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The Nearctic Psylloidea (Insecta: Homoptera): an annotated check list

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The 302 species of jumping plant lice (Insecta: Homoptera: Psylloidea) recorded from the Nearctic zoogeographical region are listed under their respective genera. Information is given on synonymy, host plants and distribution; and the taxonomic position of problematical species is discussed. A list of host-plants and their associated psyllids is also included.

KEYWORDS: Psylloidea; Homoptera; checklist; distribution; host-plant; synonymy; bibliography.

Introduction

This paper attempts to bring together the scattered literature on the Nearctic Psylloidea. It complements earlier check lists that reviewed the psyllids or jumping plant lice of the Palaearctic, Neotropical, Oriental, Austro-Oriental and Pacific zoogeographical realms (Hodkinson, 1983a, 1986; Hodkinson & White, 1981; Klimaszewski, 1973). The account includes all psyllids recorded from the North American continent north of the USA–Mexico political boundary, including Greenland and the Arctic islands. The origins of the Nearctic psyllid fauna were discussed in detail by Hodkinson (1980) who recognized 3 basic faunal elements. The first element embraced a group of genera, including *Aphalara*, *Craspedolepta*, *Livia*, *Psylla* and *Cacopsylla*, which is holarctic in distribution. These genera contained some species that exhibit a broad northern circumpolar distribution. The second element contained genera that appear to have spread into the Nearctic region from the northern Neotropics. Typical genera included here are *Katacephala*, *Ceropsylla*, *Leuronota* and *Gyropsylla*. This left a residual third major element of apparently endemic genera such as *Tetragonocephala*, *Leurolophus*, *Purshivora*, *Neophyllura*, *Amorpha*, *Pexopsylla* and *Paraphalaroida* which appear to have their origins in the Nearctic region. Recent work on the temperate South American fauna suggests that some genera, such as *Aphalaroida*, that were considered to belong to this 'endemic' group, have strong affinities with elements of the Neotropical fauna (Burckhardt, personal communication). It is also apparent that closer attention should be paid to the relationship between described Nearctic and Palaearctic species as it is possible that some species still exist under different names in the two regions.

Apparently several species have been introduced into North America. These include *Arytaina genistae*, *Arytainilla spartiophila*, *Acizzia uncatoides*, *Psyllopsis fraxini*, *P. fraxinicola*, *P. discrepans*, *Blastopsylla occidentalis*, *Ctenary longicauda*, *Spanioneura fonscolombii*, *Cacopsylla mali*, *C. sorbi*, *C. pyricola*, *C. fatsiae*, *C. buxi*, *Trioza alacris* and *Homotoma ficus*. Among these, *Cacopsylla pyricola* is a major pest of

pear (*Pyrus communis*) while other species, such as *A. uncatoides*, *B. occidentalis*, *C. mali*, *T. alacris* and *H. ficus*, are minor pests of Acacia, Eucalyptus, Apple, Bay tree and Fig respectively. Among the native species *Paratrioza cockerelli* is potentially a serious pest of potato while *Trioxa tripunctata*, *Ceropsylla sideroxyli*, *Trioxa diospyri*, *Pachypsylla* spp. are minor pests of blackberry, false mastic, persimmon and nettle-tree respectively. *Heteropsylla cubana* has recently become a major pest of the forage- and shade-legume *Leucaena*, within the Pacific Basin.

In addition to the species listed below, Aulmann (1913) and Crawford (1914) included *Psylla cedrelae* Kieffer and *Uhleria* (\equiv *Crawfordiella*) *mira* Crawford from N. America. These are mistakes; the former is an Indian species, the latter belongs to the Australian genus *Lasiopsylla* (Taylor, 1960). Also Provancher (1872, 1886) lists 3 species, *Psylla brunnea*, *P. ochracea* and *P. recticeps* whose identity is uncertain and each should be regarded as *nomina dubia*.

I have also incorporated the species and genera included in papers published privately by Bliven (1955, 1956, 1958, 1960). While the descriptions are reasonably adequate for species recognition there remains some doubt as to whether the distribution of the papers was sufficiently wide to signify 'publication' in the sense of the International Code of Zoological Nomenclature.

The check list follows the format of my earlier catalogues. Genera are designated by capital letters and are listed alphabetically. Species as presently conceived are listed alphabetically in bold italics within their respective genera. Synonyms, misidentifications and misspellings of names are indented in italics. References in square brackets following a specific name relate to those authors who have referred to the species in question under that name. For each species the type locality and host-plant is given where known. Standard abbreviations are used for states within the USA and provinces within Canada. A further note on distribution is added where species have been recorded outside the type locality. In the main text host plants are quoted directly from the literature to avoid compounding any errors that may have occurred. However, in the host-plant catalogue following the check list, the generic names of plants follows Willis (1973). The abbreviations (BM), (USNM) and (IDH) are used to indicate material deposited in the British Museum (Natural History), the United States National Museum and the I.D. Hodkinson collections respectively. The family classification of the Psylloidea follows White & Hodkinson (1985).

SUPERFAMILY PSYLLOIDEA

ACIZZIA Heslop-Harrison, 1949 a, 1961 b

[PSYLLIDAE]

TYPE-SPECIES: *Psylla acaciae* Maskell, 1894

A large genus distributed primarily on mimosoid legumes throughout the warmer regions of the Old World, including Australia (White & Hodkinson, 1985). A single species has been introduced into the USA.

uncatoides (Ferris and Klyver, 1932) [Hodkinson, 1980; Hodkinson & White, 1981; White & Hodkinson, 1985; Hodkinson & Hollis, 1987]

Psylla uncatoides Ferris & Klyver [Jensen, 1957 d; Munro, 1965; Koehler *et al.*, 1966; Madubunyi & Koehler, 1974; Pinnock *et al.*, 1978]

Neopsylla uncatoides (Ferris & Klyver) [Heslop-Harrison, 1949 a]

Type-locality: New Zealand. Distribution: USA, Calif., Chile, Mexico, Colombia, Guadeloupe, Europe (introd.), native to Australia. Host-plants: *Acacia* and *Albizia* species, Munro (1965) gives a full list.

AMORPHICOLA Heslop-Harrison, 1961 [PSYLLIDAE]TYPE-SPECIES: *Psylla amorphae* Mally, 1894

A small North American legume-feeding genus possibly related to the Old World genus *Cyamophila* Loginova, 1977.

amorphae Mally, 1894 [Heslop-Harrison, 1961; Loginova, 1977; White & Hodkinson, 1985]

Psylla amorphae Mally [Aulmann, 1913]

Arytaina amorphae (Mally) [Crawford, 1914; Van Duzee, 1916, 1917; Klyver, 1931 c; Tuthill, 1943; Heslop-Harrison, 1951 b; Jensen, 1957 c]

Psylla floridensis Crawford, 1911 c [Crawford, 1912 a]

Psylla ilicis Crawford *nec* Ashmead [Crawford, 1911 c, 1912 a]

Amblyrhina fractiforceps Riley MS name [Crawford, 1914]

Type locality: USA, Iowa. Distribution: USA, Nebr., Fla. Host-plants: *Amorpha canescens*, *A. fruticosa*.

pallida (Tuthill, 1943) [Heslop-Harrison, 1961; Loginova, 1977]

Arytaina pallida Tuthill

Type locality: USA, Iowa, Kans., Minn., Nebr. Host-plant: *Amorpha canescens*.

APHALARA Förster, 1848 [APHALARIDAE]TYPE-SPECIES *Aphalara polygoni* Förster, 1848

A large, holarctic genus with members feeding on Polygonaceae, Ranunculaceae, and Primulaceae (Hodkinson, 1980). The North American species listed together below as *A. calthae* and *A. polygoni* are almost certainly not conspecific with the European type material and are, in all probability, mixtures of species (see Ossiannilsson & Jansson, 1981 for critical taxonomy of group). Gillette & Baker (1895) listed *Aphalara marginata* from Colorado as a Riley manuscript name. This species was not subsequently described.

calthae L., 1758 and ***polygoni*** Förster, 1848 [Gillette & Baker, 1895; Tucker, 1907; Johannsen & Patch, 1911; Patch, 1912 a; Zacher, 1913; Crawford, 1914; McAttee, 1915, 1918; Van Duzee, 1916, 1917; Leonard, 1928; Klyver, 1931 a, 1932; Kitching, 1971; Papp & Johnson, 1979]

Aphalara calthae Mally, 1894 [misspelling]

Distribution: abundant records from throughout the USA, often on *Polygonum*.

confusa Caldwell, 1937 [Strickland, 1938; Kitching, 1971]

Type locality: USA, Wyo. Distribution: Alta. Host-plant: possibly *Rumex* sp.

curta Caldwell, 1937 [Strickland, 1938; Jensen & Knowlton, 1951; Kitching, 1971; Hodkinson, 1980; White & Hodkinson, 1985]

curta var. *californica* Caldwell

Type locality: USA, Ariz., Calif., Colo., Iowa, Kans., Nebr., SDak., Utah, Wisc., Wyo. Distribution: Canada, Alta. Host-plant: unknown.

dentata Caldwell, 1937 [Strickland, 1938; Kitching, 1971; Hodkinson, 1980]

Type locality: USA, Calif., Wyo. Distribution: Canada, Alta. Host-plant: unknown.

loca Caldwell, 1937 [Strickland, 1938; Kitching, 1971; Hodkinson, 1980]

Type locality: USA, Ariz., Calif., Colo., Ill., Iowa, NMex., Oreg., Tenn., Wash., Wash. DC. Distribution: Canada, Alta., Man. (IDH). Host-plant: *Polygonum erectum*.

maculata Caldwell, 1937

Type locality: USA, Calif. Host-plant: unknown.

manitobaensis Caldwell, 1938 b [Strickland, 1939; Kitching, 1971; Hodkinson, 1978, 1980; MacLean & Hodkinson, 1980]

Type locality: Canada, Man. Distribution: Canada, Alta; USA, Alas. Host-plant: unknown.

monticola Hodkinson, 1973 a [Hodkinson, 1980; White & Hodkinson, 1985]

Type locality: Canada, Alta. Host-plant: *Rumex pauciflorus* Nuttall.

nigra Caldwell, 1937 [Hodkinson, 1978, 1980; MacLean & Hodkinson, 1980]

Type-locality: Canada, Man. Distribution: USA, Alas. Host-plant: unknown.

nubifera Patch, 1912 a [Crawford, 1914; Van Duzee, 1917; Jensen & Knowlton, 1951; Hodkinson, 1976, 1980; MacLean & Hodkinson, 1980]

Aphalara nubifera var. *reducta* Caldwell, 1937

Type locality: USA, Colo. Distribution: USA, Alas., Maine, Utah, Wash. Host-plant: unknown.

persicaria Caldwell, 1937 [Caldwell, 1938 a; Kitching, 1971; Hodkinson, 1980; White & Hodkinson, 1985]

Aphalara persicaria var. *cubana* Caldwell, 1937

Type locality: Ohio. Distribution: Cuba (var. *cubana*). Host-plant: *Persicaria persicaria* L.

quadrilineata—see *Cacopsylla quadrilineata*

rumicis Mally, 1894 [Patch, 1912 a; Crawford, 1914; Van Duzee, 1916, 1917; Klyver, 1931 d, 1932; Strickland, 1938; Heslop-Harrison, 1949 c; Kitching, 1971; Hodkinson, 1973 a, 1980; White & Hodkinson, 1985]

Aphalara exilis rumicis Mally

Aphalara exilis Van Duzee, 1916 *nec* Weber & Mohr, 1804?

Aphalara calthae maculipennis Löw [Crawford, 1911 b] misidentification

Type locality: USA, Iowa. Distribution: USA, Ariz., Calif., Colo., Ill., Miss., Mont., Oreg., Tex., Wash., Wyo.; Canada: BC, NS. Host-plant: *Rumex altissimus*.

simila Caldwell, 1937 [Strickland, 1938; Caldwell, 1941, 1944 a; Jensen & Knowlton, 1951; Kitching, 1971]

Type locality: USA, Calif., Colo., Idaho, Oreg., Utah, Wash., Wyo. Distribution: Mexico. Host-plant: unknown.

steironemicola Richards, 1970

Type locality: Canada, Ont. Host-plant: *Steironema ciliatum*.

APHALAROIDA Crawford, 1914 [APHALARIDAE]TYPE-SPECIES: *Aphalaroida pithecolobia* Crawford, 1914

A small genus found on legumes in the south western USA and Mexico. It appears to be closely related to *Russelliana* and related genera from S. America (Burckhardt, 1987).

acaciae Crawford, 1914 [Van Duzee, 1916, 1917]

Type locality: USA, Calif. Host-plant: *Acacia amentasea* and possibly *A gregii*.

californica Tuthill, 1939 b

Distribution: USA, Calif. Host-plant: unknown.

inermis Crawford, 1914 [Van Duzee, 1916, 1917; Tuthill, 1939 b; Caldwell, 1941; Jensen, 1949; Hodkinson & White, 1971; Russell, 1973; White and Hodkinson, 1985]

Aphalara punctellus Van Duzee, 1923 [Jensen, 1949; Russell, 1973]

Type locality: USA, Ariz., Calif., Tex. Distribution: Mexico. Host-plant: *Prosopis juliflor*.

intermedia Klyver, 1931 a

Type locality: USA, Nev. Host-plant: unknown.

masonici (Caldwell, 1940) replacement name

Euphyllura acacia Caldwell, 1938 b *nec* Crawford, 1914

Type locality: USA, Fla. Host-plant: *Acacia* sp.

pithecolobia Crawford, 1914 [Van Duzee, 1916, 1917; Klyver, 1932; Jensen, 1957 c]

Type locality: USA, Tex. Distribution: USA, Ariz., NMex. Host-plant: *Pithecolobium* sp.

prosopis Crawford, 1914 [Van Duzee, 1916, 1917]

Rhinocola prosopis Hubbard MS name [Crawford, 1914]

Type locality: USA, Ariz. Host-plant: *Prosopis juliflor*.

spinifera Crawford, 1914 [Van Duzee, 1916, 1917]

Rhinocola spinifera Hubbard MS name [Crawford, 1914]

Rhinocola rauca Hubbard MS name [Crawford, 1914]

Type locality: USA, Ariz., Calif. Host-plant: *Prosopis juliflor* and possibly *Acacia gregii*.

ARYTAINA Förster, 1848

[PSYLLIDAE]

TYPE-SPECIES: *Psylla genistae* Latreille, 1804

An old world genus feeding on legumes of the tribe Genisteae, primarily in the Mediterranean basin (Hodkinson & Hollis, 1987). A single species has been introduced into the USA.

genistae (Latreille, 1804) [Crawford, 1914; Van Duzee, 1916, 1917; Tuthill, 1943; Heslop-Harrison, 1951 b; Vondráček, 1953; Loginova, 1976; Hodkinson 1980; Hodkinson & Hollis, 1987; White & Hodkinson, 1985]

Psyllopa magna Crawford, 1911 b [Zacher, 1913]

Arytaena genistae Förster [Enderlein, 1921]

Type locality: Europe. Distribution: USA, Mass. (introd.). Host-plant: *Cytisus scoparius*. A full account of the European distribution, host-plants and synonymy is given by Hodkinson & Hollis (1987).

ARYTAINILLA Loginova, 1972 b

[PSYLLIDAE]

TYPE-SPECIES: *Psylla delarbrei* Puton, 1873

A heterogeneous west palaearctic genus, members of which feed in papilionoid legumes. A single species has been introduced into North America.

spartiophila (Förster, 1848) [Loginova, 1972 b, 1977; Hodkinson, 1973 b; Hodkinson & Hollis, 1987; White & Hodkinson, 1985]

Psylla spartii Guérin-Méneville, 1842 [Aulmann, 1913]

Arytaina spartii Guérin-Méneville [Heslop-Harrison, 1951 b]

Arytaina spartiophila Förster, 1848 [Tuthill, 1943; Kitching, 1971]

Type locality: Europe. Distribution: USA, Wash. (introd.). Host-plant: *Cytisus scoparius*. A full account of the European distribution, host-plants and synonymy is given by Hodkinson & Hollis (1987).

BLASTOPSYLLA Taylor, 1985

[APHALARIDAE?]

TYPE-SPECIES: *Blatopsylla moorei* Taylor, 1985

An Australian *Eucalyptus*-feeding genus that has been introduced into the USA.

occidentalis Taylor, 1985

Type locality: Australia. Distribution: USA, Calif.; New Zealand. Host-plant: *Eucalyptus spathulata* Hook.

BRACHYLIVIA Riley, 1884—a *nomen nudum*

CACOPSYLLA Ossiannilsson, 1970

[PSYLLIDAE]

TYPE-SPECIES: *Psylla mali* Schmidberger, 1836

Cacopsylla is used here in its broadest sense to include species previously placed in *Psylla* (*sensu lato*) but not congeneric with *P. alni* and its relatives, which feed on Betulaceae (see Klimaszewski, 1972; Loginova, 1978). White & Hodkinson (1985), however, included *Cacopsylla* as a subgenus of *Psylla* (*sensu lato*). Even as now constituted *Cacopsylla* is almost certainly an assemblage of distantly related groups that, when fully understood, may well warrant separate generic status. At present, a number of subgenera are described but many of the N. American species remain to be allocated to them (Loginova, 1978).

acuminata* (Jensen, 1956) comb. n.Psylla acuminata* Jensen [Bliven, 1956]Type locality: USA, Calif. Host-plant: *Cercocarpus ledifolius*.***alaskensis* (Ashmead, 1904) comb. n.***Psylla alaskensis* Ashmead [Aulmann, 1913; Crawford, 1914; Tuthill, 1943; Jensen, 1951; Kitching, 1971; Hodkinson, 1978; MacLean & Hodkinson, 1980]*Psyllia alaskensis* (Ashmead) [Van Duzee, 1916, 1917]*Arytaina fuscata* Caldwell, 1938 b [Tuthill, 1943; Heslop-Harrison, 1951 b]Type locality: USA, Alas. Distribution: USA, Colo.; Canada, Man. Host-plant: *Salix* sp.***alba* (Crawford, 1914) comb. n.***Psylla alba* Crawford [Tuthill, 1943; Jensen, 1946, 1951; Vondráček, 1953; Kitching, 1971; Papp & Johnson, 1979]*Psylla* (?*Hepatopsylla*) *alba* Crawford [White & Hodkinson, 1985]*Psyllia alba* (Crawford) [Van Duzee, 1916, 1917; Klyver, 1932; Strickland, 1938]Type locality: USA, Calif., NMex., Nev., Tex. Distribution: USA, Colo., Idaho, Utah, Wash., Wisc., Wyo.; Canada, Alta. Host-plant: *Salix linearifolia*, *S. hindsiana*, *S. longifolia*?***albagenae* (Caldwell, 1938 a) comb. n.***Psylla albagenae* (Caldwell) [Tuthill, 1943; Jensen, 1951]*Psyllia albagenae* Caldwell*Psylla* (*Hepatopsylla*) *albagenae* Caldwell [White & Hodkinson, 1985]Type locality: USA, Ohio. Distribution: USA, Iowa. Host-plant: *Salix interior* (= *longifolia*).***ambigua* (Förster, 1848) comb. n.***Psylla ambigua* Förster. The record for Greenland of this *Salix*-feeding species is unlikely to be correct (see Rubsäamen, 1898; Aulmann, 1913; Van Duzee, 1917; Henriksen, 1939) (Klimaszewski (1973) gives a European bibliography).***americana* (Crawford, 1914) comb. n.***Psylla americana* Crawford [Tuthill, 1943; Caldwell, 1944 a; Jensen, 1951, 1957 c; Kitching, 1971; Hodkinson & White, 1981]*Psyllia americana* (Crawford) [Van Duzee, 1916, 1917; Klyver, 1931 c, 1932; Strickland, 1938]*Psylla americana* Crawford, 1911 b *nomen nudum* [Crawford, 1912 a]*Psylla* (*Hepatopsylla*?) *americana* Crawford [White & Hodkinson, 1985]

Type locality: USA, Calif.; Canada, Alta. Distribution: USA, Colo., Idaho, Oreg., Utah, Wash.; Canada, NS; Mexico.

Tuthill (1943) states that the Alberta specimens differ from those from California. Host-plant: *Salix lasiolepis*, *S. lasiandra*.***annulata* (Fitch, 1851) comb. n.***Psylla annulata* Fitch [Walker, 1852; Thomas, 1879; Ashmead, 1881; Riley, 1885; Lintner, 1893; Mally, 1894; Smith, 1910; Crawford, 1914; Patch, 1912 a, 1924; McAtee, 1918; Tuthill, 1943]

Psyllia annulata (Fitch) [Van Duzee, 1917; Caldwell, 1938 a]

Psylla (?*Hepatopsylla*) *annulata* Fitch [White & Hodkinson, 1985]

Type locality: not stated. Distribution: USA, Conn., Ill., Iowa, Maine, Md., Mass., Mich., NH, NY, Ohio. Host-plant: *Acer saccharum*.

***arctica* (Walker, 1852) comb. n.**

Psylla arctica (Walker) [Scott, 1882; Riley, 1885; Mally, 1894; Schwarz, 1900; Aulmann, 1913; Tuthill, 1943; Jensen, 1951; Hodkinson, 1978]

Aphalara arctica Walker

Psylla arctica Walker, 1852 [Van Duzee, 1917]

Type locality: Canada, Ont. Host-plant: unknown. This is a dubious species as only female types exist and they cannot readily be separated from related species.

***breviata* (Patch, 1912 a) comb. n.**

Psylla breviata Patch [Crawford, 1914; Tuthill, 1943; Jensen, 1951, 1957 c; Hodkinson, 1978; Papp & Johnson, 1979]

Psyllia breviata (Patch) [Van Duzee, 1916, 1917]

Type locality: Canada, Ont. Distribution: USA, Alas., Calif., Mich., Nev. Host-plant: *Salix* sp. This species was confused with *P. confusa* by Klyver.

***brevistigmata* (Patch, 1912 a) comb. n.**

Psylla brevistigmata Patch [Crawford, 1914, 1925 a; Tuthill, 1943; Jensen & Knowlton, 1951; Jensen, 1957 c]

Psyllia brevistigmata (Patch) [Van Duzee, 1912, 1916; Klyver, 1931 c, 1932]

Psylla (?*Hepatopsylla*) *brevistigmata* Patch [White & Hodkinson, 1985]

Psylla albirufa Crawford MS name [Crawford, 1914]

Psylla brevistigmata acuta Crawford, 1914 [Tuthill, 1943]

Psyllia brevistigmata acuta (Crawford) [Van Duzee, 1917]

Psylla acuta Crawford [Jensen & Knowlton, 1951]

Type locality: USA, Calif. Distribution: USA, Ariz., Colo., Nev., NMex., Utah. Host-plant: *Cercocarpus betulaeifoliae*, *C. parvifolius*, *C. betuloides*, *C. ledifolius*.

***bulbosa* (Tuthill, 1943) comb. n.**

Psylla bulbosa Tuthill [Jensen, 1951]

Type locality: USA, Ariz. Host-plant: *Salix taxifolia*.

***buxi* (Förster, 1848) comb. n.**

Psylla buxi Förster [Riley, 1890; Mally, 1894; Smith, 1910; Aulmann, 1913; Britton, 1916; Patch, 1924; Tuthill, 1943; Hodkinson, 1980]

Psylla (*Baepelma*) *buxi* Förster [White & Hodkinson, 1985]

Psyllia buxi (Förster) [Van Duzee, 1917; Weiss & Dickerson, 1917; Ferris, 1926; Leonard, 1928; Klyver, 1931 c, 1932; Caldwell, 1938 a]

Asphagidella buxi Förster [Enderlein, 1926]

Type locality: Europe. Distribution: widely distributed throughout the western Palaearctic. USA (introduced) Cal., Conn., Iowa, NJ, NY, Ohio, Oreg. Host-plant: *Buxus sempervirens*. Klimaszewski (1973) gives a bibliography for the Palaearctic region.

confusa* (Tuthill, 1943) comb. n.Psylla confusa* Tuthill [Jensen, 1951; Jensen & Knowlton, 1951]*Psyllia breviata* Klyver, 1931a *nec* Patch, 1912 a

Type locality: USA, Ariz., Nev., Utah. Distribution: USA, Calif. Host-plant: 'probably willow'.

coryli* (Patch, 1912 a) comb. n.Psylla coryli* Patch [Tuthill, 1943; Jensen, 1946; Jensen & Knowlton, 1951; Kitching, 1971]*Psyllia coryli* (Patch) [Van Duzee, 1916, 1917]Type locality: USA, Colo. Distribution: USA, Ariz., Calif., Colo., Idaho, Nev., Oreg., Utah, Wash.; Canada, BC. Host-plant: possibly *Purshia tridentata*.***curta* (Tuthill, 1943) comb. n.***Psylla curta* Tuthill [Jensen, 1951]*Psylla americana curta* TuthillType locality: USA, Calif., Colo. Distribution: USA, Oreg. Host-plant: *Salix californica*.***difficilis* Tuthill, 1943 [Jensen, 1946] comb. n.**Type locality: USA, Idaho, Mont. Host-plant: *Cercocarpus ledifolius*.***dilonchi* (Caldwell, 1938 a) comb. n.***Psylla dilonchi* (Caldwell) amended name [Tuthill, 1943; Vondráček, 1953]*Psyllia diloncha* Caldwell, 1938 a*Psylla coryli* Crawford, 1914 *nec* Patch, 1912 aType locality: USA, Ohio. Distribution: USA, Minn., Nev., Wisc.; Canada, Alta. Host-plant: *Corylus rostrata*.***fatsiae* (Jensen, 1957 b) comb. n.***Psyllia fatsiae* Jensen [Miyatake, 1964; Hodkinson, 1980]Type locality: USA, Calif. Distribution: native to Japan. Host-plant: *Fatsia japonica*.***fibulata* (Crawford, 1914)***Psylla fibulata* Crawford, 1914 [Tuthill, 1943; Jensen, 1951; Hodkinson, 1978; MacLean & Hodkinson, 1980]*Psyllia fibulata* (Crawford) [Van Duzee, 1916, 1917; Klyver, 1932; Strickland, 1938]*Cacopsylla fibulata* (Crawford) [Hodkinson, 1980]*Psylla* (?*Hepatopsylla*) *fibulata* Crawford [Loginova, 1978]Type locality: USA, Colo. Distribution: USA, Idaho, Oreg. Material from Alberta and Alaska differs somewhat from the type. Host-plant: *Salix* spp.***groenlandica* (Šulc, 1913) comb. n.***Psylla groenlandica* Šulc [Haupt, 1935; Tuthill, 1943; Koponen, 1978]Type locality: Greenland. Host-plant: probably *Salix*.

haliaeeti* (Hodkinson, 1978) comb. n.Psylla haliaeeti* Hodkinson [MacLean & Hodkinson, 1980]Type locality: USA, Alas. Host-plant: *Salix depressa* ssp. *rostrata*.***hamata* (Tuthill, 1944 a) comb. n., replacement name***Psylla hamata* Tuthill [Jensen, 1951; Hodkinson, 1973 b, 1976, 1978; MacLean & Hodkinson, 1980]*Psylla uncata* Tuthill, 1943 *nec* Ferris & Klyver, 1932 [Kitching, 1971]*Psylla* (?*Hepatopsylla*) *hamata* Tuthill [White & Hodkinson, 1985]Type locality: Canada, Alta. Distribution: USA, Alas. Host-plant: *Salix* sp.***hartigii* (Flor, 1861 b) comb. n.***Psylla hartigii* Flor [Patch, 1912 a, 1924; Crawford, 1914; Tuthill, 1943; Kitching, 1971; Hodkinson, 1980]*Psyllia hartigii* (Flor, 1861 b) [Van Duzee, 1916, 1917; Klyver, 1932; Strickland, 1938]Type locality: Europe. Distribution: USA, Conn., Maine, Mich., NY, SDak.; Canada, Alta, NS. Host-plant: *Betula populifolia* (in N. America). Klimaszewski (1973) gives a bibliography for the Palaearctic region.***highwoodensis* (Hodkinson, 1978) comb. n.***Psylla highwoodensis* HodkinsonType locality: Canada, Alta. Distribution: USA, Alas. Host-plant: probably *Salix* spp.***hirsuta* (Tuthill, 1938) comb. n.***Arytaina hirsuta* Tuthill*Psylla hirsuta* Tuthill [Tuthill, 1943; Kitching, 1971; Papp & Johnson, 1979]*Psylla* (*Hepatopsylla*) *hirsuta* Tuthill [White & Hodkinson, 1985]Type locality: USA, Nev., Oreg. Distribution: USA, Calif., Idaho, Mont., Wash. Host-plant: possibly *Purshia tridentata*.***insignita* (Tuthill, 1943) comb. n.***Psylla insignita* Tuthill [Jensen & Knowlton, 1951; Papp & Johnson, 1979]Type locality: USA, Calif., Utah. Host-plant: possibly *Cercocarpus ledifolius*.***jenseni* (Hodkinson, 1978) comb. n.***Psylla jenseni* Hodkinson [MacLean & Hodkinson, 1980]Type locality: USA, Alas. Host-plant: *Salix phlebophylla*.***kananaskensis* (Hodkinson, 1976) [Hodkinson, 1980]***Psylla kananaskensis* Hodkinson [Hodkinson, 1978; MacLean & Hodkinson, 1980]Type locality: Canada, Alta. Distributions: USA, Alas. Host-plant: *Salix* spp.***latiforceps* (Tuthill, 1943) comb. n.***Psylla latiforceps* Tuthill [Jensen, 1951; Kitching, 1971]Type locality: USA, Colo. Distribution: USA, possibly Wash.; Canada, possibly BC. Host-plant: *Salix* sp. Jensen (1951) states that paratypes from Oregon are *nordica* Jensen.

