HETEROPTERA NEW TO CANADA

G. G. E. SCUDDER
Department of Zoology,
University of British Columbia,
Vancouver, V6T 2A9

ABSTRACT

The following 19 species are recorded as new to Canada: *Dendrocoris pini* Mont., *Liorhyssus hyalinatus* (Fab.), *Euthochtha galeator* (Fab.), *Melanopleurus pyrrhopterus* (Stal), *Neacoryphus lateralis* (Dallas), *Belonochilus numenius* (Say), *Isthmocoris piceus* (Say), *Crophius angustatus* Van Duzee, *C. ramosus* Barber, *Heterogaster behrensii* (Uhler), *Scolopostethus tropicus* (Distant), *Neopamera albocinctus* (Barber), *Sisamnes clavigerus* Uhler, *Malezonotus grossus* Van Duzee, *Piesma explanatum* McAtee, *Nabis lovetti* Harris, *Nabicula vanduzeei* (Kirk.), *Macrotylus multipunctatus* Van Duzee, and *Ioscytus politus* (Uhler).

INTRODUCTION

Recent research on material in the Canadian National Collection (CNC), Lyman Entomological Museum (LM), Pacific Forest Research Centre (PF) and Spencer Entomological Museum (UBC) has revealed 19 species of Heteroptera, not previously reported from Canada. These are enumerated below, together with notes on their distribution and identification. The majority of the genera may be keyed out in Slater & Baranowski (1978).

FAMILY PENTATOMIDAE

Dendrocoris pini Montandon

Dendrocoris pini Montandon 1893, Proc. U.S. Nat. Mus. 16: 51.

A member of the tribe Pentatomini, the genus *Dendrocoris* Bergroth is similar to *Acrosternum* Fieber and *Banasa* Stal in having abdominal sternum III medially with a distinct projection or tubercle. *Dendrocoris* differs from both *Acrosternum* and *Banasa* in having the jugae surpassing the tylus and usually being contiguous in front of it.

The genus *Dendrocoris* has been revised by Nelson (1955). *D. pini* characteristically has the vertex of the head and base of the tylus distinctly convex, and the antero-lateral margins of the pronotum are straight or somewhat convexly arcuate. To date the species has been reported only from Arizona, California, Colorado, New Mexico and Utah (Nelson, 1955), but is listed from B.C. by Evans (1984) without localities. I have seen specimens from Oregon (1♀, Jackson Co., Union Creek, beaten from *Pinus ponderosa*, 30.ix.1959 (L. G. Gentner); 1♂ 1♀, Wasco Co., 4 mi E Mosier, ex. *Pinus ponderosa*, 13.ix.1979 (J. D. Lattin) [OSU].

Canadian material examined. BRITISH COLUMBIA: 1♂ 1♀, Vaseux L., 3 mi S, Ponderosa Pine, 15.viii.1957 (N. Anderson); 1♂, Okanagan Landing, *Pinus ponderosa*, 10.vi.1964 (F.I.S.); 1♀, Okanagan Falls, *Pinus ponderosa*, 25.vii.1961 (F.I.S.); 1♀, *id.*, 25.vi.1964; 1♀, Okanagan Falls, 8.vii.1974 (L. A. Kelton); 1♂, Oliver, 14.vii.1923 (P. N. Vroom) [CNC, PF, UBC].

FAMILY RHOPALIDAE

Liorhyssus hyalinatus (Fabricius)

Lygaeus hyalinatus Fabricius 1794, Ent. Syst. 4: 168.

Liorhyssus hyalinatus, Stal 1870, K. Svensk. Vet. Akad. Handl. 2 (2): 98.

A key to aid in the identification of this species is provided by Hoebeke & Wheeler (1982). The taxon can be recognized by the narrow anterior collar to the pronotum, the pronotum between the collar and the calli forming a distinct transverse ridge which is polished and virtually impunctate. *L. hyalinatus* is a cosmopolitan species, widespread throughout North America. It has been recorded from the following host plants: *Abutilon* (Malvaceae), *Lactuca*, *Sonchus* (Compositae) and *Euphorbia* (Euphorbiaceae) (Schaefer & Chopra, 1982).

Canadian material examined. BRITISH COLUMBIA: 1♀, Robson, 10.ix.1967 (H. R. Foxlee) [UBC]. MANITOBA: 1♂, Lyleton, 19.viii.1939 (D. S. Smith); 1♀, Shilo, 3 mi S, 30.vi.1958 (C. D. F. Miller). ONTARIO: 1♂, Belleville, 7.viii.1942 (H. G. James) [CNC].

