

Резюме

Описываются 2 новых вида рода *Isoplia*-*Isoplia ganganicola* n. sp. и *Isoplia freyi* n. sp из западной Африки и сравниваются с известным до сих пор видом — *Isoplia lasiosoma* Burmeister.

Zitierte Literatur

BURMEISTER, H., Handbuch der Entomologie, 4 (2), 487, 1855.

PÉRINGUEY, L., Description Catalogue of the Coleoptera of South Africa. Trans. S. Afr. philos. Soc., 12, 622, 1902.

A Catalogue of the known Species of the World belonging to the Subfamily Aphidiinae

(Hymenoptera: Braconidae)

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Introduction

There can be little doubt that research in parasitic Hymenoptera has suffered a great deal in India because of the lack of up-to-date catalogues. This is particularly true of the Family *Braconidae* whose members though abundant in the Indian Union and exercising considerable control of many agricultural pests, have been, nevertheless, not intensively studied: either from the taxonomic or biological standpoint.

The subfamily *Aphidiinae* is particularly interesting since its members exclusively attack Aphids and are known, in many parts of the world, to keep their infestation in check to some extent. Our aphid fauna is large and varied and yet only three genera of the *Aphidiinae* are recorded from the Indo-Pakistan Subcontinent, viz. *Aphidius* NEES, *Diaeretus* FOERSTER and *Trioxys* HALIDAY. A species of the latter, the first record of the genus from the subcontinent, has been described by the junior authors only recently (SUBBA RAO & SHARMA, Ind. Journ. Ent., 20, 199—202, 1959).

This catalogue grew out of the taxonomic difficulties that were felt while collecting parasites of aphids, to study their taxonomy and biology.

We are aware of some lacunae in the present work, and so we cordially invite the critical suggestions of other workers in this group for our benefit. All such suggestions would be gratefully accepted, acknowledged and incorporated subsequently as far as possible.

It is hoped that the present effort will be of some use to biologists and taxonomists in this group. Literature up to 1957 has been consulted while preparing this for publication. A supplement on the *Aphidiinae* recorded between 1957—1960 will be published at an early date.

Salient characters of the Subfamily

Small, slender bodied insects upto 5 mm. in length. Head transverse or quadrate (except in *Dyscritus* MARSHALL), with sharp carinae delimiting the occiput from genae, temple and vertex; temples convex and narrow; mandibles triangular, apically bidentate; maxillary palpi 2—4 segmented, sometimes as long as the head, labial palpi usually shorter, 1—3 segmented. Antennae filiform, number of segments varying from 11—12 (in *Ephedrus* HALIDAY) to 20 or more (in *Praon* HALIDAY and *Aphidius* NEES), scape and pedicel short and subglobose. Prothorax short, mesonotum gibbous, notaulices may or may not be present or only partly indicated, mesoscutellum small, convex; mesopleura large. Metathorax small; propodeum reduced, usually convex but in certain forms nearly flat or with a posterior depression, propodeum usually bearing carinae (except in *Praon* HALIDAY where it is ecarinate). Legs long and slender. Venation of forewing widely varying from the rather 'full' pattern seen in *Ephedrus* HALIDAY and *Toxares* HALIDAY to the greatly reduced types seen in *Trioxys* HALIDAY, *Diaeretus* FOERSTER and *Myrmecobosca* MANEVAL. Dorsal sutures of abdomen all flexible, enabling it to be bent forward and beneath and beyond the thorax (during the act of oviposition), whence the former name "Flexiliventre", abdomen usually long and lanceolate in female, short and oval or spatulate in the male.

The parasites of this subfamily, so far as authentic records go, choose only aphids as their hosts. The parasitised aphids present the wellknown 'mummified' appearance. Pupation occurs within the dried up host skin, except in *Praon* HALIDAY, where the parasite larva makes a slit in the ventral surface of the host skin, comes out of it and spins a cocoon beneath the host skin. *Myrmecobosca* MANEVAL and *Menozzia* GOIDANICH have been recorded from ant nests and the hosts are not known. But in both cases it is suspected that the host is some aphid which had been carried inside the ant nest.

Key to Genera

1.	Ovipositor distinct	2
	Ovipositor concealed	<i>Gynocryptus</i> PÉREZ
2. (1)	Forewing with less than 3 cubital cells	3
	Forewing with 3 cubital cells	12
3. (2)	Venation more or less 'normal', though may be reduced: first abscissa of cubitus may be absent, recurrent and cubital cross veins may be partly effaced, but at least a stub of the cubitus is always present	4
	Venation much reduced: recurrent vein, cubital cross vein and cubitus entirely effaced	10
4. (3)	Forewing with a more or less complete discocubital cell because of the absence of the first abscissa of the cubitus; propodeum may or may not be carinate	5
	First abscissa of cubitus present, propodeum always without carinae	<i>Praon</i> HALIDAY
5. (4)	Abdomen peculiar: composed of three normal proximal segments of which the 3rd is the largest, and 6 distal, tubular, elongated, subequal segments	<i>Menozzia</i> GOIDANICH
	Abdomen normal	6
6. (5)	Ovipositor and ovipositor sheath curved downward. <i>Monoctonus</i> HALIDAY	
	Ovipositor and ovipositor sheath either straight or curved upwards	7
7. (6)	Middle region of the petiole "swollen", bearing protuberances	<i>Pauesia</i> PÉREZ
	Petiole not as above	8

8. (7) Radial vein strongly elongated, reaching more than 2/3rds of the distance to the wing margin 9
 Radial vein short, not reaching more than 1/2 the distance to the wing margin *Aphidius* NEES
9. (8) Radial vein almost reaching the wing margin; head distinctly rounded *Dyscritulus* HINCKS (= *Dyscritus* MARSHALL preocc.)
 Radial elongated but not reaching the wing margin; head transverse *Aclitus* FOERSTER
10. (4) Fore- and hind-wings truncated: forewings just beyond the stigma, hind wings a little further. Only a stub of the radius present; veins of both wings very thick; hindwing with one closed cell. Abdomen recurved below the thorax between 3rd and 4th segments *Myrmecobosca* MANEVAL
 Wings not truncated; veins not thick; hindwing without a closed cell. Abdomen not recurved 11
11. (10) Female with prongs on the terminal abdominal sternite . *Trioxys* HALIDAY
 Female without prongs on the terminal abdominal sternite *Diaeretus* FOERSTER
12. (3) Antennae 20—21 segmented; ovipositor and sheath decurved (as in *Monoctonus*), ovipositor sheath markedly broadened caudad, tridentate on the posterior margin *Toxares* HALIDAY
 Antennae 11—12 segmented, ovipositor and sheath not decurved and not broadened caudad and without teeth on the posterior margin; but compressed and rather narrow *Ephedrus* HALIDAY

The genera *Aphidius* NEES and *Trioxys* HALIDAY are further subdivided into 4 and 2 subgenera respectively. Keys to the subgenera of *Aphidius* and *Trioxys* are given below.

Key to the Subgenera of *Aphidius* NEES¹⁾

1. Recurrent vein complete 2
 Recurrent vein partly effaced 4
2. (1) Propodeum without carinae; metacarpus not longer than width of stigma Subgenus *Xenostigmus* SMITH
 Propodeum with carinae, carinae may or may not form an areola above the propodeum; metacarpus longer than width of stigma 3
3. (2) Carinae forming an exceptionally large, wide areola, when present on posterior declivity of propodeum; or longitudinal carinae absent on posterior declivity Subgenus *Protaphidius* ASHMEAD
 Carinae forming a small pentagonal areola; or carinae faint or absent from anterior declivity of propodeum Subgenus *Aphidius* NEES
4. (1) Propodeum bearing carinae; petiole practically parallel sided; anterior prong of the second valvulae (of the ovipositor) large and appearing flat from the side Subgenus *Lysaphidus* SMITH
 Propodeum without carinae; petiole noticeably enlarged at the posterior end; second valvulae (of the ovipositor) smaller and appearing more or less cylindrical from the side Subgenus *Lysiphlebus* FOERSTER

Key to the Subgenera of *Trioxys* HALIDAY¹⁾

Posterior prongs on the terminal abdominal sternite without an accessory prong; terminal abdominal segments not bearing conspicuous, stout spines on the dorsal, caudal margin Subgenus *Trioxys* HALIDAY

¹⁾ From SMITH, C. F., The Aphidiinae of North America. The Ohio State University, Contributions in Zoology and Entomology, No. 6. Columbus, 1944.

Posterior prongs on the terminal abdominal sternite with an accessory prong; terminal abdominal segments bearing conspicuous, stout spines on the dorsal, caudal margin Subgenus *Acanthocaudus* SMITH

Genus *Aphidius* NEES

Aphidius NEES, 1818. Nova Acta Acad. Caes. Leopold. Carol., 9, 302.

Subgenus *Xenostigmus* SMITH

Xenostigmus SMITH, 1944. Aphidiinae N. Amer., pp. 35, 36.

Type: *Aphidius bifasciatus* ASHMEAD. Monob. & orig. desig.
bifasciatus ASHMEAD N. America: U.S.A.
Aphidius bifasciatus ASHMEAD, 1891. Canad. Ent., 23, 6. ♀.
Aphidius (Xenostigmus) bifasciatus SMITH, 1944. Aphidiinae N. Amer., p. 36. ♀ ♂.
 Hosts: *Cinara australis* (ASHMEAD); *C. carolina* TISSOT; *C. taedae* TISSOT.

Subgenus *Protaphidius* ASHMEAD

Coelonotus FOERSTER, 1862. Verh. Naturh. Ver. Rheinl., 19, 248. Proecc.
 Type: *Coelonotus rufus* FOERSTER. Monob.

Coelonotus (err.) THOMPSON, 1895. Opusc. Ent., 20, 2334.

Protaphidius ASHMEAD, 1900. Canad. Ent., 32, 368.

Type: *Coelonotus rufus* FOERSTER. Autob.
bicolor ASHMEAD N. America: U.S.A.
Aphidius bicolor ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus., 11, 658. ♀.
Aphidius pinaphidis ASHMEAD, 1891. Canad. Ent., 23, 6. ♂.
 Host: *Cinara strobi* (FITCH); *C. longipinosa* TISSOT;
C. pini (LINN.); *C. australis* (ASHMEAD).

californicus ASHMEAD N. America: U.S.A.
Aphidius californicus ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus. 11, 660. ♀.
 Host: *Cinara occidentalis* (DAVIDS.); *Schizolachnus piniradiatae* (DAVIDS.).

gillettei GAHAN N. America: U.S.A.
Aphidius gillettei GAHAN, 1911. Bull. Maryland agr. expt. Sta. 152, p. 171. ♀.
 Host: *Lachnus* sp.

grossus (FAHRINGER) Europe: Austrian Alps.
Coelonotus grossus FAHRINGER, 1937. Festschr. 60. Geburtst. E. Strand, 3, 242. ♀ ♂.
 Host: *Cinara cecconii* DEL G.

japonicus ASHMEAD Asia: Japan; China; Formosa.
Aphidius japonicus ASHMEAD, 1906. Proc. U. S. Nat. Mus., 30, 189. ♂.

Coelonotus japonicus FAHRINGER, 1937. Festschr. 60. Geburtst. E. Strand., **3**, 241.

Hosts: *Lachnus* (*Pterochlorus*) *tropicalis* VAN DER GROOT; *Macrosiphum avenae* (F.); *Toxoptera aurantii* BOYER.

Further description: WATANABE, 1938. Insect. Matsum. **13**, 83. ♀, ♂.

juniperaphidis GAHAN

N. America: U.S.A.

Aphidius juniperaphidis GAHAN, 1911. Bull. Maryland agr. expt. Sta. **152**, p. 174. ♀.

Hosts: *Cinara occidentalis* (DAVIDS.); *C. pulverulus* (G. & P.); *Cinara* sp.; *Lachnus* sp.

laricis HALIDAY

Europe: England, Switzerland, Spain.

Aphidius laricis HALIDAY, 1835. Ent. Mag., **2**, 97. ♀ ♂.

Coelonotus laricis SZÉPLIGETI, 1904. Gen. Ins. fasc. 22 a—b, p. 185.

Coelonotus (*Aphidius*) *laricis* WATANABE, 1940. Ins. Matsum., **15**, 55. ♀ ♂.

Host: *Cinara laricicola* MATS.

macrogaster ASHMEAD

N. America: Canada.

Aphidius macrogaster ASHMEAD, 1891. Canad. Ent., **23**, 5. ♀.

nigrovarius PROVANCHER

N. America: U.S.A.

Aphidius nigrovarius PROVANCHER, 1888. Addit. Corr. Faune ent. Canada Hym., p. 396. ♀.