ledi (Flor, 1861 b) [Hodkinson, 1980]*Psylla ledi* [Hodkinson, 1978; MacLean & Hodkinson, 1980; MacLean, 1981]*Psylla* (*Hepatopsylla*) *ledi* Flor [Loginova, 1978]Type locality: Europe. Distribution: USA, Alas. Host-plant: *Ledum palustre*. See Klimaszewski (1973) for bibliography in Palaearctic.***longiforceps*** (Hodkinson, 1978) **comb. n.***Psylla longiforceps* HodkinsonType locality: USA, Alas. Host-plant: *Salix* sp.***macleani*** (Hodkinson, 1978) [Hodkinson, 1980]*Psylla macleani* Hodkinson [Hodkinson *et al.*, 1978; MacLean & Hodkinson, 1980]Type locality: USA, Alas. Host-plant: *Salix alaxensis*, *S. depressa*.***maculata*** (Crawford, 1914) **comb. n.***Psylla maculata* Crawford [Crawford, 1925; Tuthill, 1943; Jensen & Knowlton, 1951]*Psylla maculata* Crawford [Van Duzee 1916, 1917]Type locality: USA, Colo. Distribution: USA, Utah. Host-plant: *Cercocarpus betulaeifoliae*, *C. parvifolius*. According to Tuthill (1943) Crawford's (1914) Californian specimen is a different species. This may also apply to the record by Papp & Johnson (1979).***magna*** (Crawford, 1914) **comb. n.***Psylla brevistigmata magna* Crawford*Psylla magna* Crawford [Tuthill, 1943; Jensen & Knowlton, 1951; Papp & Johnson, 1979; Spalding, 1979]*Psylla* (?*Thamnopsylla*) *magna* Crawford [White & Hodkinson, 1985]Type locality: USA, Nev., Utah. Host-plant: possibly *Cercocarpus ledifolius*.***magnicauda*** (Crawford, 1914) [Hodkinson, 1980]*Psylla magnicauda* Crawford [Tuthill, 1943; Vondráček, 1953; Kitching, 1971]*Psylla magnicauda* Crawford [Papp & Johnson, 1979]*Psyllia magnicauda* (Crawford) [Van Duzee, 1916, 1917; Klyver, 1932; Strickland, 1938, 1939]*Psylla* (?*Hepatopsylla*) *magnicauda* Crawford [White & Hodkinson, 1985]*Psylla americana abdominalis* Crawford MS name [Crawford, 1914]Type locality: USA, Colo., Wyo. Distribution: USA, Calif., Minn., Mont., NDak.; Canada, Alta, BC, Sask., Man. Host-plant: *Elaeagnus commutata*.***mali*** (Schmidberger, 1836) [Hodkinson, 1980]*Psylla mali* Schmidberger [Brittain, 1919, 1922 a, b, c, d, 1923 a, b; Klyver, 1931 b; Tuthill, 1943]*Psylla* (*Cacopsylla*) *mali* Schmidberger [Loginova, 1978; White & Hodkinson, 1985]

Type locality: Europe. Distribution: Canada, NB, NS. Klimaszewski (1973) gives a bibliography for the Palaearctic region.

manisi* (Tuthill, 1943) comb. n.Psylla manisi* Tuthill [Heslop-Harrison, 1948 a]

Type locality: USA, Idaho. Host-plant: 'mountain ash'.

media* (Tuthill, 1943) comb. n.Psylla media* Tuthill [Jensen & Knowlton, 1951; Bliven, 1956; Papp & Johnson, 1979]Type locality: USA, Utah. Host-plant: *Cercocarpus ledifolius*.***minor* (Crawford, 1914) comb. n.***Psylla americana minor* Crawford*Psylla minor* Crawford [Tuthill, 1943; Jensen, 1951; Jensen & Knowlton, 1951; Vondráček, 1953; Kitching, 1971; Papp & Johnson, 1979]*Psyllia americana minor* (Crawford) [Van Duzee, 1917, Klyver, 1931 c, 1932]*Psylla rufula* Riley MS name [Crawford, 1914]*Psylla americana flava* Crawford, 1914 [Van Duzee, 1917]*Psylla minor flava* Crawford [Tuthill, 1943]*Psylla* (?*Hepatopsylla*) *minor flava* Crawford [White & Hodkinson, 1985]*Psyllia americana flava* (Crawford) [Strickland, 1938]*Psylla americana longipennis* Crawford, 1914 MS name [Tuthill, 1943]Type locality: USA, Colo. Distribution: USA, Alas., Calif., Oreg., Utah, Wash., Wyo.; Canada, Alta, BC. Host-plant: *Salix* spp. Some records from California apparently refer to *Cacopsylla curta* (Tuthill, 1943; Jensen, 1951).***minuta* (Crawford, 1914) comb. n.***Psylla minuta* Crawford [Tuthill, 1943; Jensen & Knowlton, 1951; Jensen, 1957 a]*Psylla* (?*Hepatopsylla*) *minuta* Crawford [White & Hodkinson, 1985]*Psyllia minuta* (Crawford) [Van Duzee, 1916, 1917; Klyver, 1931 a, 1932]*Psylla purshiae* Riley MS name [Crawford, 1914]*Brachyopsylla purshiae* Crawford, 1914, MS name [Tuthill, 1943]Type locality: USA, Ariz., Calif., Colo., Nev., Utah. Distribution: USA, Idaho. Host-plant: *Purshia tridentata*.***myrtilli* (Wagner, 1947 a) [Hodkinson, 1980]***Psylla myrtilli* Wagner*Psylla myrtilli canadensis* Hodkinson, 1976 [Hodkinson, 1978, 1983 b; MacLean & Hodkinson 1980; Hodkinson & MacLean, 1980; MacLean, 1981]*Psylla* (?*Hepatopsylla*) *myrtilli* Wagner [White & Hodkinson, 1985]Type locality: Europe. Distribution: across the N. Holarctic. USA, Alas.; Canada, Alta. Host-plant: *Vaccinium* spp. Klimaszewski (1973) gives a bibliography for the Palearctic region.***nana* (Tuthill, 1938) comb. n.***Psylla nana* Tuthill [Caldwell, 1941; Tuthill, 1943; Hodkinson & White, 1981]

Type locality: USA, Ariz. Distribution: Mexico. Host-plant: unknown.

negundinis* (Mally, 1894) comb. n.Psylla negundinis* Mally [Patch, 1912 a, 1924; Aulmann, 1913; Crawford, 1914; Tuthill, 1943; Jensen & Knowlton, 1951; Kitching, 1971]

Psyllia negundinis (Mally) [Van Duzee, 1916, 1917; Caldwell, 1938 a; Strickland, 1938]

Psylla (? *Hepatopsylla*) *negundinis* Mally [White & Hodkinson, 1985]

Psylla negundinis Riley MS name [Gillette & Baker, 1895]

Type locality: USA, Iowa. Distribution: USA, Ariz., Colo., Conn., Iowa, Kans., Minn., Nebr., NMex., NDak., Ohio, Utah, Wisc.; Canada, Alta, Man. Host-plant: *Negundo interius*, *Acer negundo*.

***nigranervosa* (Jensen, 1956) comb. n.**

Psylla nigranervosa Jensen [Bliven, 1956]

Type locality: USA, Calif. Host-plant: unknown.

***nordica* (Jensen, 1951) comb. n.**

Psylla nordica Jensen

Psylla latiforceps Tuthill, 1943 in part

Type locality: USA, Wash. Distribution: USA, Oreg. Host-plant: probably *Salix* sp.

***notapennis* (Jensen, 1956) comb. n.**

Psylla notapennis Jensen [Bliven, 1956]

Type locality: USA, Calif. Host-plant: *Ribes* sp.

***omani* (Tuthill, 1943) comb. n.**

Psylla omani Tuthill, 1943 [Spalding, 1979]

Type locality: USA, Calif. Host-plant: unknown.

***palmeni* (Löw, 1882) [Hodkinson, 1980]**

Psylla palmeni Löw [Aulmann, 1913; Heslop-Harrison, 1951 a; Hodkinson, 1978; Hodkinson *et al.*, 1979; Hodkinson & MacLean, 1980; MacLean & Hodkinson, 1980; MacLean, 1981]

Psylla (*Hepatopsylla*) *palmeni* Löw [White & Hodkinson, 1985]

Type locality: Europe. Distribution: throughout far northern Palaearctic region. USA, Alas. Host-plant: *Salix pulchra* Cham, *S. lanata* L., *S. glauca* L., *S. alaxensis* (Anderss.) Cov., *S. niphoclada* Rydb. A full bibliography for the Palaearctic region is given by Klimaszewski (1973).

***parallela* (Crawford, 1914) comb. n.**

Psylla parallela Crawford [Tuthill, 1943; Jensen, 1951; Bliven, 1956; Kitching, 1971]

Psyllia parallela (Crawford) [Van Duzee, 1916, 1917; Klyver, 1931 d]

Psylla (*Hepatopsylla*) *parallela* Crawford [Loginova, 1978]

Type locality: USA, Calif. Distribution: Records for Washington and British Columbia are possibly incorrect (Tuthill, 1943; Jensen, 1951). Host-plant: *Salix* sp.

***pararibesiae* (Jensen, 1956) comb. n.**

Psylla pararibesiae Jensen [Kitching, 1971]

Psylla ribesiae Crawford *sensu* Bliven, 1956 in part

Type locality: USA, Calif. Distribution: USA, Nev., Utah, Wash. Host-plant: *Ribes* sp.

phlebophyllae (Hodkinson, 1978) [Hodkinson, 1980]

Psylla phlebophyllae Hodkinson [Hodkinson *et al.*, 1979; Hodkinson & MacLean, 1980; MacLean & Hodkinson, 1980; MacLean, 1981]

Type locality: USA, Alas. Distribution: USSR, E. Siberia. Host-plant: *Salix phlebophylla* Anderss., *S. reticulata* L.

phorodendri (Tuthill, 1939 b) amended name, **comb. n.**

Psylla phorodendrae Tuthill

Psylla phoradendri Tuthill [Tuthill, 1943; White & Hodkinson, 1985]

Type locality: USA, Ariz., Calif. Host-plant: Adults taken from *Phorodendron pubescens* and *P. tomentosum* Olivar.

propria (Tuthill, 1943) **comb. n.**

Psylla propria Tuthill [Jensen, 1951; Jensen & Knowlton, 1951]

Type locality: USA, Colo. Distribution: USA, Utah. Host-plant: unknown.

pyricola (Förster, 1848) [Hodkinson, 1980; 1984; Burckhardt & Hodkinson, 1986]

Psylla pyricola (Förster) [Riley & Howard, 1893; Mally, 1894; Riley, 1885; Smith, 1910; Patch, 1911, 1912 a, 1924; Crawford, 1914; Klyver, 1931 b; Brimley, 1938; Tuthill, 1943; Kitching, 1971; Hodkinson & White, 1981; Chang & Philogene, 1975; Fields *et al.*, 1981]

Psyllia pyricola (Förster) [Van Duzee, 1916, 1917; Leonard, 1928; Caldwell, 1938 a]

Psylla (Hepatopsylla) pyricola Förster [White & Hodkinson, 1985]

Psylla pyri auctt. *nec* L. [Ashmead, 1881; Riley, 1884]

Type locality: Europe. Distribution: mapped in detail by Hodkinson (1984). West Palaearctic to E. Siberia, S. Korea and Japan. Northern USA and Canada. Argentina (introd.). Host-plant: *Pyrus communis*.

Detailed bibliographies on biology and Palaearctic distribution are given by Chang & Philogene (1975), Fields *et al.*, (1981), Klimaszewski (1973), Hodkinson (1984) and Burckhardt & Hodkinson (1986).

quadrilineata (Fitch, 1851) **comb. n.**

Psylla quadrilineata Fitch [Riley, 1885; Thomas, 1879; Ashmead, 1881; Provancher, 1886; Lintner, 1893; Aulmann, 1913; Crawford, 1914; Tuthill, 1943; Jensen, 1951]

Psylla 4-lineata Fitch [Gillette & Baker, 1895]

Psyllia quadrilineata (Fitch) [Van Duzee, 1916, 1917; Leonard, 1928]

Type locality: USA, NY. Distribution: not clear from literature. USA, Colo., Ill., NH. Host-plant: *Salix* sp. This species has been much confused and there is doubt over the identity of type material. Both Mally (1894) and Crawford (1911 b) identified *Aphalara* species with *quadrilineata*. Furthermore it is uncertain whether the *Psylla quadrilineata* of Walker (1852) is the same species (see also Thomas, 1879; Leonard, 1928).

rara (Tuthill, 1944 a) **comb. n.**

Psylla rara Tuthill, 1944 a [Hodkinson, 1978; MacLean & Hodkinson, 1980]

Type locality: USA, NC, NH, Tenn. Distribution: USA, Alas.; Canada, Alta. Host-plant: *Viburnum edule*.

ribesiae* Crawford, 1911 c) comb. n.Psyllopa ribesiae* Crawford [Zacher, 1913]*Arytaina ribesiae* (Crawford) [Crawford, 1914; Van Duzee, 1916, 1917; Klyver, 1931 c, 1932]*Psylla ribesiae* (Crawford) [Tuthill, 1943; Jensen, 1946, 1956, 1957 c; Jensen & Knowlton, 1951; Bliven, 1956]*Euglyptoneura ribesiae* (Crawford) [Heslop-Harrison, 1961]*Psylla (Osmopsylla) ribesiae* (Crawford) [Loginova, 1978; White and Hodkinson, 1985]*Psylla gilletti* Patch, 1912 a [Tuthill, 1943]*Psylla gilleti* Riley MS name [Gillette & Patch, 1895]Type locality: USA, Colo. Distribution: USA, Ariz., Calif., Idaho, Kans., Nebr., Nev., NMex., Oreg., SDak., Utah, Wyo. Host-plant: *Ribes longiflorum*, *R. aureum*. Klyver lists *Ceanothus thyrsiflorus* as a host: this is wrong according to Jensen (1956).***ribis* (Patch, 1912 a) comb. n.***Psylla ribis* Patch*Psyllia ribis* (Patch) [Van Duzee, 1916, 1917]*Psylla ribis* Riley MS name [Gillette & Baker, 1895]

Type locality: USA, Colo. Host-plant: unknown. A doubtful species, the types of which appear to be lost.

rufipennis* Hodkinson, 1978 [Hodkinson, 1980]Psylla rufipennis* Hodkinson [MacLean & Hodkinson, 1980]Type locality: USA, Alas. Distribution: Canada, Alta. Host-plant: *Salix depressa* ssp. *rostrata*.***saliceti* (Förster, 1848)/*salicicola* (Förster, 1848)/*dudai* (Šulc, 1904) comb. n.**A psyllid species occurring on *Salix* has been recorded from Greenland under the above names. Its true identity is uncertain. See Rubsäamen (1898), Breddin (1902) and Henrikson (1939).***septentrionalis* (Šulc, 1939) comb. n.***Psylla septentrionalis* Šulc [Tuthill, 1943]Type locality: Greenland. Host-plant: probably *Salix* sp.***sinuata* Crawford, 1914 [Hodkinson, 1980]***Psylla sinuata* Crawford [Tuthill, 1943; Jensen, 1951; Vondráček, 1953; Kitching, 1971; Hodkinson, 1978; MacLean & Hodkinson, 1980]*Psyllia sinuata* (Crawford) [Van Duzee, 1916, 1917; Klyver, 1932; Strickland, 1938]*Psylla (?Hepatopsylla) sinuata* Crawford [White & Hodkinson, 1985]*Psylla fibulata simulans* MS name [Crawford, 1914]Type locality: USA, Colo. Distribution: USA, Alas., Idaho, Minn., Wyo.; Canada, Alta, Man., Ont. Host-plant: *Salix* spp.***sorbi* (L., 1758) [Hodkinson, 1980]***Psylla sorbi* L. [Aulmann, 1913; Heslop-Harrison, 1948 a]*Psylla (Cacopsylla) sorbi* L. [Loginova, 1978; White & Hodkinson, 1985]Type locality: Europe. Distribution: N. America, precise locality not stated. Host-plant: *Pyrus americana* DC. See Klimaszewski (1973) for Palaearctic bibliography.

spiculata* (Jensen, 1951) comb. n.Psylla spiculata* Jensen*Psylla parallela* Crawford *sensu* Bliven, 1956?Type locality: USA, Calif. Distribution: Utah (BMNH). Host-plant: *Salix* sp.***striata* (Patch, 1911) comb. n.***Psylla striata* Patch [Crawford, 1914; Patch, 1924; Brimley, 1938; Tuthill, 1943; Jensen & Knowlton, 1951; Kitching, 1971; Hodkinson, 1978; MacLean & Hodkinson, 1980; White & Hodkinson, 1985]*Psyllia striata* (Patch) 1911 [Van Duzee, 1916, 1917; Osborn, 1922 a; Leonard, 1928; Klyver, 1932; Strickland, 1938]*Psylla (Chamaepsylla) striata* Patch [Loginova, 1978]Type locality: USA, Maine. Distribution: USA, Alas., Calif., Colo., Conn., Maine, Mass., Mich., NH, NY, NC, SDak., Utah, Wash., Wisc.; Canada, Alta, BC, NS. Host-plant: *Betula* species including *B. fontanalis*.***stricklandi* (Caldwell, 1939 a) [Hodkinson, 1980]***Psyllia stricklandi* Caldwell (Strickland, 1939)*Psylla stricklandi* (Caldwell) [Tuthill, 1943, 1944 a; Kitching, 1971; Hodkinson, 1978; MacLean & Hodkinson, 1980]*Psylla (Cacopsylla) stricklandi* Caldwell [White & Hodkinson, 1985]Type locality: Canada, Alta. Distribution: USA, Alas., Colo., NY. Host-plant: *Sheperdia canadensis*.***subspiculata* (Hodkinson, 1976) comb. n.***Psylla subspiculata* Hodkinson*Psylla (?Hepatopsylla) subspiculata* Hodkinson [White & Hodkinson, 1985]Type locality: Canada, Alta. Host-plant: *Salix* sp.***tenuata* (Jensen, 1951) [Hodkinson, 1980]***Psylla tenuata* Jensen [Jensen, 1957 c]Type locality: USA, Calif. Host-plant: *Salix laevigata*.***toolikensis* (Hodkinson, 1978) comb. n.***Psylla toolikensis* Hodkinson [MacLean & Hodkinson, 1980]Type locality: USA, Alas. Host-plant: *Salix* sp.***tuthilli* (Caldwell, 1939 b) replacement name, comb. n. [Hodkinson, 1980]***Psyllia virida* Caldwell, 1939 *nec* Hartig, 1841 [Strickland, 1939]*Psylla tuthilli* (Caldwell) [Caldwell, 1940; Tuthill, 1943; Kitching, 1971]Type locality: Canada, Alta. Host-plant: *Sheperdia argentea****urticaecolens* Fitch *sensu* Walker, 1852? [Thomas, 1879; Ashmead, 1881]**The identity of this species, recorded from New York, is uncertain. Fitch did not describe a *Psylla urticaecolens****usitata* (Tuthill, 1943) comb. n.***Psylla usitata* Tuthill

Type locality: USA, Mont. Host-plant: unknown.

yosemitensis (Jensen, 1951) **comb. n.***Psylla yosemitensis* Jensen

Type locality: USA, Calif. Distribution: USA, Nev. Host-plant: unknown, possibly *Salix*.

zaecevi (Šulc, 1915) [Hodkinson, 1980]

Psylla zaecevi Šulc [Hodkinson, 1978; Hodkinson *et al.*, 1979; Hodkinson & MacLean, 1980; MacLean & Hodkinson, 1980]

Type locality: Europe. Distribution: USA, Alas. Arctic and subarctic areas of Palaearctic region. N. India. Host-plant: *Salix lanata* ssp. *richardsonii*, *S. pulchra* Cham. See Klimaszewski (1973) for Palaearctic bibliography.

CALOPHYA Löw, 1879

[CALOPHYDAE]

TYPE-SPECIES: *Psylla rhois* Löw, 1878

A large genus with a worldwide distribution. Members feed primarily on Anacardiaceae and Burseraceae.

arcuata Caldwell, 1944 b

Type locality: USA, Fla. Host-plant: unknown.

aurca Tuthill, 1942 b [Jensen & Knowlton, 1951]

Type locality, USA, Colo., Mont. Distribution: USA, Utah. Host-plant: *Rhus trilobata*.

californica Schwarz, 1904 b [Aulmann, 1913; Crawford, 1914; Van Duzee, 1916, 1917; Tuthill, 1939 b, 1942 b; Jensen, 1957 c; Vondráček, 1953]

Type locality: USA, Calif. Distribution: USA, Ariz. Host-plant: *Rhus integrifolia*, *R. ovata*.

dubia Crawford, 1914 [Van Duzee, 1916, 1917; Tuthill, 1942 b; Jensen and Knowlton, 1951; White & Hodkinson, 1985]

Type locality: USA, Colo. Distribution: USA, Mont., Utah. Host-plant: *Rhus trilobata*.

flaccida Riley, 1884—a *nomen nudum* as no description given except host plant, *Rhus glabra*.**flavida** Schwarz, 1904 b [Aulmann, 1913; Crawford, 1914; Van Duzee, 1916, 1917; McAtee, 1918; Patch, 1924; Caldwell, 1938 a; White & Hodkinson, 1985]

Calophya flavida Riley, *nomen nudum* [Mally, 1894]

Type locality: USA, Mass., Miss. Distribution: USA, Conn., Kans., Ohio, Wash. DC. Host-plant: *Rhus glabra*.

minuta Tuthill, 1942 b

Type locality: USA, Ariz. Host-plant: unknown.

nigrella Jensen, 1957 b [Jensen, 1957 c]

Type locality: USA, Calif. Host-plant: *Rhus trilobata*.

nigripennis Riley, 1884 [Mally, 1894; Schwarz, 1904 b; Aulmann, 1913; Crawford, 1914; Van Duzee, 1916, 1917; McAtee, 1918; Weiss & Nicolay, 1918; Patch, 1924; Leonard, 1928; Brimley, 1938; Caldwell, 1938 a; Loginova, 1982; White & Hodkinson, 1985]

Calophya rhois Glover, 1877 *nec* Löw 1878 [Mally, 1894]

Type locality: USA. Distribution: USA, Conn., Ga, Fla, Md., NY, NJ, NC, Ohio, W. Va, Wash. DC. Host-plant: *Rhus capallina*.

oweni Tuthill, 1939 b

Type locality: USA, Colo. Host-plant: Adults only collected from *Phorodendron juniperinum* Engelm.

pallidula McAtee, 1926 [Frison, 1927]

Type locality: USA, Ill. Host-plant: unknown.

triozomima Schwarz, 1904 b [Aulmann, 1913; Crawford, 1914; Van Duzee, 1916, 1917; Klyver, 1932; Strickland, 1939; Jensen & Knowlton, 1951; Vondráček, 1953; Jensen, 1957 c; Kitching, 1971; White & Hodkinson, 1985]

Calophya triozomima claripennis Crawford, 1914 [Van Duzee, 1916, 1917]

Type locality: USA, Ariz. Distribution: USA, Calif., Colo., Idaho, Utah. Host-plant: *Rhus trilobata*.

vitreipennis Riley, 1884 a *nomen dubium* as no description given.

Distribution: USA, Ariz. [Aulmann, 1913; Van Duzee, 1917]. Host-plant: unknown.

washingtonia (Klyver, 1931 d) [Jensen, 1949]

Hemitrioza washingtonia Klyver [Tuthill, 1943; Kitching, 1971]

Type locality: USA, Wash. Host-plant: unknown.

CEANOETHIA Heslop-Harrison 1961

[PSYLLIDAE]

TYPE-SPECIES: *Arytaina ceanothae* Crawford, 1914

A North American genus, members of which feed on Rhamnaceae. Hodkinson & Hollis (1987) have recently transferred several species to it from the European genus *Arytaina*.

aculeata (Crawford, 1914) [Heslop-Harrison, 1961; White & Hodkinson, 1985]

Arytaina aculeata Crawford [Van Duzee, 1916, 1917; Klyver, 1932; Tuthill, 1943; Jensen, 1957 c]

Type locality: USA, Calif. Host-plant: *Cercocarpus betuloides*.

assimilis (Crawford, 1914) [Hodkinson & Hollis, 1987]

Arytaina assimilis Crawford [Van Duzee, 1916, 1917; Klyver, 1931 c, 1932; Tuthill, 1943]

Type locality: USA, Calif. Host-plant: *Ceanothus crassifolius* and probably *C. cuneatus*.

bicolor (Jensen, 1957 a) [Hodkinson & Hollis, 1987]

Arytaina bicolor Jensen

Type locality: USA, Calif. Host-plant: *Ceanothus cuneatus*.

boharti (Jensen, 1957 a) [Hodkinson & Hollis, 1987]

Arytaina boharti Jensen

Type locality: USA, Calif. Host-plant: *Ceanothus cuneatus*.

ceanothi (Crawford, 1914) amended name [Heslop-Harrison, 1961; Hodkinson, 1973 b; White & Hodkinson, 1985]

Arytaina ceanothae Crawford [Van Duzee, 1916, 1917; Klyver, 1931 c, 1932]

Arytaina ceanothi Crawford amended name [Tuthill, 1943; Jensen & Knowlton, 1951; Jensen, 1957 c; Kitching, 1971]

Type locality: USA, Calif. Distribution: USA, Mont., Utah, Wash. Host-plant: *Ceanothus crassifolius*, *C. rigidus*, *C. cuneatus*, *C. thyrsiflorus*, *C. velutinus*.

essigi (Jensen, 1957 a) [Hodkinson & Hollis, 1987]

Arytaina essigi Jensen

Arytaina fuscipennis Klyver, 1932 *nec* Crawford, 1914 [Jensen, 1957 a, c]

Type locality: USA, Calif. Host-plant: *Ceanothus tomentosus* Parry, *C. divaricatus* Nutt., *C. papillosus* T & G, and *C. crassifolius* Torr.

insolita (Tuthill, 1943) [Hodkinson & Hollis, 1987]

Arytaina insolita Tuthill [Jensen & Knowlton, 1951; Jensen, 1957 c]

Type locality: USA, Calif., Utah. Host-plant: *Ceanothus velutinus*.

mitella (Jensen, 1957 a) [Hodkinson & Hollis, 1987]

Arytaina mitella Jensen

Type locality: USA, Calif. Host-plant: *Ceanothus divaricatus* Nutt., *C. tomentosus* Parry.

tardiuscula (Bliven, 1958) **comb. n.**

Arytaina tardiuscula Bliven

Type locality: USA. Calif. Host-plant: *Ceanothus* sp.