FAMILY COREIDAE

Euthochtha galeator (Fabricius)

Coreus galeator Fabricius 1803, Syst. Rhyng: 191.

Euthochtha galeator, Mayr 1865, Verh. Zool. Bot. Ges. Vien 15: 431.

E. galeator has been illustrated by Slater & Baranowski (1978) and characteristically has slender antennae, moderately swollen armed hind femora, and antennal tubercles with a prominent spine on the outer side. It is a common species throughout the entire eastern United States west to the Great Plains (Slater & Baranowski, 1978). Host plants records include *Prunus* (Rosaceae), *Gaura* (Onagraceae), *Ambrosia*, *Cirsium* and *Heterotheca* (Compositae) (Schaefer & Mitchel, 1983).

Canadian material examined. ONTARIO: 1♂, Leamington, 9.vi.1937 (G. S. Walley) [CNC].

FAMILY LYGAEIDAE

Melanopleurus pyrrhopterus (Stal)

Lygaeus (Ochrostomus) pyrrhopterus Stal 1874, K. Svensk. Vet. Akad. Handl. 12 (1): 160.
Melanopleurus pyrrhopterus, Ashlock 1975, J. Kansas Ent. Soc. 48: 30.

Ashlock (1975) provides a key to separate *Melanopleurus* Stal from other genera of Lygaeinae in America north of Mexico, while Scudder (1981) gives a key for species identification: *M. pyrrhopterus* characteristically has the ostiolar peritreme ochraceous.

To date the species is reported from Arizona, California, Colorado, Guatemala, Idaho, Mexico, Texas and Utah (Slater, 1964). I have also seen specimens from Oregon: 1♀, Steens, 8-10,000', 14-16.vii.1953 (Roth & Beer) [OSU], and Wyoming: 2♀, Jackson, 15.viii.1961 (J. E. R. Stainer) [CNC].

Canadian material examined. ALBERTA: 2♀, Medicine Hat, 27.vii.1924 [LM].

Neacoryphus lateralis (Dallas)

Lygaeus lateralis Dallas 1852, List Hem. B.M. 2: 550.
Neacoryphus lateralis, Scudder 1965, Proc. Entomol. Soc. Brit. Col. 62: 37.

The genus *Neacoryphus* is keyed in Ashlock (1975) and characteristically has an entirely black head, and membrane without a white discal spot, being either black with a white border, or entirely white with black veins. *N. lateralis* has the pronotum fuscous with anterior margin, humeral areas and a caudo-mesal area red, the sunken disc of each side of midline closely and coarsely punctate; costal margin of corium narrowly red; membrane fuscous with narrow white margin and a white lunate spot near base; venter completely fuscous: the species can be keyed in Barber (1921).

N. lateralis is known from Arizona, California, Colorado, Idaho, Iowa, Kansas, Lower California, Mexico, Montana, New Mexico, South Dakota, Texas, Utah (Slater, 1964) and Oklahoma (Schaefer & Drew, 1969). In addition, I have collected the species in Wyoming (3♂ 5♀, Buffalo, to light, 13.ix.1963), and seen specimens in the collections of Oregon State University from Nevada (1♂, Clark Co., Railway Pass. 21.iv.1962 (F. D. Tibbits & E. G. Fuller)) and Oregon (1♀, Klamath Falls, 2.vi.1956 (Dwight Schuh); 1♀, Malheur Co., Jordan Valley, 10.vii.1953 (R. W. Landerdale); 2♀, Umatilla Co., Hermiston, black light, 10.vi.1963 (Charles W. Baker); 1♀, Umatilla Co., O.S.U. Exp. Stn., black light, 10.vi.1963 (Charles W. Baker)).

Canadian material examined. BRITISH COLUMBIA: 1♂, Vancouver, University campus, 4.viii.1960 (J. Lanko) [UBC). SASKATCHEWAN: 1♂, Val Marie, 14.vi.1955 (A. R. Brooks) [CNC].

Belonochilus numenius (Say)

Lygaeus numenius Say 1831, Des. Het. N. Amer. (Fitch Reprint): 775.
Belonochilus numenius, Uhler 1871, Proc. Boston Soc. Nat. Hist. 14: 104.

