlk.); *Anarsia lineatella* Zell.; *Exoteleia pinigoliella* (Chamb.); *Recurvaria piceaella* Kearf.; *Plutella maculipennis* (Curt.); *Argyresthia thiarella* Pack.; *Choreutis silphella* Grote; *Coleophora fletcherella* Fern.; *C. laricella* (Hbn.); *C. malivorella* Riley; *C. pruniella* Clem.; *C. salmani* Heinr.; *Bucculatrix thurberiella* Busck; *Apanteles congregatus* (Say); *S. melanoscelus* (Ratz.); *A. militaris* (Walsh); *Meteorus laphygmae* Vier.; *M. versicolor* (Wesm.); *Camptolepis argentifrons* (Cress.); *Horogenes insularis* (Cress.); *H. plutellae* (Vier.).

*Smiera side* Walker, 1843. Soc. Ent. France Ann. (2) 1: 145. ♀.

*Smicra torvina* Cresson 1872. Amer. Ent. Soc. Trans. 4: 40. ♀.

Biology: Vickery, 1929. U. S. Dept. Agr. Tech. Bul. 138: 21, 32-33, 52-53, 58.—Doner, 1936. Ent. Soc. Amer. Ann. 29: 234.

**subobsoleta** (Cresson). N. Dak. to Ill., Tex. and Mont.

*Smicra subobsoleta* Cresson, 1872. Amer. Ent. Soc. Trans. 4: 42. ♂.

**tanais** Burks. Tex., Calif. Host: *Gnorimoschema* sp.

*Spilochalcis tanais* Burks, 1940. U. S. Natl. Mus. Proc. 88: 309. ♂ ♀.

**transitiva** (Walker). Ga., Fla.

*Smiera transitiva* Walker, 1862. Ent. Soc. London Trans. (3) 1: 371. ♀.

*Smiera pulchra* Cresson, 1865. Ent. Soc. Phila. Proc. 4: 94.

**xantha** Burks. Tex., N. Mex., Ariz.

*Spilochalcis xantha* Burks, 1940. U. S. Natl. Mus. Proc. 88: 320. ♀.

**xanthostigma** (Dalman). Ont. Host: *Coleophora laricella* (Hbn.).

*Chalcis xanthostigma* Dalman, 1820. Svenska Vetensk. Akad. Handl. 41: 141. Taxonomy: Graham, 1944. Ent. Soc. Ontario Ann. Rpt. 74: 49.

### Genus CERATOSMICRA Ashmead

**Sayiella** Ashmead, 1904. Carnegie Mus. Mem. 1: 251, 253. Preocc.

Type: *Smicra debilis* Say. Monob.

**Ceratosmicra** Ashmead, 1904. Carnegie Mus. Mem. 1: 251, 253.

Type: *Ceratosmicra petiolata* Ashmead. Monob.

**Mischosmicra** Ashmead, 1904. Carnegie Mus. Mem. 1: 251, 253.

Type: *Mischosmicra kahlii* Ashmead. Monob.

**Melanosmicra** Ashmead, 1904. Carnegie Mus. Mem. 1: 251, 253, 447.

Type: *Melanosmicra immaculata* Ashmead. Orig. desig.

**Eusayia** Ashmead, 1904. Ent. Soc. Wash. Proc. 6: 126. N. name.

Revision: Burks, 1940. U. S. Natl. Mus. Proc. 88: 343-351.

**debilis** (Say). R. I. to Minn. and Kans.; Fla., Iowa, and Tex. Hosts: *Apanteles delicatus* How.; *A. hyphantriae* Riley; *A. melanoscelus* (Ratz.); *Meteorus hyphantriae* Riley; *Casinaria limenitidis* How.

*Chalcis debilis* Say, 1836. Boston Jour. Nat. Hist. 1: 271.

*Smicra longipetiolata* Ashmead, 1885. Amer. Ent. Soc. Trans. 12: Proc. p. x.  
♂.

*Mischosmicra Kahlii* Ashmead, 1904. Carnegie Mus. Mem. 1: 250, 381. ♀.

**immaculata** (Cresson). Tex. Host: *Meteorus* sp.

*Smiera immaculata* Cresson, 1865. Ent. Soc. Phila. Proc. 4: 97.