CERNA—see *Craspedolepta*

CEROPSYLLA Riley 1884

[TRIOZIDAE]

TYPE-SPECIES: *Ceropsylla sideroxyli* Riley, 1884

A small, primarily Central American genus probably related to *Trioizoida*.

sideroxyli Riley, 1884 [Mally, 1894; Aulmann, 1913; Crawford, 1914; Van Duzee, 1916, 1917; Ferris, 1923, 1928 b; Caldwell, 1941; Tuthill, 1943, 1944 b, 1945 a; Caldwell & Martorell, 1952; Mead, 1964; Hodkinson & White, 1981; White & Hodkinson, 1985].

Type locality: USA, Fla. Distribution: Mexico, Puerto Rico, Cuba, Haiti, Virgin Is., Trinidad. Host-plant: *Sideroxylon foetidissimum* Jacq.

CHORICYMOZA Bliven, 1955

[TRIOZIDAE]

TYPE-SPECIES: *Choricymoza sequoiae* Bliven, 1955

A monotypic genus. It is difficult to imagine why Bliven erected this genus, which is not clearly differentiated from existing genera within the Trioizidae. The one species is probably now referable to the subgenus *Bactericera* Puton.

sequoiae Bliven, 1955 [Bliven, 1956]

Type locality: USA, Calif. Host-plant: unknown, unlikely to be *Sequoia sempervirens* as stated in description.

CRASPEDOLEPTA Enderlein, 1921

[ALPHALARIDAE]

TYPE-SPECIES: *Aphalara artemisiae* Förster, 1848

A large, holarctic genus with members feeding primarily on plants in the families Compositae and Onagraceae. The genus has been partially split by Klimaszewski (1973, 1983) into 4 genera; *Craspedolepta* (*sensu stricto*), *Tetrafollicula* Klimaszewski *et al.*, 1974, *Cerna* Klimaszewski *et al.*, 1974 and *Xanioptera* Enderlein 1921. In the following account these taxa are given subgeneric status. A detailed description of *Craspedolepta* morphology is given by Journet & Vickery, 1978 b.

americana Klimaszewski, 1979

Type locality: USA, Wash. Host-plant: unknown.

angustipennis (Crawford, 1911 b) [Enderlein, 1921 a; Russell, 1973; Klimaszewski, 1977, 1979; Journet & Vickery, 1978 a, 1979]

Aphalara artemisiae angustipennis Crawford [Patch, 1912 a; Zacher, 1913]

Aphalara angustipennis Crawford [Crawford, 1914; 1925 a; Van Duzee, 1916, 1917; Leonard, 1928; Brimley, 1938; Jensen & Knowlton, 1951; Kitching, 1971]

Aphalara utahensis Riley MS name and *nomen nudum* [Tucker, 1907; Crawford, 1911 b]

Aphalara angustipennis Riley MS name and *nomen nudum* [Gillette & Baker, 1895; Tucker, 1907]

Aphalara easta Caldwell, 1938 a

Craspedolepta easta (Caldwell) [Russell, 1973; Journet & Vickery, 1978 a, 1979; Klimaszewski, 1979]

Type locality: USA, Colo. Distribution: USA, Alas., Ariz., Calif., Colo., Idaho, Iowa, Kans., Maine, Md., Mich., Minn., Mont., NMex., NY, NC, NDak., Okla, Ohio, Oreg., Penn., SDak., Utah, Va, Wash., WV, Wyo.; Canada, Alta, BC, Ont., Queb., Sask., Yuk. Host-plant: Journet & Vickery (1979) give *Achillea lanulosa* (Nutt) and *A. ptermaei*. Earlier papers list *Artemisia californica*, *A. tridentata*, *A. ludoviciana* Nutt. and even *Solidago* sp.

anomola (Crawford, 1914) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Aphalara (*Anomocera*) *anomola* Crawford [Van Duzee, 1916, 1917; Crawford, 1920 a; Klyver, 1932 a]

Aphalara anomola Crawford [Jensen & Knowlton, 1951]

Aphalara occidentalis anomola Riley MS name [Crawford, 1914]

Type locality: USA, Calif. Distribution: USA, NMex., Oreg., Wash. Host-plant: *Artemisia tridentata* and probably '*A. vulgaris*'.

canadensis Journet & Vickery, 1979

Type locality: Canada, BC, Ont. Distribution: Canada, Sask.; USA, Ariz., Utah. Host-plant: *Artemisia* sp.

caudata (Crawford, 1914) [Russell, 1973; Journet & Vickery, 1978 a, 1979; Hodkinson & White, 1981]

Alphalara caudata Crawford [Van Duzee, 1916, 1917; Caldwell, 1941]

Aphalara koebeli Riley MS name [Crawford, 1914]

Aphalara veaziei var. *metzaria* Crawford, 1914 in part.

Type locality: USA, Calif. Distribution: USA, Ariz., Calif., NMex.; Mexico. Host-plant: unknown.

constricta (Caldwell, 1936) [Russell, 1973; Journet & Vickery, 1979]

Aphalara constricta Caldwell [Jensen & Knowlton, 1951]

Craspedolepta osborni (Caldwell) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Aphalara osborni Caldwell, 1936

Type locality: USA, Ariz., Idaho. Distribution: USA, Colo. Host-plant: *Chrysothamnus nauseosus* (Pall.) and possibly *Artemisia tridentata* Nutt and *Crotolaria* sp. Type material of *osborni* does not conform with the original description but is identical with *constricta*. However, the species described as *osborni* is a separate species and specimens collected by Caldwell in Texas conform to the description. To prevent confusion Journet & Vickery sank *osborni* in synonymy and described the Texas material as a new species *C. lapsus*.

delongi (Caldwell, 1936) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Type locality: USA, Penn. Distribution: USA, Maine, Mich., NH, NJ, NY, RI, Vt, Wisc. Host-plants: *Solidago graminifolia*, *S. canadensis*, *S. rugosa*.

eas (McAtee, 1918) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Aphalara eas McAtee, 1918

Type locality: USA, Mary. Host-plant: unknown.

flavida (Caldwell, 1938 a) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Aphalara flavida Caldwell

Cerna flavida (Caldwell) [Klimaszewski, 1979]

Type locality: USA, Maine, Mich., Ohio. Distribution: USA, Oreg., Penn., SDak., Wisc.; Canada, Alta, Man., Ont., Queb., Sask. Host-plant: *Solidago graminifolia*.

fumida (Caldwell, 1938 a) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Aphalara fumida Caldwell [Strickland, 1939; Kitching, 1971]

Type locality: USA, Maine, Ohio, Penn. Distribution: USA, Alab., Calif., Colo., Ill., Iowa, Kans., Mich., Minn., Miss., Mont., NY, Utah, Va, Wash. DC, Wisc.; Canada, Alta, BC, NB, NS, Ont., Queb., Sask. Host-plant: probably *Solidago canadensis*.

furcata (Caldwell, 1936) [Russell, 1973; Journet & Vickery, 1978 a, 1979; White & Hodkinson, 1985]

Aphalara furcata Caldwell [Caldwell, 1938 a]

Aphalara bifida Caldwell, 1936

Craspedolepta bifida (Caldwell) [Russell, 1973; Journet & Vickery, 1978 a]

Cerna bifida (Caldwell) [Klimaszewski, 1979]

Type locality: USA, Penn., Va.; Canada, Ont. Distribution: USA, Alas., Ark., Calif., Colo., Conn., Fla, Kans., Maine, Md., Mich., Minn., Miss., Mon., NH, NJ, NY, Ohio, Oreg., Penn., SCar., Tex., Tenn., Utah, Va, Wash. DC, Wisc., Wyo.; Canada, Alta, BC, Man., NB, NS, Ont., Queb., Sask. Host-plant: *Solidago graminifolia*, *S. canadensis*.

gutierreziae (Klyver, 1931 a) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Aphalara gutierreziae Klyver [Strickland, 1939]

Type locality: USA, Nev. Distribution: USA, Calif., NMex., Utah; possibly Canada, Alta. Host-plant: *Gutierrezia sorothrae* (Pursh.).

lapsus Journet & Vickery, 1979

Type locality: USA, Tex. Host-plant: unknown. See comment under *C. constricta*.

macula Journet & Vickery, 1979

Type locality: USA, Calif., Penn. Distribution: Kans., Md., Utah, Va. Host-plant: uncertain, may be one of *Artemisia dracunculus*, *Erigeron canadensis* or *Echinacea angustifolia*.

maculidracunculi Journet & Vickery, 1979

Type locality: USA, Calif. Host-plant: *Artemesia dracunculus*.

maculimagna Journet & Vickery, 1979

Type locality: USA, Oreg. Host-plant: probably *Chrysothamnus viscidiflorus*.

maculipilosa Journet & Vickery, 1979

Type locality: Canada, Alta, Sask. Host-plant: unknown.

magna Journet & Vickery, 1979 [Journet, 1984]

Type locality: Canada, Queb. Distribution: Canada, Alta, Man., NS, NB, Ont., PEI, Sask.; USA, Ariz., Idaho, Maine, Mich., Mon., NH, Wisc. Host-plant: *Solidago canadensis*, *S. rugosa*, *S. graminifolia*, *S. nemoralis*.

martini (Van Duzee, 1924) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Aphalara martini Van Duzee [Ferris, 1924; Klyver, 1931 c, 1932]

Type locality: USA, Calif. Host-plant: *Frankenia grandifolia* Cham & Sch.

minuta (Caldwell, 1938 a) [Russell, 1973; Journet & Vickery, 1978 a, 1979; White & Hodkinson, 1985]

Aphalara minuta Caldwell

Cerna minuta (Caldwell) [Klimaszewski, 1979]

Type locality: USA, Ill., Ohio, Penn. Distribution: Kans., Maine, Md., Mich., NY, NC, Ohio, Penn., Tenn., Wash. DC, WV, Wisc. Host-plant: *Solidago canadensis*, *S. graminifolia*.

minutissima (Crawford, 1911 b) [Russell, 1973; Hodkinson, 1976; Journet & Vickery, 1978 a, 1979; White & Hodkinson, 1985]

Aphalara minutissima Crawford [Zacher, 1913; Jensen & Knowlton, 1951; Papp & Johnson, 1979]

Aphalara (Anomocera) minutissima Crawford [Crawford, 1914; Van Duzee, 1916, 1917; Klyver, 1931 a, 1932; Vondráček, 1953]

Aphalara occidentalis Riley MS name and *nomen nudum* [Gillette & Baker, 1885; Crawford, 1911 b, 1914]

Type locality: USA, Nev. Distribution: USA, Calif., Idaho, Nev., Oreg., Utah; Canada, BC. Host-plant: *Artemisia californica*, *A. tridentata*.

minutistylus (Klyver, 1931 a) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Aphalara minutistylus, Klyver, 1931 a [Jensen & Knowlton, 1951]

Type locality: USA, Utah, neotype designated by Journet & Vickery (1979). Host-plant: *Artemisia filifolia* Torr.

nebulosa (Zetterstedt, 1840) [Heslop-Harrison, 1949 c; Journet & Vickery, 1979; Hodkinson, 1980; White & Hodkinson, 1985]

Psylla nebulosa Zetterstedt

Aphalara nebulosa (Zetterstedt) [Patch, 1912 a; Van Duzee, 1916, 1917]

Aphalara n. sp. [Schwarz, 1904]

Aphalara nebulosa americana Crawford, 1911 b [Journet & Vickery, 1978 a; Zacher, 1913]

Cerna nebulosa (Zetterstedt) [Klimaszewski, 1983]

Aphalara kincaidi Ashmead, 1904 [Aulmann, 1913; Van Duzee, 1916]

Aphalara nebulosa kincaidi Ashmead [Crawford, 1914; Kitching, 1971; Klyver, 1931 d; Tuthill, 1944 a, Strickland, 1938, 1939; Van Duzee, 1917]

Craspedolepta nebulosa kincaidi (Ashmead) [Russell, 1973; Hodkinson, 1978; Journet & Vickery, 1978 a; MacLean & Hodkinson, 1980]

Craspedolepta kincaidi (Ashmead) [Journet & Vickery, 1978 a]

Aphalara epilobii Riley MS name and *nomen nudum* [Gillette and Baker, 1895; Crawford, 1914]

Type locality: Europe. Distribution: throughout the Palaearctic region (Klimaszewski, 1973). USA, Alas., Calif., Colo., NH, Wash.; Canada, Alta, BC, Man., NWT, Ont., Queb., Yuk. Host-plant: *Epilobium angustifolium*. Klimaszewski (1973) summarizes references for the Palaearctic region.

nota Journet & Vickery, 1979

Type locality: USA, Kans.; Canada, Man. Distribution: USA, Fla; Canada, Alta. Host-plant: unknown.

numerica (Caldwell, 1941) [Russell, 1973; Journet & Vickery, 1978 a, 1979; Hodkinson & White, 1981]

Aphalara numerica Caldwell

Type locality: Mexico. Distribution: USA, Calif., Colo., Fla. Kans., NMex. Host-plant: *Echinacea angustifolia*.

nupera (Van Duzee, 1923) [Russell, 1973; Hodkinson & White, 1981]

Aphalara nupera Van Duzee [Caldwell, 1941]

Type locality: Mexico. Distribution: USA, Calif. Host-plant: unknown.

oregonensis Journet & Vickery, 1979

Type locality: USA, Oreg. Host-plant: unknown.

parvula Journet & Vickery, 1979

Type locality: Canada, NB, Queb. Distribution: Canada, Alta, Sask.; USA, Fla, Mich., Minn., NH, Oreg., Penn. Host-plant: *Solidago nemoralis* Ait., *S. canadensis* L., *S. rugosa* Mill.

pinicola (Crawford, 1914) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Aphalara pinicola Crawford [Van Duzee, 1916, 1917]

Type locality: USA, Calif. Distribution: USA, Idaho, Oreg., Utah. Host-plant: probably *Artemisia tridentata*.

pulchella (Crawford, 1911 b) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Aphalara pulchella Crawford [Zacher, 1913; Crawford, 1914; Van Duzee, 1916, 1917; Klyver, 1931 a, 1932; Jensen, 1949; Jensen & Knowlton, 1951]

Aphalara coquilletti Riley MS name and *nomen nudum* [Crawford, 1914]

Type locality: USA, Calif. Distribution: USA, Calif., Nev., NMex., Tex., Utah. Host-plant: *Salsola kali* and possibly *Chilopsis linearis*.

russellae Klimaszewski, 1977

Craspedolepta russellae Klimaszewski [Klimaszewski, 1979]

Aphalara artemisiae Förster, 1848 (*sensu auctt. nec* Wagner (1947 b)) [Crawford, 1911 b, 1914; Van Duzee, 1916, 1917; Strickland, 1938; Jensen & Knowlton, 1951; Papp & Johnson, 1979]

Craspedolepta artemisiae (Förster, 1848) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Type locality: USA, Wyo. Distribution: USA, Calif., Colo., Idaho, Oreg., Utah, Wash. Host-plant: *Chrysothamnus nauseosus* (Pall) and probably *Artemisia tridentata*.

schwarzi (Ashmead, 1904) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Aphalara n. sp. [Schwarz, 1900]

Aphalara schwarzi Ashmead [Aulmann, 1913; Crawford, 1914; Van Duzee, 1917]

Aphalara alaskensis Ashmead [Aulmann, 1913; Crawford, 1914; Van Duzee, 1916, 1917; Kitching, 1971]

Craspedolepta alaskensis (Ashmead) [Russell, 1973; Hodkinson, 1976, 1978; MacLean & Hodkinson, 1980; Journet & Vickery, 1978 a]

Type locality: USA, Alas. Distribution: USA, Colo., Wash.; Canada, Alta, BC. Host-plant: *Epilobium angustifolium*.

scurra Journet & Vickery, 1979

Type locality: Canada, Queb. Distribution: Canada, NS; USA, Maine, Penn. Host-plant: *Solidago canadensis*, *S. graminifolia* (L.), *S. rugosa* Mill.

sinuata (Caldwell, 1936) [Russell, 1973; Journet & Vickery, 1978 a]

Aphalara sinuata Caldwell

Cerna sinuata (Caldwell) [Klimaszewski, 1979]

Type locality: USA, NDak. Host-plant: unknown.

smithsonia (Klimaszewski, 1979) **comb. n.**

Cerna smithsonia Klimaszewski

Type locality: USA, Mon. Host-plant: unknown.

sonchi (Förster, 1848) [Klimaszewski, 1961; Journet & Vickery, 1979; Hodkinson, 1980; White & Hodkinson, 1985]

Aphalara sonchi Förster

Cerna sonchi (Förster) [Klimaszewski, 1983]

Aphalara fascipennis Patch, 1912 a [Crawford, 1914; Van Duzee, 1916, 1917; Patch, 1924; Leonard, 1928; Caldwell, 1938 a]

Craspedolepta fascipennis (Patch) [Russell, 1973; Journet & Vickery, 1978 a]

Aphalara picta (Zetterstedt, 1828) *auctt.* [Crawford, 1911 b, 1914; Van Duzee, 1916, 1917; McAtee, 1918]

Craspedolepta picta (Zetterstedt) [Wagner, 1947 b; Russell, 1973; Journet & Vickery, 1978 a]

Psylla pallida Harris MS name and *nomen nudum* [Crawford, 1914]

Aphalara harrissii Riley MS name and *nomen nudum* [Gillette & Baker, 1895; Crawford, 1911 b, 1914]

Aphalara leucanthemi Fitch MS name and *nomen nudum* [Crawford, 1914]

Type locality: Europe. Distribution: Widely distributed in the W. Palaearctic. USA, Colo., Conn., Mass., Mich., NH, NY, Ohio, Wyo; Canada, Alta, Man., Ont., Sask. Host-plant: several species of Compositae, probably including *Sonchus*, *Leontodon*, *Crepis*, *Hypochoeris*, *Senecio* and *Hieracium*. This is probably a species complex. Klimaszewski (1961, 1973) discussed the synonymy of the species in W. Europe.

suaedae (Crawford, 1914) [Russell, 1973; Journet & Vickery, 1978 a, 1979; White & Hodkinson, 1985]

Aphalara suaedae Crawford [Van Duzee, 1916, 1917; Klyver, 1931 a, c, 1932; Jensen & Knowlton, 1951; Jensen, 1957 c]

Aphalara suaedae Schwarz MS name and *nomen nudum* [Cockerell, 1900]

Aphalara suaedae Riley MS name and *nomen nudum* [Crawford, 1914]

Type locality: USA, Calif., NMex. Distribution: Ariz., Nev., Tex., Utah. Host-plant: *Suaeda hiemalis*, *S. nigra* (Raf), *S. torreyana* (S. Wats), *S. ramossimia* (Standley), *S. fruticosa* (= *manquini*) (L.).

subpunctata (Förster, 1848) [Heslop-Harrison, 1949 c; Hodkinson, 1976, 1978, 1980; MacLean & Hodkinson, 1980; Journet & Vickery, 1979]

Aphalara subpunctata Förster [Aulmann, 1913]

Cerna subpunctata (Förster) [Klimaszewski, 1983]

Aphalara hebecephala Caldwell, 1936 [Strickland, 1938]

Craspedolepta hebecephala (Caldwell) [Russell, 1973; Journet & Vickery, 1978 a]

Type locality: Europe. Distribution: USA, Alas., Minn., NY; Canada, Alta, BC, Ont., Man., Sask., Yuk. Host-plant: *Epilobium angustifolium*. Klimaszewski (1973) gives the synonymy for the Palaearctic region.

vancouverensis (Klyver, 1931 d) [Russell, 1973; Journet & Vickery, 1978 a, 1979; Hodkinson, 1980]

Aphalara vancouverensis Klyver [Strickland, 1938; Kitching, 1971]

Cerna vancouverensis (Klyver) [Klimaszewski, 1979]

Aphalara angustipennis Crawford, 1911 b in part [Journet & Vickery, 1979]

Type locality: Canada, BC. Neotype designated by Journet and Vickery (1979) is from USA, Wash. Distribution: Canada, Alta; USA, Ariz., Calif., Colo., Idaho, Mont., NMex., NDak., Oreg., Utah. Host-plant: possibly *Artemisia tridentata* Nutt.

veaziei (Patch, 1911) [Enderlein, 1921; Russell, 1973; Journet & Vickery, 1978 a, 1979; Hodkinson & White, 1981]

Aphalara veaziei Patch [Crawford, 1914; Van Duzee, 1916, 1917, 1923; McAtee, 1918; Osborn, 1922 a; Leonard, 1928; Klyver, 1932; Brimley, 1938; Strickland, 1938;

Caldwell, 1938 a; Jensen & Knowlton, 1951; Vondráček, 1953; Kitching, 1971]

Aphalara communis Crawford, 1911 b [Patch, 1912 a; Zacher, 1913]

Aphalara communis metzaria Crawford, 1911 b [Zacher, 1913]

Aphalara veaziei metzaria Crawford [Crawford, 1914; Van Duzee, 1917; McAtee, 1918; Caldwell, 1941; Papp & Johnson, 1979]

Craspedolepta veaziei metzaria (Crawford) [Russell, 1973; Journet & Vickery, 1978 a]

Aphalara solidaginis Riley MS name and *nomen nudum* [Gillette and Baker, 1895; Crawford, 1914; McAtee, 1918]

Type locality: USA, Maine. Distribution: USA, Alab., Ariz., Calif., Colo., Conn., Del., Kans., La., Md., Mich., Minn., Nev., NH, NJ, NY, Ohio, Oreg., Penn., SDak., Tex., Utah, Va, WV, Wash., Wash. DC, Wisc., Wyo.; Canada, Alta, Man., NB, NS, Ont., Queb., Sask.; Mexico. Host-plant: *Solidago nemoralis*, *S. graminifolia*, *S. canadensis*. This is probably a species complex (Journet & Vickery, 1979).

viridis (Crawford, 1914) [Russell, 1973; Journet & Vickery, 1978 a, 1979]

Aphalara viridis Crawford [Van Duzee, 1916, 1917]

Aphalara cuyama Tuthill, 1939 b

Craspedolepta cuyama (Tuthill) [Russell, 1973; Journet & Vickery, 1978 a]

Type locality: USA, Ariz. Distribution: USA, Calif. Host-plant: *Frankenia grandifolia* Cham & Sch.

vulgaris (Journet & Vickery, 1979) [Journet, 1984]

Type locality: USA, Mich., Wyo.; Canada, Queb., Ont. Distribution: USA, Calif., Del., Kans., Maine, Md., Mich., Minn., Mont., Nev., NH, NY, NC, Ohio, Penn., RI, SDak., Vt, Va, Wash. DC, Wyo., Wisc.; Canada, Alta, BC, Man., NB, NS, Ont., PEI, Sask. Host-plant: *Solidago canadensis*, *S. rugosa*, *S. graminifolia*.

CTENARYTAINA Ferris & Klyver, 1932

[APHALARIDAE?]

TYPE-SPECIES: *Rhinocola fuchsiae* Maskell, 1890

An Australian/Asian/Pacific genus that has been introduced into the USA.

longicauda Taylor, 1987

Type locality: Australia, USA. Host-plant: *Lophostemon confertus* (R. Br). *L. suaveolens* (Soland, ex Gaertn).

EUGLYPTONEURA Heslop-Harrison, 1961

[PSYLLIDAE]

TYPE-SPECIES: *Arytaina minuta* Crawford, 1914

A small, Nearctic genus whose members usually feed on the plants of the family Rhamnaceae (Hodkinson, 1980).

fuscipennis (Crawford, 1914) [Heslop-Harrison, 1961; Hodkinson, 1973 b; White & Hodkinson, 1985]

Arytaina fuscipennis Crawford [Van Duzee, 1916, 1917; Tuthill, 1943; Jensen & Knowlton, 1951; Jensen, 1957 c; Kitching, 1971]

Euglyptoneura tristis Schwarz MS name and *nomen nudum* [Crawford, 1914]

Type locality: USA, Calif., Colo., Nev.; Canada, BC. Distribution: USA, Oreg., Utah. Host-plant: *Ceanothus sanguineus*, *C. papillosus*, *C. velutinus*. See also synonymy under *Ceanothia essigi*.

minuta (Crawford, 1914) [Heslop-Harrison, 1961]

Arytaina minuta Crawford [Van Duzee, 1917; Klyver, 1931 c, 1932; Tuthill, 1943; Jensen & Knowlton, 1951; Jensen, 1957 c]

Type locality: USA, Calif. Distribution: USA, Utah. Host-plant: *Ceanothus cuneatus* and *C. rigidus*.

robusta (Crawford, 1914) [Heslop-Harrison, 1961; Hodkinson, 1973 b; White & Hodkinson, 1985]

Arytaina robusta Crawford [Van Duzee, 1916, 1917; Klyver, 1931 c, 1932; Tuthill, 1943; Kitching, 1971]

Arytaina robusta Crawford complex [Jensen & Knowlton, 1951; Heslop-Harrison, 1951 b; Jensen, 1957 c]

Arytaina snowi Dowell, 1932 [Jensen & Knowlton, 1951]

Euglyptoneura snowi (Dowell) [Heslop-Harrison, 1961]

Arytaina montana Crawford, 1920 a [Dowell, 1932; Tuthill, 1943]

Euglyptoneura montana (Crawford) [Heslop-Harrison, 1961]

Arytaina robusta sinuata Tuthill, 1943

Euglyptoneura robusta sinuata (Tuthill) [Heslop-Harrison, 1961]

Type locality: USA, Ariz., Calif., Colo., Wash. Distribution: Idaho, Mont., Oreg., SDak., Utah, Wyo.; Canada, BC. Host-plant: *Ceanothus fendleri*, *C. cordulatus*, *C. velutinus*.

EUPHARLERUS Schwarz, 1904 a

[PSYLLIDAE]

TYPE-SPECIES: *Euphalerus nidifex* Schwarz, 1904 b

A heterogeneous genus in need of revision. At present the genus contains many unrelated species from different parts of the world. The usual host-plants of members closest to the type species are Leguminosae, although several of the North American species occur on Rhamnaceae and Rosaceae and are most closely related to *Ceanothia* and *Euglyptoneura*. See also *Nyctiphalerus* Bliven.

adustus Tuthill, 1937 [Tuthill, 1943; Jensen & Knowlton, 1951]

Type locality: USA, Colo., Utah. Host-plant: *Cercocarpus ledifolius*

cercocarpi Jensen, 1957 b

Type locality: USA, Calif. Host-plant: *Cercocarpus ledifolius* Nuttall.

dubius Caldwell, 1944 a

Type locality: USA, Tex. Host-plant: unknown.

idahoensis Jensen, 1946

Type locality: USA, Idaho. Host-plant: *Cercocarpus ledifolius*.

jugonervosus Tuthill, 1937 [Tuthill, 1943]

Type locality: USA, Calif. Host-plant: unknown.

nepos Bliven, 1955 [Bliven, 1956]

Type locality: USA, Calif. Host-plant: *Ceanothus* sp.

nidifex Schwarz, 1940 b [Aulmann, 1913; Crawford, 1914; Van Duzee, 1916, 1917; Tuthill, 1937, 1943; Mead, 1967; Russell, 1971; Hodkinson & White, 1981; White & Hodkinson, 1985]

Euphalerus ficus Riley MS name and *nomen nudum* [Crawford, 1914]

Undescribed species Schwarz (1904 a)

Type locality: USA, Fla. Distribution: Antigua; Belize; Jamaica; Mexico; Puerto Rico; Virgin Is? Host-plant: *Piscida piscipula* (L.) Sarg., *P. carthegenesis*.

propinquus Crawford, 1914 [Van Duzee, 1916, 1917; Tuthill, 1937, 1943]

Cephalopsylla latifrons Riley MS name and *nomen nudum* [Crawford, 1914]

Type locality: USA, Ariz. Host-plant: *Ceanothus* sp. and possibly *Amorpha fruticosa*.

rugipennis Crawford, 1914 [Van Duzee, 1916, 1917; Tuthill, 1937, 1943; Jensen & Knowlton, 1951; White & Hodkinson, 1985]

Cephalopsylla rugipennis Riley MS name and *nomen nudum* [Crawford, 1914]

Cephalopsylla rugipennis immaculatus Crawford, 1914 [Van Duzee, 1916, 1917]

Type locality: USA, Ariz., Calif. Distribution: USA, Oreg., Utah. Host-plant: *Ceanothus cuneatus*, *C. rigidus*.

tantillus Tuthill, 1937 [Tuthill, 1943; Jensen & Knowlton, 1951]

Type locality: USA, Utah. Host-plant: unknown.

vermiculosus Crawford, 1914 [Van Duzee, 1916, 1917; Crawford, 1925 a; Tuthill, 1937, 1943; Jensen & Knowlton, 1951; Bliven, 1956; Jensen, 1957 c; Papp & Johnson, 1979; White & Hodkinson, 1985]

Euphalerus beameri Tuthill, 1943

Euphalerus vermiculosus beameri Tuthill [Jensen, 1957 c]

Euphyllerus vermiculosus Crawford [Klyver, 1932]

Cephalopsylla ceanothi Riley MS name and *nomen nudum* [Crawford, 1914]

Type locality: USA, Calif. Distribution: USA, Idaho, Mont., Oreg., Utah. Host-plants: *Ceanothus cordulatus*, *C. velutinus*, *C. leucodermis*.