The genus *Belonochilus* Uhler is keyed by Bueno (1946) and Ashlock (1967), *B. numenius* being the only Nearctic species. Among the genera of Orsillini (subfamily Orsillinae), it is characterized by the elongate head (anteocular length more than twice eye length), fore femora with single spine, absence of carinae on vertex, mesopleuron apparently overlapping propleuron, straight costal margin and antenniferous tubercle not produced.

B. numenius has been reported on golden rod, and on the ripened fruit and seed-heads of sycamore (*Platanus occidentalis* L. and *P. wrighti*) (Bueno 1946). The seasonal history, habits and immature stages are described by Wheeler (1984). It is reported from Connecticut, Maryland, Massachusetts, and New York in the east to Arizona and California in the west (Slater 1964).

Canadian material examined. ONTARIO: 1♂, Prince Edward Co., 5.vi.1921 (J. F. Brimley), 1♀, *id.*, 17.vii.1925 [Scudder Coll.]; 2♂, Vineland Station, on *Plantanus*, 2.ix.1941 (W. L. Putman) [CNC].

Isthmocoris piceus (Say)

Salda picea Say 1831 Des. Het. N. Amer.: 336.
Isthmocoris piceus, McAtee 1914, Proc. Biol. Soc. Wash. 27: 127.

Keyed by Readio & Sweet (1982) this species of Geocorinae is easily recognized by the distinctly stylate eyes, ocelli mid-way between eye and midline of vertex, and unicolorous black colouration with vertex bright reddish-yellow.

In the United States, *I. piceus* is a northern species occurring from Connecticut, Massachusetts, Maryland and New York west to Iowa and Kansas and south to Mississippi (Readio & Sweet, 1982).

Canadian material examined. ONTARIO: 1♂ 1♀, Prince Edward Co., on sand beach, 2.ix.1958 (J. F. Brimley) [CNC; Scudder Coll.].

Crophius angustatus Van Duzee

Crophius angustatus Van Duzee 1910, Bull. Buff. Soc. Nat. Sci. 9: 395.

This species, keyed by Barber (1938) characteristically has a distinct pale transverse band to the pronotum anteriorly, pronotum rather narrow posteriorly, basal antennal segments ferruginous, and membrane with veins branched at the extreme apex.

To date, *C. angustatus* has been reported only from California and Utah. However, I have seen specimens from Colorado (1♂ 1♀ Dinosaur Nat. Park, vi.1952 (van Pelt) [CNC] and Oregon (7♂ 4♀, Wallowa Co., inlet at S end Wallowa Lk., 4400', 12.vii.1964 (T. Schuh & J. Lattin); 12♂ 11♀, Wallowa Co., Wallowa Lake St. Park, leaf litter under cotton-wood tree, 1.ix.1962 (D. Mays) [OSU]).

Canadian material examined. BRITISH COLUMBIA: 19♂ 12♀, Grand Forks, 29.vi.1971 (G. G. E. Scudder); 1♀, Keremeos, 23.vii.1925 (H. S. Crawford); 1♂, Lytton, 18 mi N, 12.vi.1963 (G. G. E. S); 1♀, Okanagan Mission, 5 mi S of Kelowna,

under leaf litter on sand, 13.vi.1969 (M. J. Hale); 11♂ 21♀, Oliver, 15.v.1959 (L. A. Kelton); 1♂ 1♀, *id.*, 18.v.1959 (E. E. MacDougal); 1♀, *id.*, 19.v.1959 (R. Madge); 1♂ 1♀, Princeton, 4.vi.1961 (G. G. E. S); 1♂, Savona, 28.v.1983 (G. G. E. S.); 1♂ 1♀, Tweedsmuir Prov. Park, Young Cr., 18.vii.1978 (G. G. E. S.); 3♂ 2♀, W. Summerland, 26.vii.1963 (G. J. Spencer) [CNC; UBC; Scudder Coll.].

Crophius ramosus Barber

Crophius ramosus Barber 1938, J. N.Y. Ent. Soc. 46: 315.

This species differs from *C. angustatus* by having the pronotum without a pale transverse band anteriorly. It characteristically has the veins of the membrane fuscous, irregularly ramose and broken; the costal margin is very slightly expanded, gently convex throughout; the dorsum is covered with short glandular hairs.

To date, the species has only been reported from Idaho and Utah (Barber, 1938; Slater, 1964).