Host: *Lachnus* sp.

pictus HALIDAY

Europe: England.

Aphidius pictus HALIDAY, 1834. Ent. Mag., **2**, 85. ♀;

MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 563. ♀ (Redescription).

pini HALIDAY

Europe: England, Switzerland; Spain; Austrian Alps.

Aphidius pini HALIDAY, 1834. Ent. Mag., **2**, 96. ♀; MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 566—67.

Coelonotus pini SZÉPLIGETI, 1904. Gen. Ins. fasc. 22 a—b, p. 185.

Coelonotus (*Aphidius*) *pini* WATANABE, 1940. Ins. Matsum. **15**, 53—56. (Further description).

Hosts: *Cinara laricola* MATS.; *C. pinea* MORDW.; *Lachnus pini* L.; *L. cembrae* SEITNER.

procephali ASHMEAD

N. America: U.S.A.

Aphidius procephali ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus., **11**, 659. ♂.

Host: *Procephalus* sp. on *Pinus inops*; *Cinara* spp. on pine.

scorpinicus SMITH

N. America: U.S.A.

Aphidius (*Protaphidius*) *scorpinicus* SMITH, 1944. Aphidiinae N. Amer., p. 45. ♀ ♂.

takomaensis SMITH N. America: U.S.A.
Aphidius (Protaphidius) takomaensis SMITH, 1944. *Aphidiinae* N. Amer.,
 p. 46. ♀ ♂.
 Host: *Cinara hottesi* (G. & P.)

varigatus SMITH N. America: U.S.A.
Aphidius (Protaphidius) varigatus SMITH, 1944. *Aphidiinae* N. Amer.,
 p. 47. ♀.
 Host: *Cinara hottesi* (G. & P.); *Lachnus* sp.

varius NEES Europe: Germany.
Aphidius varius NEES, 1834. Hym. Ichn. aff. Monogr., 1, 21. ♀ ♂.
Coelonotus varius SZÉPLIGETI, 1902. Gen. Ins. fasc., 22, p. 185.

xanthotherus SMITH N. America: U.S.A.
Aphidius (Protaphidius) xanthotherus SMITH, 1944. *Aphidiinae* N. Amer.,
 p. 48. ♀ ♂.
 Hosts: *Cinara carolina* TISSOT; *C. strobili* (FITCH); *Cinara* sp.

Subgenus *Lysaphidus* SMITH

Lysaphidus SMITH, 1944. *Aphidiinae* N. Amer., pp. 35, 72.
 Type: *Aphidius (Lysaphidus) adelocarinus* SMITH. Orig. desig.

adelocarinus SMITH N. America: U.S.A.
Aphidius (Lysaphidus) adelocarinus SMITH, 1944. *Aphidiinae* N. Amer.,
 pp. 72, 73. ♀ ♂.
 Host: *Capitophorus glandulosus* (KLTB.); *Pseudoepameibaphis glauca*
 G. & P.; *P. xenotrichus* K. & S.

multiarticulatus ASHMEAD N. America: U.S.A.
Lysiphlebus multiarticulatus ASHMEAD, 1889 (1888). Proc. U. S. Nat.
 Mus., 11; 664. ♂.
Aphidius (Lysaphidus) multiarticulatus SMITH, 1944. *Aphidiinae* N.
 Amer., p. 74. ♂ (Redescription).

ramithyrus SMITH N. America: U.S.A.
Aphidius (Lysaphidus) ramithyrus SMITH, 1944. *Aphidiinae* N. Amer.,
 p. 75. ♀ ♂.
 Host: *Capitophorus gregarius* KNOWLTON.

rosaphidis SMITH N. America: U.S.A.
Aphidius (Lysaphidus) rosaphidis SMITH, 1944. *Aphidiinae* N. Amer.,
 pp. 75, 76. ♀ ♂.
 Host: *Capitophorus potentillae* (WALK.); *C.* sp.

Subgenus *Lysiphlebus* FOERSTER

Lysiphlebus FOERSTER, 1862. Verh. Naturh. Ver. Rheinl., 19, 248 & 250;
 SZÉPLIGETI, 1904. Gen. Ins. fasc. 22 a—b, p. 188; SMITH, 1944. *Aphidi-*
inae N. Amer., pp. 35, 76. (Subgeneric rank).
 Type: *Bracon dissolutus* NEES. Monob. & orig. desig.

Aphidaria PROVANCHER, 1888. Addit. Corr. Faune Ent. Canada Hym., p. 396.

Type: *Aphidaria basilaris* PROVANCHER. Monob.

cardui MARSHALL Europe: England; France; Spain; Yugoslavia; U.S.S.R.
Aphidius cardui MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 593, 594. ♀ ♂.

Hosts: *Aphis amygdali* BUCKT.; *A. cardui* L.; *A. genistae* SCOP.; *Macrosiphum cyparissiae* BUCKT.

Biology: GAUTIER, BONNAMOUR & GAUMONT, 1926. Bull. Soc. ent. France, 1926: 148—149.

var. *aceri* IVANOV Europe: South U.S.S.R.

Aphidius cardui var. n. *aceri* IVANOV, 1927. Ent. Mitt., 16, 429.

Host: Aphids on *Acer campestre* L. and *A. platanoides* L.

var. *artemisiae* IVANOV Europe: South U.S.S.R.

Aphidius cardui var. n. *artemisiae* IVANOV 1927. Ent. Mitt., 16, 429.

Host: Aphids on *Artemisia absinthium* L.

var. *cirsii* IVANOV Europe: South U.S.S.R.

Aphidius cardui var. n. *cirsii* IVANOV, 1927. Ent. Mitt., 16, 430.

Host: Aphid on *Cirsium eriophorum* SCOP.

var. *polygoni* IVANOV Europe: South U.S.S.R.

Aphidius cardui var. n. *polygoni* IVANOV, 1927. Ent. Mitt., 16, 430.

Host: Aphid on *Polygonum aviculare* L.

chrysoaphidis SMITH N. America: U.S.A.

Aphidius (Lysiphlebus) chrysoaphidis SMITH, 1944. Aphidiinae N. Amer., pp. 77, 78. ♀ ♂.

Host: *Aphis chrysothamni* WILSON; *Aphis gregalis* KNOWLTON.

dissolutus (NEES) Europe: Germany; Britain, Italy; Austria.

Bracon dissolutus NEES, 1834. Hym. Ichn. aff. Monogr., 1, 23. ♀ ♂.

Lysiphlebus dissolutus SZÉPLIGETI, 1904. Gen. Ins. fasc. 22 a—h, p. 188.

Hosts: *Aphis fabae* (SCOP.); *A. fabae armata* (HAUSM.); *Aphis rumicis* L.

fabarum MARSHALL Europe: England; France; Spain; Czechoslovakia.
Asia: Japan.

Aphidius fabarum MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 599, 600. ♀ ♂.

Lysiphlebus fabarum WATANABE, 1949. Mushi (Fukuoka), 20, 43. ♀ ♂ (Redescription).

Hosts: *Aphis rumicis* L.; *A. neoarticulatus* THEOB.; *Peragandeida quilibi* G. FRESCA.

Biology: GENIEYS, 1926. Feuille. Nat., 47, 121 (aberration in oviposition); PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat., 20, 11—12; DRAGON, 1934. Ber. Forschungsinst. Čechoslov. Zuckerindust., 37, 163—66.

- var. *inermis* PÉREZ Europe: Spain.
Lysiphlebus fabarum var. *inermis* PERÉZ, 1931. Eos, 7, 46. ♀ ♂.
 Host: Black aphid of *Urtica urens*.
 Biological note: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat. 20, 12.
- flavidus* (GAHAN) N. America: U.S.A.
Lysiphlebus flavidus GAHAN, 1911. Maryl. agr. expt. Sta. Bull. 152, p. 186. ♀.
Aphidius (*Lysiphlebus*) *flavidus* SMITH, 1944. Aphidiinae N. Amer., pp. 77, 79. ♀ ♂.
 Host: *Aphis albipes* OESTL.; *Aphis debilicornis* G. & P.
- fuscatus* (CRESSON) Central-America: Cuba.
Trioxys fuscatus CRESSON, 1865. Proc. ent. Soc. Philadelphia, 4, 89. ♀.
Lysiphlebus fuscatus GAHAN, 1911. Maryl. agr. expt. Sta. Bull. 152, p. 185.
Aphidius (*Lysiphlebus*) *fuscatus* SMITH, 1944. Aphidiinae N. Amer., pp. 77, 79. ♀.
- gomezi* PÉREZ Europe: Spain.
Aphidius gomezi PÉREZ, 1929. Bol. Pat. veg. ent. agric., 4, 51. ♀ ♂.
 Host: *Toxoptera aurantii* BOY.; *Aphis rumicis* L.
 Biological note: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat., 20, 14.
- innovatus* PÉREZ Europe: Spain.
Lysiphlebus innovatus PÉREZ, 1931. Eos, 7, 39. ♀ ♂.
 Host: *Pergandeida quilisi* G. FRESCA.
 Biological note: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat. 20, 14.
- janinii* PÉREZ Europe: Spain.
Aphidius janinii PÉREZ, 1929. Bull. Pat. veg. ent. agric., 4, 61. ♀ ♂.
Lysiphlebus janinii PÉREZ, 1931. Eos, 7, 37 (Further description; biology).
 Host: *Aphis neoarticulatus* THEOB.; an aphid on artichoke.
- knowltoni* SMITH N. America: U.S.A.
Aphidius (*Lysiphlebus*) *knowltoni* SMITH, 1944. Aphidiinae N. Amer., pp. 77, 80. ♀ ♂.
 Hosts: *Aphis artemisicola* WILLIAMS; *Microsiphum acophorum* SMITH & KNOWLTON.
- moroderi* PÉREZ Europe: Spain.
Lysiphlebus moroderi PÉREZ, 1931. Eos, 7, 43. ♀ ♂.
 Host: Green aphid on *Erigeron canadensis*.
 Biological Note: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat., 20, 12.

testaceipes (CRESSON)

N. America: All U.S.A.; Bermuda.

Central America: Mexico; Haiti; Puerto Rico.

South America: Colombia.

Trioxys testaceipes CRESSON, 1880. U. S. Comm. Agric. Ann. Rept. for 1879, p. 208. ♀.*Aphidius citraphis* ASHMEAD, 1880. Orange Insects, p. 70. ♀ ♂.*Adialytus maidaphidis* GARMAN, 1885. Ill. State Ent. Rpt. 14, p. 31. ♀ ♂.*Aphidius flavicoxa* ASHMEAD, 1888. Fla. agr. expt. Sta. Bull. 2, p. 23. ♀ ♂.*Aphidaria basilaris* PROVANCHER, 1888. Addit. Corr. Faune Ent. Canada Hym., p. 396. ♀ ♂.*Lysiphlebus piceiventris* ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus., 11, 663, 664. ♀.*Lysiphlebus minutus* ASHMEAD, 1889 (1888). t. c.: 663, 664. ♂ ♀.*Lysiphlebus eragrostaphidis* ASHMEAD, 1889 (1888). t. c., p. 663, 665. ♂ ♀.*Lysiphlebus coquilleti* ASHMEAD, 1889 (1888). t. c., p. 663, 665. ♀ ♂.*Lysiphlebus cucurbitaphidis* ASHMEAD, 1889 (1888). t. c., p. 663, 666. ♀ ♂.*Lysiphlebus myzi* ASHMEAD, 1889 (1888). t. c., p. 663, 666. ♂ ♀.*Lysiphlebus gossypii* ASHMEAD, 1889 (1888). t. c., p. 663, 667. ♂ ♀.*Lysiphlebus abutilaphidis* ASHMEAD, 1889 (1888). t. c., p. 663, 667. ♂ ♀.*Lysiphlebus persicaphidis* ASHMEAD, 1889 (1888). t. c., p. 663, 668. ♀.*Lysiphlebus tritici* ASHMEAD, 1889 (1888). t. c., p. 663, 668. ♂ ♀.*Lysiphlebus baccharaphidis* ASHMEAD, 1889 (1888). t. c., p. 663, 668. ♂ ♀.*Aphidius persiaphis* COOK, 1891. Bull. Mich. agr. Coll., 73, p. 12. ♂.*Lysiphlebus crawfordi* ROHWER, 1909. Trans. Amer. ent. Soc., 35, 135. ♀ ♂.*Lysiphlebus testaceipes* GAHAN, 1910. Proc. ent. Soc. Wash., 12, 183.*Aphidius* (*Lysiphlebus*) *testaceipes* SMITH, 1944. Aphidiinae N. Amer., pp. 77, 82. ♀ ♂.