GYROPSYLLA

[APHALARIDAE]

TYPE-SPECIES: *Paurocephala spegazziniana* Lizer, 1919

A genus broadly distributed throughout the Neotropical region with members usually feeding on *Ilex* sp. A single species occurs in the southern USA. The full synonymy of the genus is discussed by Hodkinson & White (1981).

ilicis (Ashmead, 1881) [Tuthill, 1950 a; Mead, 1983; White & Hodkinson, 1985]

Psylla ilicis Ashmead

Aphalara ilicis (Ashmead) [Mally, 1894; Riley, 1885; Aulmann, 1913]

Paurocephala ilicis (Ashmead) [Crawford, 1914; Van Duzee, 1916, 1917; Boselli, 1929 a]

Metaphalara ilicis (Ashmead) [Crawford, 1925 b; Heslop-Harrison, 1949 c, 1952]

Type locality: USA, Fla. Distribution: USA, Ga. Host-plant: *Ilex vomitoria* Ait.

HEMITRIOZA Crawford, 1914

[TRIOZIDAE]

TYPE-SPECIES: *Hemitrioza sonchi* Crawford, 1914A monotypic genus related to *Trioza* (*sensu lato*).*sonchi* Crawford, 1914 [Van Duzee, 1916, 1917; McAtee, 1918; Crawford, 1920c; Tuthill, 1943]*Trioza sonchi* Riley, 1884 *nomen nudum* [Aulmann, 1913]Type locality: USA, Fla, Ga, Wash. DC, Va. Host-plant: *Sonchus arvensis*.**HETEROPSYLLA** Crawford, 1914

[PSYLLIDAE]

TYPE-SPECIES: *Heteropsylla texana* Crawford, 1914

A tropical Central and South American genus, members of which feed on mimosoid legumes. A few species extend into the southern States of the USA.

cubana Crawford, 1914 [Tuthill, 1945 b; Caldwell and Martorell, 1952; Hodkinson & White, 1981; Burckhardt, 1986 a]*Rhinocola incisa* Šulc, 1914 [Burckhardt, 1986 a]Type locality: Cuba. Distribution: Central America; Antilles; USA, Fla; Colombia; Peru; Surinam. This is the species that has, between 1984 and 1986, spread rapidly from its native habitat in C. America to become a major pest of forage legumes throughout the Pacific basin. Host-plant: *Leucaena glauca*, *Leucaena leucopcephala* and other *Leucaena* species.*mimosae* Crawford, 1914 [Van Duzee, 1916, 1917; Caldwell, 1941; Hodkinson & White, 1981]Type locality: USA, Tex. Distribution: Mexico; El Salvador; Costa Rica; Colombia. Host-plant: *Mimosa* sp.*quassiae* Crawford, 1914 [Leonard, 1928; Hodkinson & White, 1981]Type locality: Bahamas. Distribution: USA, Fla; Cuba. Leonard (1928) confused Long Is., New York with Long Is., Bahamas. Host-plant: *Quassia* sp.?*texana* Crawford, 1914 [Van Duzee, 1916, 1917; Klyver, 1931 a, c, 1932; Caldwell, 1944 a; Jensen, 1945, 1949; Jensen & Knowlton, 1951; Tuthill, 1959, 1964; Russell, 1973; Hodkinson & White, 1981; White & Hodkinson, 1985].*Aphalara mera* Van Duzee, 1923*Paurocephala* (*Aphalara*) *mera* (Van Duzee) [Caldwell, 1941]Type locality: USA, Tex. Distribution: USA, Ariz., Colo., Kans., Nev., NMex., Utah; Mexico: Nicaragua; Peru. Host-plant: *Prosopis juliflor* and *Prosopis chilensis*. Also recorded less reliably from *Pithecolobium* sp., *Sphaeralcea angustifolia*, *Monarda citriodora* and *Chrysopsis* sp.**HOMOTOMA** Guérin-Méneville, 1844

[HOMOTOMIDAE]

TYPE-SPECIES: *Chermes ficus* L., 1758A genus associated with plants of the genus *Ficus* throughout the Old World. A single species has been introduced into the USA.

ficus (L., 1758)*Chermes ficus* L.

Type locality: Europe. Distribution: USA (USNM) introduced. Warmer regions of western Palearctic. Host-plant: *Ficus carica*. See Klimaszewski (1961, 1973) and Hodkinson (1980) for full bibliography and distribution data.

KATACEPHALA Crawford, 1914

[APHALARIDAE]

TYPE-SPECIES: *Katacephala grandis* Crawford, 1914

A small, Central American genus with one species occurring in Florida.

grandiceps Crawford, 1914 [Van Duzee, 1916, 1917; Tuthill, 1945 b; Loginova, 1974; Hodkinson & White, 1981]

Type locality: USA, Fla; Bahamas. Distribution: Cuba. Host-plant: unknown.

KUWAYAMA Crawford, 1911 b

[TRIOZIDAE]

TYPE-SPECIES: *Paratrioza medicaginis* Crawford, 1910 a

A poorly defined genus that includes representatives in North and South America and the Pacific islands. *Kuwayama* is a replacement name for *Epitrioza* Crawford (1911 a) which was preoccupied by *Epitrioza* Kuwayama.

medicaginis (Crawford, 1910 a) [Crawford, 1911 b, 1914; Van Duzee, 1916, 1917; Klyver, 1932; Caldwell, 1941; Tuthill, 1943, 1945 a; Hodkinson & White, 1981]

Paratrioza medicaginis Crawford*Epitrioza medicaginis* (Crawford) [Crawford, 1911 a; Zacher, 1913]

Type locality: USA, Colo. Distribution: USA, Ariz., Calif., NMex., Tex.; Mexico. Host-plant: unknown, possibly *Medicago sativa*.

LEUROLOPHUS Tuthill, 1942 c

[ALPHALARIDAE]

TYPE-SPECIES: *Leurolophus vittatus* Tuthill, 1942 c

A monotypic genus related to *Agonoscena* and its allies.

vittatus Tuthill, 1942 c [Heslop-Harrison, 1952; White & Hodkinson, 1985]

Type locality: USA, Ariz. Distribution: USA, Tex. (USNM). Host-plant: *Rhus* sp.

LEURONOTA Crawford, 1914

[TRIOZIDAE]

TYPE-SPECIES: *Trioza maculata* Crawford, 1910 a

Primarily a Central and South American genus near to *Trioza* (*sensu lato*). Species are also ascribed to this genus from India and Borneo (Hodkinson, 1983 a, 1986). The wide range of host-plant families on which the different species feed is unusual among the Psylloidea.

longipennis Crawford, 1914 [Van Duzee, 1916, 1917; Crawford, 1920 b; Tuthill, 1943]

Type locality: USA, Fla. Host-plant: unknown.

maculata (Crawford, 1910 a) [Crawford, 1914, 1920 b; Van Duzee, 1916, 1917; Ferris, 1928 b; Klyver, 1932; Caldwell, 1941; Tuthill, 1943, 1945 a; Hodkinson & White, 1981; Loginova, 1982]

Trioza maculata Crawford [Crawford, 1910 b]

Allotrioza maculata Crawford [Crawford, 1911 a]

Type locality: USA, Ariz. Distribution: USA, NMex., Tex.; Mexico. Host-plant: *Celtis iguanea*, *C. pallidus*.

LEVIDEA Tuthill, 1938

[TROIZIDAE]

TYPE-SPECIES: *Levidea lineata* Tuthill, 1938

A monotypic Nearctic genus.

lineata Tuthill, 1938 [Tuthill, 1943]

Type locality: USA, Ariz. Host-plant: *Parthenium incanum*.

LIVIA Latreille, 1805

[APHALARIDAE]

TYPE-SPECIES: *Psylla juncorum* Latreille, 1798

A characteristic holarctic genus, extending southwards into Mexico, India and Indo-China (Loginova, 1974; Hodkinson, 1980). The identities of several species described under *Diraphia* (a synonym) by Provancher (1872, 1886) are very doubtful and the synonymies suggested by different authors often conflict. Some of the species may not belong in *Livia* as it is now conceived. As the Provancher names have priority they are, in the interest of stability, best regarded as *nomina dubia*. The names are *bifasciata*, *4-cornis* (*quadricornis*), *sanguinea* and *viridescens*. They are mentioned or discussed by Patch (1912 b); Aulmann (1913); Van Duzee (1912, 1917); Heslop-Harrison (1949 b) and Tuthill (1943). In addition, it is unlikely that the record of *L. juncorum* for the USA by Papp & Johnson (1979) is correct and it is excluded. *Vailakiella* Bliven (1955) is almost certainly synonymous with *Livia*.

aba Caldwell, 1940

Type locality: USA, Wyo. Host-plant: unknown.

caricis Crawford, 1914 [Van Duzee, 1916, 1917; Klyver, 1932; Jensen & Knowlton, 1951; Kitching, 1971]

Diraphia caricis (Crawford) [Heslop-Harrison, 1948 b, 1949 b; Vondráček, 1953; Hodkinson, 1973 b]

Type locality: USA, Calif., Colo., Ill., Maine, NMex., Oreg., Penn., Utah, Va; Canada, BC. Distribution: USA, Idaho. Host-plant: *Carex* sp.

coloradensis Crawford, 1914 [Van Duzee, 1916, 1917; Caldwell, 1938 a; White & Hodkinson, 1985]

Diraphia coloradensis Crawford [Heslop-Harrison, 1949 b]

Type locality: USA, Colo., Ark. Distribution: USA, Ohio. Host-plant: unknown.

fimbriata (Heslop-Harrison, 1949 b) **comb. n.**

Diraphia fimbriata Heslop-Harrison.

Type locality: Canada, Ont. Host-plant: unknown.

maculipennis (Fitch, 1857) [Riley, 1885; Mally, 1894; Smith, 1910; Patch, 1912 b, 1916, 1924; Aulmann, 1913; Crawford, 1914; Van Duzee, 1916, 1917; McAtee, 1915, 1918; Weiss & West, 1922; Heslop-Harrison, 1949 b; Loginova, 1974; White & Hodkinson, 1985]

Diraphia maculipennis Fitch, 1857 [Thomas, 1879; Ashmead, 1881]

Type locality: not stated. Distribution: USA, Alab., Colo., Conn., Ill., Mass., NH, NJ, NY, Penn., Wash. DC; Canada, Ont., Queb. Host-plant: *Juncus* sp.

marginata Patch, 1912 b [Crawford, 1914; Van Duzee, 1916, 1917; McAtee, 1918; Patch, 1924]

Diraphia marginata Patch [Heslop-Harrison, 1949 b; Loginova, 1974]

Type locality: USA, Conn. Distribution: NH. Host-plant: unknown.

omissa (Heslop-Harrison, 1949 b) [Loginova, 1974]

Diraphia omissa Heslop-Harrison

Type locality: Canada, Ont. Host-plant: unknown.

ohioensis Caldwell, 1938 a

Type locality: USA, Ohio. Host-plant: unknown.

opauqua Caldwell, 1938 a

Type locality: USA, Ohio. Distribution: USA, Ill. Host-plant: unknown.

vernaliforma Caldwell, 1940

Type locality: USA, NDak. Host-plant: unknown.

vernalis Fitch, 1851 [Walker, 1852; Lintner, 1893; Mally, 1894; Gillette & Baker, 1895; Smith, 1910; Patch, 1912 b, 1924; Crawford, 1914; McAtee, 1915; Van Duzee, 1916, 1917; Leonard, 1928; Caldwell, 1938 a; Loginova, 1974; White & Hodkinson, 1985]

Diraphia vernalis (Fitch) [Thomas, 1879; Ashmead, 1881; Riley, 1885; Heslop-Harrison, 1949 b]

Livia calamorum Fitch, 1857

Diraphia calamorum (Fitch) [Thomas, 1879; Ashmead, 1881; Heslop-Harrison, 1949 b]

Livia femoralis Fitch, 1951 [Walker, 1852; Lintner, 1893; Aulmann, 1913; Crawford, 1914; Heslop-Harrison, 1949 b]

Diraphia femoralis (Fitch) [Thomas, 1879; Ashmead, 1881]

Type locality: not stated. Distribution: USA, Ariz., Colo., Conn., Ill., Iowa, La, Md., Mich., NJ, NY, Ohio, Penn., Va, Wash. DC; Canada, Queb. Host-plant: unknown.

METATRIOZA Tuthill, 1939 a

[TRIOZIDAE]

TYPE-SPECIES: *Metatrioza pubescens* Tuthill, 1939 a

A poorly defined Nearctic genus.

pubescens Tuthill, 1939 a [Tuthill, 1943, 1945 a]

Type locality: USA, Ariz., Host-plant: unknown.

neotriozella Caldwell, 1944 b

Type locality: USA, Ariz. Host-plant: unknown.

NEOPHYLLURA Loginova, 1973

[APHALARIDAE]

TYPE-SPECIES: *Euphyllura arctostaphyli* Schwarz, 1904 b

A genus created to contain those Nearctic species previously assigned to *Euphyllura* Förster.

arbuti (Schwarz, 1904 b) [White & Hodkinson, 1985]

Neophyllura (Arbutophila) arbuti (Schwarz) [Loginova, 1973]

Euphyllura arbuti Schwarz [Aulmann, 1913; Crawford, 1914; Van Duzee, 1916, 1917; Ferris & Hyatt, 1923; Ferris, 1928 a; Klyver, 1930 b, 1931 c, d, 1932; Martin, 1931; Tuthill, 1943; Jensen, 1957 c; Kitching, 1971]

Platystigma arbuti (Schwarz) (Enderlein, 1921)

Type locality: USA, Calif. Distribution: USA, Oreg.; Canada, BC. Host-plant: *Arbutus menziesii*.

arbuticola (Crawford, 1914) [Loginova, 1973]

Euphyllura arbuticola Crawford [Van Duzee, 1916, 1917; Ferris, 1928 a; Klyver, 1930 b; Martin, 1931; Tuthill, 1943]

Platystigma arbuticola (Crawford) (Enderlein, 1921)

Type locality: USA, Ariz. Host-plant: *Arbutus arizonica* Sargent.

arctostaphyli Schwarz, 1904 b [White & Hodkinson, 1985]

Neophyllura (Neophyllura) arctostaphyli (Schwarz) [Loginova, 1973]

Euphyllura arctostaphyli Schwarz [Aulmann, 1913; Crawford, 1914, 1920 a; Van Duzee, 1916, 1917; Klyver, 1930 b, 1931 c, d, 1932; Martin, 1931; Tuthill, 1943; Jensen & Knowlton, 1951; Jensen, 1957 c, Kitching, 1971]

Euphyllura arctostaphyli Riley MS name and *nomen nudum* [Gillette & Baker, 1895]

Platystigma arctostaphyli (Schwarz) (Enderlein, 1921)

Euphyllura arctostaphyli var. *bifasciata* Crawford, 1920 a [Tuthill, 1943]

Neophyllura (Neophyllura) arctostaphyli bifasciata (Crawford) [Loginova, 1973]

Type locality: USA, Calif. Distribution: USA, Ariz., Colo., Mont., Nev., NMex., Oreg., Utah, Wash., Wyo.; Canada, BC, Man. Host-plant: *Arctostaphylos pungens* H.B.K., *A. tomentosa* Pur., *A. patula* Greene, *A. montana* East, *A. glauca* Lindl., *A. canescens* East, *A. viscida* Parry.

bicolor (Martin, 1931) [White & Hodkinson, 1985]

Neophyllura (Neophyllura) bicolor (Martin) [Loginova, 1973]

Euphyllura bicolor Martin [Tuthill, 1943]

Type locality: USA, Calif. Host-plant: *Arctostaphylos glauca* Lindl., *A. manzanita* Parry, *A. zacaensis* East, *A. patula* Greene, *A. glandulosa* East.

niveipennis (Schwarz, 1904 b)

Neophyllura (Neophyllura) niveipennis (Schwarz) [Loginova, 1973]

Euphyllura arctostaphyli var. *niveipennis* Schwarz, 1904 b [Aulmann, 1913; Van Duzee, 1916, 1917].

Euphyllura neveipennis Schwarz, 1904 b [Klyver, 1930 b, 1932; Martin, 1931]

Euphyllura niveipennis Schwarz [Tuthill, 1943]

Type locality: USA, Calif. Host-plant: *Arctostaphylos viscida* Parry.

pruinosa (Martin, 1931)

Neophyllura (*Neophyllura*) *pruinosa* (Martin) [Loginova, 1973]

Euphyllura pruinosa Martin [Tuthill, 1943]

Type locality: USA, Calif. Host-plant: *Arctostaphylos pungens* H.B.K., *A. glauca* Lindl, *A. tomentosa* Pur.

separata (Tuthill, 1943)

Neophyllura (*Neophyllura*) *separata* (Tuthill) [Loginova, 1973]

Euphyllura separata Tuthill

Type locality: USA, Oreg. Host-plant: unknown.

NEOTRIOZELLA Crawford, 1911 b

[TRIOZIDAE]

TYPE-SPECIES: *Trioza immaculata* Crawford, 1910 a

A small Nearctic genus of uncertain position. *Neotriozella* is a replacement name for *Neotrioza* Crawford, 1911 a, preoccupied by *Neotrioza* Kieffer, 1905.

hirsuta Tuthill, 1939 a [Tuthill, 1943]

Type locality: USA, Ariz. Host-plant: unknown.

laticeps (Crawford, 1910 a) [Crawford, 1911 b, 1914; Van Duzee, 1916, 1917; Klyver, 1932; Tuthill, 1939 a, 1943]

Trioza laticeps Crawford [Aulmann, 1913]

Neotrioza laticeps (Crawford) [Crawford, 1911 a]

Type locality: USA, La. Distribution: USA, NMex. Host-plant: unknown.

pyrifolii (Forbes, 1885) amended name [Tuthill, 1943]

Trioza pyrifoliae Forbes [Mally, 1894; Crawford, 1910 a; Zacher, 1913; Van Duzee, 1917; Frison, 1927]

Neotriozella pyrifoliae (Forbes) [Tuthill, 1939 a]

Neotriozella ottowaensis Patch, 1912 a [Crawford, 1914]

Trioza immaculata Crawford, 1910 a, [Aulmann, 1913]

Neotriozella immaculata (Crawford) [Crawford, 1911 b, 1914; Van Duzee, 1916, 1917; McAtee, 1918; Caldwell, 1938 a]

Type locality: USA, Ill. Distribution: USA, Iowa, Ohio; Canada, Ottawa, also one specimen taken from surface of Atlantic Ocean 94 miles off Nova Scotia. Host-plant: unknown.

sculptoconus Crawford, 1914 [Van Duzee, 1916, 1917; Tuthill, 1939 a, 1943]

Type locality: USA, Calif. Host-plant: unknown.

NYCTIPHALERUS Bliven, 1955

[PSYLLIDAE]

TYPE-SPECIES: *Nyctiphalerus lynceus* Bliven, 1955

A monotypic genus of doubtful status: there is little to distinguish the one species from others placed in *Euphalerus* (*sensu lato*).

lynceus Bliven, 1955 [Bliven, 1956]

Type locality: USA, Calif. Host-plant: unknown.

PACHYPSYLLA Riley, 1885

[PSYLLIDAE]

TYPE-SPECIES: *Psylla venusta* Osten-Sacken, 1861

A compact North American genus with members forming various galls on *Celtis* spp. (Ulmaceae) (Hodkinson, 1980; Lewis & Walton, 1964). The Old World species previously referred to this genus have recently been transferred to *Celtisaspis* Yang & Li (see Hodkinson, 1986). Riley (1884) mentioned this genus but did not describe it until a year later (Riley, 1885). Similarly *Pachypsylla coagulata* Uhler and *P. celtidis-minuta* Riley are published manuscript names that should be treated as *nomina nuda* (see Tucker, 1907; Leonard, 1928).

celtidisgemma Riley, 1885 [Riemann, 1966; White & Hodkinson, 1985]

Pachypsylla (Blastophysa) celtidis-gemma [Riley, 1890; Mally, 1894; Aulmann, 1913; Van Duzee, 1916, 1917]

Blastophysa celtidis-gemma Riley, 1884 *nomen nudum*

Pachypsylla celtidis-gemma Riley [Beutenmüller, 1892; Smith, 1910; Crawford, 1914; McAtee, 1918; Weiss, 1921; Patch, 1924; Leonard, 1928; Brimley, 1938; Caldwell, 1938 a; Tuthill, 1943; Smith & Taylor, 1953; Walton, 1960]

Pachypsylla gemma Riley [Wells, 1916]

Type locality: not stated. Distribution: USA, Conn., Ga, Iowa, Kans., La, NJ, NY, NC, Nebr., Md., Mo., Ohio, Okla., Tex., Va, Wash. DC. Host-plant: *Celtis occidentalis*.

celtidismamma (Fletcher, 1883 a) [Thompson, 1962; Riemann, 1966; White & Hodkinson, 1985]

Psylla celtidis-mamma Fletcher, 1883 a [Fletcher, 1883 b; Fyles, 1883 a, b]

Psylla celtidis-mamma (Riley, 1876) *nomen nudum*

Pachypsylla celtidis-mamma (Riley) [Riley, 1885, 1890; Mally, 1894; Beutenmüller, 1892; Cook, 1903; Tucker, 1907; Smith, 1910; Crawford, 1914; McAtee, 1915, 1918; Weiss, 1916; Van Duzee, 1916, 1917; Patch, 1924; Leonard, 1928; Klyver, 1932; Caldwell, 1938 a; Jensen, 1946; Jensen & Knowlton, 1951; Vondráček, 1953; Smith & Taylor, 1953]

Pachypsylla celtidis-mamma (Fletcher) [Tuthill, 1943]

Pachypsylla celtidis-mammae (Riley) [Cook, 1904; Stough, 1910; Patch, 1912 a]

Pachypsylla celtidis mamma (Riley) [Boselli, 1929 b]

Pachypsylla mamma (Riley) [Stebbins, 1909; Wells, 1916, 1920]

Pachypsylla celtidis-astericus Riley, 1890 [Mally, 1893; Riley, 1894; Tucker, 1907; Aulmann, 1913; Crawford, 1914; Boselli, 1929 b]

Pachypsylla astericus Riley [Wells, 1920]

Pachypsylla celtidis-umbilicus Riley, 1890 [Mally, 1893; Riley, 1894; Gillette and Baker, 1895; Tucker, 1907; Aulmann, 1913; Crawford, 1914; Boselli, 1929 b]

Pachypsylla celtidis-pubescens Riley, 1890 [Mally, 1893; Riley, 1894; Tyler-Townsend, 1895; Tucker, 1907; Aulmann, 1913; Crawford, 1914; Boselli, 1929 b]

Pachypsylla celtidis-cucurbita Riley, 1890 [Mally, 1893; Riley, 1894; Beutenmüller, 1892; Tucker, 1907; Smith, 1910; Aulmann, 1913; Crawford, 1914; Boselli, 1929 b]

Pachypsylla celtidiscucurbita Riley [Riemann, 1966]

Pachypsylla cucurbita Riley, 1890 [Stebbins, 1909]

Pachypsylla celtidis-globulus Riley, 1890 [Mally, 1893; Riley, 1894; Tucker, 1895; Aulmann, 1913; Crawford, 1914; Boselli, 1929 b]

Pachypsylla rohweri Cockerell, 1910 [Aulmann, 1913; Van Duzee, 1916, 1917; Tuthill, 1943]

Type locality: USA, Iowa. Distribution: USA, Ariz., Colo., Conn., Ill., Ind., Kans., Mass., Minn., Nebr., NJ, NY, NC, Ohio, Okla., Tex., Utah, Wash. DC; Canada, Ont. Host-plant: *Celtis occidentalis*, *Celtis texana*, *Celtis reticulata* Torrey.

celtidisinteneris Mally, 1893 [Riemann, 1966]

Pachypsylla celtidis-inteneris Mally [Mally, 1894; Aulmann, 1913; Tuthill, 1943; Smith & Taylor, 1953]

Pachypsylla inteneris Mally [Crawford, 1914; Van Duzee, 1916, 1917]

Pachypsylla unguolata Caldwell, 1938 a [Tuthill, 1943]

Type locality: USA, Iowa. Distribution: USA, Ill., Kans., Ohio. Host-plant: *Celtis* sp.

celtidisvesiculum Riley, 1884 [Riemann, 1966; White & Hodkinson, 1985]

Pachypsylla celtidis-vesiculum Riley [Beutenmüller, 1892; Mally, 1894; Smith, 1910; Aulmann, 1913; Crawford, 1914; Van Duzee, 1916, 1917; Patch, 1924; Leonard, 1928; Boselli, 1929 b]

Pachypsylla celtidis-vesicula Riley [Tuthill, 1943; Smith & Taylor, 1953; Jensen, 1957 c]

Pachypsylla vesiculum Riley [Stebbins, 1909; Wells, 1916]

Type locality: type specimen not designated. Distribution: USA, Ariz., Conn., Ill., Iowa, Kans., La, Nebr., NJ, NY, Ohio. Okla. Host-plant: *Celtis douglasi* Planchon.

dubia Patch 1912 a [Crawford, 1914; Van Duzee, 1916, 1917; Klyver, 1932; Tuthill, 1943; Jensen & Knowlton, 1951]

Type locality: not stated. Distribution: USA, Utah. Host-plant: unknown.

pallida Patch, 1912 a [Crawford, 1914; Van Duzee, 1916, 1917; Tuthill, 1943]

Type locality: USA, Ariz. Distribution: USA, NMex. Host-plant: unknown.

venusta (Osten-Sacken, 1861) [Riley, 1885, 1890; Mally, 1894; Beutenmüller, 1892; Smith, 1910; Aulmann, 1913; Crawford, 1914; Wells, 1916; Van Duzee, 1916, 1917; McAtee, 1918; Patch, 1924; Ferris, 1926; Leonard, 1928; Boselli, 1929 b; Klyver, 1932; Caldwell, 1938 a; Brimley, 1938; Tuthill, 1943; Jensen, 1946, 1957 c; Jensen & Knowlton, 1951; Smith & Taylor, 1953; Riemann, 1966; White & Hodkinson, 1985]

Psylla venusta Osten-Sacken [Ashmead, 1881; Riley, 1883; Fyles, 1883 a, b]

Psylla celtidis-grandis Riley, 1876 [Riley, 1885; Mally, 1894]

Pachypsylla tridentata Patch, 1912 a [Crawford, 1914]

Type locality: USA, Wash. Distribution: USA, Colo., Conn., Idaho, Iowa, Kans., Miss., NJ, NMex., NY, NC, Ohio, Tenn., Tex., Utah. Host-plant: *Celtis occidentalis*, *C. douglasi*.

PARAPHALAROIDA Loginova, 1972 a [APHALARIDAE]

TYPE-SPECIES: *Paurocephala fremontiae* Klyver, 1930 a

A monotypic genus.

fremontiae (Klyver, 1930 a) [Loginova, 1972 a; White & Hodkinson, 1985]

Paurocephala fremontiae Klyver [Klyver, 1931 b, c, 1932]

Type locality: USA, Calif. Host-plant: *Fremontia californica* Torrey.