Canadian material examined. BRITISH COLUMBIA: 1♀, Chopaka, 6.vi.1983 (S. G. Cannings) [UBC]. SASKATCHEWAN: 1♂, Gascoigne, 23.viii.1957 (A. R. Brooks & J. E. Brooks) [CNC]. YUKON: 65♂ 56♀, Alaska Hwy, Km 1604, Aishihik River, Canyon, under *Artemisia frigida*, 9.vii.1983 (G. G. E. S.); 2♂ 4♀, Burwash airstrip, 8.vii.1983 (J. J. Robinson); 1♂ 2♀, Carcross, 8.vii.1983 (G. G. E. Scudder); 5♂ 1♀, Cracker Creek, 12.v.1983 (J. J. Robinson); 1♂, Haines Junction, 22.vi.1982 (J. J. Robinson); 4♂ 6♀, Pelly Crossing, 2.2 km N, under *Artemisia frigida*, 17.vii.1983 (G. G. E. S.); 3♂ 1♀, Stewart Crossing, 4.7 km E on Keno Road, under *A. frigida*, 17.vii.1983 (G. G. E. S.); 1♂, Klondike Hwy, km 466.8, under *A. frigida*, 17.vii.1983 (G. G. E. S.); 1♂, Whitehorse, on *Juniperus communis*, 3.vi.1961 (FIS) [CNC; UBC; Scudder Coll.].

Heterogaster behrensii (Uhler)

Phygadicus behrensii Uhler 1876, Bull. U.S. Geol. Surv. Terr. 1: 312.

Heterogaster behrensii, Lethierry & Severin 1894, Gen. Cat. Hem. 2:176.

A distinctive species of Heterogastrinae, keyed by Bueno (1946). Characterized by the second antennal segment longer than third and fourth, which are subequal.

Recorded previously from California, Idaho, Lower California, Oregon and Utah (Slater, 1964). A note on its occurrence in British Columbia has been published by Cannings (1981).

Canadian material examined. BRITISH COLUMBIA: 5♂ 3♀, Oliver, 4 km N, on *Urtica dioica* L., 11.x.1981 (S. G. Cannings) [UBC].

Scolopostethus tropicus (Distant)

Eremocoris tropicus Distant 1882, Biol. Centr. Amer. Het. 1: 218.

Scolopostethus tropicus, Blatchley 1934, Trans. Ent. Soc. Amer. 60: 9.

In *S. tropicus*, like *S. thomsoni* Reut., the anterior femora have smaller spines both proximally and distally to the subapical larger spine: the key in Bueno (1946) is incorrect. *S. tropicus* can be recognized by the completely dark brown antennae, four rows of punctures to the clavus and the rather flattened anterior lobe to the pronotum which is characteristically pale ferruginous, with a median fuscous line and punctate. *S. tropicus* is usually macropterous and has been recorded from Guatemala, California and Idaho. I have also seen specimens from Oregon (1♀, Coffin Butte, 10 mi N of Corvallis, leaf litter, 300', south side, 15.i.1959 (S. Radinovsky); 1♂, Benton Co., Corvallis, 7.xi.1967 (Oman); 1♂, McDonald Forest, N of Corvallis, 3.xi.1949 (V. Roth); 1♀, Scotts Hill, 1 mi SW of Corvallis, in moss, 26.iii.1959 (J. D. Lattin); 1♂, Jackson Co., Sams Valley, sweeping alfalfa, 16.v.1961 (L. G. Gentner); 1♂, Klamath Co., 4 mi E Bly, 5000', Sprague Riv. Park, 22.v.1958 (R. K. Eppley); 1♂ 1♀, Klamath Falls, Algoma, under moss, 4.iii.1958 (J. Schuh); 1♂, *id.*, 14.ix.1961 (J. Schuh) [OSU]) and Utah (1♀, Box Elder Co., Kelton Pass, 1.v.1969 (G. F. Knowlton); 1♀, Provo Environs, 15.vi.1954 (G. L. Nielson)) and the species is now known from British Columbia.

Material examined. BRITISH COLUMBIA: 1♀, Goldstream, 11.v.1925 (W. Downes) [UBC].

Neopamera albocinctus (Barber)

Pachybrachius albocinctus Barber 1953, J. N.Y. Ent. Soc. 60: 216.

Neopamera albocinctus, Harrington 1980, Bull. Amer. Mus. Nat. Hist. 167: 107.