Hosts: *Aphis cerasifoliae* FITCH; *A. gossypii* GLOV.; *A. helianthi* MON.; *A. heraclella* DAVIS; *A. laburni* KALT.; *A. maidis* FITCH; *A. medicaginis* KOCH; *A. nerii* FONSC.; *A. neogilletti* PALMER; *A. oenotherae* OESTL.; *A. oestlundii* GILL.; *A. phaceliae* G. and P.; *A. rumicis* L.; *A. saliceti* KALT.; *Brevicoryne brassicae* (L.); *Capitophorus ribis* (L.); *Hysteroneura setariae* (THOS.); *Myzus rhamni* (FONSC.); *M. persicae* (SULZ.); *M. cerasi* (F.); *Macrosiphum rosae* (L.); *M. granarium* (KBY.); *M. citrifolii* (ASHM.); *M. cucurbitae* (THOS.); *Rhopalosiphum prunifoliae* (FITCH); *Lipaphis erysimi* L. (= *Rhopalosiphum pseudobrassicae* DAVIS); *Toxoptera aurantii* BOYER; *T. graminum* (ROND.).

utahensis SMITH

N. America: U.S.A.

Aphidius (*Lysiphlebus*) *utahensis* SMITH, 1944. Aphidiinae N. Amer., pp. 77, 83. ♀ ♂.Host: *Macrosiphum coweni* HUNTER.*viburnaphis* (FITCH)

N. America: U.S.A.

Praon viburnaphis FITCH, 1855 (1854). Trans. N. Y. State agric. Soc., 14, 841.

Aphidius (Lysiphlebus) viburnaphis MUESEBECK & WALKLEY, 1951.
Syn. Cat., p. 96.

Host: *Aphis* on *Viburnum opulus americanum*.

Subgenus *Aphidius* NEES

Aphidius NEES, 1818. Nov. Act. Acad. Caes. Leopold. Carol., 9, 302.

In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 557; SZÉPLIGETI, 1904. Gen. Ins., fasc. 22 a—b, p. 185; SMITH, 1944. Aphidiinae N. Amer., pp. 35, 49 (Subgeneric rank).

Type: *Bracon picipes* NEES. Desig. by VIERECK, 1914.

Theracmion Holmgren, 1872. Ofvers. Svensk. Vet. Akad. Forh., 29, 99.

Type: *Theracmion arcticus* HOLMGREN, Monob.

abietis MARSHALL

Europe: England, Spain.

Aphidius abietis MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 565. ♀.

Hosts: *Lachnus pini* L.; *Macrosiphum latucae* SCHRANK; *M. ulmariae* WALKER.

Biological note: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat., 20, 21.

absinthii MARSHALL

Europe: England.

Aphidius absinthii MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 605. ♂.

Host: *Macrosiphum absinthii* (L.).

acalephae MARSHALL

Europe: England.

Aphidius acalephae MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 608. ♂.

affinis PÉREZ

Europe: Spain.

Aphidius affinis PÉREZ, 1931. Eos, 7, 48. ♀ ♂.

Host: *Aphis neoarticulatus* THEOB. on artichoke.

ambiguus HALIDAY

Europe: England.

Aphidius ambiguus HALIDAY, 1835. Ent. Mag., 2, 104. ♀; MARSHALL, 1896. In: André, Spec. Hym. Eur. Alg., 5, 599. ♀.

antennatus MUKERJI & CHATTERJI

Asia: Pakistan (Baluchistan).

Aphidius antennatus MUKERJI & CHATTERJI, 1950. Indian Journ. agric. Sci., 18, 33. ♀.

Host: *Pterochlorus persicae* CHOL. on peach.

adiphophilus BENOIT

Africa: Belgian Congo.

Aphidius aphidiphilus BENOIT, 1953. Ann. Mus. Congo belge, Sci. Zool., 36, 349.

areolatus ASHMEAD

Asia: Japan.

Aphidius areolatus ASHMEAD, 1906. Proc. U. S. Nat. Mus., 30, 189. ♀.

- arundinis* HALIDAY Europe: England; Spain.
Aphidius arundinis HALIDAY, 1835. Ent. Mag., **2**, 104. ♀; MARSHALL, 1896. In: André, Spec. Hym. Eur. Alg., **5**, 592. ♀.
 Host: Green aphid of *Erigeron canadensis*.
 Biological note: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat., **20**, 17.
- var. *obscuriformis* PÉREZ Europe: Spain.
Aphidius arundinis var. *obscuriforme* PÉREZ, 1931. Eos, **7**, 50. ♀ ♂.
 Host: Green aphid of *Urtica dioica*.
- asteris* HALIDAY Europe: England; Spain.
Aphidius asteris HALIDAY, 1835. Ent. Mag., **2**, 100. ♀ ♂.
 Host: Aphid on *Aster tripolium* L.
 Biological note: PÉREZ, 1931. Anal. Inst. Nac. Val. Valencia, 2. ser. Hist. nat., **20**, 25.
- aterrimus* FAHRINGER Europe: Austrian Alps.
Aphidius aterrimus FAHRINGER, 1936. Zbl. ges. Forstwes. Wien, **62**, 45.
 Host: *Lachnus cembrae* SEITNER.
- atropetiolatus* ASHMEAD N. America: U.S.A.
Aphidius atropetiolatus ASHMEAD, 1890. Bull. Colorado biol. Assoc., **1**, 20. ♂.
Aphidius (*Aphidius*) *atropetiolatus* SMITH, 1944. Aphidiinae N. Amer., pp. 50, 52. ♂ (Redescription.)
- aurantii* PIERANTONI Europe: Italy.
Aphidius aurantii PIERANTONI, 1907. Atti Ist. Sci. nat. Napoli, **59**, 3.
 Host: *Toxoptera aurantii* BOY.
- avenae* HALIDAY Europe: England, Spain; Germany; Belgium; France; U.S.S.R.
 Asia: China.
Aphidius avenae HALIDAY, 1835. Ent. Mag., **2**, 99. ♀ ♂; MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 573. ♀ ♂.
 Hosts: *Aphis scabiosae* KALT.; *A. roseus* BAKER; *Macrosiphum festucae*; *M. granarium* KBY.; *M. pisi* KALT.; *M. rubiellum* THEOB.; *M. solanifolii* ASHM.; *M. ulmariae*; *Myzus persicae* (SULZ.).
 Biology: BAUME-PLUVINEL & KEILIN, 1914. Bull. Soc. ent. France, 1914, p. 464—65; MACGILL, 1923. Proc. Roy. Soc. Edinburgh, **43**, 51—71; PÉREZ, 1929. Eos, **7**, 427—39.
- avenaphis* (FITCH) N. America: U.S.A.; Canada.
Praon avenaphis FITCH, 1861 (1860). Trans. N. Y. State agr. Soc., **20**, 840.
Aphidius xanthus ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus., **11**, 661. ♂.
Aphidius granariaphis COOK, 1890. Canad. Ent., **22**, 125. ♀ ♂.

Aphidius (*Aphidius*) *avenaphis* SMITH, 1944. *Aphidiinae* N. Amer., pp. 52, 53. ♀ ♂ (Redescription).

Hosts: *Macrosiphum granarium* KBY.; *Myzus persicae* (SULZ.); *Rhopalosiphum prunifoliae* (FITCH).

baudysi PÉREZ Europe: Czechoslovakia.

Aphidius baudysi PÉREZ, 1934. *Eos.*, **10**, 10. ♀.

Host: *Aphis galii* KALT.

beltrani PÉREZ Europe: Spain.

Aphidius beltrani PÉREZ, 1931. *Eos.*, **7**, 51. ♀ ♂.

Host: *Macrosiphum granarium* KBY.

Biological note: PÉREZ, 1931. *Anal. Inst. Nac. Valencia*, 2. ser. *Hist. nat.*, **20**, 22.

berberidis SMITH N. America: U.S.A.

Aphidius (*Aphidius*) *berberidis* SMITH, 1944. *Aphidiinae* N. Amer. pp. 51, 54. ♀ ♂.

Host: *Liosomaphis berberidis* (KALT.)

bertrandi BENOIT Africa: Belgian Congo.

Aphidius bertrandi BENOIT, 1933. *Ann. Mus. Congo belg. Sci. Zool.*, **36**, 350.

bicolor SZÉPLIGETI Europe: Croatia.

Aphidius bicolor SZÉPLIGETI, 1898. *Term. Füzet.*, **21**, 395, 407. ♂.

brasiliensis BRÈTHES S. America: Brazil.

Aphidius brasiliensis BRÈTHES, 1918. *Ann. Soc. rur. argent.*, **52**, 8.

callipteri MARSHALL Europe: England.

Aphidius callipteri MARSHALL, 1896. In: ANDRÉ, *Spec. Hym. Eur. Alg.*, **5**, 609. ♂.

Host: "Aphids on *Quercus robur*".

cerasi MARSHALL Europe: England.

Aphidius cerasi MARSHALL, 1896. In: ANDRÉ, *Spec. Hym. Eur. Alg.*, **5**, 607. ♂.

Host: *Myzus cerasi* F.

chrysanthemi MARSHALL Europe: England.

Aphidius chrysanthemi MARSHALL, 1896. In: ANDRÉ, *Spec. Hym. Eur. Alg.*, **5**, 591. ♀ ♂.

Host: *Aphis tanacetina* WALKER.

chilensis BRÈTHES South America: Chile.

Aphidius chilensis BRÈTHES, 1913. *Anil. Mus. nacion. Hist. nat. Buenos Aires.*, **24**, 41.

cingulatus RUTHE Europe: Iceland; Greenland.

Aphidius cingulatus RUTHE, 1859. *Stett. ent. Ztg.*, **20**, 315. ♀ ♂.

- colemani* VIERECK Asia: India.
Aphidius colemani VIERECK, 1921. Proc. U. S. Nat. Mus., **42**, 141. ♀.
- commodus* GAHAN Asia: Formosa.
Aphidius commodus GAHAN, 1926. Proc. U. S. Nat. Mus., **70**, 3. ♀ ♂.
 Host: *Macrosiphoniella formosartemisiae* TAK.
- coloratus* BAKER¹⁾ N. America: U.S.A.
Aphidius coloratus BAKER, 1909. Pomona Journ. Ent., **1**, 24 ♀.
Aphidius (*Aphidius*) *coloratus* MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 93.
- var. *ferruginosus* BAKER¹⁾ N. America: U.S.A.
Aphidius coloratus var. *ferruginosus* BAKER, 1909. Pomona Journ. Ent., **1**, 24. ♀.
Aphidius (*Aphidius*) *coloratus* var. *ferruginosus* MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 93.
- confusus* ASHMEAD N. America: U. S. A.
Aphidius confusus ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus., **11**, 662. ♀.
Aphidius (*Aphidius*) *confusus* SMITH, 1944. Aphidiinae N. Amer., p. 51, 55. ♀ (Redescription).
 Host: An aphid on orange.
- crassicornis* ASHMEAD N. America: Canada.
Aphidius crassicornis ASHMEAD, 1891. Canad Ent., **23**, 5 ♂.
Aphidius brevicornis ASHMEAD, 1891. Canad. Ent., **23**, 6 ♀.
Aphidius (*Aphidius*) *crassicornis* SMITH, 1944. Aphidiinae N. Amer. pp. 49, 55. ♀ ♂ (Redescription).
- crepidis* HALIDAY Europe: England; Belgium.
Aphidius crepidis HALIDAY, 1835. Ent. Mag., **2**, 94. ♀ ♂; MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 581. ♀ ♂.
Aphidius tuberculatus WESMAEL, 1835. Nouv. Mém. Acad. Sci. belg., **9**, 80.
 Host: Aphids on *Crepis virens*, *Cichorium intybus* and *Lapsana communis*.
- crithmi* MARSHALL Europe: England.
Aphidius crithmi MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 605. ♂.
 Host: *Aphis crithmi* BUCKTON on *Crithmum maritimum*.

¹⁾ SMITH (1944, p. 103) includes both *coloratus* and var. *ferruginosus* under "Species described as Aphidiinae but unknown to the writer". He also states that "Professor Hilton says Baker's types are not at Pomona yet Mr. Muesebeck has notes made in 1937 concerning some of Baker's species of Aphidiinae at Pomona". MUESEBECK & WALKLEY (1951, p. 93), however, list both *coloratus* BAKER and *coloratus* var. *ferruginosus* BAKER as valid species.

dauci MARSHALL

Europe: England.

Aphidius dauci MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 601. ♀ ♂.