PARATRIOZA Crawford, 1910 a

[TRIOZIDAE]

TYPE-SPECIES: *Paratríoza ocellata* Crawford, 1910 a

A loosely defined genus with representatives in the Palaearctic and Oriental regions in addition to the New World (Hodkinson & White, 1981; Hodkinson, 1986; Klimaszewski, 1973). *Paratríoza cockerelli* (Šulc) is an important pest of potato in the USA.

arbolensis Crawford, 1910 a [Crawford, 1914; Van Duzee, 1916, 1917; Tuthill, 1943; White & Hodkinson, 1985]

Allotrioza arbolensis (Crawford) [Crawford, 1911 a; Patch, 1912 a; Zacher, 1913]

Type locality: USA, Colo. Distribution: USA, Mont., Wyo. Host-plant: *Shepherdia canadensis*.

cockerelli (Šulc, 1909) [Crawford, 1911 a, 1914; Patch, 1912 a; Zacher, 1913; Compere, 1915, 1916; Van Duzee, 1916, 1917; Essig, 1917; Ferris, 1925; Pack, 1928; Shapovalov, 1929; Lehrman, 1930; Richards, 1927, 1928, 1931; Richards & Blood, 1933; Klyver, 1931 a, c, 1932; List, 1925, 1932, 1934, 1935, 1938, 1939 a, b, 1943; List & Daniels, 1934; Knowlton, 1932, 1933 a, b, c, d, e, 1934 a, b, c, 1937; Knowlton & Thomas, 1934; Knowlton & Allen, 1936; Knowlton & Janes, 1931; Eyer & Crawford, 1933; Sandsten, 1933, 1934; Daniels, 1934; Rowe & Knowlton, 1935; Hartman, 1936; Eyer, 1937; Davis, 1937; Janes, 1937, 1939; Hixson, 1938; Strickland, 1938, 1939; Milliron, 1939; Mills, 1939; Romney, 1939; Wallis, 1940, 1941, 1946, 1951, 1954, 1955; Edmundson, 1940; Swenk & Tate, 1940; Pletsch, 1940, 1942, 1947; Caldwell, 1941, 1944 a; Tuthill, 1943, 1945 a; Riedl & Harrison, 1945; Hill, 1947; Jensen & Knowlton, 1951; Jensen, 1954; Sanford, 1952; Staples, 1968; Kitching, 1971; Neilson, 1978; Papp & Johnson, 1979; Hodkinson & White, 1981; Arslan *et al.*, 1985; White & Hodkinson, 1985]

Trioza cockerelli Šulc

Paratríoza ocellata Crawford, 1910 a [Crawford, 1911 a, c, 1914; Zacher, 1913]

Paratríoza pulchella Crawford, 1910 a [Crawford, 1911 a, 1914]

Paratríoza pulchella flava Crawford, 1910 a [Crawford, 1911 a, 1914; Zacher, 1913]

Type locality: USA, Colo. Distribution: USA, Ariz., Calif., Colo., Idaho, Iowa, Kans., Minn., Mont., Nebr., NMex., Nev., NDak., Okla., SDak., Tex., Utah, Wyo.; Canada, Alta, BC, Sask.; Mexico. Host-plant: various species of Solanaceae including *Capsicum*, *Lycium* and *Solanum* species. See Knowlton & Thomas (1934) for full list.

dorsalis (Crawford, 1914) [Tuthill, 1943]

Kuwayama dorsalis Crawford [Van Duzee, 1916, 1917]

Type locality: USA, Ariz. Host-plant: unknown.

dubia Tuthill, 1943 [Tuthill, 1945 a; Hodkinson & White, 1981]

Paratríoza simila Caldwell 1944 a [Tuthill, 1945 a]

Type locality: USA, Ariz. Distribution: USA, Calif.; Mexico; Guatemala. Host-plant: *Senecio salignis*.

lavaterae (Van Duzee, 1924) [Tuthill, 1943; White & Hodkinson, 1985]

Kuwayama lavaterae Van Duzee [Ferris, 1924; Klyver, 1931 c, 1932]

Type locality: USA, Calif. Host-plant: *Lavatera assurgentiflora*.

maculipennis (Crawford, 1910 a) [Crawford, 1911 a, 1914; Van Duzee, 1916, 1917; Klyver, 1932; Tuthill, 1943; Jensen & Knowlton, 1951; Jensen, 1957 c; White & Hodkinson, 1985]

Trioza maculipennis Crawford [Aulmann, 1913]

Type locality: USA, Calif. Distribution: USA, Utah. Host-plant: *Convolvulus* sp.

PEXOPSYLLA Jensen, 1957 b [PSYLLIDAE]

TYPE-SPECIES: *Pexopsylla cercocarpi* Jensen, 1957 b

A monotypic genus probably related to some of the North American species currently placed in *Euphalerus* (*sensu lato*) and *Euglyptoneura*.

cercocarpi Jensen, 1957 b [Jensen, 1957 c; Loginova, 1982; White & Hodkinson, 1985]

Type locality: USA, Calif. Host-plant: *Cercocarpus betuloides* Nuttall, *C. ledifolius* Nuttall.

PSYLLA Geoffroy, 1762 [PSYLLIDAE]

TYPE-SPECIES: *Chermes alni* Linnaeus, 1758

The genus *Psylla* is used here in the restricted sense as defined by Klimaszewski (1972) and Klimaszewski *et al.* (1973), and includes species placed in the nominate subgenus *Psylla* by Loginova (1978) (see *Cacopsylla*). This is now a moderate-sized holarctic genus, members of which feed on Betulaceae and Carpinaceae.

alni (L., 1758) [Aulmann, 1913; Henriksen, 1939; Tuthill, 1943; Russell, 1946; Vondráček, 1953; Kitching, 1971; Loginova, 1978; White & Hodkinson, 1985]

Chermes alni L. [Caldwell, 1946]

Psyllia alni (L.) [Van Duzee, 1916, 1917; Ferris, 1925]

Psylla alniamericana L. [Loginova, 1978]

Psyllia alni americana L. [Van Duzee, 1916, 1917; Klyver, 1931 d, 1932; Strickland, 1938]

Psylla alni americanella Strickland, 1939 replacement name

Type locality: Europe. Distribution: USA, Ariz., Calif., Idaho, Nev., Oreg., Wash.; Canada, Alta, BC; Greenland. Widely distributed across the Palaearctic region. Host-plant: *Alnus rhombifolia*; Strickland's record from swamp birch is doubtful. Klimaszewski (1973) gives a bibliography for the Palaearctic region.

betulae L., 1758 [Loginova, 1978; Hodkinson, 1980]

Type locality: Europe. Distribution: Canada, Alta (IDH). Widely distributed across the Palaearctic. Host plant: *Betula* sp. Klimaszewski (1973) gives a bibliography for the Palaearctic region.

betulaenanae Ossiannilsson, 1970 [Koponen, 1978; Loginova, 1978; Hodkinson, 1978, 1980; MacLean & Hodkinson, 1980; Hodkinson & MacLean, 1980; MacLean, 1981; White & Hodkinson, 1985]

Type locality: Europe. Distribution: USA, Alas.; Greenland. Widely distributed across the northern Palearctic. Host-plant: *Betula nana*.

borealis Horvath, 1908 [Šulc, 1913; Aulmann, 1912]

Psyllia borealis (Horvath) [Van Duzee, 1917]

Type locality: Greenland. Host-plant: unknown. This may be a form of *Psylla alni* (see Šulc, 1913).

carpinicola Crawford, 1914 replacement name for *Psylla carpini* Fitch, 1851. [McAtee, 1918; Patch, 1924; Tuthill, 1943; Vondráček, 1953; Miyatake, 1964; Loginova, 1978; Hodkinson, 1980; White & Hodkinson, 1985]

Psylla carpini Fitch, 1851 *nec* Förster, 1848 [Walker, 1852; Thomas, 1879; Ashmead, 1881; Riley, 1885; Lintner, 1893; Mally, 1894; Van Duzee, 1906, 1908]

Psyllia carpinicola Crawford [Van Duzee, 1916, 1917; Osborn, 1922 a; Leonard, 1928; Caldwell, 1938 a]

Psylla carpina Fitch [Smith, 1910]

Psylla coryli Riley MS name and *nomen nudum* [Gillette & Baker, 1895; Tucker, 1907]

Psylla cephalica Crawford, 1914 [Tuthill, 1943]

Psyllia cephalica Crawford [Van Duzee, 1917; Leonard, 1928]

Type locality: not stated. Distribution: USA, Alab., Ark., Colo., Conn., Fla., Ill., Iowa, La, Md., Mich., Miss., Mo., NH, NJ, NY, NC, Ohio, Penn., Tex., Va, Wash. DC, Wisc.; Canada, NS; Japan. Host-plant: *Carpinus caroliniana*.

caudata Crawford, 1914 [Tuthill, 1943; Kitching, 1971; Loginova, 1978]

Psyllia caudata (Crawford) [Van Duzee, 1916, 1917; Klyver, 1931 d, 1932]

Type locality: USA, Colo. Distribution: USA, Idaho; Canada, BC. Host-plant: *Alnus tenuifolia*.

floccosa Patch, 1909 a [Patch, 1909 b, 1911, 1924; Aulmann, 1913; Crawford, 1914; Tuthill, 1943; Jensen & Knowlton, 1951; Jensen, 1957 c; Kitching, 1971; Hodkinson, 1978, 1980; MacLean & Hodkinson, 1980; Loginova, 1978; White & Hodkinson, 1985]

Psyllia floccosa (Patch) [Van Duzee, 1916, 1917; Osborn, 1922 a; Leonard, 1928; Klyver, 1932; Strickland, 1938, 1939]

Asphagidella floccosa (Patch) [Enderlein, 1921]

Psylla styliformis Patch MS name [Crawford, 1914]

Type locality: USA, Maine. Distribution: USA, Alas., Calif., Colo., Conn., Maine, Mich, Minn., Mont., Nev., NH, NMex., NY, Oreg., Utah, Wash., Wyo.; Canada, Alta, BC, Man., NS, Ont. Host-plant: *Alnus incana*, *A. tenuifolia*.

galeaformis Patch, 1911 [Crawford, 1914; Patch, 1924; Tuthill, 1943; Jensen & Knowlton, 1951; Kitching, 1971; Loginova, 1978; Hodkinson, 1978; MacLean & Hodkinson, 1980; White & Hodkinson, 1985]

Psyllia galeaformis (Patch) [Van Duzee, 1916, 1917; Leonard, 1928]

Type locality: USA, Maine. Distribution: USA, Colo., Conn., Maine, Mass., Mich., Minn., Nev., NH, NY, Oreg., Utah, Vt, Wash., Wisc.; Canada, BC, Man., NS, Ont., Sask. Host-plant: *Alnus crispa*, *A. tenuifolia*.

trimaculata Crawford, 1911 c [Crawford, 1914; Tuthill, 1943; Kitching, 1971; Loginova, 1978; White & Hodkinson, 1985]

Psylla alni trimaculata Crawford, 1911 c [Zacher, 1913]

Psyllia trimaculata (Crawford) [Van Duzee, 1916, 1917; Osborn, 1922 b; Leonard, 1928; Klyver, 1932]

Psyllia 3-maculata (Crawford) [Osborn, 1922 a]

Psylla astigmata Crawford, 1914 [Tuthill, 1943; Loginova, 1978]

Psylla trimaculata astigmata Crawford [Tuthill, 1943; Kitching, 1971; Loginova, 1978]

Psyllia astigmata (Crawford) [Van Duzee, 1916, 1917; Klyver, 1931 d, 1932]

Psylla cerasi Patch, 1912 a [Crawford, 1914; Patch, 1924]

Psylla trimaculata cerasi Crawford [Tuthill, 1943]

Psyllia cerasi (Patch) [Van Duzee, 1916, 1917; Strickland, 1939]

Type locality: USA, NY. Distribution: USA, Calif., Colo., Conn., Fla, Maine, Mich., Minn., NH, NY, Wash., Wisc.; Canada, Alta, BC, Man., NS. Host-plant: *Prunus cerasus*, *P. emarginata*, *P. demissa*?

PSYLLOPSIS Löw, 1879

[APHALARIDAE]

TYPE-SPECIES: *Psylla fraxinicola* Förster, 1848

A west Palaearctic genus whose members feed on *Fraxinus* spp. (Klimaszewski, 1973). Three species appear to have been introduced into North America.

discrepans (Flor, 1861 a) [Aulmann, 1913; Tuthill, 1943; Hodkinson, 1980]

Psylla discrepans Flor

Type locality: Europe. Distribution: W. Palaearctic region. Canada, NS (introd.). Host-plant: *Fraxinus excelsior*. Klimaszewski (1973) gives a bibliography for the Palaearctic.

fraxini (L., 1761) [Aulmann, 1913; Tuthill, 1943; Hodkinson, 1980; White & Hodkinson, 1985]

Chermes fraxini L.

Psyllopsis fraxinicola Felt, 1910 *nec* Förster, 1848 [Tuthill, 1943]

Type locality: Europe. Distribution: W. Palaearctic Region; USA, NY, (introd.). Host-plant: *Fraxinus excelsior*. Klimaszewski (1973) gives a bibliography for the Palaearctic.

fraxinicola (Förster, 1848) [Smith, 1910; Aulmann, 1913; Crawford, 1914; Van Duzee, 1916, 1917; McAtee, 1918; Ferris, 1923; Patch, 1924; Leonard, 1928?; Klyver, 1931 c; Tuthill, 1943; Kitching, 1971; Hodkinson, 1980; White & Hodkinson, 1985.

Psylla fraxinicola Förster

Type locality: Europe. Distribution: W. Palaearctic region; USA, Calif., Conn., Idaho, NJ, Utah, Wash. DC (introd.); Canada, BC, NS (introd.). Host-plant: *Fraxinus excelsior*, *F. dipetala*.

PURSHIVORA Heslop-Harrison, 1961

[PSYLLIDAE]

TYPE-SPECIES: *Arytaina chelifera* Crawford, 1914

A small, North American genus most probably related to *Amorphicola*, *Euglyptoneura*, and *Ceanothia* (Hodkinson, 1980).

chelifera (Crawford, 1914) [Heslop-Harrison, 1961; White & Hodkinson, 1985]

Arytaina chelifera Crawford [Van Duzee, 1916, 1917; Tuthill, 1943; Jensen & Knowlton, 1951]

Brachypsylla purshiae Schwarz MS name and *nomen nudum* [Crawford, 1914]

Type locality: USA, Ariz., Utah. Host-plant: *Prushia tridentata*.

pubescens Crawford, 1914 [Heslop-Harrison, 1961; Hodkinson, 1973 b; White & Hodkinson, 1985]

Arytaina pubescens Crawford [Van Duzee, 1916, 1917; Klyver, 1931 c, 1932; Tuthill, 1938, 1943; Jensen, 1946; Jensen & Knowlton, 1951; Vondráček, 1953; Kitching, 1971]

Type locality: USA, Cal., Colo., Nev. Distribution: USA, Idaho, Oreg., Utah; Canada, BC. Host-plant: *Purshia tridentata*.

RHINOPSYLLA Riley, 1885

[TRIOZIDAE]

TYPE-SPECIES: *Rhinopsylla schwarzii* Riley, 1885

A genus that extends as far south as Panama (Hodkinson, 1980). The taxonomic limits of the individual species are poorly defined and the genus, which has representatives in the Oriental and Austro-Oriental regions, is in need of revision. *Rhinopsylla* species resemble, in some respects, Palaearctic species placed in *Bactericera* (*sensu stricto*).

arcuata Tuthill, 1942 a

Rhinopsylla schwarzi Tuthill, 1938 *nec* Riley 1885

Type locality: USA, Fla. Host-plant: unknown.

antennata Crawford, 1910 a [Crawford, 1911 a, 1914; Zacher, 1913; Van Duzee, 1916, 1917; Tuthill, 1942 a, 1950 b; Hodkinson & White, 1981]

Paratrioza antennata Crawford

Rhinopsylla antennata proxima Crawford, 1911 a [Zacher, 1913; Crawford, 1914; Van Duzee, 1916, 1917; Tuthill, 1942 a]

Rhinopsylla dimorpha Caldwell, 1938 a [Tuthill, 1942 a]

Rhinopsylla nigra Laing, 1923 [Caldwell, 1941; Caldwell, 1944 a; Tuthill, 1950 b]

Rhinopsylla nigra Caldwell [Tuthill, 1950 b]

Rhinopsylla rubrafacia Caldwell, 1941 [Tuthill, 1950 b]

Type locality: USA, Colo. Distribution: USA, Okla., Ohio, Tex., Utah; Mexico; Panama (IDH). Host-plant: *Polygonum persicaria* L.

athenae Crawford, 1914 [Van Duzee, 1916, 1917; Tuthill, 1942 a]

Type locality: USA, Ga. Host-plant: unknown.

caldwelli Tuthill, 1944 a

Type locality: USA, Fla. Host-plant: unknown.

schwarzii Riley, 1885 [Mally, 1894; Crawford, 1911 a, 1914; Van Duzee, 1916, 1917; Brimley, 1938; Tuthill, 1942 a]

Rhinopsylla schwarzii Riley, 1884 *nomen nudum*

Type locality: USA, Fla. Distribution: NC. Host-plant: unknown.

SPANIONEURA Förster, 1848

[PSYLLIDAE]

TYPE-SPECIES: *Spanioneura fonscolombii* Förster, 1848

A small Palearctic genus, some of whose members feed on box (*Buxus*). A single species has been introduced into the USA.

fonscolombii Förster, 1848 [Aulmann, 1913; Britton, 1916; Patch, 1924; Tuthill, 1943; White & Hodkinson, 1985]

Type locality: Europe. Distribution: USA, Conn. (introd.). Host-plant: *Buxus sempervirens*. Klimaszewski (1973) gives a bibliography for the Palearctic region.

TETRAFOLLICULA—see *Craspedolepta*.

TETRAGONOCEPHALA Crawford, 1914

[PSYLLIDAE]

TYPE-SPECIES: *Tetragonocephala flava* Crawford, 1914

A monotypic genus related to *Pachypsylla*. The single species feeds on *Celtis* (Ulmaceae).

flava Crawford, 1914 [Van Duzee, 1916, 1917; Tuthill, 1943; Riemann, 1958, 1966; Hodkinson & White, 1981]

Type locality: USA, Tex. Distribution: USA, Ariz.; Mexico. Host-plant: *Celtis reticulata*, *C. laevigata*.

TRIOZA Förster, 1848

[TRIOZIDAE]

TYPE-SPECIES: *Chermes urticae* L., 1758

A diverse and ubiquitous genus of worldwide distribution (Hollis, 1984). European workers have, in recent years, tended to split *Trioza* into separate genera or subgenera (e.g. Klimaszewski, 1975). Subdivision of the North American species is probably not worthwhile at this stage and must await a comprehensive revision. Members of *Trioza* (*sensu lato*) feed on a variety of different plant families.

alacris Flor, 1861 a [Crawford, 1912 b, 1914; Van Duzee, 1917; Essig, 1917; Weiss, 1917; Weiss & Dickerson, 1918; Klyver, 1931 c, 1932; Tuthill, 1943; Hodkinson, 1980; Hodkinson & White, 1981]

Trioza (*Heterotrioza*) *alacris* Flor [White & Hodkinson, 1985]

Lauritrioza alacris (Flor) [Conci & Tamanini, 1985]

Spanioza alacris Flor [Enderlein, 1926]

Type locality: Europe. Distribution: USA, Calif., NJ (introd.); Argentina; Brazil; Chile (introd.). Native to W. Palearctic region. Host-plant: *Laurus nobilis*. Klimaszewski (1973) and Conci & Tamanini (1985) gave bibliographies for the Palearctic region. The genus *Lauritrioza* Conci & Taminini (1985) is not recognised here.

albifrons Crawford, 1910 a [Crawford, 1910 b, 1911 a, 1914; Aulmann, 1913; Van Duzee, 1916, 1917; Klyver, 1930 a, 1932; Tuthill, 1943; Jensen & Knowlton, 1951; Jensen, 1957 c; Vondráček, 1953; Kitching, 1971; Hodkinson, 1978, 1980; MacLean & Hodkinson, 1980; Hodkinson & White, 1981; White & Hodkinson, 1985]

Trioza rotundipennis Crawford, 1910 a [Crawford, 1914]

Trioza fovealis Crawford, 1910 a [Aulmann, 1913]

Trioza similis fovealis Crawford, 1910 a [Crawford, 1911 a; Tuthill, 1943]

Trioza frontalis Crawford, 1911 a, 1914 in part [Tuthill, 1943]

Trioza sulcata similis Crawford, 1910 a [Crawford, 1910 b, 1911 a, 1914; Aulmann, 1913; Tuthill, 1943]

Trioza urticae Van Duzee, 1916 *nec* L., 1758?

Type locality: USA, Calif. Distribution: USA, Alas., Ariz., Colo., Idaho, Minn., Mont., NMex., Oreg., Utah, Wash.; Canada, Alta, BC; Mexico. Host-plant: *Urtica holosericea*, *U. dioica*, *U. gracilis*.

arctica Hodkinson, 1978 [Hodkinson, 1980; Hodkinson & MacLean, 1980; MacLean & Hodkinson, 1980]

Type locality: USA, Alas. Distribution: USSR, Chukotka. Host-plant: *Salix* spp.

astraea Bliven, 1960

Type locality: USA, Calif., Host-plant: possibly *Rubus parviflorus*.

atkasookensis Hodkinson, 1978 [Hodkinson *et al.*, 1979; Hodkinson, 1980; Hodkinson & MacLean, 1980; MacLean & Hodkinson, 1980]

Trioza (?*Bactericera*) *atkasookensis* Hodkinson [White & Hodkinson, 1985]

Type locality: USA, Alas. Distribution: USSR, Chukotka. Host-plant: *Salix* spp.

aylmeriae Patch, 1912 a [Crawford, 1914; Van Duzee, 1917; McAtee, 1918; Tuthill, 1939 b, 1943, 1944 a]

Trioza alymeriae Patch [Van Duzee, 1916]

Trioza (?*Bactericera*) *aylmeriae* Patch [White & Hodkinson, 1985]

Neotriozaella virginiana Caldwell, 1938 a [Tuthill, 1939 a, 1943]

Type locality: Canada, Ont. Distribution: USA, Ohio. Host-plant: 'Bilberry'?

bakeri Crawford, 1910 a [Crawford, 1911 a, 1914, 1925 a; Aulmann, 1913; Van Duzee, 1916, 1917; Klyver, 1932; Tuthill, 1939 b, 1943; Jensen, 1957 c; White & Hodkinson, 1985]

Trioza montana Crawford, 1911 c [Zacher, 1913; Crawford, 1914]

Trioza puberula Riley MS name and *nomen nudum* [Crawford, 1914]

Type locality: USA, Calif. Distribution: USA, Calif., Colo., Nev. Host-plant: *Rhamnus smithii* Green, *R. crocea* var. *ilicifolia*.

beameri Tuthill, 1939 b [Tuthill, 1943; Jensen, 1957 c; White & Hodkinson, 1985]

Type locality: USA, Calif. Host-plant: *Rhamnus californica* Esch.

breviantennata Crawford, 1914 [Van Duzee, 1916, 1917; Klyver, 1932; Tuthill, 1943]

Type locality: USA, Calif. Host-plant: unknown.

californica Crawford, 1910 a [Crawford, 1911 a; Aulmann, 1913; Tuthill, 1943]

Triozoida californica (Crawford) [Crawford, 1911 b]

Ceropsylla californica (Crawford) [Crawford, 1914; Van Duzee, 1916, 1917]

Trioza ichneumonina Riley MS name and *nomen nudum* [Crawford, 1914]

Type locality: USA, Calif. Distribution: USA, Ariz., Colo. Host-plant: possibly *Salix*.

chlora Tuthill, 1938 [Tuthill, 1943]

Type locality: USA, Ariz. Host-plant: unknown.

collaris Crawford, 1910 a [Crawford, 1910 b, 1911 a, 1914; Patch, 1912 a; Aulmann, 1913; Van Duzee, 1916, 1917; Klyver, 1931 c, 1932; Tuthill, 1943, 1944 c; Hodkinson, 1980; Hodkinson & White, 1981]

Trioza longistylus Crawford, 1910 a [Crawford, 1911 a, 1914; Patch, 1912 a; Aulmann, 1913; Van Duzee, 1916, 1917; Caldwell, 1941; Tuthill, 1943; 1944 c]

Type locality: USA, Calif. Distribution: USA, Ariz., Colo., NMex., Tex.; Mexico. Host-plant: *Baccharis viminea*.

diospyri (Ashmead, 1881) [Forbes, 1885; Riley, 1885; Mally, 1894; Smith, 1910; Crawford, 1910 a; 1911 a, 1914; Patch, 1912 a; Van Duzee, 1916, 1917; McAtee, 1918; Leonard, 1928; Brimley, 1938; Mead, 1966 a; Hodkinson & White, 1981; Hollis, 1984]

Psylla diospyri Ashmead [Aulmann, 1913]

Megatrioza diospyri (Ashmead) [Crawford, 1919]

Trioza (Megatrioza) diospyri (Ashmead) [Tuthill, 1943, 1945 a; Vondráček, 1953; White & Hodkinson, 1985]

Spanioza diospyri (Ashmead) [Enderlein, 1926]

Phylloplecta diospyri (Ashmead) [Ferris, 1926, 1928 b; Caldwell, 1938 a, 1941]

Trioza latipennis Crawford, 1910 a *nomen nudum* [Crawford, 1910 b]

Type locality: USA, Fla. Distribution: USA, Ala., Ga, Iowa, Ky, La, Miss., Mo, NJ, NY, NC, Ohio, Okla, Tenn., Tex., Va; Mexico. Host-plant: *Diospyros virginiana*.

forcipula Patch, 1912 a [Van Duzee, 1917; Leonard, 1928]

Spanioza forcipula (Patch) [Enderlein, 1926]

Type locality: Canada, Ont.; USA, Colo., NY. Host-plant: unknown.

frontalis Crawford, 1910 a [Crawford, 1910 b, 1911 a, 1914; Aulmann, 1913; Van Duzee, 1916, 1917; Klyver, 1931 d, 1932; Tuthill, 1939 b, 1943, 1944 a; Strickland, 1939; Kitching, 1971]

Trioza (? *Bactericera*) *frontalis* Crawford [White & Hodkinson, 1985]

Spanioza frontalis (Crawford) [Enderlein, 1926]

Type locality: USA, Colo. Distribution: USA, Calif., Minn., Nev., NDak., SDak.; Canada, Alta, BC, Man. Host-plant: *Amelanchier alnifolia* Nuttall.

incerta Tuthill, 1943 [Jensen & Knowlton, 1951; Kitching, 1971; Hodkinson, 1978, 1980; Papp & Johnson, 1979; MacLean & Hodkinson, 1980]

Type locality: USA, Alas., Calif., Colo., Oreg., Utah, Wash.; Canada, BC. Distribution: Utah. Host-plant: *Salix depressa* ssp. *rostrata*.

inversa Tuthill, 1939 b [Tuthill, 1943; Kitching, 1971]

Type locality: USA, Colo., Utah; Canada, BC. Host-plant: *Amelanchier* sp.

lobata Crawford, 1914 [Van Duzee, 1916, 1917; Klyver, 1931 a; Tuthill, 1943]

Trioza (?*Heterotrioza*) *lobata* Crawford [White & Hodkinson, 1985]

Type locality: USA, Ariz., Calif. Distribution: USA, Colo., Nev., NMex. Host-plant: unknown.

loletae Bliven, 1958

Type locality: USA, Calif. Host-plant: unknown.