The genus *Neopamera* has recently been described and keyed by Harrington (1980), to contain most of the New World species formerly placed in the genus *Pachybrachius* Hahn. The species *N. albocinctus* has a more or less conspicuous postmedian transverse facia to the corium, the costal margin of the corium gently sinuate, the terminal antennal segment broadly white at the base, membrane with conspicuous pale veins and an apical pale streak (Barber 1953a).

It occurs from Brazil, Ecuador, and the West Indies in the south to Maryland in the north, but is confined to the eastern part of North America (Slater, 1964).

Canadian material examined. ONTARIO: 1♂, Prince Edward Co., 9.ix.1953 (J. F. Brimley) [Scudder Coll.].

Sisamnes clavigerus (Uhler)

Ptochiomera clavigera Uhler 1895, (in) Gillette & Baker, He. Colorado: 24.

Sisamnes clavigera, Barber 1928, J. N.Y. Ent. Soc. 36: 177.

The genus *Sisamnes* Distant has been keyed by Harrington (1980) who notes that it is best characterized by its enlarged terminal antennal segments, the double-ranked fore femoral spines, and the scale-like hairs on the dorsum of the body that give it a granular appearance. *S. clavigerus* has

the clavus and corium coarsely punctate, and the brachypterous form has the apical margin of the corium obliquely truncate and with a slight trace of membrane (Barber, 1953b).

The species is recorded from Colorado, Connecticut, Idaho, Iowa, Kansas, Massachusetts, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, Texas, Utah (Slater, 1964) and Oklahoma (Schaefer & Drew, 1969). I have also studied specimens in the collections of Oregon State University from Oregon (1♀, J. & H. Co., Pioneer Ford, Metolins R., 8.vii.1959 (K. Fender); 1♀, Klamath Co., Bly Mts., 22.v.1958 (Vertees & Schuh); 1♂, Klamath Co., Chilequin, 6 mi W, under *Purshia tridentata*, 20.viii.1961 (J. Schuh); 1♀, Wasco Co., Wapinitia, 2000', Juniper, 22.v.1959 (K. Goeden)) and Washington (1♂, Yakima Co., Toppenish, 14 mi S, Satus Cr., 26.xii.1972 (J. Ringhold)).

Canadian material examined. BRITISH COLUMBIA: 1♀, Keremeos Creek, 2000', fall trap, sagebrush flat, 16.vi.1982 (H. Kirk) [UBC]; 2♀, Oliver, 19.v.1959 (L. A. Kelton) [CNC].

Malezonotus grossus Van Duzee

Malezonotus grossus Van Duzee 1935, Pan-Pacif. Ent. 11: 28.

This species, keyed by Ashlock (1958) can be distinguished by its large size (male over 4.7 mm, female over 5.2 mm in length), straight apical margin to the corium, and fuscous corium with a pale spot near the inner apical angle, the fore femora being black except at apex.

To date *M. grossus* has been recorded only from California and Oregon (Ashlock 1958; Slater 1964).

Canadian material examined. BRITISH COLUMBIA: 1♀, Summerland, 10.vii.1975 (L. A. Kelton) [CNC].

FAMILY PIESMATIDAE

Piesma explanatum McAtee

Piesma explanatum McAtee 1919, Bull. Brooklyn Ent. Soc. 14: 91.

The key provided by Drake & Davis (1951) and the illustration of the head and pronotum provided by these authors, facilitate identification of this distinctive species. In *P. explanatum* the pronotal paranota are broadly explanate in front of the humeral angles, and are provided with triseriate areoles posterior to the level of the calli; the lateral margin of the pronotum is also gently convex.

According to Drake & Davis (1951) the species is known only from a slightly teneral, macropterous female from Bear River, Utah.

Canadian material examined. BRITISH COLUMBIA: 1♀, Clinton, 18.vi.1959 (G. G. E. Scudder); 15♂ 5♀, Kamloops, 5.v.1969 (G. G. E. S.); 1♂ 9♀, Nimpo Lake, 18.vii.1978 (G. G. E. S.); 2♂ 1♀, Princeton, 4.vi.1961 (G. G. E. S.) [UBC].

FAMILY NABIDAE

Nabis lovetti Harris

Nabis lovetti Harris 1925, Ent. News 36: 205.

This distinctive species is keyed by Harris (1928). It may be recognized by the yellowish to reddish brown colour, which has a somewhat orange tinge, the thick and even short golden pubescence to the hemelytra, and the first antennal segment which is shorter than the head width.

The species is known from California and Oregon (Harris, 1928), and I have seen material from Washington (1♀, Bothell, 28.iv.1969 [OSU]).

