

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 *Trioxyys* 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* NEES<sup>1)</sup>

- 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* HALIDAY<sup>1)</sup>

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

<sup>1)</sup> 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 ceconii* 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. ♀ ♂.

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*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. strobi* (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 quilisi* 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;

DRAGOUN, 1934. Ber. Forschungsinst. Českoslov. Zuckerindust., 37, 163—66.

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- 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 coquilletti* 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.

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*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 adiphophilus* 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. ♀ ♂.

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- 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* BAKER<sup>1)</sup> 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* BAKER<sup>1)</sup> 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*.

<sup>1)</sup> 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.

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- dauci* MARSHALL Europe: England.  
*Aphidius dauci* MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 601. ♀ ♂.  
 Host: *Macrosiphum pastinaceae* L.
- delicatus* BAKER<sup>1)</sup> 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.

<sup>1)</sup> 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 infuscata* 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* MARSCHALL 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. ♀ ♂.

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- 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. ♀.
- loniceræ* MARSHALL Europe: England; Yugoslavia, U.S.S.R.  
*Aphidius loniceræ* MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., **5**, 572. ♀ ♂.  
 Hosts: *Macrosiphum sonchi*; *M. caraganae* CHOL.; *M. pisi* KALT.; *Siphocoryne xylostei* SCHRANK.
- lutescens*<sup>1)</sup> 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.

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

- 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* MARSHALL Europe: 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.).

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- 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*<sup>1)</sup> BRÈTHES S. America: Argentina; Uruguay; Chile.  
*Aphidius platensis* BRÈTHES, 1913. Anal. Mus. nacion. Hist. nat. Buenos Aires., **24**, 41.

<sup>1)</sup> 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* VIERECK, 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*.

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N. America: U.S.A.

*Aphidius pterommae* ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus., **11**, 659. ♂.*Aphidius lachni* ASHMEAD, 1889 (1888). t.c., p. 660. ♀ ♂.*Aphidius (Aphidius) pterommae* SMITH, 1944. Aphidiinae N. Amer., pp. 50, 68. ♀ ♂ (Redescription).Hosts: *Clavigerus bicolor* (OESTL.); *C. smithiae* (MONELL); *Lachnus salicicola* (UHLER).*pulcher* BAKER<sup>1)</sup>

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* HINCKS<sup>2)</sup>*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).<sup>1)</sup> The same remarks apply to *pulcher* BAKER as those in case of *coloratus* BAKER.<sup>2)</sup> 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.)

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*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 aphis; *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* (DAVIS); *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.

*Scotoneurus* PROVANCHER, Add. Faun. Canad. Hym., pp. 152, 156.

Type: *Scotoneurus 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. Aphidiinae N. Amer., p. 15.; MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 91.

*aestivalis* VIERECK<sup>1</sup>)

N. America: U.S.A.

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

<sup>1</sup>) 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 descriptions 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.

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- lacertosus* HALIDAY Europe: Britain; Switzerland; Yugoslavia.  
*Ephedrus lacertosus* HALIDAY, 1833. Ent. Mag., 1, 485. ♀ ♂.  
*Ephedrus lacertosus* MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 543. ♀ ♂.  
 Hosts: *Macrosiphum absinthi* L.; *Myzus cerasi* F.; *Hyalopterus arundinis* F.
- levicollis* THOMSON Europe: Switzerland.  
*Ephedrus levicollis* THOMSON, 1895. Opusc. ent., p. 2332. ♀ ♂.
- muesebecki* SMITH N. America: U.S.A.  
*Ephedrus muesebecki* SMITH, 1944. Aphidiinae N. Amer., p. 20. ♀ ♂.  
*Ephedrus muesebecki* MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 91.  
 Host: *Amphorophora maxmia* MASON.
- nacheri* PÉREZ Europe: Czechoslovakia.  
*Ephedrus nacheri* PÉREZ, 1934. Eos, 10, 17, ♀.  
 Host: *Aphis* spp.
- nitidus* GAHAN N. America: U.S.A.  
*Ephedrus nitidus* GAHAN, 1917. Proc. U. S. Nat. Mus., 53, 195. ♀.  
 SMITH, 1944. Aphidiinae N. Amer., p. 21 ♀ ♂. MUESEBECK & WALKLEY, 1951. Syn. Cat., p. 91.  
 Host: *Macrosiphum cerasi* (F.); *M. persicae* (SULZ.); *M. solanifolii* ASHM.
- picticornis* STELFOX Europe: Ireland.  
*Ephedrus picticornis* STELFOX, 1941. Proc. roy. Irish Acad., 46, 138. ♀.
- plagiator* (NEES) Europe: Germany; England; Belgium; Holland; France; Italy; Spain; U.S.S.R.  
*Bracon plagiator* NEES, 1811. Mag. Ges. Naturf. Freunde Berlin, 5, 17.  
*Ephedrus plagiator* MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5, 544. ♀ ♂.  
*Ephedrus plagiator* SZÉPLIGETI, 1904. Gen. Ins., fasc. 22 a—b, p. 183.  
 Host: *Aphis infuscata* (KOCH); *Macrosiphum granarium* KBY; *S. caraganae* CHOL.  
 Biology: Filip'ev, 1930. Ann. Rept. State Inst. exptl. Agron., Div. appl. Ent., Leningrad, 1928—1929, p. 169—98; SKRIPTSHINSKY, 1930. Repts. appl. Ent. Leningrad, 4, 351—64.
- var. *minor* STELFOX Europe: Ireland.  
*Ephedrus plagiator* var. *minor* STELFOX, 1941. Proc. roy. Irish Acad., 46, 135.
- var. *nigra* GAUTIER, BONAMOUR & GAUMONT. Europe: France.  
*Ephedrus plagiator* var. *nigra* GAUTIER, BONAMOUR & GAUMONT, 1929. Bull. Soc. ent. France, 1929, p. 200. ♀.  
 Host: *Macrosiphum sanborni* GILLETT.