**meteori** Burks. N. Y. and Mass. to N. C., Tenn. and Ill.; La., Tex. Hosts: *Laphygma frugiperda* (A. and S.); *Apanteles delicatus* How.; *A. sp.*; *Meteorus hyphantriae* Riley; *M. sp.*; *Casinaria limenitidis* How.

*Ceratosmicra meteori* Burks, 1940. U. S. Natl. Mus. Proc. 88: 346. ♂ ♀.

**paya** Burks. Ill., Kans., Tex., Calif. Host: *Oidaematophorus paleaceus* (Zell.).  
**Ceratosmicra paya** Burks, 1940. U. S. Natl. Mus. Proc. 88: 348. ♂ ♀.

## Family LEUCOSPIDAE

Revision: Weld 1922. U. S. Natl. Mus. Proc. 61 (6): 1-43.

### Genus LEUCOSPIS Fabricius

**Leucospis** Fabricius, 1775. Syst. Ent., p. 361.

Type: *Leucospis dorsigera* Fabricius. Monob.

**Coelogaster** Schrank, 1780. Schrift. Gesell. Naturf. Freunde Berlin 1: 303  
 (no species).

Type: (*Coelogaster passavianus* Schrank)=*Leucospis dorsigera* Fabricius. Included by Foerster, 1782.

**Leucaspis** Burmeister, 1835. Arch. f. Naturgesch. 1 (2): 47. Emend.

**Exochlaenus** Shipp, 1894. Ent. Monthly Mag. 30: 245.

Type: *Leucospis anthidioides* Westwood. Monob.

**Micrapion** Kriechbaumer, 1894. Berlin. Ent. Ztschr. 39: 315.

Type: *Micrapion bilineatum* Kriechbaumer. Monob.

**Parexoclaenus** Girault, 1915. Queensland Mus. Mem. 4: 355.

Type: *Parexoclaenus vespooides* Girault. Monob.

**Exoclaenoides** Girault, 1915. Queensland Mus. Mem. 4: 356.

Type: *Exoclaenoides unicinctus* Girault. Monob.

Revision: Weld, 1922. U. S. Natl. Mus. Proc. 61 (6): 1-43.

**affinis affinis** Say. Widespread in Canada and U. S. Hosts: *Ecdytolopha insciticiana* Zell.; *Anthidium emarginatum* (Say); *Dianthidium pudicum consimile* (Ashm.); *Megachile brevis* Say; *M. montivaga* Cress.; *Osmia atriventris* Cress.; *O. pumila* Cress.; *O. similima* Smith.

**Leucospis affinis** Say, 1824. In Keating, Narr. Long's 2nd Exped., App. p. 327.  
 ♂ ♀.

**Leucospis subnotata** Westwood, 1834. Ent. Mag. 2: 215. ♀.

**Leucospis fraterna** Say, 1836. Boston Jour. Nat. Hist. 1: 269. ♂ ♀.

**Leucospis basalis** Westwood, 1839. Ztschr. f. Ent. 1: 251. ♂ ♀.

**Leucospis Canadensis** Walker, 1860. Jour. Ent. 1: 17. ♂.

**Leucospis bicincta** Viereck, 1906. Amer. Ent. Soc. Trans. 32: 227. ♂.

Biology: Graenicher, 1906. Wis. Nat. Hist. Soc. Bul. 4: 153-159.

Morphology: Snodgrass, 1910. U. S. Natl. Mus. Proc. 39: 65.

**affinis floridana** (Cresson). Mass., Fla.

**Leucospis affinis** var. **floridana** Cresson, 1872. Amer. Ent. Soc. Trans. 4: 33.  
 ♂ ♀.

**birkmani** Brues. Tex.

**Leucospis birkmani** Brues, 1925. Psyche 32: 23. ♀.

**robertsoni** Crawford. Fla.

**Leucospis robertsoni** Crawford, 1909. Ent. Soc. Wash. Proc. 11: 51. ♂ ♀.

**slossonae** Weld. Ga., Fla.

**Leucospis slossonae** Weld, 1922. U. S. Natl. Mus. Proc. 61 (6): 11. ♂ ♀.

**texana** Cresson. N. C., Ga., Tex.

**Leucospis texana** Cresson, 1872. Amer. Ent. Soc. Trans. 4: 31, 191. ♂.

### Unplaced Genera

**Hoplocrepis** Ashmead, 1890. Ent. Soc. Wash. Proc. 1: 235.

Type: *Hoplocrepis albiclavus* Ashmead. Monob. and orig. desig.