Canadian material examined. BRITISH COLUMBIA: 1♀, Galiano Is., Spanish Hills, 18.iii.1972 (G. G. E. Scudder); 1♀, Saanich, 30.vi.1930 (W. H. A. Preece) [UBC].

Nabicula vanduzeei (Kirkaldy)

Reduviolus vanduzeei Kirkaldy 1901, Wien. Ent. Zeit. 20: 223.

N. vanduzeei is similar to *N. flavomarginatus* in general appearance, but is slightly shorter, more ovate, paler in general coloration, with the markings on the head and pronotum brown to brownish-black, but not completely black. The male clasper is also different, in that it lacks the distinctive projecting spine-like hook on the dorsal edge near the base of the blade, so characteristic of *N. flavomarginatus*.

Harris (1928) reports *N. vanduzeei* from Colorado and Montana. I have seen material from Oregon (1♂, Baker Co., Sparta, 3.viii.1972 (Oman); 1♂, Grant Co., 12 mi N Seneca, 4900', 15.vii.1973 (Oman & Musgrave); 6♂ 2♀, Harney Co., 13 mi E. Frenchglen, 6500', 13.viii.1971 (Oman); 2♂ 1♀, Wallowa Co., 3.5 mi S Lostine, 21.vii.1970 (Oman); 1♂, Wasco Co., 5 mi SE The Dalles, sweeping pasture, 17.v.1957 (E. Burts); 1♂, Wasco Co., 7 mi S Wapinitia, 3300 ft, Nena Cr., 17.vi.1964 (T. Schuh & J. Lattin); 1♂, 30 mi N Enterprise, 30.vii.1968 (P. Oman); 2♂, Joseph, 10.vii.1969 (P. Oman); 1♀, Mtchll, 29.vii.1967 (P. Oman) [OSU]), Washington (1♀, Colter, virgin prairie *Agropyron/Poa*), 15.vii.1960 (W. W. Cone) [OSU]) and Wyoming (1♀, Jackson, 15.viii.1961 (J. E. R. Stainer); 1♀, Foxpark, 10 mi S 8200', on *Pinus contorta*, 15.viii.1968 (L. A. Kelton) [CNC].

Canadian material examined. ALBERTA: 1♂ 1♀ Bellevue, 7.vii.1980 (R. A. Cannings) [UBC]; 1♂ 3♀, Elkwater Park, 29.vii.1952 (A. R. Brooks) [CNC]. BRITISH COLUMBIA: 1♂, Alexis Creek, 15.vii.1978 (G. G. E. Scudder); 1♂, Borgeson L., 6.viii.1959 (G. G. E. S.); 1♀, Canal Flats, 5 mi NW, 17.vii.1970 (Oman); 11♀, Cawston, 4 mi E. 9.vii.1959 (L. A. Kelton); 1♀, Chilcotin, 10.viii.1930 (G. J. Spencer); 3♂, *id.*, 17.vi.1963; 5♀, Dog Creek, 18.vi.1963 (G. G. E. S.) (G. J. S.); 1♂, Grand Forks, 5.vi.1961 (G. G. E. S.); 1♀, Aspen Grove, on *Pinus contorta*, 25.vii.1970 (L. A. K.); 11♂, Kamloops, 19.vi.1959 (G. G. E. S.); 1♀, Keremeos, 29.vi.1923 (C. B. Garrett); 1♂ 1♀, Lac la Hache, 21.viii.1933 (W. Downes); 4♀, Manning Prov. Park, 29.vii.1962 (G. G. E. S.); 4♂ 1♀, *id.*, East Gate, 9.vii.1980 (Bruce Gill); 1♂ 1♀, Merritt, 10.vii.1963 (G. G. E. S.); 1♂ 2♀, Merritt, 10 mi. S, 19.vii.1959 (L. A. K.); 1♀, Moyie, 9.vii.1970 (L. A.