This species appears to be synonymous with *Trioza albifrons*.

longicornis Crawford, 1910 a [Crawford, 1910 b, 1911 a, 1914; Van Duzee, 1916, 1917; Tuthill, 1943; Kitching, 1971]

Trioza dubia Patch, 1912 a [Tuthill, 1943]

Spanioza forcipula Enderlein, 1926

Trioza forcipula (Enderlein, 1926) [Tuthill, 1943]

Type locality: Canada, BC. Distribution: USA. Calif. Host-plant: unknown.

magnoliae (Ashmead, 1881) [Riley, 1885; Mally, 1894; Crawford, 1910 a, 1914; Van Duzee, 1916, 1917; Barber, 1919; Tuthill, 1943, 1944 c; Mead, 1963; Hodkinson & White, 1981]

Psylla magnoliae Ashmead [Aulmann, 1913]

Trioza (?*Heterotrioza*) *magnoliae* (Ashmead) [White & Hodkinson, 1985]

Allotrioza magnoliae (Ashmead) [Crawford, 1911 a]

Type locality: USA, Fla. Distribution: USA, Ga; Mexico. Host-plant: *Persea borbonia* (L.) Spreng and probably not *Magnolia virginia* as suggested in earlier accounts (see Mead, 1963).

mexicana Crawford, 1911 a [Crawford, 1914; Tuthill, 1939 b, 1945 a; Caldwell, 1941, 1944 a]

Trioza mexicana minuta Crawford, 1911 a [Crawford, 1914; Caldwell, 1941]

Trioza mexicana minor Crawford, 1911 a [Tuthill, 1943; Vondráček, 1953]

Type locality: Mexico. Distribution: USA, Ariz. Host-plant: *Rhus* sp.

minuta Crawford, 1910 a [Crawford, 1911 a; Aulmann, 1913; Tuthill, 1943; Vondráček, 1953; Jensen & Knowlton, 1951; Jensen, 1957 c]

Trioza (?*Heterotrioza*) *minuta* Crawford, 1910 a [White & Hodkinson, 1985]

Trioza minuta similis Crawford, 1911 a [Crawford, 1914]

Phyllopecta minuta (Crawford, 1910 a) [Caldwell, 1940]

Trioza marginata (Crawford, 1910 a) *nec* Hartig 1841 [Crawford, 1910 b, 1911 a; Patch, 1912 a; Aulmann, 1912]

Trioza arizonae Aulmann, 1912 replacement name [Aulmann, 1913; Van Duzee, 1916, 1917; Caldwell, 1941, 1944 a; Hodkinson & White, 1981]

Trioza minuta var. *arizonae* [Tuthill, 1943, 1944 c; Jensen, 1957 c]

Trioza nigra Crawford, 1910 a *nec* Kuwayama 1910 [Crawford, 1910 b]

Trioza nigrilla Crawford, 1911 b replacement name [Crawford, 1914; Van Duzee, 1917; Osborn, 1922 a; Leonard, 1928]

Trioza louisianae Aulmann, 1912 replacement name [Aulmann, 1913]

Trioza assimilis Crawford, 1910 a *nec* Flor, 1861 a [Crawford, 1911 a]

Trioza flori Crawford, 1911 b replacement name [Crawford, 1911 b, 1914]

Trioza pomonae Aulmann, 1912 replacement name [Aulmann, 1913]

Trioza salicis Mally, 1894 *nec* Linnaeus, 1761 [Crawford, 1910 a, 1911 a, 1914; Aulmann, 1913; McAtee, 1915, 1918; Van Duzee, 1916, 1917; Klyver, 1932; Tuthill, 1943]

Phyllopecta salicis (Mally, 1894) [Caldwell, 1938 a]

Phyllopecta multidubiata Caldwell, 1939 a replacement name [Strickland, 1939; Tuthill, 1943]

Type locality: USA, Iowa (for *salicis* Mally). Distribution: USA, Ariz., Calif., Colo., Idaho, Ill., Iowa, La, Md., Mont., Nev., NY, Okla., Oreg., Utah, Wash., Wash. DC; Canada, Alta; Mexico. Host-plant: *Salix* spp. including *S. lasiandra* Benth, *S. lasiolepis*, *S. longifolia*.

mira Tuthill, 1943 replacement name [Jensen & Knowlton, 1951]

Trioza forcipula Tuthill, 1939 b *nec* Patch, 1912 a

Trioza mira curta Tuthill, 1943

Type locality: USA, Colo., Wash. Distribution: Calif., Utah. Host-plant: *Amelanchier alnifolia* Nutt.

obtusa Patch, 1911 [Crawford, 1914; Van Duzee, 1916, 1917; McAtee, 1918; Patch, 1924; Brimley, 1938; Tuthill, 1943; Hodkinson, 1976]

Trioza (Bactericera) obtusa Patch [White & Hodkinson, 1985]

Trioza amelanchieris Riley MS name and *nomen nudum* [Gillette & Baker, 1985; Crawford, 1914]

Type locality: USA, Maine. Distribution: USA, Alab., Colo., Conn., Minn., NY, NC, Wash. DC; Canada, Alta, NS. Host-plants: *Amelanchier canadensis*, *A. alnifolia*.

occidentalis Tuthill [Tuthill, 1943; Kitching, 1971]

Type locality: USA, Calif.; Canada, BC. Distribution: USA, Wash. Host-plant: *Rubus parviflorus*.

phoradendri Tuthill, 1939 b amended name [Tuthill, 1943]

Trioza phorodendrae Tuthill, 1939 b

Trioza phoradendrae Tuthill, 1939 b [White & Hodkinson, 1985]

Trioza phoradendri acuminata Tuthill, 1943

Type locality: USA, Colo. Distribution: USA, Calif. Host-plant: adults collected from *Phoradendron juniperinum* Engelm and *P. pubescens*.

pletschi Tuthill, 1944 a [Hodkinson, 1976]

Type locality: USA, Mont. Distribution: Canada, Alta. Host-plant: *Thalictrum occidentale*, *Thalictrum venulosum*.

proximata Crawford, 1911 a [Crawford, 1914; Caldwell, 1941; Tuthill, 1943, 1945 a; Hodkinson, 1980; Hodkinson & White, 1981]

Type locality: Mexico. Distribution: USA, Ariz. Host-plant: *Baccharis* sp., *Senecio* sp.

pulla Tuthill, 1939 b [Tuthill, 1943; Kitching, 1971]

Type locality: USA, Oreg., Wash. Host-plant: unknown.

quadripunctata Crawford, 1910 a [Crawford, 1911 a, 1914; Patch, 1912 a; Aulmann, 1913; Van Duzee, 1916, 1917; Leonard, 1928; Strickland, 1938, 1939; Caldwell, 1938 a; Tuthill, 1943; Kitching, 1971]

Spanioza quadripunctata (Crawford) [Enderlein, 1926]

Type locality: USA, Colo. Distribution: USA, Calif., Iowa, Kans., Minn., Mo, Mont., NY, Ohio, Wyo.; Canada, Alta, BC. Host-plant: *Urtica* sp. probably *procera*.

robusta Tuthill, 1944 a

Type locality: USA, Mont. Host-plant: unknown.

rubicola Tuthill, 1943 [Kitching, 1971]

Type locality: USA, Wash. Host-plant: *Rubus leucodermis*.

rubra Tuthill, 1939 b [Tuthill, 1943, 1944 c]

Trioza albanigra Caldwell, 1944 [Tuthill, 1944 c]

Type locality: USA, Ariz., Colo., NMex., Oreg. Distribution: Mexico. Host-plant: *Baccharis* sp.

salicivora Reuter, 1876 [Hodkinson, 1978, 1980; Hodkinson & MacLean, 1980; MacLean & Hodkinson, 1980]

Trioza (Bactericera) salicivora Reuter [White & Hodkinson, 1985]

Trioza maura (auctt.) N. America nec Förster, 1848 [Patch, 1912 a; Crawford, 1914, 1925 a; Van Duzee, 1916, 1917; Leonard, 1928; Klyver, 1931 d, 1932; Strickland, 1938; Tuthill, 1939 b, 1943; Jensen & Knowlton, 1951; Vondráček, 1953; Jensen, 1957 c; Kitching, 1971]

Trioza aurantiaca Crawford, 1910 a [Crawford, 1910 b, 1911 a, c, 1914; Aulmann, 1913]

Trioza aurantiaca frontalis Crawford, 1910 a [Aulmann, 1913; Crawford, 1914]

Trioza fulvida Crawford, 1910 a [Crawford, 1910 b, 1911 a, 1914; Aulmann, 1913]

Trioza nigrifrons Crawford, 1910 a [Crawford, 1910 b, 1911 a, 1914; Aulmann, 1913]

Trioza fulvida similis Crawford, 1910 a [Crawford, 1910 b, 1911 a, 1914; Aulmann, 1913]

Trioza saliciperda Riley MS name and *nomen nudum* [Crawford, 1914]

Type locality: Europe. Distribution: USA, Alas., Calif., Colo., Ill., Nev., NMex., Oreg., Utah, Wash.; Canada, Alta, BC. Host-plant: *Salix* species including *S. lasiolepsis*, *S. longifolia*, *S. lasiandra*, *S. depressa* ssp. *rostrata*.

sembra Caldwell, 1940 [Tuthill, 1943, 1944 a]

Type locality: USA, Ariz. Host-plant: unknown.

sheperdiae Tuthill, 1938 [Tuthill, 1943]

Phyllopecta multidubiata breviradia Caldwell, 1939 a [Strickland, 1939; Tuthill, 1943]

Type locality: USA, Colo. Distribution: Canada, Alta. Host-plant: *Sheperdia canadensis* (L.) Nutt.

singularis Tuthill, 1943 [Tuthill, 1944 a]

Type locality: USA, Mich. Host-plant: unknown.

sinuosa Tuthill, 1944 a

Type locality: USA, NH. Host-plant: unknown.

stygma Tuthill, 1939 b corrected spelling [Tuthill, 1943; Hodkinson, 1980; Burckhardt, 1983, 1986 b]

Trioza stygma Tuthill, 1939 b

Type locality: USA, Calif. Host-plant: unknown.

stylifera Patch, 1912 a [Crawford, 1914; Van Duzee, 1916, 1917; Tuthill, 1943, 1944 a; Hodkinson, 1978]

Type locality: Canada, Ont. Distribution: Canada, Man.; USA, Alas. Host-plant: unknown.

sulcata Crawford, 1910 a [Aulmann, 1913; Strickland, 1938; Tuthill, 1943; Jensen & Knowlton, 1951; Kitching, 1971]

Trioza frontalis sulcata Crawford, 1911 a [Crawford, 1914; Van Duzee, 1916, 1917]

Type locality: USA, Colo. Distribution: USA, Ariz., Calif., Nev., Oreg., Utah. Also possibly Canada, Alta. Host-plant: *Amelanchier* sp.

tripunctata (Fitch, 1851) [Fuller & Riley, 1880; Ashmead, 1881; Riley, 1885; Lintner, 1893; Mally, 1894; Sirrine, 1895; Felt, 1906; Smith, 1910, 1911; Crawford, 1910 a, 1911 a, 1914, 1920 c; Patch, 1912 a; Aulmann, 1913; Zacher, 1913; Headlee, 1914, 1915; McAttee, 1915, 1918; Van Duzee, 1916, 1917; Peterson, 1923; Patch, 1924; Leonard, 1928; Brimley, 1938; Tuthill, 1939 b, 1943, 1944 a; Mead, 1966 b]

Psylla tripunctata Fitch [Walker, 1852; Thomas, 1879]

Trioza (?*Bactericera*) *tripunctata* (Fitch) [White & Hodkinson, 1985]

Phylloplecta tripunctata (Fitch) [Riley, 1884; Ferris, 1926; Caldwell, 1938 a]

Psylla rubi Walsh & Riley, 1869 [Thomas, 1879; Fuller & Riley, 1880; Ashmead, 1881; Mally, 1894]

Type locality: not stated. Distribution: USA, Conn., Ga, Iowa, Maine, Mich., NH, NJ, NY, NC, Ohio, Va, Wash. DC; 'Canada'. Host-plant: *Rubus* spp.

varians Crawford, 1910 a [Crawford, 1910 b, 1911 a, c, 1914; Aulmann, 1913; Van Duzee, 1916, 1917; Strickland, 1938, 1939; Tuthill, 1943; Jensen & Knowlton, 1951; Kitching, 1971]

Type locality: USA, Colo. Distribution: USA, Calif., Utah; Canada, Alta, BC. Host-plant: *Salix* spp. including probably *Salix linearifolia*.

viridis Crawford, 1910 a [Crawford, 1910 b, 1914, 1925 a; Aulmann, 1913; Van Duzee, 1916, 1917; Tuthill, 1939 b, 1943]

Allotrioza viridis (Crawford) [Crawford, 1911 a]

Spanioza viridis (Crawford) [Enderlein, 1926]

Type locality: USA, Calif. Host-plant: unknown.

VAILAKIELLA Bliven, 1955

[APHALARIDAE]

TYPE-SPECIES: *Vailakiella eos* Bliven, 1955

There seems to be no good reason why this monotypic genus should be separated from *Livia*.

eos Bliven, 1955 [Bliven, 1956]

Type locality: USA, Calif. Host-plant: unknown.

Host plants

Generic names of plant listed below follow Willis (1973) and the families are arranged according to Cronquist (1968). Generic names have been amended where necessary, to bring them into line with modern usage.

| Host-plant | | | Psyllid |
|----------------|----------------|--------------------------------|---|
| MAGNOLIALES | Lauraceae | <i>Laurus</i> <i>Persea</i> | <i>Trioza alacris</i> <i>Trioza magnoliae</i> |
| RANUNCULALES | Ranunculaceae | <i>Thalictrum</i> | <i>Trioza pletschi</i> |
| URTICALES | Ulmaceae | <i>Celtis</i> | <i>Pachypsylla celtidisgemma</i> <i>P. celtidismamma</i> <i>P. celtidisinteneris</i> <i>P. celtidisvesiculum</i> <i>P. venusta</i> <i>Tetragonocephala flava</i> |
| | | | <i>Homotoma ficus</i> |
| | Moraceae | <i>Ficus</i> | <i>Trioza albifrons</i> |
| | Urticaceae | <i>Urtica</i> | <i>T. quadripunctata</i> |
| FAGALES | Betulaceae | <i>Alnus</i> | <i>Psylla alni</i> <i>P. caudata</i> <i>P. floccosa</i> <i>P. galeaformis</i> |
| | | | <i>Psylla betulae</i> <i>P. betulaenanae</i> <i>Cacopsylla striata</i> <i>C. hartigii</i> |
| | | <i>Betula</i> | <i>Psylla carpinicola</i> <i>Cacopsylla delonchi</i> |
| | | | |
| | | <i>Carpinus</i> | |
| | | <i>Corylus</i> | |
| | | | |
| | | | |
| CARYOPHYLLALES | Chenopodiaceae | <i>Salsola</i> | <i>Craspedolepta pulchella</i> |
| | | <i>Suaeda</i> | <i>C. suaedae</i> |
| POLYGONALES | Polygonaceae | <i>Persicaria</i> | <i>Aphalara persicaria</i> |
| | | <i>Polygonum</i> | <i>Aphalara loca</i> <i>A. 'calthae/polygoni'</i> complex? |
| | | | <i>Rhinopsylla antennata</i> |
| | | <i>Rumex</i> | <i>Aphalara confusa</i> <i>A. monticola</i> |
| | | | <i>A. rumicis</i> |
| MALVALES | Sterculiaceae | <i>Fremontodendron</i> | <i>Paraphalaroida fremontiae</i> |
| | Malvaceae | <i>Lavatera</i> | <i>Paratrioza lavaterae</i> |
| VIOLALES | Frankeniaceae | <i>Frankenia</i> | <i>Craspedolepta martini</i> <i>C. viridis</i> |
| SALICALES | Salicaceae | <i>Salix</i> | <i>Cacopsylla alaskensis</i> <i>C. alba</i> <i>C. albagena</i> <i>C. americana</i> <i>C. bulbosa</i> <i>C. confusa?</i> <i>C. curta</i> <i>C. fibulata</i> <i>C. groenlandica?</i> <i>C. haliaeeti</i> <i>C. hamata</i> <i>C. highwoodensis</i> <i>C. jenseni</i> <i>C. kananaskensis</i> <i>C. latiforceps</i> <i>C. macleani</i> |

| Host-plant | | | Psyllid |
|------------|-----------------|-----------------------|--|
| | | | <i>C. minor</i> <i>C. nordica?</i> <i>C. palmeni</i> <i>C. parallela</i> <i>C. phlebophylla</i> <i>C. quadrilineata</i> <i>C. rufipennis</i> <i>C. septentrionalis?</i> <i>C. sinuata</i> <i>C. spiculata</i> <i>C. subspiculata</i> <i>C. tenuata</i> <i>C. toolikensis</i> <i>C. zaecevi</i> <i>Trioza arctica</i> <i>T. atkasookensis</i> <i>T. californica</i> <i>T. incerta</i> <i>T. minuta</i> <i>T. salicivora</i> <i>T. varians</i> |
| ERICALES | Ericaceae | <i>Arctostaphylos</i> | <i>Neophyllura arctostaphyli</i> <i>N. bicolor</i> <i>N. niveipennis</i> <i>N. pruinosa</i> |
| | | <i>Arbutus</i> | <i>Neophyllura arbuti</i> <i>N. arbuticola</i> |
| | | <i>Ledum</i> | <i>Cacopsylla ledi</i> |
| | | <i>Vaccinium</i> | <i>Cacopsylla myrtilli</i> <i>Trioza aylmeriae?</i> |
| | | | |
| EBENALES | Sapotaceae | <i>Sideroxylon</i> | <i>Ceropsylla sideroxyli</i> |
| | Ebenaceae | <i>Diospyros</i> | <i>Trioza diospyri</i> |
| PRIMULALES | Primulaceae | <i>Steironema</i> | <i>Aphalara steironemicola</i> |
| ROSALES | Grossulariaceae | <i>Ribes</i> | <i>Cacopsylla notapennis</i> <i>C. pararibesiae</i> <i>C. ribesiae</i> |
| | | | <i>Trioza frontalis</i> <i>T. mira</i> <i>T. obtusa</i> <i>T. sulcata</i> |
| | Rosaceae | <i>Amelanchier</i> | <i>Ceanothia aculeata</i> <i>Euphalerus adustus</i> <i>E. cercocarpi</i> <i>E. idahoensis</i> <i>Pexopsylla cercocarpi</i> <i>Cacopsylla brevistigmata</i> <i>C. acuminata</i> <i>C. difficilis</i> <i>C. insignita?</i> <i>C. maculata</i> <i>C. magna?</i> <i>C. media</i> |
| | | <i>Cercocarpus</i> | <i>Cacopsylla mali</i> <i>Psylla trimaculata</i> |
| | | <i>Malus</i> | |
| | | <i>Prunus</i> | |
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| Host-plant | | | Psyllid |
|--------------|---------------|-----------------------|--|
| | | <i>Purshia</i> | <i>Purshivora chelifera</i> <i>P. pubescens</i> <i>Cacopsylla coryli?</i> <i>C. hirsuta</i> <i>C. minuta</i> |
| | | <i>Pyrus</i> | <i>Cacopsylla sorbi</i> <i>C. pyricola</i> |
| | | <i>Rubus</i> | <i>Trioza occidentalis</i> <i>T. rubicola</i> <i>T. tripunctata</i> <i>T. astraea</i> |
| | Leguminosae | <i>Acacia</i> | <i>Acizzia uncatoides</i> <i>Aphalaroida acaciae</i> <i>A. masonici</i> <i>A. spinifera?</i> |
| | | <i>Albizia</i> | <i>Acizzia uncatoides</i> |
| | | <i>Amorpha</i> | <i>Amorphicola pallida</i> <i>Euphalerus propinquus</i> |
| | | <i>Cytisus</i> | <i>Arytaina genistae</i> <i>Arytainilla spartiophila</i> |
| | | <i>Leucaena</i> | <i>Heteropsylla cubana</i> |
| | | <i>Medicago</i> | <i>Kuwayama medicaginis?</i> |
| | | <i>Mimosa</i> | <i>Heteropsylla mimosae</i> |
| | | <i>Piscidia</i> | <i>Euphalerus nidifex</i> |
| | | <i>Pithecellobium</i> | <i>Aphalaroida pithecolobia</i> |
| | | <i>Prosopis</i> | <i>Aphalaroida inermis</i> <i>A. prosopis</i> <i>A. spinifera</i> <i>Heteropsylla texana</i> |
| MYRTALES | Myrtaceae | <i>Eucalyptus</i> | <i>Blastopsylla occidentalis</i> |
| | | <i>Lophostemon</i> | <i>Ctenarytaina longicauda</i> |
| | Onagraceae | <i>Epilobium</i> | <i>Craspedolepta nebulosa</i> <i>C. schwarzi</i> <i>C. subpunctata</i> |
| PROTEALES | Elaeagnaceae | <i>Elaeagnus</i> | <i>Cacopsylla magnicauda</i> |
| | | <i>Sheperdia</i> | <i>Craspedolepta stricklandi</i> <i>C. tuthilli</i> <i>Trioza sheperdiae</i> <i>Paratrioza arbolensis</i> |
| SANTALES | Loranthaceae | <i>Phoradendron</i> | <i>Trioza phoradendri?</i> <i>Cacopsylla phorodendri</i> |
| CELESTRALES | Aquifoliaceae | <i>Ilex</i> | <i>Gyropsylla ilicis</i> |
| EUPHORBIALES | Buxaceae | <i>Buxus</i> | <i>Spanioneura fonscolombii</i> <i>Cacopsylla buxi</i> |
| RHAMNALES | Rhamnaceae | <i>Ceanothus</i> | <i>Ceanothia assimilis</i> <i>C. bicolor</i> <i>C. boharti</i> <i>C. ceanothi</i> <i>C. essigi</i> <i>C. insolita</i> <i>C. mitella</i> <i>C. tardiuscula</i> <i>Euglyptoneura fuscipennis</i> <i>E. minuta</i> |

| Host-plant | | | Psyllid |
|-----------------|----------------|-------------------------------------|------------------------------------|
| SAPINDALES | | <i>Rhamnus</i> | <i>E. robusta</i> |
| | | | <i>Euphalerus nepos</i> |
| | | | <i>E. rugipennis</i> |
| | | | <i>E. vermiculosus</i> |
| | | | <i>Trioza bakeri</i> |
| | | | <i>T. beameri</i> |
| | Aceraceae | <i>Acer</i> | <i>Cacopsylla annulata</i> |
| | | <i>Negundo</i> | <i>Cacopsylla negundinis</i> |
| | Anacardiaceae | <i>Rhus</i> | <i>Calophya aurea</i> |
| | | | <i>C. californica</i> |
| | | | <i>C. dubia</i> |
| | | | <i>C. flavida</i> |
| | | | <i>C. nigrella</i> |
| | | | <i>C. nigripennis</i> |
| | | | <i>C. triozaomima</i> |
| | | | <i>C. vittatus</i> |
| | | | <i>Trioza mexicana</i> |
| | | | <i>Heteropsylla quassiae?</i> |
| Simaroubaceae | <i>Quassia</i> | | |
| UMBELLALES | Araliaceae | <i>Fatsia</i> | <i>Cacopsylla japonica</i> |
| POLEMONIALES | Solanaceae | <i>Capsicum</i> | <i>Paratrioza cockerelli</i> |
| | | <i>Lycium</i> | <i>Paratrioza cockerelli</i> |
| | | <i>Solanum</i> | <i>Paratrioza cockerelli</i> |
| | Convolvulaceae | <i>Convolvulus</i> | <i>Paratrioza maculipennis</i> |
| SCROPHULARIALES | Oleaceae | <i>Fraxinus</i> | <i>Psyllopsis discrepans</i> |
| | | | <i>P. fraxini</i> |
| | Bigoniaceae | <i>Chilopsis</i> | <i>P. fraxinicola</i> |
| | | | <i>Craspedolepta pulchella?</i> |
| DIPSACALES | Caprifoliaceae | <i>Viburnum</i> | <i>Cacopsylla rara</i> |
| ASTERALES | Compositae | <i>Achillea</i> <i>Artemisia</i> | <i>Craspedolepta angustipennis</i> |
| | | | <i>Craspedolepta anomola</i> |
| | | | <i>C. canadensis</i> |
| | | | <i>C. constricta?</i> |
| | | | <i>C. maculidracunculi</i> |
| | | | <i>C. minutissima</i> |
| | | | <i>C. minutistylus</i> |
| | | | <i>C. pinicola?</i> |
| | | | <i>C. russellae?</i> |
| | | | <i>C. vancouverensis</i> |
| | | <i>Baccharis</i> | <i>Trioza collaris</i> |
| | | | <i>T. proximata</i> |
| | | | <i>T. rubra</i> |
| | | | <i>Craspedolepta constricta</i> |
| | | | <i>C. maculimagna?</i> |
| | | <i>Chrysothamnus</i> | <i>C. russellae</i> |
| | | | <i>Craspedolepta numerica</i> |
| | | | <i>Craspedolepta gutierreziae</i> |
| | | | <i>Levidea lineata</i> |
| | | | <i>Paratrioza dubia</i> |
| | | | <i>Trioza proximata</i> |
| | | | <i>Craspedolepta delongi</i> |
| | | | <i>C. flavida</i> |
| | | | <i>C. fumida?</i> |
| | | | <i>C. furcata</i> |

| Host-plant | | | Psyllid |
|------------|------------|------------------|-----------------------------|
| | | | <i>C. magna</i> |
| | | | <i>C. minuta</i> |
| | | | <i>C. parvula</i> |
| | | | <i>C. scurra</i> |
| | | | <i>C. veaziei</i> |
| | | <i>Sonchus</i> | <i>Hemitrioza sonchi</i> |
| | | Other misc. spp. | <i>Craspedolepta sonchi</i> |
| JUNCALIS | Juncaceae | <i>Juncus</i> | <i>Livia maculipennis</i> |
| | Cyperaceae | <i>Carex</i> | <i>Livia caricis</i> |

References

ARSLAN, A., BESSEY, P. M., MATSUDA, K. & OEBKER, N. F., 1985. Physiological effects of the psyllid *Paratrioza cockerelli* on potato. *American potato Journal*, **62**, 9–22.

ASHMEAD, W. H., 1881. On the Aphididae of Florida with descriptions of new species (Family Psyllidae). *Canadian Entomologist*, **13**, 220–225.

——— *Homoptera of Alaska* 8 (part 1), New York (Doubleday, Page & Co.).

AULMANN, G., 1912. Einige notwendige Namenänderungen bei Psylliden. *Entomologische Rundschau*, **29**, 144.

——— 1913. *Psyllidarum Catalogus*, Berlin (W. Junk), 92 pp.

BARBER, H. S., 1919. Avocado seed weevils. *Proceedings of the Entomological Society of Washington*, **21**, 53–60.

BEUTENMULLER, W., 1892. Catalog of the gall-producing insects found within fifty miles of New York City. *Journal of the American Museum of Natural History*, **4**, 245–268.

BLIVEN, B. P., 1955. *New phytophagous Hemiptera from the coast range Mountains (Pentatomidae, Miridae, Cicadellidae, Psyllidae)*, *Studies on the Insects of the Redwood Empire*. Eureka, California (published privately): 8–14.

——— 1956. *New Hemiptera from the western states with illustrations of previously described species and new synonymy in the Psyllidae*. Eureka, California (published privately), 27 pp.

——— 1958. Studies on the insects of the Redwood Empire II. New Hemiptera and further notes on the *Colladonus* complex. *Occidental Entomologist*, **1**, 8–24 (published privately).

——— 1960. Studies on insects of the Redwood Empire III. New Hemiptera with notes on others. *Occidental Entomologist*, **1**, 34–42 (published privately).

BOSELLI, F. B., 1929 a. Studii sugli Psyllidi (Homoptera: Psyllidae o Chermidae) II. Descrizione di una nuova specie di *Paurocephala* della Cina a dei suoi stadii larvali. *Bolletino de Laboratorio di zoologia generale e agraria della Facolta agraria in Portici*, **21**, 251–264.

——— 1929 b. Studii sugli Psyllidi (Homoptera: Psyllidae o Chermidae) III. Appunti su alcune ninfe di Pachypsyllini. *Bolletino de Laboratorio di zoologia generale e agraria della Facolta agraria in Portici*, **22**, 204–218.

BREDDIN, J., 1902. Die Hemipteren und Siphunculaten des Arktischen Gebietes, Familie Psyllidae. *Fauna Arctica* **II**, **3**, 543–544.

BRETHES, J., 1921. Uno nuevo Psyllidae de la Republica Argentina (*Gyropsylla ilicicola*). *Revista de la Facultad de agronomia, Universidad nacional de La Plata*, **14**, 82–89.

BRIMLEY, C. S., 1938. *The insects of North Carolina, being a list of the insects of North Carolina and their close relatives, Family Chermidae or Psyllidae*. Raleigh, North Carolina (North Carolina Department of Agriculture): 103–104.

BRITAIN, W. H., 1919. An infestation of apple sucker *Psylla mali* Schmidberger in Nova Scotia. *Agricultural Gazette of Canada*, **5**, 823–827.

——— 1922 a. The morphology and synonymy of *Psylla mali* Schmidberger. *Proceedings of the Acadian entomological Society*, **8**, 23–42.

——— 1922 b. The present distribution and economic status of the apple sucker (*Psylla mali* Schmidberger). *Scientific Agriculture*, **3**, 23–29.