Host: *Macrosiphum pastinaceae* L.

delicatus BAKER¹⁾

N. America: U.S.A.

Aphidius delicatus BAKER, 1909. Pomona Jour. Ent., 1, 24. ♂.

Aphidius (*Aphidius*) *delicatus* MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 93.

dyscritus PERÉZ

Europe: Spain.

Aphidius dyscritus PÉREZ, 1931. Eos, 7, 65. ♀ ♂.

Host: A green aphid on artichoke.

Biological note: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat., 20, 26.

eglanteriae HALIDAY

Europe: England; Spain.

Aphidius eglanteriae HALIDAY, 1835. Ent. Mag., 2, 102. ♀ ♂.

Aphidius eglanteriae MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 589. ♀ ♂ (Redescription).

Host: Aphids on *Rosa rubiginosa*; *Forda* sp.

Biological note: PÉREZ, 1931. Anal. Inst. nac. Valencia, 2. ser. Hist. nat., 20, 24.

ephippum HALIDAY

Europe: England.

Aphidius ephippum HALIDAY, 1835. Ent. Mag., 2, 105. ♀ ♂; MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 557. ♀ ♂.

ervi HALIDAY

Europe: England; Spain; Yugoslavia; U.S.S.R.
Asia: Formosa.

Aphidius ervi HALIDAY, 1835. Ent. Mag., 2, 100. ♀ ♂; MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 575. ♀ ♂.

Hosts: *Forda* sp. on graminaceous plants; *Aphis scabiosae* KALT.; *Macrosiphum granariae* KALT.; *M. caraganae* CHOL.; *M. pisi* KALT.; *M. picridis*; *M. cyparissiae*; *M. ulmariae* WALK.; *M. solanii* KALT.; *M. solanifolii* ASHM.; *Macrosiphum* sp. on *Rubus*.

Biological Note: PÉREZ, 1931. Anal. Inst. Nac. Val. Hist. nat., 20, 19.

euphorbiae MARSHALL

Europe: England.

Aphidius euphorbiae MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 606. ♂.

Host: An aphid on *Euphorbia paralias*.

exiguus HALIDAY

Europe: England; Spain.

Aphidius exiguus HALIDAY, 1835. Ent. Mag., 2, 104. ♀ ♂; MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5 P. 595. ♀ ♂ (Redescription).

Host: *Macrosiphum rogersii* THEOB.

¹⁾ The same remarks apply to this species as those regarding *coloratus* BAKER.

- expectatus* GAUTIER & BONNAMOUR Europe: France.
Aphidius expectatus GAUTIER & BONNAMOUR, 1936. Bull. Soc. linn.
 Lyon, (N. S.), **5**, 74. ♀ ♂.
 Host: Small aphids on pines.
- floridaensis* SMITH N. America: U.S.A.
Aphidius (Aphidius) floridaensis SMITH, 1944. Aphidiinae N. Amer.,
 pp. 50, 56. ♀ ♂.
 Host: *Macrosiphum ambrosiae* (THOS.)
- fulvus* CRESSON Central America: Cuba.
Aphidius fulvus CRESSON, 1865. Proc. ent. Soc. Philadelphia, **4**, 90.
- gifuensis* ASHMEAD Asia: Japan.
Aphidius gifuensis ASHMEAD, 1906. Proc. U. S. Nat. Mus. **30**, 188. ♂ ♀.
- glacialis* ASHMEAD N. America: U.S.A.
Aphidius glacialis ASHMEAD, 1902. Proc. Washington. Acad. Sci., **4**,
 245. ♀.
Aphidius (Aphidius) glacialis SMITH, 1944. Aphidiinae N. Amer. pp. 50,
 57. ♀ (Redescription).
- goidanchi* PÉREZ Europe: Italy.
Aphidius goidanchi PÉREZ, 1932. Boll. Lab. Ent. Bologna, **5**, 50. ♀ ♂.
- granarius* MARSHALL Europe: England; France; Hungary; U.S.S.R.
 Asia: Japan.
Aphidius granarius MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur.
 Alg., **5**, 579. ♀ ♂.
 Hosts: *Aphis infuscat* KOCH.; *Macrosiphum granarium* KBY.; *M.*
avenae F.; *M. festuca* THEOB.; *Rhopalosiphum prunifoliae* FITCH.
 Biology: FILIP'EV, 1930. Ann. Rept. State Inst. expt. Agron., Div.
 appl. Ent., Leningrad 1928—29, pp. 169—98; SKRIPTSHINSKY, 1930.
 Repts. appl. Ent. Leningrad, **4**, 351—64; WATANABE, 1941. Ins.
 Matsum., **15**, 167—68; ARTHUR, 1944, Bull. ent. Res., **35**, 257—70.
- var. *pailloti* PÉREZ Europe: France.
Aphidius granarius var. *pailloti* PÉREZ, 1931. Eos, **7**, 57. ♀ ♂.
 Host: *Macrosiphum dirhodum* WALK.
- gregarius* MARSHALL Europe: England.
Aphidius gregarius MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur.
 Alg., **5**, 569. ♀ ♂.
 Host: *Melanoxanthus salicis* L.
- hedini* FAHRINGER Asia: Kamtchatka.
Aphidius hedini FAHRINGER, 1930. Ark. Zool., **21A** (8), 2. ♀ ♂.
- hortensis* MARSHALL Europe: England.
Aphidius hortensis MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur.
 Alg., **5**, 590. ♀ ♂.

- infulatus* HALIDAY Europe: England.
Aphidius infulatus HALIDAY, 1835. Ent. Mag., **2**, 96. ♀ ♂; MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 564. ♀ ♂ (Redescription).
- indivisus* PERÉZ Europe: Spain.
Aphidius indivisus PÉREZ, 1931. Eos, **7**, 62. ♀ ♂.
 Host: *Siphonophora longipennis* BUCKT.
- inouyei* WATANABE Asia: Japan.
Aphidius inouyei WATANABE, 1941. Ins. Matsum., **15**, 107. ♀ ♂.
 Host: *Cinara todocola* INOUE.
- jezoensis* WATANABE Asia: Japan.
Aphidius jezoensis WATANABE, 1941. Ins. Matsum., **15**, 108. ♀ ♂.
 Hosts: *Cinara nopporoensis* INOUE; *Lachniella costata* ZETT.
- kakimaphidis* SMITH N. America: U.S.A.
Aphidius (*Aphidius*) *kakimaphidis* SMITH, 1944. *Aphidiinae* N. Amer., pp. 52, 58. ♀ ♂.
 Host: *Kakimia cerei* G. & P.
- konoï* WATANABE Asia: Japan.
Aphidius konoï WATANABE, 1941. Ins. Matsum., **15**, 106. ♂.
 Host: *Cinara longipennis* MATS.
- lachnivorus* ASHMEAD Asia: Japan.
Aphidius lachnivorus ASHMEAD, 1906. Proc. U. S. Nat. Mus., **30**, 189.
- laticeps* GAHAN Asia: Formosa.
Aphidius laticeps GAHAN, 1926. Proc. U. S. Nat. Mus., **70**, 2. ♀.
 Host: *Dilachnus* sp.
- longulus* MARSHALL Europe: England.
Aphidius longulus MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 561. ♀.
- lonicerae* MARSHALL Europe: England; Yugoslavia, U.S.S.R.
Aphidius lonicerae MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 572. ♀ ♂.
 Hosts: *Macrosiphum sonchi*; *M. caraganae* CHOL.; *M. pisi* KALT.; *Siphocoryne xylostei* SCHRANK.
- lutescens*¹⁾ HALIDAY Europe: England.
Aphidius lutescens HALIDAY, 1835. Ent. Mag., **2**, 99. ♀.
- lychnidis* MARSHALL Europe: England.
Aphidius lychnidis MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 607. ♂.
 Host: *Aphis lychnidis* L.

¹⁾ MARSHALL (1896, p. 614) remarks „..... il (i. e. *lutescens* HALIDAY) ne differe peut-etre pas de *lonicerae*”.

macropterus PÉREZ

Europe: Spain.

Aphidius macropterus PÉREZ, 1931. Eos. 7, 54. ♀ ♂.Host: *Macrosiphum granarium* Kby.

Biological note: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat. 20, 22.

matricariae HALIDAY

Europe: England; Spain.

Aphidius matricariae HALIDAY, 1835. Ent. Mag., 2, 103. ♀ ♂.; MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 592. ♀ ♂.Hosts: *Anuraphis roseus* BAKER; *Myzus circumflexus* BUCKT.; *M. persicae* (SULZ.); *Macrosiphum solani* KALT.

Immature stages: VEVAI, 1942. Parasitology, 34, 141—146.

medicaginis MARSHALLEurope: France; Yugoslavia.
Asia: China.*Aphidius medicaginis* MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 249. ♀.Hosts: *Macrosiphum pisi* KALT.; *M. ulmariae* WALKER

Biology: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat., 20, 20; VUKASOVIC, 1932. Acta. Soc. ent. jugoslav., 5—6, 94—97.

melanocephalus NEES

Europe: Germany; Spain.

Bracon melanocephalus NEES, 1834. Hym. Ichn. aff. Monogr., 1, 21. ♂.Host: *Myzus persicae* (SULZ.)

Biological note: PÉREZ, 1931. Anal. Inst. nac. Valencia, 2. ser. Hist. nat., 20, 18.

merceti PÉREZ

Europe: Spain.

Aphidius merceti PÉREZ, 1931. Eos, 7, 58. ♀ ♂.Host: *Macrosiphum longipennis* (BUCKT.)

Biological note: PÉREZ, 1931. Anal. Inst. nac. Valencia, 2. ser. Hist. nat., 20, 24.

montanus ASHMEAD

N. America: U.S.A.

Aphidius montanus ASHMEAD, 1890. Bull. Colo. biol. Assoc., 1, 20. ♂.*Aphidius* (*Aphidius*) *montanus* SMITH, 1944. Aphidiinae N. Amer., pp. 50; 59 ♂ (Redescription).*nigripes* ASHMEAD

N. America: U.S.A.

Aphidius nigripes ASHMEAD, 1901. Bull. N. Y. State Mus., 47, 588. ♂.*Aphidius* (*Aphidius*) *nigripes* SMITH, 1944. Aphidiinae N. Amer., pp. 51; 60. ♀ ♂.Hosts: *Macrosiphum dirhodum* (WALK.); *M. liriodendri* (MONELL); *M. pisi* (KALT.); *M. solanifolii* (ASHM.); ? *M. rosae* (L.)*nigritelus* SMITH

N. America: U.S.A.

Aphidius (*Aphidius*) *nigritelus* SMITH, 1944. Aphidiinae N. Amer., pp. 51, 61. ♀ ♂.Hosts: *Macrosiphoniella sanborni* (GILL.); *Myzus persicae* (SULZ.); *Rhopalosiphum rufomaculatum* (WILS.).

obscuripes ASHMEAD

N. America: U.A.S.

Aphidius obscuripes ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus., **11**, 660. ♀.*Aphidius (Aphidius) obscuripes* SMITH, 1944. Aphidiinae N. Amer., pp. 51, 62. ♀ ♂.Hosts: *Macrosiphum granarium* KIRBY; *M. pisi* (KALT.); *Rhopalosiphum prunifoliae* (FITCH).*ohioensis* SMITH

N. America: U.S.A.

Aphidius (Aphidius) ohioensis SMITH, 1944. Aphidiinae N. Amer., pp. 52, 63. ♀ ♂.Hosts: *Macrosiphum anomalae* H. & F.; *M. illini* H. & F., *M. sp.**palpator* GAUTIER & BONNAMOUR

Europe: France.

Aphidius palpator GAUTIER & BONNAMOUR, 1931. Bull. Soc. ent. France, 1931, p. 166. ♀ ♂.Hosts: Aphids (including *E. lanigerum* HSMN.) on apple trees.*pascuorum* MARSHALL

Europe: England.