**Lophocomodia** Ashmead, 1888. Kans. Agr. Expt. Sta. Bul. 3: App. p. VI.

Type: *Lophocomodia americana* Ashmead. Monob.

**Pteratomus** Packard, 1866. Essex Inst. Proc. 4: 137.

Type: *Pteratomus putnamii* Packard. Monob.

### Unplaced Species

- Entedon antiopae** Packard, 1881. Boston Soc. Nat. Hist. Proc. 21: 36. ♂.
- Stenomesius? aphidicola** Ashmead, 1880. Orange Insects, p. 67. ♂ ♀.
- Smicra Bimaculatas** (!) Strecker, 1878. War Dept. U. S. Ann. Rpt. for 1878, v. 2, pt. 3, p. 1848.
- Coccophagus (!) brunneus** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 205.—**Coccophagus bruneus** Dalla Torre, 1898. Cat. Hym., v. 5, p. 224, emend.
- Camptotera (!) clavata** Provancher, 1888. Addit. Corr. Faune Ent. Canada Hym., p. 404. ♂ ♀.
- Entedon coquilletti** Riley, 1889. U. S. Dept. Agr. Ann. Rpt. for 1888, p. 86.
- Stinoplus cyaneus** Ashmead, 1894. Amer. Ent. Soc. Trans. 21: 338. ♂.
- Semiotellus fasciatus** Provancher, 1881. Nat. Canad. 12: 294. ♂ ♀.
- Trichogramma flavus** Ashmead, 1880. Orange Insects, p. 33. ♀.
- Encyrtus Gastron** Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 21. ♀.
- Eulophus Gobryas** Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 26. ♂.
- Entedon Imbrasus** Walker, 1847. Ann. Mag. Nat. Hist. 20: 23. ♀.
- Leucospis integra** Haldeman, 1844. Acad. Nat. Sci. Phila. Proc. 2: 53. ♂.
- Perilampus laevis** Provancher, 1887. Addit. Corr. Faune Ent. Canada Hym., p. 199.—**Perilampus levis** Dalla Torre, 1898. Cat. Hym., v. 5, p. 355, emend.
- Semiotellus minimus** Provancher, 1881. Nat. Canad. 12: 295. ♀.
- Eulophus Minyas** Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 26. ♀.
- Cricellius megachilis** Ashmead, 1897. South. Calif. Acad. Sci. Proc. 1 (3): 6. ♂ ♀.
- Pteromalus nigricornis** Provancher, 1881. Nat. Canad. 12: 297. ♀.
- Semiotellus oblongus** Provancher, 1881. Nat. Canad. 12: 295. ♀.
- Eurytoma orbiculata** Say, 1836. Boston Jour. Nat. Hist. 1: 272.
- Pteratomus Putnamii** Packard, 1864. Essex Inst. Proc. 4: 138. ♂.
- Eulophus ramosus** Provancher, 1881. Nat. Canad. 12: 297. ♂ ♀.
- Encyrtus Reate** Walker, 1847. Ann. Mag. Nat. Hist. (1) 20: 22. ♂.
- Trigonoderus varipes** Viereck, 1903. Amer. Ent. Soc. Trans. 29: 75. ♀.

### Superfamily CYNIPOIDEA<sup>18</sup>

Revision: Dalla Torre and Kieffer, 1910. Cynipidae, Das Tierreich, vol. 24. This is the latest monograph of the species of the world. It closed with the literature of 1905.

#### Family IBALIIDAE

#### Subfamily IBALIINAE

#### Genus IBALIA Latreille

**Ibalia** Latreille, 1802. Hist. Nat. Crust. Ins., v. 3, p. 306.

Type: (**Ophion cultellator** Fabricius)=**Ichneumon leucospoides** Hochenwarth. Monob.

**Sagaris** Panzer, 1806. Krit. Rev. Insektenf. Deutschlands, v. 2, p. 91.

Type: **Ophion cultellator** Fabricius. Monob.

Parasitic on Siricidae.

<sup>18</sup> By L. H. Weld, Falls Church, Va.

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