*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. ♀.

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*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* NEES<sup>1)</sup> 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* VIERECK<sup>2)</sup> 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.

<sup>1)</sup> 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”.

<sup>2)</sup> 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. ♂.

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*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* NEES<sup>1)</sup> 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.

*lemantinum* 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.

<sup>1)</sup> 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 deltigger* HALIDAY, 1833.

*deltigger* HALIDAY

Europe: England.

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

Genus *Trioxyis* HALIDAY

*Trioxyis* HALIDAY, 1833. Ent. Mag., 1, 261, 488.

Subgenus *Trioxyis* HALIDAY

*Trioxyis* 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.

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

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

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

*amoplanus* PÉREZ

Europe: Czechoslovakia.

*Trioxyis amoplanus* PÉREZ, 1934. Eos, 10, 13. ♀.

Host: *Macrosiphum sonchi* R.

*angelicae* HALIDAY

Europe: England; Spain.

*Trioxyis 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.

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*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 ballota* 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. Aphidinae 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. ♀.

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- letifer* HALIDAY Europe: England.  
*(Aphidius) Trioxyx letifer* HALIDAY, 1933, Ent. Mag., 1, 491. ♀.  
*Trioxyx letifer* MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5,  
 557. ♀ (Redescription)  
 Host: Aphid on *Salix ulmifolia*.
- minutus* HALIDAY Europe: England.  
*(Aphidius) Trioxyx minutus* HALIDAY, 1833. Ent. Mag., 1, 491. ♀.  
*Trioxyx minutus* MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg., 5,  
 556. ♀ (Redescription).  
 Host: Aphids on *Buxus balearica*.
- obscuriformis* PÉREZ Europe: Spain.  
*Trioxyx 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* HALIDAY<sup>1)</sup> Europe: England.  
*(Aphidius) Trioxyx pallidus* HALIDAY, 1833. Ent. Mag., 1, 489. ♀.  
*Trioxyx pallidus* MARSHALL, 1896. In: ANDRÉ, Spec. Hym. Eur. Alg.,  
 5, 556. ♀ (Redescription).
- palmerae* SMITH N. America: U.S.A.  
*Trioxyx (Trioxyx) palmerae* SMITH, 1944. Aphidiinae N. Amer., pp. 86,  
 94. ♀ ♂.  
 Host: *Macrosiphum mentzeliae* WILS.
- placidus* GAUTIER Europe: France.  
*Trioxyx placidus* GAUTIER, 1922. Bull. Soc. ent. France 1922 (1921),  
 p. 303. ♀.
- pulcher* GAUTIER & BONNAMOUR Europe: France.  
*Trioxyx 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.  
*Trioxyx rhagii* ASHMEAD, 1889 (1888). Proc. U. S. Nat. Mus., 11, 670. ♀.  
*Trioxyx (Trioxyx) rhagii* SMITH, 1944. Aphidiinae N. Amer., pp. 87, 95. ♀.

<sup>1)</sup> MARSHALL (1896, p. 556), makes the following observations regarding this and two other species of *Trioxyx* 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.

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