Aphidius pascuorum MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 577. ♀.Host: *Macrosiphum longipennis* (BUCKT.).*phorodontis* ASHMEAD

N. America: U.S.A.; Canada.

S. America: Peru.

Aphidius phorodontis ASHMEAD, 1889 (1888). Proc. U.S. Nat. Mus., **11**, 662. ♀.*Aphidius (Aphidius) phorodontis* SMITH, 1944. Aphidiinae N. Amer. pp. 51, 64. ♀ (Redescription).Hosts: *Aphis gossypii* GLOV.; *Myzus* on turnip; "*Phorodon mahabel* Mon."; Aphids on dock (*Rumex*).Biology: BAIRD, 1935. Rept. ent. Soc. Ontario 1934, **64**, 72—73; McLEOD, 1937. Rept. ent. Soc. Ont., **67** (1936), 63—64; MARIV, 1939. Inf. Estac. exp. agric. La Molina No. 51.*pisivorus* SMITH

N. America: U.S.A.

Aphidius pisivorus SMITH, 1941. Ann. ent. Soc. Amer., **34**, 537. ♀ ♂.*Aphidius (Aphidius) pisivorus* SMITH, 1944. Aphidiinea N. Amer., pp. 51, 65. ♀ ♂ (Further description).Host: *Macrosiphum pisi* (KALT.)*platensis*¹⁾ BRÈTHES

S. America: Argentina; Uruguay; Chile.

Aphidius platensis BRÈTHES, 1913. Anal. Mus. nacion. Hist. nat. Buenos Aires., **24**, 41.

¹⁾ According to MILLAN (1956) [Rev. Invest. agric. Buenos Aires, **10**, 243—280], BLANCHARD (in litt.) considers *huebrichi* BRÈTHES and *porteri* BRÈTHES to be synonyms of *platensis* BRÈTHES, and that *platensis* BRÈTHES should more correctly be assigned to the subgenus *Lysaphidus* SMITH, 1944.

Aphidius huebrichi BRÈTHES, 1913, t. c., p. 41.

Aphidius porteri BRÈTHES, 1915. Anal. Zool. aplic. Santiago, **2**, 13.

Host: *Toxoptera* (*Schizaphis*) *graminum* (ROND.)

Biology: GRIOT, 1944. Rev. argent. Agron., **11** (4), 309—319; GRIOT, 1949. Publ. Inst. Sanid. veg. Argent. (A) **5**, No. 48, 29 pp.; MILLAN, 1956. Rev. Invest. agric. Buenos Aires., **10**, 243—80; SIVEIRA & CONDE, 1946. Rev. Fac. Agron. Univ. Montevideo (1945) 1946, 54 pp.

polygonaphis (FITCH)

N. America: U.S.A.; Canada.

Praon polygonaphis FITCH, 1855 (1854). Trans. N. Y. State agric. Soc., **14**, 840.

Aphidius canadensis PROVANCHER, 1881. Nat. Canad., **12**, 204. ♀.

Aphidius obscurus PROVANCHER, 1886. Addit. Corr. Faune ent. Canada Hym., p. 152. ♀.

Aphidius pallidus ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus., **11**, 661. ♀.

Aphidius nigriceps ASHMEAD, 1891. Canad. Ent., **23**, 6. ♂.

Lysiphlebus succineus VIREECK, 1904. Trans. Kansas Acad. Sci., **19**, 282. ♀.

Aphidius (*Aphidius*) *polygonaphis* SMITH, 1944. Aphidiinae N. Amer., pp. 51, 66. ♀ ♂ (Redescription).

Hosts: *Macrosiphum ambrosiae* THOS.; *M. rudbeckiae* (FITCH); *M. taraxaci* (KALT.); *M. sp.*

polygoni MARSHALL

Europe: England; Spain.

Aphidius polygoni MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 602. ♀ ♂.

Hosts: *Aphis genistae* (SCOP.); *Brevicoryne brassicae* L.

praevisus GAUTIER & BONNAMOUR

Europe: France.

Aphidius praevisus GAUTIER & BONNAMOUR, 1936. Bull. Soc. linn. Lyon, (N. S.), **5**, 74. ♀ ♂.

Host: Small aphids on pine.

propinquus ASHMEAD

N. America: U.S.A.

Aphidius propinquus ASHMEAD, 1902. Trans. Washington Acad. Sci., **4**, 245. ♂.

Aphidius frigidus ASHMEAD, 1902. t. c., p. 246. ♂.

Aphidius (*Aphidius*) *propinquus* SMITH, 1944. Aphidiinae N. Amer., pp. 50, 68. ♀ ♂.

pseudoplatani MARSHALL

Europe: England; France; Spain.

Aphidius pseudoplatanti MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 582. ♀ ♂.

Host: *Drepanosiphum acerinum* WALKER, aphid of *Acer pseudoplatanus*.

pterocommae ASHMEAD

N. America: U.S.A.

Aphidius pterocommae ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus., **11**, 659. ♂.

Aphidius lachni ASHMEAD, 1889 (1888). t.c., p. 660. ♀ ♂.

Aphidius (*Aphidius*) *pterocommae* SMITH, 1944. Aphidiinae N. Amer., pp. 50, 68. ♀ ♂ (Redescription).

Hosts: *Clavigerus bicolor* (OESTL.); *C. smithiae* (MONELL); *Lachnus salicicola* (UHLER).

pulcher BAKER¹⁾

N. America: U.S.A.

Aphidius pulcher BAKER, 1894. Pomona Journ. Ent., **1**, 24. ♀.

Aphidius (*Aphidius*) *pulcher* MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 94.

cirsii HALIDAY

Europe: England; Spain.

(*renominatus* HINCKS²⁾)

Aphidius cirsii HALIDAY, 1835. Ent. Mag., **2**, 101. ♀ (Preocc.).

Aphidius renominatus HINCKS, 1943. Ent. mon. Mag., **79**, 44 (n. n.).

Host: *Macrosiphum longipennis* (BUCKT.)

Biological note: PÉREZ, 1931. Anal. Inst. nac. Valencia, 2. ser. Hist. nat., **20**, 25.

ribis HALIDAY

Europe: England; France; Spain.

N. America: U.S.A.; Canada.

Aphidius ribis HALIDAY, 1835. Ent. Mag., **2**, 101. ♀;

MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 587. ♀ ♂.

Lysiphlebus ribaphidis ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus., **11**, 664. ♂.

Aphidius ribis ASHMEAD, 1898. Proc. Washington ent. Soc., **4** (2), 167.

♀ ♂.

Aphidius (*Aphidius*) *ribis* SMITH, 1944. Aphidiinae N. Amer., pp. 52, 70.

♀ ♂.

Hosts: *Aphis neoarticulatus* THEOB.; *Capitophorus ribis* (L.); *Periphyllus* (*Chaitophorus*) *aceris* KOCH; *P. (C.) lyropictus* KESSLER.

Biology: PÉREZ, 1931. Anal. Inst. nac. Valencia, 2. ser. Hist. nat., **20**, 24; PAILLOT, 1934. C. R. Acad. Sci. France, **199**, 1450—1452; PAILLOT, 1938. C. R. Acad. Sci. Fr., **127**, 1504—1506 (Formation of giant cells in parasitised aphids).

¹⁾ The same remarks apply to *pulcher* BAKER as those in case of *coloratus* BAKER.

²⁾ CURTIS (1831) described *Aphidius cirsii* from an aphid infesting *Cirsium arvense*. HALIDAY (1833) described the same species, reared by him from an aphid on *Acer pseudo-platanus*, and placed it in his subgenus *Trioxys*, renaming it as *Aphidius* (*Trioxys*) *aceris*. Later, HALIDAY (1835) described a species *Aphidius cirsii*, but since the same is preoccupied by the species of the same name described by CURTIS (1831) — arbitrarily changed to *aceris* by HALIDAY (1833) — HINCKS proposed the new name *renominatus* for *Aphidius cirsii* HALIDAY, 1835.

- rosae* HALIDAY Europe: England; France; Most of Europe.
N. America: U.S.A.
Aphidius rosae HALIDAY, 1833. Ent. Mag., **1**, 261. ♀ ♂; MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 571. ♀ ♂.
Aphidius (Aphidius) rosae SMITH, 1944. Aphidiinae N. Amer., pp. 51, 71.
♀ ♂ (Redescription).
Hosts: *Macrosiphum dirhodum* (WALKER); *M. liriodendri* (MONELL);
M. rosae (L.); *M. solanifolii* (ASHM.).
Biology: TIMBERLAKE, 1910. Psyche, **17**, 129 (immature stages); PÉREZ, 1931. Anal. Inst. nac. Valencia, 2. ser. Hist. nat. **20**, 23.
- salicis* HALIDAY Europe: England; Spain.
Aphidius salicis HALIDAY, 1835. Ent. Mag., **2**, 102. ♀ ♂; MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 594. ♀ ♂.
Morphological note: PÉREZ, 1931. Anal. Inst. nac. Val. Hist. nat. **20**, 27.
- salignae* WATANABE Asia: Japan.
Aphidius salignae WATANABE, 1938. Ins. Matsum **13**, 81. ♀ ♂.
Host: *Lachnus salignus* GMEL.
- scabiosae* MARSHALL Europe: England; Spain.
Aphidius scabiosae MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 596. ♀ ♂.
Host: *Aphis scabiosae* (KALT.)
- seyrigi* GRANGER Africa: Madagascar.
Aphidius seyrigi GRANGER, 1949. Mém. Inst. Sci. Madagascar, **2**(A), 410.
♀ ♂.
- silenes* MARSHALL Europe: England.
Aphidius silenes MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 603. ♂.
Host: *Macrosiphum pisi* (KALT.)
- smithi* SHARMA & SUBBA RAO Asia: India.
Aphidius (Aphidius) smithi SHARMA & SUBBA RAO, 1959. Indian Journ. Ent., **20**, 183. ♀ ♂.
Host: *Macrosiphum pisi* KALT.
- sonchi* MARSHALL Europe: England; Yugoslavia.
Aphidius sonchi MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 585. ♀ ♂.
Hosts: *Macrosiphum lactucae* (KALT.); *M. cyparissiae* (L.).
- ulmi* MARSHALL Europe: England; Spain.
Aphidius ulmi MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 576. ♀ ♂.
Host: *Schizoneura ulmi* (L.)

unilachni GAHAN

Asia: Formosa.

Aphidius unilachni GAHAN, 1926. Proc. U. S. Nat. Mus., **70**, 1. ♀ ♂.
Host: *Unilachnus* sp. on *Pinus*.

urticae HALIDAY

Europe: England; Spain.

Aphidius urticae HALIDAY, 1835. Ent. Mag., **2**, 100. ♀; MARSHALL, 1896.
In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 568 ♀ (Redescription).
Host: *Macrosiphum urticae* (KALT.)

wissmanii RATZEBURG

Europe: Germany.

Aphidius wissmani RATZEBURG, 1848. Ichn. Forstins., **2**, 59. ♀; MARSHALL,
1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 562. ♀ (Redescription).

Genus *Diaeretus* FOERSTER

Diaeretus FOERSTER, 1862. Verh. Naturh. Ver. Rheinl., **19**, 249, 250.

Type: *Aphidius leucopterus* HALIDAY, Monob. and orig. design.

Adialytus FOERSTER, 1862. t. c., p. 249, 250.

Type: *Adialytus tenuis* FOERSTER. Monob. and orig. design.

Lipolexis FOERSTER, 1862. t. c., p. 249, 250.

Type: *Lipolexis gracilis* FOERSTER. Monob. and orig. design.

Misaphidius RONDANI, 1877. Bull. Soc. ent. Ital., **9**, 185.

Type: *Misaphidius aphidiperda* RONDANI.

Diaeretus SZÉPLIGETI, 1904. Gen. Ins., fasc. 22 a—b, p. 189; SMITH,
1944. Aphidiinae N. Amer., p. 99; MUESEBECK & WALKLEY, 1951.
Syn. Cat., p. 97.

aphidiperdus (RONDANI)

Europe: Italy.

Misaphidius aphidiperda RONDANI, 1877. Bull. Soc. ent. Ital., **9**, 134.
Aphidius aphidiperdus MARSHALL, 1891. In: ANDRÉ, Spec. Hym. Eur.
Alg., **5**, 615.

Host: *Aphis chloris* KOCH on *Hypericum perforatum*.

aphidum MUKERJI & CHATTERJI

Asia: Baluchistan.

Diaeretus aphidum MUKERJI & CHATTERJI, 1950. Proc. Roy. ent. Soc.
London. (B) **19**, 4. ♀ ♂.

Host: *Pterochlorus persicae* CHOLD. on peach.

chenopodiaphidis (ASHMEAD).

N. America: U.S.A.

Lipolexis chenopodiaphidis ASHMEAD, 1889 (1888). Proc. U. S. Nat.
Mus., **11**, 671. ♀ ♂.

Diaeretus chenopodiaphidis GAHAN, 1911. Maryland. agr. exp. Sta.
Bull. 152, p. 192; SMITH, 1944. Aphidiinae N. Amer., p. 97, ♀ ♂; MUESE-
BECK & WALKLEY, 1951. Syn. Cat., p. 97.

Host: *Hylopterus atriplicis* (L.) on *Chenopodium album*.