——— 1922 c. The apple sucker (*Psylla mali*). *Journal of Economic Entomology*, **15**, 96–101.

——— 1922 d. The adult habits of the apple sucker (*Psylla mali* Schmidberger). *Scientific Agriculture*, **3**, 59–64.

- 1923 a. The European apple sucker. *Bulletin of the Nova Scotia Department of Agriculture*, **10**, 1–69.
- 1923 b. Injuries, life history and control of the apple sucker (*Psylla mali* Schmidberger). *Scientific Agriculture*, **3**, 176–188.
- BRITTON, W. E., 1916. Two psyllids new to Connecticut. *39th Annual Report of the Connecticut Agricultural Experimental Station*, p. 186.
- BURCKHARDT, D., 1983. Wirtspflanzenspektren und Morphologie der Arter der *Trioza apicalis*—Gruppe (Sternorrhyncha, Psylloidea). *Verhandlungen SIEEC X Budapest*, **1983**, 105–107.
- 1986 a. Nomenclatorial note on *Heteropsylla cubana* Crawford (Homoptera: Psylloidea), a new pest in Pacific countries. *Revue Suisse de Zoologie*, **93**, 1023–1024.
- 1986 b. Taxonomy and host plant relationships of the *Trioza apicalis* Förster complex (Homiptera, Homoptera, Triozidae). *Entomologica Scandinavica*, **16**, 415–432.
- 1987. Jumping plant lice (Homoptera: Psylloidea) of the temperate neotropical region. Part 1: Psyllidae (subfamilies Aphalarinae, Rhinocolinae and Aphalaroidinae). *Zoological Journal of the Linnean Society*, **89**, 299–392.
- BURCKHARDT, D. & HODKINSON, I. D., 1986. A revision of the west palaearctic pear psyllids (Homiptera: Psyllidae). *Bulletin of Entomological Research*, **76**, 119–132.
- CALDWELL, J. S., 1936. Seven new species of the genus *Aphalara* (Homoptera: Chermidae). *Ohio Journal of Science*, **36**, 220–223.
- 1937. Some North American relatives of *Aphalara calthae* Linnaeus (Homoptera: Chermidae). *Annals of the Entomological Society of America*, **30**, 563–569.
- 1938 a. The jumping plant lice of Ohio (Homoptera, Chermidae). *Bulletin of the Ohio Biological Survey*, **34** (6), 227–281.
- 1938 b. Three new species of psyllids and the description of the allotype of *Livia opaquia* Cald. (Hom.—Psyllidae). *Annals of the Entomological Society of America*, **31**, 442–444.
- 1939. New psyllids from Alberta (Psyllidae, Homoptera). *Canadian Entomologist*, **71**, 211–212.
- 1940. Three new species of Psyllidae with notes on others. *Ohio Journal of Science*, **40**, 49–50.
- 1941. A preliminary survey of Mexican Psyllidae (Homoptera). *Ohio Journal of Science*, **41**, 418–424.
- 1944 a. Notes on Mexican and Central American Psyllidae. *Ohio Journal of Science*, **44**, 57–64.
- 1944 b. Psyllidae from tropical and semitropical America (Homoptera). *Journal of the New York Entomological Society*, **52**, 335–340.
- 1946. *Chermes alni*, two centuries after Kalm (Homoptera: Psyllidae). *Ohio Journal of Science*, **46**, 71–72.
- CALDWELL, J. & MARTORELL, L. F., 1952. A brief review of the Psyllidae of Puerto Rico. *Annals of the Entomological Society of America*, **44**, 603–613.
- CHANG, J. F. & PHILOGENE, B. J. R., 1975. A bibliography of the pear psylla *Psylla pyricola* (Hom.—Psyllidae). *Bulletin of the Entomological Society of America*, **21**, 247–249.
- COCKERELL, T. D. A., 1900. The lower and middle Sonoran Zones in Arizona and New Mexico. *American Naturalist*, **34**, 290.
- 1910. A new gall-making psyllid on hackberry. *Entomological News*, **20**, 180–181.
- COMPÈRE, H., 1915. *Paratrioza cockerelli* (Šulc). *Monthly Bulletin of California Commission of Horticulture*, **4** (12), 574.
- 1916. Notes on the tomato psylla. *Monthly Bulletin of California Commission of Horticulture*, **5** (5), 189–191.
- CONCI, C. & TAMANINI, L., 1985. *Lauritrioza* n. gen. for *Trioza alacris*. *Atti della Societa Italiana di Scienze Naturali e del Museo Civile di Storia Naturale, Milano*, **126**, 237–256.
- COOK, M. T., 1903. Galls and insects producing them. *Ohio Naturalist*, **3**, 419–436.
- 1904. Insect galls of Indiana. *29th Report of the Indiana Department of Geology and Natural Resources*, 844–845.
- CRAWFORD, D. L., 1910 a. American Psyllidae I (Triozinae). *Pomona College Journal of Entomology*, **2**, 228–237.
- 1910 b. American Psyllidae II (Triozinae). *Pomona College Journal of Entomology*, **2**, 347–362.
- 1911 a. American Psyllidae III (Triozinae). *Pomona College Journal of Entomology*, **3**, 422–453.

- 1911 b. American Psyllidae IV (Partial revision of subfamilies). *Pomona College Journal of Entomology*, **3**, 480–503.
- 1911 c. American Psyllidae V. *Pomona College Journal of Entomology*, **3**, 628–632.
- 1912 a. A note on certain Psyllidae. *Pomona College Journal of Entomology*, **4**, 684.
- 1912 b. A new insect pest (*Trioza alacris* Flor). *Monthly Bulletin of the California Commission of Horticulture*, **1**, 86–87.
- 1914. A monograph of the jumping plant lice or Psyllidae of the New World. *Bulletin of the United States National Museum*, **85**, 1–186.
- 1919. The jumping plant lice of the Palaetropics and the South Pacific islands—Family Psyllidae or Chermidae, Homoptera. *Philippine Journal of Science*, **15**, 139–207.
- 1920 a. New or interesting Psyllidae of the Pacific coast. *Entomological News*, **31**, 12–14.
- 1920 b. *Cerotrioza* (Psyllidae, Homoptera). *Proceedings of the Hawaiian Entomological Society*, **4**, 374–375.
- 1920 c. Notes on Psyllidae (Homoptera). *Entomological News*, **31**, 69–70.
- 1925 a. Notes on Californian Psyllidae. *Proceedings of the Hawaiian Entomological Society*, **6**, 30–31.
- 1925 b. Psyllidae of South America. *Brotéria: Série Zoologica*, **22**, 56–74.
- CRONQUIST, A., 1968. *The evolution and classification of flowering plants*. London (Nelson).
- DANIELS, L. B., 1934. The tomato psyllid and the control of psyllid yellows of potatoes. *Bulletin of Colorado Agricultural College*, **410**, 1–18.
- DAVIS, A. C., 1937. Observations on the life history of *Paratrioza cockerelli* (Šulc) in southern California. *Journal of Economic Entomology*, **30**, 377–379.
- DOWELL, A., 1932. A new *Arytaina* (Homoptera, Chermidae). *Journal of the Kansas Entomological Society*, **5**, 93–94.
- EDMUNDSEN, W. C., 1940. The effect of psyllid injury on the vigour of seed potatoes. *American Potato Journal*, **17** (12), 315–317.
- ENDERLEIN, G., 1921. Psyllidologica VI. *Zoologischer Anzeiger*, **52**, 115–123.
- 1926. Psyllidologica VIII. *Entomologische Mitteilungen*, **15**, 397–401.
- ESSIG, E. O., 1917. The tomato and laurel psyllids. *Journal of Economic Entomology*, **10**, 433–444.
- EYER, J. R., 1937. Physiology of psyllid yellows of potatoes. *Journal of Economic Entomology*, **30**, 891–898.
- EYER, J. R. & CRAWFORD, R. F., 1933. Observations on the feeding habits of the potato psyllid (*Paratrioza cockerelli* Šulc) and the pathological history of the psyllid yellows which it produces. *Journal of Economic Entomology*, **26**, 847–850.
- FELT, E. P., 1906. *Bramble flea louse*. Memoir New York State Museum, 688–689.
- 1910. The ash psylla (*Psyllopsis fraxinicola* Fst). *64th Annual Report of the New York State Museum Bulletin*, **147**, 39–40.
- FERRIS, G. F., 1923. Observations on the Chermidae (Hemiptera: Homoptera) Part I. *Canadian Entomologist*, **55**, 250–256.
- 1924. The nymphs of two species of Chermidae (Hemiptera). *Pan-Pacific Entomologist*, **1**, 24–28.
- 1925. Observations on the Chermidae (Hemiptera: Homoptera) Part II. *Canadian Entomologist*, **57**, 46–50.
- 1926. Observations on the Chermidae (Hemiptera: Homoptera) Part III. *Canadian Entomologist*, **58**, 13–20.
- 1928 a. Observations on the Chermidae (Hemiptera: Homoptera) Part IV. *Canadian Entomologist*, **60**, 109–117.
- 1928 b. Observations on the Chermidae (Hemiptera: Homoptera) Part V. *Canadian Entomologist*, **60**, 240–245.
- FERRIS, G. F. & HYATT, P., 1923. The life history of *Euphyllura arbuti* Schwarz (Hemiptera: Chermidae). *Canadian Entomologist*, **55**, 88–92.
- FERRIS, G. F. & KLYVER, F. D., 1932. Report upon a collection of Chermidae (Homoptera) from New Zealand. *Transactions of the New Zealand Institute*, **63**, 34–61.
- FIELDS, G. J., ZWICK, R. W. & MOFFITT, H. R., 1981. A bibliography of Psylla (Homoptera: Psyllidae) on pear trees. *United States Department of Agriculture, Scientific Education and Administration, Bibliography of the Literature in Agriculture*, **17**, 1–13.
- FITCH, A., 1851. Catalogue with references and descriptions of the insects collected and arranged for the state cabinet of natural history. *Fourth Annual Report of the Regents of the University on the condition of the state cabinet of natural history and the historical and antiquarian collection annexed thereto, made to the senate January 14, 1851*, **4**, 43–69.
- 1857. Fourth Report on the noxious and other insects of the state of New York (1857). *Transactions of the New York State Agricultural Society*, **17**, 687–753.

- FLETCHER, J., 1883 a. Homoptera—the harvest flies and their allies. *Annual Report of the Entomological Society of Ontario*, **1882**, 69–83.
- 1883 b. Note on the occurrence of *Pachypsylla* in Cowansville, Canada, near Ottawa. *Canadian Entomologist*, **15**, 40.
- FLOR, G., 1861 a. Zur Kenntniss der Rhynchoten. *Bulletin de la Société des Naturalistes de Moscou*, **34**, 331–422.
- 1861 b. Die Rhynchoten Livlands. *Archiv für Naturkunde Livlands* (2), **4**, 438–546.
- FORBES, S. A., 1885. The yellow jumping pear-louse. *Fourteenth Annual Report of the State Entomologist on the noxious and beneficial insects of the State of Illinois*, 98–100.
- FÖRSTER, A., 1848. Uebersicht der gattungen und arten in der familie der Psylloden. *Verhandlungen des Naturhistorischen Vereins der Preussischen Rheinlande*, **5**, 65–98.
- FRISON, T. H., 1927. A list of the insect types in the collections of the Illinois State Natural History Survey and the University of Illinois. *Bulletin of the Illinois Natural History Survey*, **16**, 137–309.
- FULLER, A. S. & RILEY, C. V., 1880. The insect enemies and diseases of our small fruits. *American Entomologist* (2), **3**, 61–63.
- FYLES, T. W., 1883 a. The gall insects of the nettle tree. *Canadian Entomologist*, **15**, 83–84.
- 1883 b. Further notes on the Psyllidae. *Canadian Entomologist*, **15**, 198–200.
- GEOFFROY, E. L., 1762. *Histoire abrégée des Insectes qui se trouvent aux environs de Paris*, **1**. Paris (Durand).
- GILLETTE, C. P. & BAKER, C. F., 1895. A preliminary list of the Hemiptera of Colorado. *Bulletin of the Colorado Agricultural Experimental Station*, **31**, 113–115.
- GLOVER, T., 1877. *Calophya rhois*, Homoptera. *Report of the Commissioner of Agriculture for the year 1876. Agricultural Report of the United States Department of Agriculture*, 24–26.
- GUÉRIN-MÉNEVILLE, M. F. E., 1844. *Iconographie du regne animal de G. Cuvier. Insectes*. Paris (Baillière), 576 pp., 104 pls.
- HARTIG, T., 1841. Versuch einer Eintheilung der Pflanzenlausen (Phytophthires Burm.) nach der Flügelbildung. *Germar's Zeitschrift für Entomologie, Leipzig*, **2**, 359–376.
- HARTMAN, G., 1936. Potato psyllid control. *Bulletin of the Wyoming Agricultural Experimental Station*, **217**, 24 pp.
- HAUPT, H., 1935. Gleichflüger, Homoptera. *Tierwelt Mitteleuropas*, **4**, 221–252.
- HEADLEE, T. J., 1914. Miscellaneous species—the bramble flea-louse (*Trioza tripunctata* Fitch). *35th Annual Report of the New Jersey Agricultural Experimental Station*, 354.
- 1915. *Trioza tripunctata* Fitch, the bramble flea-louse. *36th Annual Report of the New Jersey Agricultural Experimental Station*, 315.
- HENRIKSEN, K. L., 1939. A revised index of the insects of Greenland. *Meddelelser om Grønland*, **119**, 1–111.
- HESLOP-HARRISON, G., 1948 a. Observations on the British Psyllidae II. A preliminary note on the *Psylla sorbi-mali-peregrina* complex of the Homopterous family Psyllidae, an alleged instance of poecilogony. *Entomologist's monthly Magazine*, **84**, 199–202.
- 1948 b. The subfamily Liviinae Löw of the Homopterous family Psyllidae I. *Annals and Magazine of Natural History*, (12) **1**, 284–293.
- 1949 a. A new Indo-Malayan genus and species of the family Psyllidae (Homiptera-Homoptera). *Entomologist's monthly Magazine*, **85**, 161–164.
- 1949 b. The subfamily Liviinae Löw of the Homopterous Family Psyllidae II. *Annals and Magazine of Natural History*, (12) **2**, 241–270.
- 1949 c. The Aphalaran genera, *Aphalara* Förster, *Craspedolpeta* Enderlein and *Metaphalara* Crawford, with special reference to the European species of *Aphalara*: Hemiptera-Homoptera, family Psyllidae. *Annals and Magazine of Natural History*, (12) **1**, 284–293.
- 1951 a. Notes on Scandinavian Psyllidae I. *Annals and Magazine of Natural History*, (12) **4**, 657–672.
- 1951 b. The Arytainini of the subfamily Psyllinae, Hemiptera-Homoptera, Family Psyllidae. *Annals and Magazine of Natural History*, (12) **4**, 417–454.
- 1952. The genus *Rhinocola* and the associated genera of the Aphalarinae. *Annals and Magazine of Natural History*, (12) **5**, 957–974.
- 1961. The Arytainini of the sub-family Psyllinae. Hemiptera-Homoptera, family Psyllidae—2. *Annals and Magazine of Natural History*, (13) **3**, 417–439.

- HILL, R. E., 1947. An unusual weather sequence accompanying the severe potato psyllid outbreak of 1938 in Nebraska. *Journal of the Kansas Entomological Society*, **20**, 88–92.
- HIXSON, A., 1938. *Paratrioza cockerelli* (Šulc) in Oklahoma. *Journal of Economic Entomology*, **31**, 546.
- HODKINSON, I. D., 1973 a. A new species of *Aphalara* Förster (Homoptera: Psylloidea: Aphalaridae) from Alberta. *Canadian Entomologist*, **105**, 1413–1415.
- 1973 b. A note on the taxonomy of the Psyllidae of British Columbia. *Journal of the Entomological Society of British Columbia*, **70**, 68–69.
- 1976. New psyllids from Canada (Homoptera: Psylloidea). *Zoological Journal of the Linnaean Society*, **58**, 321–330.
- 1978. The psyllids (Homoptera-Psylloidea) of Alaska. *Systematic Entomology*, **3**, 333–360.
- 1980. Present day distribution patterns of the holarctic Psylloidea with particular reference to the origins of the Nearctic fauna. *Journal of Biogeography*, **7**, 127–146.
- 1983 a. The Psyllids (Homoptera: Psylloidea) of the Austro-Oriental, Pacific and Hawaiian zoogeographical realms, an annotated check list. *Journal of Natural History*, **17**, 341–377.
- 1983 b. Facultative pathenogenesis in *Psylla myrtilli* Wagner (Hom., Psyllidae): the saga continues in Norway. *Fauna norvegica* (B), **30**, 1–2.
- 1984. The taxonomy, distribution and host-plant range of the pear feeding psyllids (Homoptera: Psylloidea). *International Organization of Biological Control, West Palaearctic Region Bulletin*, **7** (5), 32–44.
- 1986. The psyllids (Homoptera: Psylloidea) of the Oriental Zoogeographical Region: an annotated check list. *Journal of Natural History*, **20**, 299–357.
- HODKINSON, I. D. & HOLLIS, D., 1987. Legume-feeding psyllids (Homoptera: Psylloidea) of the western palaearctic region. *Bulletin of the British Museum (Natural History)* (Entomology), **56**, 1–86.
- HODKINSON, I. D., JENSEN, T. S. & MACLEAN, S. F., 1979. The distribution, abundance and host-plant relationships of *Salix*-feeding psyllids (Homoptera: Psylloidea) in arctic Alaska. *Ecological Entomology*, **4**, 119–132.
- HODKINSON, I. D. & MACLEAN, S. F., 1980. The psyllids (Homoptera: Psylloidea) of Chukotka, Northeast USSR. *Arctic and Alpine Research*, 377–380.
- HODKINSON, I. D. & WHITE, I. M., 1981. The Neotropical Psylloidea (Homoptera: Insecta) an annotated check list. *Journal of Natural History*, **15**, 491–523.
- HOLLIS, D., 1984. Afrotropical jumping plant lice of the family Triozidae (Homoptera: Psylloidea). *Bulletin of the British Museum (Natural History)* (Entomology), **49**, 1–102.
- HORVATH, G., 1908. Remarques sur quelques hemiptères de l'Amerique du Nord. *Annales Historico-Naturales Musei Nationalis Hungarici*, **6**, 555–569.
- JANES, M. J., 1937. *Paratrioza cockerelli* (Šulc) on tomatoes in southwest Texas. *Journal of Economic Entomology*, **30**, 379.
- 1939. Observations on the potato psyllid in southwest Texas. *Journal of Economic Entomology*, **32**, 468.
- JARVIS, J., 1906. *Pachypsylla celtidis-mamma* and *P. celtidis-vesiculum*. 37th Annual Report of the Entomological Society of Ontario, **1906**, 65.
- JENSEN, D. D., 1945. Notes on the synonymy, nymphs and distribution of *Heteropsylla texana* Crawford (Homoptera: Psyllidae). *Pan-Pacific Entomologist*, **21**, 74–76.
- 1946. A new *Euphalerus* and notes on other species of Psyllidae from Idaho. *Annals of the Entomological Society of America*, **39**, 242–245.
- 1949. The identity of *Hemitrioza washingtonia* Klyver and *Aphalara punctellus* Van Duzee. *Pan-Pacific Entomologist*, **25**, 145–146.
- 1951. The North American species of *Psylla* from willow, with descriptions of new species and notes on biology (Homoptera-Psyllidae). *Hilgardia*, **20**, 299–324.
- 1954. Notes on the potato psyllid *Paratrioza cockerelli* (Šulc) Homoptera, Psyllidae. *Pan-Pacific Entomologist*, **30**, 161–165.
- 1956. New species of *Psylla* from the western United States and biological notes. *Canadian Entomologist*, **88**, 101–109.
- 1957 a. Four new species of *Arytaina* from California (Homoptera: Psyllidae). *Journal of the Kansas Entomological Society*, **30**, 89–98.
- 1957 b. A new genus and five new species of Psyllidae from California and Lower California (Homoptera). *Wasmann Journal of Biology*, **15**, 15–34.

- 1957 c. Parasites of the Psyllidae. *Hilgardia*, **27**, 71–99.
- 1957 d. The albizzia psyllid, *Psylla uncatooides* (Ferris and Klyver), in California. *Pan-Pacific Entomologist*, **33**, 29–30.
- JENSEN, D. D. & KNOWLTON, G. F., 1951. The Psyllidae of Utah. *Utah State Agricultural College Mimeograph Series*, **380**, 5 pp.
- JOHANNSEN, O. A. & PATCH, E. M., 1911. Insect Notes for 1911. *Bulletin of the Maine Agricultural Experimental Station*, **195**, 229–248.
- JOURNET, A. R. P., 1984. Associations of *Craspedolepta* species (Homoptera: Psylloidea) with goldenrod (*Solidago* spp.) in Quebec, Canada. *Revue d'Entomologie du Quebec*, **29**, 22–26.
- JOURNET, A. R. P. & VICKERY, V. R., 1978 a. Studies on nearctic *Craspedolepta* Enderlein, 1921 (Homoptera: Psylloidea). Taxonomic relationships within the superfamily. *Canadian Entomologist*, **110**, 1–12.
- 1978 b. Studies on Nearctic *Craspedolepta* Enderlein, 1921 (Homoptera: Psylloidea). External morphology. *Canadian Entomologist*, **110**, 13–36.
- 1979. Studies on Nearctic *Craspedolepta* Enderlein, 1921 (Homoptera: Psylloidea). Taxonomic revision. *Memoirs of the Lyman Entomological Museum and Research Laboratory*, **7**, 1–164.
- KIEFFER, J. J., 1905. Étude sur de nouveaux insectes et phytoptides gallicoles du Bengale. *Annales de la Société Scientifique de Bruxelles*, **29**, 159–182.
- KITCHING, R. L., 1971. The Psyllidae of British Columbia with a key to species. *Journal of the Entomological Society of British Columbia*, **68**, 36–43.
- KLIMASZEWSKI, S. M., 1961. Psyllidologische Notizen I–II. *Annales Zoologici, Warszawa*, **19**, 113–123.
- 1972. Bemerkungen über die Systematik der Gattung *Psylla* Geoffr. s.l. (Homoptera: Psylloidea). *Annales Universitatis Mariae Curie-Skłodowska, Lublin*, **27**, 11–15.
- 1973. The jumping plant lice or psyllids (Homoptera, Psylloidea) of the Palaearctic: an annotated check list. *Annales Zoologici, Warszawa*, **30**, 155–286.
- 1975. Psylloidea Koliszki (Insecta: Homoptera). *Fauna Polski*, **3**, 1–295.
- 1977. New data about North American species of the genus *Craspedolepta* Enderl. (Homoptera, Psylloidea). *Prace Nauk Uniwersytetu Śląskiego, Katowice*, **3**, 87–93.
- 1979. New data about north American species of *Craspedolepta* Enderl. and *Cerna* Klimaszewski genera (Homoptera: Psylloidea). *Acta Biologica, Katowice*, **6**, 46–54.
- 1983. Revision of the Palaearctic species of the genus *Craspedolepta* Enderlein s.l. (Homoptera, Aphalaridae). *Polski Pismo Entomologiczne*, **53**, 3–29.
- KLIMASZEWSKI, S. M., GLOWACKA, E., JANAS, R. & NOWAK, M., 1974. Systematic classification of the genus *Craspedolepta* (Hom. Psylloidea) in the light of anatomical and biochemical studies. *Bulletin de l'Académie Polonaise des Sciences (Sciences Biologiques)*, **22**, 239–243.
- KLIMASZEWSKI, S. M., NOWAK, M. & RYBKA, A., 1973. Systematic classification of the genus *Psylla* Geoffroy s.l. (Homoptera: Psyllidae) in the light of studies with biochemical methods. *Bulletin de l'Académie Polonaise des Sciences (Sciences Biologiques)*, **21**, 275–277.
- KLYVER, F. D., 1930 a. Notes on the Chermidae Part 1 (Hemiptera: Homoptera). *Canadian Entomologist*, **62**, 167–175.
- 1930 b. *Euphyllura arctostaphyli* Schwarz and *Euphyllura niveipennis* (Schwarz) a different interpretation. *Proceedings of the Entomological Society of Washington*, **32**, 153–159.
- 1931 a. Chermidae from Utah, Nevada and Arizona including three new species (Homoptera). *Pan-Pacific Entomologist*, **7**, 131–143, 157–158.
- 1931 b. Notes on the Chermidae (Hemiptera: Homoptera) part II. *Canadian Entomologist*, **63**, 111–115.
- 1931 c. California psyllids of present and potential economic importance. *Monthly Bulletin of the Department of Agriculture, State of California*, **20**, 691–697.
- 1931 d. New records and two new species of Chermidae from British Columbia and Washington with biological notes. *Pan-Pacific Entomologist*, **8**, 11–17.
- 1932. Biological notes and new records of North American Chermidae (Homoptera). *Entomological News*, **43**, 33–40, 70–75.
- KNOWLTON, G. F., 1932. Potato psyllid investigations. *Bulletin Utah Agricultural Experimental Station*, **235**, 58–59.
- 1933 a. Notes on injurious Utah insects: potato psyllid. *Proceedings of the Utah Academy of Science, Arts and Letters*, **10**, 153.
- 1933 b. Note on host plants of *Paratrioza cockerelli*. *Journal of Economic Entomology*, **26**, 730.

- 1933 c. Ladybird beetles as predators of the potato psyllid. *Canadian Entomologist*, **65**, 241–243.
- 1933 d. Length of adult life of *Paratrioza cockerelli* (Šulc). *Journal of Economic Entomology*, **26**, 730.
- 1933 e. Aphis-lion predators of the potato psyllid. *Journal of Economic Entomology*, **26**, 977.
- 1934 a. *The potato psyllid*. Leaflet no. 36, Utah Agricultural Experimental Station, 3 pp.
- 1934 b. Potato psyllid investigations. *Proceedings of the Utah Academy of Science, Arts and Letters*, **11**, 261–265.
- 1934 c. A big-eyed bug predator of the potato psyllid. *Florida Entomologist*, **18**, 40–43.
- 1937. Culture methods for the potato psyllid. *Culture Methods for Invertebrate Animals*, edited by L. Galstaff *et al.*, pp. 317–319.
- KNOWLTON, G. F. & ALLEN, M., 1936. Three hemipterous predators of the potato psyllid. *Proceedings of the Utah Academy of Science, Arts and Letters*, **13**, 293–294.
- KNOWLTON, G. F. & JAMES, M. J., 1931. Studies on the biology of *Paratrioza cockerelli*. *Annals of the Entomological Society of America*, **24**, 283–290.
- KNOWLTON, G. & THOMAS, W. L., 1934. Host plants of the potato psyllid. *Journal of Economic Entomology*, **27**, 547.
- KOEHLER, C. S., KATTOULAS, M. E. & FRANKIE, G. W., 1966. Biology of *Psylla uncatoides*. *Journal of Economic Entomology*, **59**, 1097–1100.
- KOPONEN, S., 1978. Notes on herbivorous insects of the birch in southern Greenland. *Report Kevo Subarctic Research Station*, **14**, 13–17.
- KUWAYAMA, S., 1910. Die Psylliden Japans II. *Transactions of the Sapporo Natural History Society*, **3**, 53–66.
- LAING, F., 1923. On some Psyllidae (Hem.-Hom.) from the New World. *Annals and Magazine of Natural History*, (9) **11**, 696–705.
- LATREILLE, P. A., 1798. Memoire sur une nouvelle espèce de Psylla. *Bulletin de la Société Philomathique*, **1**, 113–115.
- 1804. *Histoire naturelle, générale et particulière des Crustacés et des Insectes*, **12**, Paris.
- LEHRMAN, R. S., 1930. Some observations on the life history of the tomato psyllid (*Paratrioza cockerelli* Šulc) (Homoptera). *Journal of the New York Entomological Society*, **38**, 307–312.
- LEONARD, M. D., 1928. Check list of the Insects of New York, Chermidae. *Memoirs of Cornell University Experimental Station*, **101**, 182–184.
- LEWIS, I. F. & WALTON, L., 1964. Gall formation on leaves of *Celtis occidentalis* L. resulting from material infected by *Pachypsylla* sp. *Transactions of the American Microscopical Society*, **83**, 62–78.
- LINNAEUS, C., 1758. *Systema Naturae*, **1**, Stockholm.
- 1761. *Fauna Suecica*. Stockholm, 578 pp.
- LINTNER, J. A., 1893. Family Psyllidae (reprint of Fitch 1851). *49th Annual Report of the New York State Museum*, 404.
- LIST, G. M., 1925. The tomato psyllid, *Paratrioza cockerelli* (Šulc). *16th Annual Report of the State Entomologist of Colorado for 1924, Colorado State Entomological Circular*, **47**, 16.
- 1932. Relation of the potato psyllid *Paratrioza cockerelli* (Šulc) to the potato disease known as “psyllid yellows”. *45th Annual Report Colorado Experimental Station, 1931–1932*, 41–47.
- 1934. Lime sulfur for tomato psyllid control. *Bulletin of the Colorado Agricultural Experimental Station*, **411**, 1–14.
- 1935. Psyllid yellows of tomatoes and the control of the psyllid *Paratrioza cockerelli* (Šulc) by the use of sulfur. *Journal of Economic Entomology*, **28**, 431–436.
- 1938. Tests of certain materials as controls for the tomato psyllid *Paratrioza cockerelli* (Šulc) and psyllid yellows. *Journal of Economic Entomology*, **31**, 491–497.
- 1939 a. The effect of temperature upon egg deposition, egg hatch and nymphal development of *Paratrioza cockerelli* (Šulc). *Journal of Economic Entomology*, **32**, 30–36.
- 1939 b. The potato and tomato psyllid and its control on tomatoes. *Bulletin of the Colorado Experimental Station*, **454**, 1–33.
- 1943. Psyllid control on potatoes and tomatoes in the Victory gardens. *Bulletin of the Colorado Experimental Station*, **479**, 8 pp.
- LIST, G. M. & DANIELS, L. B., 1934. A promising control of psyllid yellows of potato. *Science*, **79** (2039), 79.