K.); 2♂, Nicola, 3.vii.1932 (G. J. S.); 1♀, *id.* 10.vii.1932; 2♂ 3♀, *id.*, 24.vii.1932; 1♀, *id.*, 31.vii.1932; 1♂, Nicola cut-off, 14.vi.1963 (G. J. S.); 5♂, Nicola, 14.vi.1963 (G. G. E. S.); 1♂, Oliver, McKinney Road, 29.vi.1959 (L. A. K.); 1♂, *id.*, 8.vii.1959 (L. A. K.); 1♂ 1♀, Oliver, White L., 29.vi.1959 (L. A. K.); 1♂ 3♀, Osoyoos, Anarchist Mt., 6.vii.1959 (R. Madge); 4♂, *id.*, 13.vii.1970 (L. A. K.); 1♂ 3♀, Pavilion, 30.vi.1961 (G. G. E. S.) 1♀, Riske Cr., 30.vii.1949 (G. J. S.); 1♀, *id.*, on D. Fir, 19.vii.1971 (F. I. S.); 1♀, Spences Bridge, 7.vii.1982 (G. G. E. S.); 1♂, Summerland, 2-11.vii.1974 (L. A. K.); 5♀, Vernon, 27.vi.1971 (G. G. E. S.); 1♂ 1♀, Vinsulla, 28.vi.1962 (G. G. E. S.); 1♂, W Summerland, 26.vii.1963 (G. J. S.) [CNC, OSU, UBC].

FAMILY MIRIDAE

Macrotylus multipunctatus Van Duzee
(Det. H. H. Knight)

Macrotylus multipunctatus Van Duzee 1916, J. Ent. Zool. Claremont 8: 7.

This very distinctive species is easily recognized by the pale upper surface closely dotted with rather large black setigerous spots.

Recorded only from California to date, but I have seen a specimen from Oregon (1♀, Jackson Co., Colestine, under old cattle dung, 17.vi.1954 (L. G. Gentner) [OSU]).

Canadian material examined. BRITISH COLUMBIA: 1♀, Grand Forks, 5.vi.1961 (G. G. E. Scudder) [UBC]; 1♂, Rock Creek, on *Potentilla milligrana*, 7.vi.1959 (R. E. Leech) [CNC]; 24♂ 17♀, Oliver, White Lake, on *Lupinus* species, 28.v.1959 (L. A. Kelton) [CNC].

FAMILY SALDIDAE

Ioscytus politus (Uhler)

Salda polita Uhler 1877, Bull. U.S. Geol. Surv. Terr. 3: 441.

Ioscytus polita, Reuter 1912, Ofv. Finska Vet. Soc. Förh. 54(12): 20.

The genus *Ioscytus* Reuter does not appear to have been recorded from Canada previously. It is keyed by Polhemus & Chapman (1979). As noted by Slater & Baranowski (1978), *I. politus* is a handsome species easily recognizable by the bright red corium and first and second antennal segments that contrast strikingly with the black clavus, pronotum and third and fourth antennal segments. In *I. politus* the thorax is normally shiny, and the thorax and clavus usually has a sparse golden pubescence.

Recorded from Arizona, California, Oregon and Nevada. I have seen a specimen in the CNC from Utah (1♂, Woodside Co., 27.ix.1921 (Grace & Wiley)). *I. politus* apparently requires, or at least prefers, an alkaline situation (Polhemus, 1964), and it is here recorded in such a locality in British Columbia.

Canadian material examined. BRITISH COLUMBIA: 1♀, Osoyoos, Richter Pass, 22.v.1959 (R. Madge); 1♀, *id.*, 6.vi.1959 (L. A. Kelton); 2♂ 5♀, *id.*, 25.vi.1959 [CNC].

ACKNOWLEDGEMENTS

Research for this paper was supported by grants from the Natural Sciences and Engineering Research Council of Canada. I am indebted to the following for the loan of material and/or confirming my identifications: Dr. L. A. Kelton (Biosystematics Research Institute, Ottawa), Dr. J. D. Lattin (Oregon State University), Prof. J. A. Slater (University of Connecticut) and Dr. D. B. Thomas (U.S. Livestock Insects Lab., Kerrville, Texas).

REFERENCES

Ashlock, P. D. 1958. A revision of the genus **Malezonotus** (Hemiptera-Heteroptera: Lygaeidae). **Ann. Ent. Soc. Amer.** 51: 199-208.

Ashlock, P. D. 1967. A generic classification of the Orsillinae of the world (Hemiptera-Heteroptera: Lygaeidae). **Univ. Calif. Publ. Ent.** 48: 1-82.

Ashlock, P. D. 1975. Towards a classification of North American Lygaeinae (Hemiptera-Heteroptera: Lygaeidae). **J. Kansas Ent. Soc. 48: 27-32.**

Barber, H. G. 1921. Revision of the genus **Lygaeus** Fab. (Hemiptera-Heteroptera). **Proc. Ent. Soc. Wash.** 23: 63-68.