- croaticus* PÉREZ Europe: Czechoslovakia.
Diaeretus croaticus PÉREZ, 1934. Eos, **10**, 8 ♀ ♂.
 Host: *Aphis* sp.
- crudelis* RONDANI Europe: Italy.
Misaphidius crudelis RONDANI, 1877. Bull. Soc. ent. Ital., **9**, 186.
 ♀ ♂.
Aphidius crudelis MARSHALL. 1891. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, p. 616. ♀ ♂.
- fuscicornis* (ASHMEAD) N. America: U.S.A.
Lipolexis fuscicornis ASHMEAD, 1891. Canad. Ent., **23**, 7. ♀.
Diaeretus fuscicornis GAHAN, 1911. Maryland agr. exp. Sta. Bull. 152, p. 191; SMITH, 1944 Aphidiinae N. Amer., p. 100. ♀ ♂; MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 97.
 Host: *Aphis forbesi* WIED.
- leucopterus* HALIDAY Europe: Britain.
Aphidius leucopterus HALIDAY, 1835. Ent. Mag. **2**, 103. ♀ ♂.
- napus* PÉREZ Europe: Spain.
Diaeretus napus PÉREZ, 1931. Eos, **7**, 71 ♀ ♂; PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. **20**, 16.
 Host: *Pergandeida quilisi* G. FRESCA on turnip, radish and pea.
- nipponensis* VIERECK Asia: Japan; Formosa.
Diaeretus nipponensis VIERECK, 1911. Proc. U. S. Nat. Mus., **40**, 182.
 ♂ ♀.
 Host: Cabbage aphid; *Greenidea ficicola* TAK.
- oregmae* GAHAN Asia: Philippines.
Diaeretus oregmae GAHAN, 1932. Ann. ent. Soc. Amer. **25**, 726. ♀ ♂.
 Host: *Oregma lanigera* ZEHNT. on sugarcane.
- obsoletus* KURDJUMOV Europe: U.S.S.R.
Diaeretus obsoletus KURDJUMOV, 1913. Rev. Russ. Ent., **13**, 25.
 Host: *Brachycolus noxius*; *Toxoptera graminum*.
- plesiorapae* BLANCHARD S. America: Argentina; Uruguay
Diaeretus plesiorapae BLANCHARD, 1940. Rev. Chil. Hist. nat. **44**, 45. ♀ ♂.
 Host: *Brevicoryne brassicae* L. on cabbage; *Toxoptera graminum* on cereals; *Myzus persicae* (SULZ.); *M. solanifolii* (ASHMEAD).
- rapae* (CURTIS) Europe: England; Spain; U.S.S.R.; Yugoslavia.
 N. America: U.S.A.; New Zealand.
Aphidius rapae (CURTIS), 1855. In: MACINTOSH, Book of the Garden, **2**, 194. ♀.
Trioxys piceus CRESSON, 1879. Rept. U. S. Comm. Agr. 1879, p. 260. ♀ ♂.
Aphidius brassicae MARSHALL. 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 598. ♀ ♂.

Diaeretus californicus BAKER, 1909. Pomona Journ. Ent., **1**, 25. ♀.
Diaeretus rapae GAHAN, 1910. Proc. ent. Soc. Washington, **12**, 180;
 1911. Maryland agr. exp. Sta. Bull. 152, p. 191; SMITH, 1944. Aphidiinae
 N. Amer., p. 101. ♀ ♂; MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 97.
 Host: *Brevicoryne brassicae* (L.); *Rhopalosiphum pseudobrassicae* (DA-
 VIS); *Myzus persicae* (SULZ.).

salicaphis (FITCH) N. America: U.S.A.; Canada.
Trioxyx salicaphis FITCH, 1855 (1854). Trans. N. Y. State Agr. Soc. **14**,
 841.

Trioxyx populaphis FITCH, 1855 (1854). t. c., p. 841.

Lipolexis salicaphidis ASHMEAD, 1889 (1888). Proc. U. S. nat. Meis., **11**,
 671. ♂ ♀.

Diaeretus salicaphis GAHAN, 1911. Maryland. Agr. exp. Sta. Bull. 152,
 p. 192; SMITH, 1944. Aphidiinae N. Amer., p. 102. ♀ ♂; MUESEBECK &
 WALKLEY, 1951. Syn. Cat., p. 97.

Host: *Chaitophorus viminalis* MONELL; *Neothomasia populicola* (THOS.).

Genus *Dyscritulus* HINCKS

Dyscritus MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 532,
 617; SZÉPLIGETI, 1904. Gen. Ins. fasc. 22 a—b, p. 188. (Preocc.)

Type: *Dyscritus planiceps* MARSHALL.

Dyscritulus HINCKS, 1944. Naturalist London, No. 810, p. 93 (n. n.)
planiceps (MARSHALL) Europe: England.

Dyscritus planiceps MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg.,
5, 618. ♀.

Cocoon formation: HINCKS, 1944. Naturalist London, No. 810, pp. 93
 to 96.

Genus *Ephedrus* HALIDAY

Ephedrus HALIDAY, 1833. Ent. Mag., **1**, 261.

Type: *Bracon plagiator* NEES. Monob.

Elassus WESMAEL, 1835. Nouv. Mém. Acad. Sci. Bruxelles, **9**, 85.

Type: *Aphidius parvicornis* NEES. Monob.

Scotioneurus PROVANCHER, Add. Faun. Canad. Hym., pp. 152, 156.

Type: *Scotioneurus incompletus* PROVANCHER.

Ephedrus MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 541;
 SZÉPLIGETI, 1904, Gen. Ins., Fasc. 22 a—b, p. 183; SMITH, 1944. Aphidi-
 inae N. Amer., p. 15.; MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 91.

aestivalis VIERECK¹) N. America: U.S.A.

Ephedrus aestivalis VIERECK, 1951. Calif. State Comn. Hort. Month.
 Bull., p. 286. ♀.; MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 91.

¹) SMITH (1944) includes *aestivalis* VIER. under the group "Species described as
 Aphidiinae but unknown to the writer" (t. c. p. 103), and of which the "original des-
 criptions are so lacking in detail that recognition is impossible".

brevicornis NEES

Europe: Germany.

Aphidius brevicornis NEES, 1834. Hym. Ichn. aff. Monogr., 1, p. 17. ♀.

brevis STELFOX

Europe: Ireland.

Ephedrus brevis STELFOX, 1941. Proc. roy. Irish Acad., 46, 138.

californicus BAKER

N. America: U.S.A.

Ephedrus californicus BAKER, 1909. Pomong Journ. Ent., 1, 23.

Ephedrus nevadensis BAKER, 1909. t. c., p. 23. ♀ ♂.

Ephedrus nigricornis GAHAN, 1911. Maryland agr. exp. Sta. Bull. 152, p. 159. ♀.

Ephedrus californicus SMITH, 1944. Aphidiinae N. Amer., p. 17. ♀ ♂; MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 91.

Host: *Macrosiphum ambrosiae* (THOS.); *M. pisi* (KALT); *M. rosae* (L.); *Macrosiphum* sp. on sunflower; *Rhopalosiphum grabhani* (CKLL.)

impressus GRANGER

Africa: Madagascar.

Ephedrus impressus GRANGER, 1949. Mém. Inst. Sci. Madagascar, 2A, 412. ♀ ♂.

incompletus PROVANCHER

N. America: Canada; U.S.A.

Perilitus incompletus PROVANCHER, 1886. Addit. Faun. Ent. Canad. Hym., p. 126. ♂.

Ephedrus incompletus PROVANCHER, 1886. t. c., p. 156. ♀.

Scotioneurus dives PROVANCHER, 1886. t. c., p. 157. ♂.

Ephedrus rosae WITHERINGTON, 1909. Trans. Kansas Acad. Sci., 27, 318. ♂♀.

Ephedrus incompletus SMITH, 1944. Aphidiinae N. Amer., p. 18. ♀ ♂; MUESEBECK & WALKLEY, 1951. Syn. cat., p. 91.

Host: *Macrosiphum carpinicoleus* PATCH; *M. dirhodum* (WALK); *M. erigeronensis* (THOS.); *M. illini* M. and F.; *M. lirodendri*; (MON.); *M. rosae* (L.); *M. solanifolii* (ASHM.); *Microparsus variabilis* PATCH.

Biology: WHEELER, 1923. Ann. ent. Soc. Amer., 16, 14—21.

interstitialis WATANABE

Asia: Japan.

Ephedrus interstitialis WATANABE, 1941. Ins. Matsum., 15, 139. ♀ ♂.

Host: *Myzus mumecola* MATS.; *M. momonis* (MATS.) on *Prunus* sp.

japonicus ASHMEAD

Asia: Japan; China; Formosa.

Ephedrus japonicus ASHMEAD, 1906. Proc. U. S. Nat. Mus., 30, 187. ♀.

Ephedrus japonicus WATANABE, 1940. Ins. Matsum. 15, 136. ♀ ♂.

Host: *Amphicercidis japonicus* HORI; *Amphorophora magnoliae* (E. & K.); *Anuraphis mumei* H.; *Aphis laburni* K.; *Aphis rumicis* (LINN.); *Brachysiphoniella graminis* (TAK.); *Hyalopterus arundinis* (FAB.); *Macrosiphum avenae* (F.); *Macrosiphum rosae* (LINN.); *Prociphilus konoi* H.

pulchellus STELFOX

Europe: Ireland.

Ephedrus pulchellus STELFOX, 1941. Proc. roy. Irish Acad., **46**, 139.

♀ ♂.

Host: *Anuraphis roseus* BAKER.

validus Haliday

Europe: England; Spain.

Ephedrus validus HALIDAY, 1833. Ent. Mag., **1**, 488. ♀ ♂.

Ephedrus validus MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 542. ♀ ♂.

Host: *Myzus cerasi* F.

vidali PÉREZ

Europe: Spain.

Ephedrus vidali PÉREZ, 1931. Eos, **7**, 72. ♀ ♂.

Genus *Gynocryptus* PÉREZ

Gynocryptus PÉREZ, 1931. Eos, **7**, 26.

Type: *Gynocryptus pieltaini* PÉREZ. Orig. desig.

pieltaini PÉREZ

Europa: Spain.

Gynocryptus pieltaini PÉREZ, 1931. Eos, **7**, 27. ♀ ♂.

Host: A black aphid.

Biological notes: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat., **20**, 9.

Genus *Menozzia* GOIDANICH

Menozzia GOIDANICH, 1934. Boll. Lab. ent. Bologna, **6**, 217.

Type: *Menozzia formicaria* GOIDANICH.

formicaria GOIDANICH

Europe: Italy.

Menozzia formicaria GOIDANICH, 1934. Boll. Lab. ent. Bologna, **6**, 217.

♀ ♂.

Host: Unknown; found in the nest of *Lasius fuliginosus* LATR.

Biology: GOIDANICH, 1934. t. c., p. 227.

Genus *Monoctonus* HALIDAY

Monoctonus HALIDAY, 1833. Ent. Mag., **1**, 261, 487.

Type: (*Aphidius*) *Monoctonus caricis* HALIDAY. Monob.

Aphidileo RONDANI, 1848. Nouvi Ann. Sci. nat. Bologna, (2) **9**, 14.

Type: *Aphidius resolutus* NEES. Monob.

caricis HALIDAY

Europe: Britain.

Aphidius (*Monoctonus*) *caricis* HALIDAY, 1933. Ent. Mag., **1**, 261, 487. ♀ ♂.

Monoctonus caricis MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 549. ♀ ♂.

nervosus HALIDAY

Europe: Britain.

Aphidius (*Monoctonus*) *nervosus* HALIDAY, 1933. Ent. Mag., **1**, 488. ♀.

Monoctonus nervosus MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 548. ♀.

paludum MARSHALL

Europe: Britain.

Monoctonus paludum MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 549. ♀.

paulensis (ASHMEAD)

N. America: U.S.A.

Aphidius paulensis ASHMEAD, 1902. Proc. Washington Acad. Sci., 4, 246. ♀ ♂.

Monoctonus paulensis SMITH, 1944. Aphidiinae N. Amer., p. 33. ♀ ♂.

Monoctonus paulensis MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 92.

Host: *Macrosiphum pisi* KALT.

resolutus NEES¹⁾

Europe: Germany.

Aphidius resolutus NEES, 1834. Hym. Ichn. aff. Monogr., 1, 24. ♀ ♂;

MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 613. ♀.

Ephedrus resolutus SZÉPLIGETI, 1904. Gen. Ins., fasc. 22 a—b, p. 183.

secundus VIERECK²⁾

N. America: U.S.A.

Monoctonus secundus VIERECK, 1915. Calif. State Comm. Hort. month.