- LIZER, C., 1919. Description d'une nouvelle espèce de Psyllide cecidogène de l'Amérique Méridionale (*Paurocephala spegazziniana* n.sp.). *Marcellia*, **16**, 103–107.
- LOGINOVA, M. M., 1972 a. Revision of jumping plant-lice of the tribe Pauropsyllini Crawford (Homoptera, Psylloidea, Carsidaridae). *Entomologicheskoe obozrenie*, **51**, 837–853.
- 1972 b. On the fauna of Psylloidea from Morocco (Homoptera). *Commentationes Biologicae*, **47**, 1–37.
- 1973. Taxonomy of the tribe Euphyllurini (Psylloidea, Homoptera). *Zoologicheskii Zhurnal*, **52**, 858–869.
- 1974. Systematics of the family Liviidae (Homoptera: Psylloidea). *Zoologicheskii Zhurnal*, **53**, 858–865.
- 1976. Classification of the subfamily Arytaininae Crawford (Homoptera: Psylloidea) I, A review of genera of the tribe Arytainini. *Entomologicheskoe obozrenie*, **55**, 589–601.
- 1977. The classification of the subfamily Arytaininae Crawford (Homoptera: Psyllidae) II. *Entomologicheskoe obozrenie*, **56**, 577–587.
- 1978. Classification of the genus *Psylla* Geoffr. (Homoptera, Psyllidae). *Entomologicheskoe obozrenie*, **57**, 808–824.
- 1982. Structure and morpho-ecological types of the psyllid nymphs (Homoptera: Psylloidea). *Trudy Zoologicheskogo Instituta, Akademyia Nauk SSR, Leningrad* (1981), **105**, 20–52.
- LÖW, F., 1878. Beiträge zur Kenntniss der Psylloden. *Verhandlungen der Zoologischbotanischen Gesellschaft in Wien*, **27**, 123–153.
- 1879. Zur Systematik der Psylloden. *Verhandlungen der Zoologischbotanischen Gesellschaft in Wien*, **28**, 585–610.
- 1882. Revision der palaarktischen Psylloden in Hinsicht auf Systematik und Synonymie. *Verhandlungen der Zoologischbotanischen Gesellschaft in Wien*, **32**, 227–254.
- MACLEAN, S. F., 1981. Life cycles and the distribution of psyllids (Homoptera) in arctic and subarctic Alaska, USA. *Oikos*, **40**, 445–451.
- MACLEAN, S. F. & HODKINSON, I. D., 1980. The distribution of psyllids (Homoptera: Psylloidea) in arctic and subarctic Alaska. *Arctic and Alpine Research*, **12**, 369–376.
- MADUBUNYI, L. C. & KOEHLER, C. S., 1974. Development, survival and capacity for increase of the Albizzia psyllid at various constant temperatures. *Environmental Entomology*, **3**, 1013–1016.
- MALLY, C. W., 1893. Hackberry Psyllidae found at Ames, Iowa. *Proceedings of the Iowa Academy of Science*, **1**, 131–138.
- 1894. Psyllidae found at Ames, Iowa. *Proceedings of the Iowa Academy of Sciences*, **2**, 152–171.
- MARTIN, R. S., 1931. Two new *Euphyllura* (Homoptera: Chermidae). *Journal of the Kansas Entomological Society*, **4**, 68–70.
- MASKELL, W. M., 1890. On some species of Psyllidae in New Zealand. *Transactions of the New Zealand Institute*, **22**, 157–168.
- 1894. On a new species of Psyllidae. *Entomologist's monthly Magazine*, **30**, 171–173.
- MCATEE, W. L., 1915. Psyllidae overwintering on conifers about Washington DC. *Science*, **41**, 940.
- 1918. Psyllidae of the vicinity of Washington DC with description of a new species of *Aphalara* (Hom.). *Entomological News*, **29**, 220–224.
- 1926. Notes on Hemiptera from Illinois, with descriptions of new forms chiefly Eupteryginae. *Bulletin of the Illinois Natural History Survey*, **16**, 127–136.
- MEAD, F. W., 1963. A psyllid, *Trioza magnoliae* (Ashmead) (Homoptera: Psyllidae). *Florida Department of Agriculture, Division of Plant Industry, Entomology Circular*, **15**, 1–2.
- 1964. The false-mastic psylla (*Ceropsylla sideroxyli* Riley) (Homoptera: Psyllidae). *Florida Department of Agriculture, Division of Plant Industry, Entomology Circular*, **26**, 1–2.
- 1966 a. Persimmon psylla *Trioza diospyri* (Ashmead) (Homoptera: Psyllidae). *Florida Department of Agriculture, Division of Plant Industry, Entomology Circular*, **50**, 1–2.
- 1966 b. The blackberry psyllid *Trioza tripunctata* (Fitch) (Homoptera: Psyllidae). *Florida Department of Agriculture, Division of Plant Industry, Entomology Circular*, **52**, 1–2.
- 1967. The nest-making psyllid *Euphalerus nidifex* in Florida, Homoptera: Psyllidae. *Florida Department of Agriculture, Division of Plant Industry, Entomology Circular*, **67**, 1–2.

- 1983. Yaupon psyllid, *Gyropsylla ilicis* (Ashmead) (Homoptera: Psyllidae). *Florida Department of Agriculture, Division of Plant Industry, Entomology Circular*, **247**, 1–2.
- MILLIRON, H., 1939. Potato and tomato psyllid (*Paratrioza cockerelli* Sulc). Insect Pest Survey. *Bulletin of the United States Bureau of Entomology and Plant Quarantine*, **19**, 564.
- MILLS, H. B., 1939. Potato psyllid (*Paratrioza cockerelli* Sulc). Montana Insect Pests for 1937 and 1938. *Bulletin of the Montana Agricultural Experimental Station*, **366**, 28–29.
- MIYATAKE, Y., 1964. A revision of the subfamily Psyllidae from Japan (Homiptera: Psyllidae) II. *Journal of the Faculty of Agriculture, Kyushu University*, **13**, 1–37.
- MUNRO, J. A., 1965. Occurrence of *Psylla uncatoides* on *Acacia* and *Albizzia* with notes on control. *Journal of Economic Entomology*, **58**, 1171–1172.
- NEILSON, E. R., 1978. Potato integrated pest management in San Luis Valley, Colorado. *Annual Proceedings of the Colorado Crop Protection Institute*, **8**, 23–28.
- OSBORN, H., 1922 a. Homoptera in the vicinity of Cranberry Lake. *Technical publication of the New York State College of Forestry at Syracuse*, **16**, 24–54.
- 1922 b. Life history notes on Cranberry Lake Homoptera. *Technical publication of the New York State College of Forestry at Syracuse*, **16**, 87–104.
- OSSIANNILSSON, F., 1970. Contributions to the knowledge of Swedish psyllids (Homiptera: Psylloidea). *Entomologica Scandinavica*, **1**, 135–144.
- OSSIANNILSSON, F. & JANSSON, M., 1981. Designation of a lectotype of *Aphalara rumicicola avicularis* n.ssp. (Homiptera: Psylloidea). *Entomologica Scandinavica*, **12**, 22–26.
- OSTEN-SACKEN, (BARON), 1861. Über due gallen und adere durch Insecten hervorgebrachte Pflanzendeformationen in Nord-America. *Stettiner entomologische Zeitung*, 405–423.
- PACK, H. J., 1928. Tomato psyllid *Paratrioza cockerelli* (Sulc). *Bulletin of the Utah Agricultural Experimental Station*, **209**, 55.
- PAPP, R. P. & JOHNSON, J. B., 1979. Origins of psyllid fallout in the central Sierra Nevada of California (Homiptera). *Pan-Pacific Entomologist*, **55**, 95–98.
- PATCH, E. M., 1909 a. Downy psyllid of alder, *Psylla floccosa*, new species. *Canadian Entomologist*, **41**, 301–303.
- 1909 b. Homologies of the wing veins of the Aphididae, Psyllidae, Aleurodidae and Coccidae. *Annals of the Entomological Society of America*, **2**, 101–135.
- 1911. Psyllidae of Maine. *Bulletin of the Maine Agricultural Experimental Station*, **187**, 10–20.
- 1912 a. Notes on Psyllidae II. *Bulletin of the Maine Agricultural Experimental Station*, **202**, 215–234.
- 1912 b. Notes on Psyllidae: *Livia*. *Psyche*, **19**, 5–8.
- 1916. A psyllid gall on *Juncus* (*Livia maculipennis* Fitch). *Psyche*, **23**, 21–22.
- 1924. Family Psyllidae (or Chermidae). *Bulletin of the Connecticut State Geological and Natural History Survey*, **34**, 243–250.
- PETERSON, A., 1923. The blackberry psyllid, *Trioza tripunctata* Fitch. *Bulletin of the New Jersey Agricultural Experimental Station*, **378**, 1–32.
- PINNOCK, D. E., HAGEN, K. S., CASSIDY, D. V., BRAND, R. J., MILSTEAD, J. E. & TASSON, R. L., 1978. Integrated pest management in highway landscapes. *California Agriculture*, **32**, 33–34.
- PLETSCH, D. J., 1940. Potato psyllids and psyllid yellows in Montana. *Plant Disease Reporter*, **24**, 173–174.
- 1942. The effect of some insecticides on the immature stages of the tomato and potato psyllid, *Paratrioza cockerelli* Sulc. *Journal of Economic Entomology*, **35**, 58–60.
- 1947. The potato psyllid *Paratrioza cockerelli* (Sulc). Its biology and control. *Bulletin of the Montana Agricultural Experimental Station*, **446**, 1–95.
- PROVANCHER, L., 1872. Description de plusieurs Homiptères Nouveaux. Homiptères. Famille des Tettigonides. *Le Naturaliste Canadien*, **4**, 376–379.
- 1886. Family XXIII Psyllides, Psyllidae. *Petite Fauna Entomologique du Canada*, **3**, 302–308.
- PUTON, A., 1873. Notes pour servir à l'étude des Homiptères. *Annales de la Société entomologique de France*, (5) **3**, 11–26.
- REUTER, O. M., 1876. Catalogus Psylloidearum in Fennia hactenus lectarum. *Meddelanden Societas pro Fauna et Flora Fennica*, **1**, 69–77.
- RICHARDS, B. L., 1927. A new and destructive disease of the potato in Utah and its relation to the potato psylla. *Proceedings of the American Potato Association* (1927), **14**, 94.

- 1931. Further studies with psyllid yellows of the potato. *Phytopathology*, **21**, 103.
- RICHARDS, B. L. & BLOOD, H. L., 1933. Psyllid yellows of potato. *Journal of Agricultural Research*, **46**, 189–216.
- RICHARDS, W. R., 1970. *Aphalara steironemicola*, a new psyllid collected on *Steironema ciliatum* in Ontario (Homoptera: Psyllidae). *Canadian Entomologist*, **102**, 1508–1509.
- RIEDL, W. & HARRISON, L. R., 1945. The control of psyllids and flea beetles on potatoes. *Bulletin of the Wyoming Agricultural Experimental Station*, **271**, 1–27.
- RIEMANN, J. G., 1958. Notes on the host and biology of *Tetragonocephala flava* Crawford (Homoptera: Psyllidae). *Journal of the Kansas Entomological Society*, **31**, 256.
- 1966. Chromosome numbers in the hackberry psyllids *Pachypsylla* and *Tetragonocephala* (Homoptera: Psyllidae). *Annals of the Entomological Society of America*, **59**, 1088–1093.
- RILEY, C. V., 1876. *Gall insects*. Johnson's Universal Encyclopedia, pp. 412–416.
- 1883. Hackberry psyllid galls. *Canadian Entomologist*, **15**, 157–159.
- 1884. The Psyllidae of the United States. *Proceedings of the American Association for the Advancement of Science* (1883), **32**, 319.
- 1885. Notes on North American Psyllidae. *Proceedings of the Biological Society of Washington* (1882–1884), **2**, 67–79.
- 1890 a. Hackberry psyllids. Forest and shade tree insects. *United States Entomological Commission 5th Report*, edited by A. S. Packard, pp. 614–622.
- 1890 b. Insects injurious to *Box Buxus sempervirens*, 1. The European Box psylla *Psylla buxi* L. *5th Report of the United States Entomological Commission*, 672–673.
- RILEY, C. V. & HOWARD, L. O., 1893. The Pear tree psylla. *Insect Life*, **5**, 226–230.
- ROMNEY, V. E., 1939. Breeding areas of the tomato psyllid *Paratrioza cockerelli* (Sulc). *Journal of Economic Entomology*, **32**, 150.
- ROWE, J. A. & KNOWLTON, G. F., 1935. Studies on the morphology of *Paratrioza cockerelli* (Šulc). *Proceedings of the Utah Academy of Sciences*, **12**, 233–239.
- RUBSÄAMEN, E. H., 1898. Grönlandische Mycetophiliden, Sciariden, Cecidomyiden, Psylliden, Aphiden und gallen. *Bibliographia Zoologica*, **20**, 103–119.
- RUSSELL, L. M., 1946. The identity of *Chermes alni* Linné, 1758 (Homoptera, Psyllidae). *Proceedings of the Entomological Society of Washington*, **48**, 249–250.
- 1971. Notes on *Euphalerus nidifex* Schwarz and related nest-making New World psyllids (Homoptera: Psyllidae). *Florida Entomologist*, **54**, 3–12.
- 1973. A list of the species of *Craspedolepta* Enderlein recorded from North America (Homoptera: Psyllidae: Aphalarinae). *Journal of the Washington Academy of Sciences*, **63**, 156–159.
- SANDSTEN, E. P., 1933. The relation of the potato psyllid *Paratrioza cockerelli* to the potato disease known as “psyllid yellows”. *Report of the Colorado Agricultural Experimental Station*, **46**, 14.
- 1934. Potato psyllids. *Report of the Colorado Agricultural Experimental Station*, **47**, 18.
- SANDFORD, G. B., 1952. Phloem necrosis of potato tubers associated with infestation of vines by *Paratrioza cockerelli* (Šulc). *Scientific Agriculture*, **32**, 433–439.
- SCHARWZ, E. A., 1900. Papers from the Harriman Alaska Expedition XIX. Entomological Results (13) Psyllidae. *Proceedings of the Washington Academy of Sciences*, 539–540.
- 1904 a. A nest making psyllid larva (*Euphalerus nidifex*). *Proceedings of the Entomological Society of Washington*, **6**, 153.
- 1904 b. Notes on North American Psyllidae. *Proceedings of the Entomological Society of Washington*, **6**, 234–245.
- SCHMIDBERGER, J., 1836. Beiträge zur Obstbaumzucht und zur Naturgeschichte der den Obstbäumen. *Schadlichen Insekten*, Linz, **4**, 186–189.
- SCOTT, J., 1882. On certain genera and species of the group of Psyllidae in the collections of the British Museum. *Transactions of the Entomological Society of London*, **3**, 449–473.
- SHAPOVALOV, M., 1929. Tuber transmission of psyllid yellows in California. *Phytopathology*, **19**, 1140.
- SIRRINE, F. A., 1895. The bramble flea louse. *14th Annual Report of the New York State Agricultural Experimental Station*, 619–623.
- SMITH, J. B., 1910. The Insects of New Jersey. Family Psyllidae. *Annual Report of the New Jersey State Museum for 1909*, 108–110.
- 1911. The bramble flea louse *Trioza tripunctata* Fitch. *32nd Annual Report of the New Jersey Agricultural Experimental Station*, 416–418.

- SMITH, R. C. & TAYLOR, R. S., 1953. The biology and control of the hackberry psyllids in Kansas. *Journal of the Kansas Entomological Society*, **26**, 103–115.
- SPALDING, J. B., 1979. The aeolian ecology of White Mountain peak California: windblown insect fauna. *Arctic Alpine Research*, **11**, 83–94.
- STAPLES, R., 1968. Cross protection between a plant virus and potato psyllid yellows. *Journal of Economic Entomology*, **61**, 1378–1380.
- STEBBINS, F. A., 1909. Insect galls of Springfield, Massachusetts. *Bulletin of Springfield Museum of Natural History*, **2**, 33.
- STOUGH, H. B., 1910. The hackberry psylla, *Pachypsylla celtidis mammae* Riley. A study in comparative morphology. *Kansas University Science Bulletin*, **5**, 121–165.
- STRICKLAND, E. H., 1938. The Chermidae (Homoptera) of Alberta. *Canadian Entomologist*, **70**, 200–206.
- 1939. Further notes on Psyllidae taken in Alberta (Homoptera). *Canadian Entomologist*, **71**, 212–215.
- ŠULC, K., 1904. Popis nové mery *Psylla dudai* n.sp. *Casopis Ceske společnosti entomologické*, **1**, 37–40.
- 1909. *Trioza cockerelli* n.sp. *Acta Societatis Entomologicae Bohemiae*, **4**, 110–116.
- 1913. Zur kenntnis einiger *Psylla*-arten aus dem Ungarischen National Museum in Budapest. *Annales Historico-Naturales Musei Nationalis Hungarici*, **11**, 409–435.
- 1914. Eine neue *Psylla* und eine neue *Rhinocola* aus Surinam. *Sitzungsberichte der Akademie der Wissenschaften in Wien, Mathematisch—naturwissenschaftliche*, **1914**(4), 1–10.
- 1915. Prispevky ku poznani Psyll III. *Rozpravy veske Akademie, Praha (ser. 2)*, **24**, 1–35.
- 1939. Description of a new psyllid from Greenland (Homoptera). *Annals and Magazine of Natural History*, (11) **4**, 78–81.
- SWENK, M. H. & TATE, H. D., 1940. The potato flea beetle and the potato psyllid in Nebraska. *Bulletin of the Nebraska Agricultural Experimental Station*, **327**, 1–19.
- TAYLOR, K. L., 1960. Additional information on the Australian genera of the family Psyllidae (Homiptera-Homoptera). *Australian Journal of Zoology*, **8**, 383–391.
- 1985. Australian psyllids: a new genus of Ctenarytainini (Homoptera: Psylloidea) on *Eucalyptus*, with nine new species. *Journal of the Australian Entomological Society*, **24**, 17–30.
- 1987. *Ctenarytaina longicauda* sp. n. (Homoptera: Psylloidea) from *Lophostemon confertus* (R. Brown) in Australia and California. *Journal of the Australian Entomological Society*, **26**, 229–233.
- THOMAS, C., 1879. Psyllidae (Jumping Plant-lice). *8th Report on the Noxious and Beneficial Insects of the State of Illinois*, pp. 12–18.
- THOMPSON, H. E., 1962. Control of hackberry—nipple-gall maker with new organic insecticides. *Journal of Economic Entomology*, **55**, 555–556.
- TUCKER, E. S., 1907. Some results of desultory collecting of insects in Kansas and Colorado. *Kansas University Science Bulletin*, **4**, 51–112.
- TUTHILL, L. D., 1937. The genus *Euphalerus* in America north of Mexico (Psyllidae: Homoptera). *Journal of the Kansas Entomological Society*, **10**, 69–74.
- 1938. Some new North American Psyllidae (Homoptera). *Entomological News*, **49**, 241–246.
- 1939 a. *Neotriozella* and a new related genus (Homoptera-Psyllidae). *Bulletin of the Brooklyn Entomological Society*, **34**, 51–54.
- 1939 b. New species of Psyllidae from the western United States. *Iowa State College Journal of Science*, **13**, 181–186.
- 1942 a. Notes on North American *Rhinopsylla* with description of new species (Psyllidae: Homoptera). *Journal of the Kansas Entomological Society*, **15**, 45–48.
- 1942 b. Two new species of *Calophya* and notes on others (Psyllidae: Homoptera). *Entomological News*, **53**, 215–218.
- 1942 c. *Leurolophus*, a new genus of the family Psyllidae. *Annals of the Entomological Society of America*, **35**, 92–93.
- 1943. The psyllids of America north of Mexico (Psyllidae: Homoptera). *Iowa State College Journal of Science*, **17**, 443–660.
- 1944 a. Descriptions of some new North American Psyllidae with notes on others. *Journal of the Kansas Entomological Society*, **17**, 1–6.

- 1944 b. On some Cuban Psyllidae (Homoptera). *Entomological News*, **55**, 93–96.
- 1944 c. Contributions to the knowledge of the Psyllidae of Mexico. *Journal of the Kansas Entomological Society*, **17**, 143–159.
- 1945 a. Contributions to the knowledge of the Psyllidae of Mexico. *Journal of the Kansas Entomological Society*, **18**, 1–29.
- 1945 b. Further observations on the Psyllidae of Cuba (Homoptera). *Entomological News*, **61**, 235–238.
- 1950 a. Taxonomic notes on two South American psyllids (Homoptera). *Entomological News*, **61**, 178–179.
- 1950 b. Contributions to the knowledge of the Psyllidae of Mexico (part II). *Journal of the Kansas Entomological Society*, **23**, 52–63.
- 1959. Los Psillidae del Perú Central (Insecta: Homoptera). *Revista Peruana de Entomologia Agricola*, **2**, 1–27.
- 1964. Conocimientos Adicionales sobre los Psyllidae (Homoptera) del Peru. *Revista Peruana de Entomologia Agricola*, **7**, 25–32.
- TYLER-TOWNSEND, C. H., 1895. A psyllid leaf gall on *Celtis* probably *Pachypsylla c-pubescens* Riley. *Psyche*, **7**, 187–188.
- VAN DUZEE, E. P., 1906. Notes on Hemiptera taken by W. J. Palmer near Lake Tegami, Ont. *Canadian Entomologist*, **38**, 406–411.
- 1908. List of Hemiptera taken by W. J. Palmer, about Quinze Lake, P. Que, in 1907. *Canadian Entomologist*, **40**, 157–160.
- 1912. Synonymy of the Provancher collection of Hemiptera. *Canadian Entomologist*, **34**, 317–329.
- 1916. Check list of the Hemiptera of America north of Mexico (excepting Aphididae, Aleurodidae and Coccidae). *New York Entomological Society*, pp. 111
- 1917. Catalogue of the Hemiptera of America north of Mexico excepting the Aphididae, Coccidae, and Aleurodidae. *University of California Publications Technical Bulletin*, **2**, pp. 902.
- 1923. Expedition of the California Academy of Sciences to the Gulf of California in 1921 (The Hemiptera). *Proceedings of the California Academy of Sciences (4th series)*, **12**, 199–200.
- 1924. Characters of two North American Chermidae. *Pan-Pacific Entomologist*, **1**, 22–23.
- VONDRÁČEK, K., 1953. Psyllids in the collection of the Moravian Museum, Brno. *Casopsis moravského Musea v Brne*, **38**, 174–179.
- WAGNER, W., 1947 a. Neue deutsche Homopteren und Memerkungen über schon bekante Arten. *Verhandlungen des Vereins für Naturwissenschaftliche Heimatforschung*, **29**, 72–85.
- 1947 b. Beitrag zur Systematik der deutschen Aphalara. *Verhandlungen des Vereins für Naturwissenschaftliche Heimatforschung*, **29**, 55–71.
- WALKER, F., 1852. *List of the specimens of Homopterous insects in the collection of the British Museum, Psyllidae*. London: Edward Newman, pp. 909–933.
- WALLIS, R. L., 1940. The potato and tomato psyllid. *21st Annual Report of the Nebraska Potato Improvement Association*, 5–9.
- 1941. The potato and tomato psyllid. *United States Department of Agriculture, Bureau of Entomology and Plant Quarantine (E. Series)*, **532**, pp. 6.
- 1946. Seasonal occurrence of the potato psyllid in the North Platte Valley. *Journal of Economic Entomology*, **39**, 689–694.
- 1951. Potato psyllid selection of host plants. *Journal of Economic Entomology*, **44**, 815–817.
- 1954. Potato psyllid numerous in southern breeding areas. *United States Department of Agriculture Cooperative Economic Insect Report*, **4**, 256.
- 1955. Ecological studies on the potato yield (*Paratrioza cockerelli*) as a pest of potatoes. *Technical Bulletin of the United States Department of Agriculture*, **1107**, pp. 24.
- WALSH, B. D. & RILEY, C. V., 1869. New Insect foe of the blackberry. *American Entomologist*, **1**, 225.
- WALTON, B. C. J., 1960. The life cycle of the hackberry gall-former *Pachypsylla celtidis-gemma* (Homoptera: Psyllidae). *Annals of the Entomological Society of America*, **53**, 265–277.
- WEBER, F. & MOHR, D. M. H., 1804. *Naturhistorische Reise durch einen Theil*. Schweid Gottingen, 208 pp.
- WEISS, H. B., 1917. Additions to insects of New Jersey, No. 4. *Entomological News*, **27**, 162–166.
- 1917. The bay flea-louse, *Trioxa alacris* Flor as a new pest in New Jersey. *Canadian Entomologist*, **49**, 73–75.

- 1921. Notes on the life-history of *Pachypsylla celtidis gemma* Riley. *Canadian Entomologist*, **53**, 19–21.
- WEISS, H. B. & DICKERSON, E. L., 1917. *Psylla buxi* Linn. in New Jersey (Homop.). *Entomological News*, **28**, 40–41.
- 1918. Notes on *Trioza alacris* Flor in New Jersey. *Psyche*, **25**, 59–63.
- WEISS, H. B. & NICOLAY, A. S., 1918. The life history and early stages of *Calophya nigripennis*. *Journal of Economic Entomology*, **11**, 467–471.
- WEISS, H. B. & WEST, E., 1922. Notes on *Livia maculipennis* (Fitch) (Homoptera: Chermidae). *Psyche*, **29**, 226–229.
- WELLS, B. W., 1916. The comparative morphology of the zooecidia of *Celtis occidentalis*. *Ohio Journal of Science*, **16**, 249–298.
- 1920. Early stages in the development of certain *Pachypsylla* galls on *Celtis*. *American Journal of Botany*, **7**, 275–285.
- WHITE, I. M. & HODKINSON, I. D., 1985. Nymphal taxonomy and systematics of the Psylloidea. *Bulletin of the British Museum (Natural History) (Entomology)*, **50**, 153–301.
- WILLIS, J. C., 1973. *A Dictionary of the Flowering Plants and Ferns*. 8th edition, Cambridge University Press, pp. xxii + 1245 + lxvi.
- ZACHER, F., 1913. Bemerkungen zum 'Psyllidarum Catalogus' von G. Aulmann. *Entomologische Mitteilungen*, **5**, 148–153.
- ZETTERSTEDT, J. W., 1828. *Fauna insectorum Lapponica*. Hammone, pp. 557.