Barber, H. G. 1938. A review of the genus **Crophius** Stal, with descriptions of three new species (Hemiptera-Heteroptera: Lygaeidae). **J. N.Y. Ent. Soc.** 46: 313-319.

Barber, H. G. 1953a. The genus **Pachybrachius** in the United States and Canada with the description of two new species (Hemiptera: Lygaeidae). J. N.Y. Ent. Soc. 60: 211-220.

Barber, H. G. 1953b. A second revision of the genus **Ptochiomera** Say and its allies (Hemiptera, Lygaeidae). **Proc. Ent. Soc. Wash.** 55: 19-27.

Bueno, J. R. de la Torre-. 1946. A synopsis of the Hemiptera-Heteroptera of America north of Mexico, Part III family XI- Lygaeidae. **Ent. Amer.** 26 (n.s.): 1-141.

Cannings, R. 1981. New find in Okanagan nettles. **Boreus** 1 (2): 9.

Drake, C. J. & Davis, N. T. 1958. The morphology and systematics of the Piesmatidae (Hemiptera), with keys to world genera and American species. **Ann. Ent. Soc. Amer.** 51: 567-581.

Evans, D. 1984. Annotated checklist of insects associated with native pines in British Columbia. **Pacific Forest Research Centre Information Report** BC-X-244: 1-115.

Harrington, B. J. 1980. A generic level revision and cladistic analysis of the Myodochini of the world (Hemiptera, Lygaeidae, Rhyparochrominae). **Bull. Amer. Mus. Nat. Hist.** 167 (2): 45-166.

Harris, H. M. 1928. A monographic study of the Hemipterous family Nabidae as it occurs in North America. **Ent. Amer. 9: 1-97.**

Hoebeke, E. R. & Wheeler, A. G. 1982. **Rhopalus (Brachycarenus) tigrinus**, recently established in North America, with a key to the genera and species of Rhopalidae in eastern North America (Hemiptera: Heteroptera). **Proc. Ent. Soc. Wash.** 84: 213-224.

McAtee, W. L. 1919. Key to the Nearctic species of Piesmidae (Heteroptera). **Bull. Brooklyn Ent. Soc.** 14: 80-93.

Nelson, G. H. 1955. A revision of the genus **Dendrocoris** and its generic relationships (Hemiptera, Pentatomidae). **Proc. Ent. Soc. Wash.** 57: 49-67.

Polhemus, J. T. 1964. A new species of **Ioscytus** from the western United States. **Proc. Ent. Soc. Wash.** 66: 253-255.

Polhemus, J. T. & Chapman, H. C. 1979. Family Saldidae (in) Menke, A. S. (ed.), The Semiaquatic and Aquatic Hemiptera of California (Heteroptera: Hemiptera). **Bull. Calif. Ins. Surv.** 21: 16-33.

Readio, J. & Sweet, M. H. 1982. A review of the Geocorinae of the United States east of the 100th meridian (Hemiptera: Lygaeidae). **Misc. publ. Ent. Soc. Amer.** 13 (3): 1-91.

Schaefer, C. W. & Chopra, N. P. 1982. Cladistic analysis of the Rhopalidae, with a list of food plants. **Ann. Ent. Soc. Amer.** 75: 224-233.

Schaefer, C. W. & Mitchell, P. L. 1983. Food plants of the Coreoidea (Hemiptera: Heteroptera). **Ann. Ent. Soc. Amer.** 76: 591-615.

Schaefer, K. F. & Drew, W. A. 1969. Lygaeidae (Hemiptera) of Oklahoma. **Proc. Okla. Acad. Sci.** (1967) 48: 83-104.

Scudder, G. G. E. 1981. Two new species of Lygaeinae (Hemiptera: Lygaeidae) from Canada. **Can. Ent.** 113: 747-753.

Slater, J. A. 1964. A Catalogue of the Lygaeidae of the World. University of Connecticut, Storrs. 2 vols. 1668 pp.

Slater, J. A. & Baranowski, R. M. 1978. How to Know the True Bugs (Hemiptera-Heteroptera). Wm. C. Brown Co., Dubuque, Iowa. 256 pp.

Wheeler, A. G. 1984. Seasonal history, habits and immature stages of **Belonochilus numenius** (Hemiptera: Lygaeidae). **Proc. Ent. Soc. Wash.** 86: 790-796.