Bull. 4, p. 28. ♀ ♂.

Monoctonus secundus MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 92.

Genus *Myrmecobosca* MANEVAL

Myrmecobosca MANEVAL, 1940. Bull. Soc. linn. Lyon, 9, 9.

Type: *Myrmecobosca mandibularis* MANEVAL, 1940.

eikoe YASUMATSU

Asia: Japan.

Myrmecobosca eikoe YASUMATSU, 1951. Rev. franc. Ent., 18, 172.

linnei HINCKS

Europe: Sweden.

Myrmecobosca linnei HINCKS, 1949. Ent. Tidskr., 70, 173.

mandibularis MANEVAL

Europe: France.

Myrmecobosca mandibularis MANEVAL, 1940. Bull. Soc. linn. Lyon, 9, 10. ♀.

Genus *Pauesia* PÉREZ

Pauesia PÉREZ, 1931. Eos, 7, 67.

Type: *Pauesia albuferensis* PÉREZ.

¹⁾ MARSHALL (1891) places *resolutus* amongst his group "Espèces de *Aphidius* douteuses", and terms the male as "douteux". He makes the following comment about it — "Antennes presque aussi longues que le corps . . . de 12(11) articles . . . ; cellule costale et commencement de la nervure radiale distincts, le reste de la nervulation obsolète".

²⁾ SMITH (1944) makes no mention whatever of this species, either under the genus *Monoctonus* (t. c., p. 33 et Seq.) or in the list of Aphidiinae described from North America but unknown to the author. (t. c., p. 103). However, *Monoctonus secundus* is included as a valid species in MUESEBECKS & WALKLEY's section of "Synoptic catalogue of Hymenoptera North of Mexico".

albuferensis PÉREZ

Europe: Spain.

Pauesia albuferensis PÉREZ, 1931. Eos., 7, 69. ♀.

Host: "Pine aphids".

Genus *Praon* HALIDAY*Praon* HALIDAY, 1833. Ent. Mag., 1, 261—483.Type: *Bracon exoletus* NEES. Monob.*Aphidaria* PROVANCHER, 1886. Addit. Faune ent. Canad. Hym., p. 152.Type: *Aphidaria simulans* PROVANCHER. Monob.*abjectus* (HALIDAY)Europe: England; France.
Greenland.*Aphidius (Praon) abjectus* HALIDAY, 1833. Ent. Mag., 1, 485. ♀.*Praon abjectum* MASRHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 534. ♀ ♂.*Praon abjectus* SZÉPLIGETI, 1904. Gen. Ins., fasc. 22 a—b, p. 184; MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 91.Host: Aphid on oats; aphid on *Sonchus*; *Aphis epilobii* KALT., *Aphis hieracii* KALT.

Morphological Notes: GAUTIER & BONNAMOUR, 1932. Bull. Soc. ent. France, 37, 99—100.

absinthii BIGNELL

Europe: England.

Praon absinthii BIGNELL, 1894. Ent. Mag., 30, 255. ♀.*aguti* SMITH

N. America: U.S.A.

Praon aguti SMITH, 1944. Aphidiinae N. Amer., p. 23. ♀ ♂.Host: *Macrosiphum pisi* KALT.; *M. rosae* L.; *M. solanifolii* ASHM.*alaskensis* ASHMEAD

N. America: U.S.A.

Praon alaskensis ASHMEAD, 1902. Proc. Washington Acad. Sci., 4, 243. ♂; SMITH, 1944. Aphidiinae N. Amer., p. 24. ♂.*americanus* (ASHMEAD)

N. America: U.S.A.

Diaeretus americanus ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus., 11, 669. ♂.*Diaeretus websteri* ASHMEAD, 1889 (1888). t. c., p. 669. ♂.*Diaeretus brunneiventris* ASHMEAD, 1889 (1888). t. c., p. 670. ♂.*Praon americanus* GAHAN, 1911. Maryland agr. exp. Sta. Bull. 152, 166; SMITH, 1944. Aphidiinae N. Amer., p. 25. ♀ ♂.Host: *Rhopalosiphum prunifoliae* (FITCH).*artemisaphis* SMITH

N. America: U.S.A.

Praon artemisaphis SMITH, 1944. Aphidiinae N. Amer., p. 26. ♀.Host: *Macrosiphum coweni* (HUNTER).*cerasaphis* (FITCH)

N. America: U.S.A.

Trioxys cerasaphis FITCH, 1855 (1854). Trans. N. Y. State agr. Soc., 14, 842. ♂.

Praon cerasaphis GAHAN, 1911. Maryland agr. exp. Sta. Bull. 152, p. 165; SMITH, 1944. *Aphidiinae* N. Amer., p. 32. ♂.
Host: A cherry aphid.

coloradensis ASHMEAD N. America: U.S.A.
Praon coloradensis ASHMEAD, 1890. Bull. Colorado biol. Assoc., 1, 20. ♂; SMITH, 1944. *Aphidiinae* N. Amer., p. 32. ♂.

discolor NEES Europe: Germany; Holland.
Blacus discolor NEES, 1834. Hym. Ichn. aff. Monogr., 1, 192. ♀.
Praon discolor MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 540. ♀.

dorsalis HALIDAY Europe: England; Switzerland; Spain.
Praon dorsale HALIDAY, 1833. Ent. Mag., 1, 484. ♀; MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 536. ♀.
Praon dorsalis SZÉPLIGETI, 1904. Gen. Ins., fasc. 22 a—b, p. 184.
Host: *Macrosiphum rogersii* THEO.

emacerator NEES¹⁾ Europe: Germany.
Blacus emacerator NEES, 1834. Hym. Ichn. aff. Monogr., 1, 193. ♀ ♂.
Praon emacerator MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 541. ♀ ♂.

exoletus NEES Europe: Germany; England; Italy; Spain; U.S.S.R.
(*Aphidius*) *Praon exoletus* NEES, 1834. Hym. Ichn. aff. Monogr., 1, 25, ♀ ♂.
Praon exoletum MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 535. ♀ ♂.

flavinodis HALIDAY Europe: England; Hungary.
Praon flavinode HALIDAY, 1833. Ent. Mag., 1, 485. ♀; MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 538. ♀.
Praon flavinodis SZÉPLIGETI, 1904. Gen. Ins., fasc. 22 a—b, p. 184.
Hosts: *Pterocallis tibiae* L.; *Siphonophora absinthii* L.

lematinum GAUTIER Europe: France.
Praon lemantinum GAUTIER, 1922. Bull. Soc. ent. France, 1922, p. 239. ♀.
Host: "Aphids on *Caleopsis tetrahit* L."

longicornis MARSHALL Europe: England.
Praon longicorne MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 537. ♀ ♂.
Praon longicornis SZÉPLIGETI, 1904. Gen. Ins. Fasc. 22 a—b, p. 184.
Host: *Siphonophora chelidoni* KALT.

¹⁾ MARSHALL (1891) remarks of this species: "female semblable a *Blacus angulator* NEES (*Praon volucre* HAL.) . . . Les deux sexes (probablement dépareilles) ont été capturés sur un chêne. Selon Curtis, ils seraient, peut-être, indiqués a *flavinode* Hal." MARSHALL, therefore, places the species in his group "Espèces de *Praon* douteuses".

- mongolicus* WATANABE Asia: Mongolia.
Praon mongolicus WATANABE, 1949. Mushi (Fukuoka), **20**, 44. ♀.
- manus* BAKER N. America: U.S.A.
Praon nanus BAKER, 1909. Pomona Journ. Ent., **1**, 23. ♂.
Praon nanus MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 92.
- negundinis* SMITH N. America: U.S.A.
Praon negundinis SMITH, 1944. Aphidiinae N. Amer., p. 27. ♀ ♂.
Host: *Periphyllus negundinis* THOS.
- occidentalis* BAKER N. America: U.S.A.
Praon occidentalis BAKER, 1909. Pomona Journ. Ent., **1**, 23. ♀; SMITH, 1944. Aphidiinae N. Amer., p. 28. ♀ ♂.
Host: *Macrosiphum pisi* (KLTB.); *Macrosiphum* sp.
- palitans* MUESEBECK N. America: U.S.A.
Europe: France; Italy; Yugoslavia.
Asia: Israel.
Praon palitans MUESEBECK, 1956. Bull. Brooklyn ent. Soc., **51**, 27. ♀ ♂.
Host: *Pterocallidium* sp.; *Pterocallidium trifolii* (Mon.).
Biology: VAN DEN BOSCH, SCHLINGER & DIETRICK, 1957. Calif. Agriculture, **11** (7), 11—12.
- pruni* IVANOV Europe: U.S.S.R. (Ukraine)
Praon pruni IVANOV, 1927. Ent. Mitt., **16**, 428.
Host: *Aphis pruni* F.
- simulans* (PROVANCHER) N. America: Canada; U.S.A.
Europe: England.
Aphidaria simulans PROVANCHER, 1886. Addit. Faune ent. Canad. Hym., p. 153. ♂ ♀.
Praon pequodorum VIERECK, 1917 (1916). Bull. Connecticut State geol. nat. Hist. Survey, **22**, 259.
Praon simulans SMITH, 1944. Aphidiinae N. Amer., p. 29. ♀ ♂.
Host: *Eriosoma lanigerum* HAUSM.; *Hyalopterus pruni* (GEOFF.);
Macrosiphum pisi (KALT.)
- unicus* SMITH N. America: U.S.A.
Praon unicus SMITH, 1944. Aphidiinae N. Amer., p. 30. ♀ ♂.
- virginensis* ASHMEAD N. America: U.S.A.
Praon virginensis ASHMEAD, 1899. Proc. U. S. Nat. Mus., **11**, 657. ♂;
SMITH, 1944. Aphidiinae N. Amer., p. 31. ♀.
Host: *Macrosiphum illini* H. & F.
- volucre* HALIDAY Europe: England; Switzerland; Germany;
Hungary, Yugoslavia; Spain.
Asia: China.
Praon volucre HALIDAY, 1833. Ent. Mag., **1**, 487. ♀ ♂; MARSHALL, 1896.
In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 538. ♀ ♂; FAHRINGER, 1933. Ark.

Zool., 27 A, 13. (First record from Asia (China)).

Host: *Anuraphis amygdali* BUCKT.; *Anuraphis padi centauriella* THOS.;
Aphis rumicis L.; *Brevicoryne brassicae* L.; *Callipterus quercus* KALT.;
Hyalopterus arundinis FABR.; *Macrosiphum lactucae* KALT.; *M. picri-*
dis FABR.; *M. persicae* SULZ.; *M. solanii* KALT.; *M. solanifolii* ASHM.;
M. solidani FABR.

Genus *Toxares* HALIDAY

Toxares HALIDAY, 1833. Ent. Mag., 1, 487; MARSHALL, 1896. In: ANDRÉ,
 Spec. Hym. Eur. Alg., 5, p. 545; SZÉPLIGETI, 1904. Gen. Ins., fasc. 22
 a—b, p. 183.

Type: *Toxares deltiger* HALIDAY, 1833.

deltiger HALIDAY

Europe: England.

Toxares deltiger HALIDAY, 1833. Ent. Mag., 1, 261, 487. ♀ ♂; MARSHALL,
 1896. In: ANDRÉ, Spec. Hym. Eur. Alg. 5, 546. ♀ ♂.

Genus *Trioxyys* HALIDAY

Trioxyys HALIDAY, 1833. Ent. Mag., 1, 261, 488.

Subgenus *Trioxyys* HALIDAY

Trioxyys HALIDAY, 1933. Ent. Mag., 1, 261, 488; MARSHALL, 1896. In:
 ANDRÉ, Spec. Hym. Eur. Alg., 5, 550; SZÉPLIGETI, 1904. Gen. Ins.,
 fasc. 22 a—b, p. 190; SMITH, 1944. Aphidiinae N. Amer., p. 85. MUESE-
 BECK & WALKLEY, 1951. Syn. Cat., p. 92.

Type: *Aphidius cirsii* CURTIS. Monob.

Nevropenes PROVANCHER, 1886. Addit. Corr. Faune ent. Canada Hym.,
 pp. 151, 153.

Type: *Nevropenes ovalis* PROVANCHER. Monob.

ameraceris SMITH

N. America: U.S.A.

Trioxyys (*Trioxyys*) *ameraceris* SMITH, 1944. Aphidiinae N. Amer., pp.
 86—87. ♀ ♂.

Trioxyys (*Trioxyys*) *ameraceris* MUESEBECK & WALKLEY, 1951. Syn.
 Cat., p. 96.

Host: *Drepanaphis acerifoliae* (THOS.); *D. monelli* (DAVIS).

amoplanus PÉREZ

Europe: Czechoslovakia.

Trioxyys amoplanus PÉREZ, 1934. Eos, 10, 13. ♀.

Host: *Macrosiphum sonchi* R.

angelicae HALIDAY

Europe: England; Spain.

Trioxyys angelica HALIDAY, 1833. Ent. Mag., 1, 489. ♀; MARSHALL, 1896.
 In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 555. ♀.

Host: *Siphonophora olivata* BUCKTON.

- atriplecis* IVANOV Europe: U.S.S.R. (Ukraine).
Trioxys atriplecis IVANOV, 1927. Ent. Mitt., **16**, 428. ♀ ♂.
 Host: An aphid on *Atriplex hortensis* L.
- auctus* HALIDAY Europe: Holland; England; Switzerland; Spain.
 Asia: China.
Trioxys auctus HALIDAY, 1833. Ent. Mag., **1**, 489. ♀ ♂; MARSHALL, 1896.
 In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 551. ♀ ♂.
 Biological, morphological note: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat., **20**, 54.
- basilewskyi* BENOIT Africa: Belgian Congo.
Trioxys basilewskyi BENOIT, 1933. Ann. Mus. Congo belg. Sci. zool., **36**, 347.
- bonnevillensis* SMITH N. America: U.S.A.
Trioxys bonnevillensis SMITH, 1944. Aphidiinae N. Amer., pp. 86, 88; ♀ ♂.
 Hosts: *Pseudoepameibaphis glauca* G. and P.; *Capitophorus glandulosus* (KLTB.); *C. bitrichus* K. & S.; *C. oestlundii* KWLt.
- betulae* MARSHALL Europe: England; Spain.
 Asia: China.
Trioxys betulae MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 554. ♀.
 Host: *Callipterus betularius* BUCKT.
- var. *solani* IVANOV Europe: U.S.S.R. (Ukraine).
Trioxys betulae var. *solani* IVANOV, 1927. Ent. Mitt., **16**, 429.
 Host: An aphid on *Solanum nigrum* L.
- boscai* PÉREZ Europe: Spain.
Trioxys boscai PÉREZ, 1931. Eos, **7**, 83. ♀.
 Host: Black aphid of pulgon.
 Biological and morphological note: PÉREZ, 1931. Anal. Inst. Nac. Val. Hist. nat., **20**, 54.
- brevicornis* HALIDAY Europe: England; Switzerland; Spain.
Trioxys brevicornis HALIDAY, 1833. Ent. Mag., **1**, 491. ♀. MARSHALL, 1895. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 551. ♀; (Redescription).
 Host: Green aphid of *Lonicera* sp.
 Biological and morphological notes: PÉREZ, 1931. Anal. Inst. Nac. Val. Hist. nat., **20**, 35.
- carolinensis* SMITH N. America: U.S.A.
Trioxys (Trioxys) carolinensis SMITH, 1944. Aphidiinae N. Amer., pp. 86, 89, ♀ ♂.
 Host: *Aphis* sp.

centaureae HALIDAY

Europe: England.

Asia: Japan.

Trioxys centaureae HALIDAY, 1833. Ent. Mag., 1, 490. ♀ ♂; MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 554—55. ♀ ♂ (Redescription).

Host: *Anuraphis padi* L. var *centauriella*.

Further description: WATANABE, 1949. Mushi (Fukuoka), 20, 44.

Biology: MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg. 5, 555.

Immature stages: BEIRNE, 1942. Ent. mon. Mag., 78, 285.

cirsii (CURTIS) (nec HALIDAY).

Europe: England; Holland; Germany, Yugoslavia; Spain.

Australia: Tasmania.

Aphidius cirsii CURTIS, 1831. Brit. Ent., 8, 383.

(*Aphidius*) *Trioxys aceris* HALIDAY, 1833. Ent. Mag., 1, 490. ♀.

Trioxys cirsii HINCKS, Ent. mon. Mag., 79, 44 (Correction of author's name).

Hosts: Aphid on *Cirsium arvense*; aphid on *Acer pseudoplatanus*; *Aphis ballotae* PASS.; *Aphis rumicis* L.; *Aphis neoarticulatus* THEOB.; *Myzocallis annulata* HTG.; *Macrosiphum granarium* KLTB.

Biology: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat., 20, 32—33.

Oviposition habits: EIDMANN, 1924. Ztschr. angew. Ent., 10, 353—63.

communis GAHAN

Asia: Formosa.

Trioxys communis GAHAN, 1926. Proc. U. S. Nat. Mus., 70, 4. ♀ ♂.

Host: *Aphis gossypii* GLOVER.

complanatus PÉREZ

Europe: Spain.

Trioxys complanatus PÉREZ, 1931. Eos, 7, 78. ♀ ♂.

Host: *Macrosiphum pisi* KLTB.

Biology: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat., note 20, 33—34.

compressicornis RUTHE

Europe: Iceland.

Trioxys compressicornis RUTHE, 1859. Stettin. ent. Ztg., 20, 314. ♀.

coruscanigrans GAHAN

N. America: U.S.A.

Trioxys coruscanigrans GAHAN, 1911. Maryland. Bull. agr. expt. Sta. 152, p. 195. ♀.

Trioxys (*Trioxys*) *coruscanigrans* SMITH, 1944. Aphidiinae N. Amer., pp. 86, 90. ♀ ♂.

Hosts: *Macrosiphum coweni* (HUNTER); *M. jonesii* G. & P.; *M. frigidiae* OESTL.

cupressicola GAHAN

N. America: U.S.A.

Trioxys cupressicola GAHAN, 1919. Proc. U. S. Nat. Mus., **55**, 116. ♀ ♂.

Trioxys (Trioxys) cupressicola SMITH, 1944. Aphidiinae N. Amer., p. 91.
♀ ♂. (Redescription).

Host: *Cerosipha* sp.

exareolatus (VIERECK)

N. America: U.S.A.

Aphidius (Trioxys) exareolatus VIERECK, 1917 (1916). Connecticut
State geol. nat. Hist. Survey Bull. **22**, p. 260, 261. ♀.

Trioxys (Trioxys) exareolatus SMITH, 1944. Aphidiinae N. Amer., p. 92.

Host: *Macrosiphum rosae* (L.).

flaviceps SZÉPLIGETI

Europe: Hungary.

Trioxys flaviceps SZÉPLIGETI, 1896. Term. Füzetek, **21**, 304, 406. ♀.

fumariae PÉREZ

Europe: Spain.

Trioxys fumariae PÉREZ, 1931. Eos, **7**, 81. ♀ ♂.

Hosts: *Macrosiphum rogersii* THEOB.

Biological Note: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist.
nat., **20**, 34.

gahani SMITH

N. America: U.S.A.

Trioxys (Trioxys) gahani SMITH, 1944. Aphidiinae N. Amer., pp. 86,
92. ♀ ♂.

Host: "*Aphis forbesi* WIED."

granatensis PÉREZ

Europe: Spain.

Trioxys granatensis PÉREZ, 1931. Eos, **7**, 74. ♀ ♂.

Host: Aphid of *Punica granatum* L.

Biological note: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist.
nat., **20**, 31.

heraclei HALIDAY

Europe: England; Holland; Germany; Spain.

(*Aphidius*) *Trioxys heraclei* HALIDAY, 1833. Ent. Mag., **1**, 491. ♀ ♂.

Trioxys heraclei MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**,
552. ♀ ♂ (Redescription).

Hosts: Aphid on *Heracleum sphondylium*; black aphid on *Anthyllis*
citisoides.

indicus SUBBA RAO & SHARMA

Asia: India.

Trioxys (Trioxys) indicus SUBBA RAO & SHARMA, 1959. Indian Journ.
Ent., **20**, 199. ♀ ♂.

Host: *Aphis gossypii* GLOVER.

infrequens SMITH

N. America: U.S.A.

Trioxys (Trioxys) infrequens SMITH, 1944. Aphidiinae N. Amer., pp. 86,
93. ♀.

- letifer* HALIDAY Europe: England.
 (*Aphidius*) *Trioxys letifer* HALIDAY, 1933, Ent. Mag., **1**, 491. ♀.
Trioxys letifer MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 557. ♀ (Redescription)
 Host: Aphid on *Salix ulmifolia*.
- minutus* HALIDAY Europe: England.
 (*Aphidius*) *Trioxys minutus* HALIDAY, 1833. Ent. Mag., **1**, 491. ♀.
Trioxys minutus MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 556. ♀ (Redescription).
 Host: Aphids on *Buxus balearica*.
- obscuriformis* PÉREZ Europe: Spain.
Trioxys obscuriformis PÉREZ, 1931. Eos, **7**, 77. ♀ ♂.
 Morphological note: PÉREZ, 1931. Anal. Inst. Nac. Valencia, 2. ser. Hist. nat., **20**, 31.
- ovalis* (PROVANCHER) N. America: Canada.
Neuropenes ovalis PROVANCHER, 1886. Addit. Corr. Faune ent. Canada Hym., p. 153. ♀ ♂.
- pallidus* HALIDAY¹) Europe: England.
 (*Aphidius*) *Trioxys pallidus* HALIDAY, 1833. Ent. Mag., **1**, 489. ♀.
Trioxys pallidus MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 556. ♀ (Redescription).
- palmerae* SMITH N. America: U.S.A.
Trioxys (*Trioxys*) *palmerae* SMITH, 1944. Aphidiinae N. Amer., pp. 86, 94. ♀ ♂.
 Host: *Macrosiphum mentzeliae* WILS.
- placidus* GAUTIER Europe: France.
Trioxys placidus GAUTIER, 1922. Bull. Soc. ent. France 1922 (1921), p. 303. ♀.
- pulcher* GAUTIER & BONNAMOUR Europe: France.
Trioxys pulcher GAUTIER & BONNAMOUR, 1924. Bull. Soc. ent. France 1924, p. 43. ♀.
 Host: "A very small aphid on oak".
- rhagii* ASHMEAD N. America: U.S.A.; Canada.
Trioxys rhagii ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus., **11**, 670. ♀.
Trioxys (*Trioxys*) *rhagii* SMITH, 1944. Aphidiinae N. Amer., pp. 87, 95. ♀.

¹) MARSHALL (1896, p. 556), makes the following observations regarding this and two other species of *Trioxys* described by HALIDAY viz. *pallidus* and *letifer*: "Les caractères de cette espèce et des deux suivantes sont si mal exposés par leur auteur qu'il a été impossible de les différencier d'une manière satisfaisante".

struma GAHAN Asia: Formosa.
Trioxys struma GAHAN, 1926. Proc. U. S. Nat. Mus., **70**, 5. ♀ ♂.
 Hosts: *Macrosiphoniella citricola* VAN DER GROOT; *Greenidea ficicola* TAK.

testaceus STELFOX Europe: Ireland.
Trioxys testaceus STELFOX, 1948. Ent. mon. Mag., **84**, 102. ♀.

utilis MUESEBECK Europe: Italy; France.
 N. America: U.S.A.
Trioxys utilis MUESEBECK, 1956. Bull. Brooklyn ent. Soc., **51**, 26. ♀ ♂.
 Hosts: *Pterocallidium* sp.; *P. trifolii* (MONELL).

variegator SZÉPLIGETI Europe: Hungary.
Trioxys variegator SZÉPLIGETI, 1898. Term. Füzetek, **21**, 394, 407. ♀.

Subgenus *Acanthocaudus* SMITH

Acanthocaudus SMITH, 1944. Aphidiinae N. Amer., pp. 85, 96.
 Type: *Trioxys (Acanthocaudus) tissoti* SMITH. Orig. desig.

caudacanthus SMITH N. America: U.S.A.
Trioxys (Acanthocaudus) caudacanthus SMITH, 1944. Aphidiinae N. Amer., pp. 96. 93. ♀ ♂.
 Hosts: *Macrosiphum erigeronensis* (THOS.); *M. gravicornis* PATCH.

tissoti SMITH N. America: U.S.A.
Trioxys (Acanthocaudus) tissoti SMITH, 1944. Aphidiinae N. Amer., p. 96.
 ♀ ♂.
 Host: *Macrosiphum rudbeckiae* (FITCH).

Summary

The above paper contains a catalogue of the known species of the world, belonging to the subfamily *Aphidiinae*, described up to 1957.

Zusammenfassung

Die vorliegende Arbeit bringt einen Katalog der Arten der Unterfamilie *Aphidiinae* der Welt, die bis 1957 beschrieben sind.

Резюме

Настоящая работа содержит список видов подсемейства *Aphidiinae* всего мира, описанных до 1957 года.