

## SCIENTIFIC NOTE

***Metopoplax ditomoides* (Costa) (Hemiptera: Lygaeoidea: Oxycarenidae): First Canadian Record of a Palearctic Seed Bug**A.G. WHEELER, JR.<sup>1</sup> and E. RICHARD HOEBEKE<sup>2</sup>

*Metopoplax ditomoides* (Costa) is a mainly west European and north African (Mediterranean) species (Péricart 1999) that has expanded its range in the last half century, as evidenced by comparing the distributions listed by Slater (1964) and Péricart (2001). First taken in England in 1952 (Woodroffe 1953a, b), this immigrant bug was not recorded again in Britain until breeding populations apparently became established in the 1990s; by the late 1990s, “prodigious numbers” were observed (Kirby *et al.* 2001). In continental Europe, *M. ditomoides* has spread north from the Mediterranean region (Rabitsch 2008) and probably also has been transported in shipments of plant material (Deckert 2004). This seed bug has been detected recently in several countries, including Belgium (Bruers and Viskens 1997), and has become more common in the Netherlands (Aukema 2003).

The first North American records were from Oregon (Benton, Lane, Marion, and Polk counties), where adults were collected from hazelnut (*Corylus avellana* L.) orchards and found swarming in houses (Lattin and Wetherill 2002). *Metopoplax ditomoides* soon was reported from California (Alameda, Marin, Solano, and Sonoma counties), with the first collections at Vernon (Sonoma Co.) in 2002 (Gaimari 2005), and from Washington State based on adults taken in a house at Lynden (Whatcom Co.) in 2006 (LaGasa and Murray 2007). Lynden is within about 6 km of the Canadian border south of Aldergrove, British Columbia.

*Metopoplax ditomoides* (Figure 1) can readily be distinguished from other Nearctic oxycarenids. The antenniferous tubercles are prominent and rounded anteriorly; the clypeus is produced and spatulate; the head, pronotum,

and scutellum are black, densely punctate, and have a vestiture of long, pale setae; and the forewings are pale to whitish, with veins of the membrane colorless to brown (Woodroffe 1953b, Péricart 1999).

Here we report *M. ditomoides* from BC as the first Canadian record for this oxycarenid. Voucher specimens have been deposited in the United States National Museum of Natural History, Smithsonian Institution, Washington, DC (USNM) and University of Georgia Collection of Arthropods, Athens, GA (UGCA).

**Specimens examined:** CANADA: BC, 100 Ave. nr 140 St., Guildford, Surrey,



**Figure 1.** *Metopoplax ditomoides* (Costa) ♀, British Columbia, Canada, Blackie Spit, Crescent Beach, Surrey, 28-vi-2011 (E. R. Hoebeke, A. G. Wheeler) [UGCA].

<sup>1</sup>School of Agricultural, Forest, and Environmental Sciences, Clemson University, Clemson SC 29634-0310, U.S.A.

<sup>2</sup>Department of Entomology, Cornell University, Ithaca NY 14853-2601, U.S.A.; current address: Georgia Museum of Natural History and Department of Entomology, University of Georgia, Athens, Georgia 30602, U.S.A

49°10.994'N 122°50.195'W, 26-vi-2010, 1♀ sweeping forbs; Blackie Spit Park, Crescent Beach, Surrey, 49°03.579'N 122°52.875'W, 24-vi-2011, 26♂, 39♀ & 28-vi-2011, 13♂, 23♀ ex *Achillea millefolium* L., E.R. Hoebeke & A.G. Wheeler.

Adults in BC, including a mating pair, were collected from inflorescences of common yarrow (*A. millefolium*; Asteraceae).

Other forbs growing nearby were goose tongue or salt marsh plantain (*Plantago maritima* L. (Plantaginaceae) and silver burr ragweed (*Ambrosia chamissonis* (Less.) Greene (Asteraceae). The collection of *M. ditomoides* from yarrow at Blackie Spit Park is consistent with the bug's frequent association with composites in the Palearctic Region (Péricart 1999).

## ACKNOWLEDGEMENTS

We thank Thomas J. Henry (Systematic Entomology Laboratory, USDA, ARS, Washington, DC) for verifying the identification of *M. ditomoides* and providing the numbers of males and females after

specimens had been deposited in the USNM collection, as well as relevant pages from Péricart (1999), and Joseph V. McHugh (Department of Entomology, University of Georgia, Athens) for providing Fig. 1.

## REFERENCES

- Aukema, B. 2003. Recent changes in the Dutch Heteroptera fauna (Insecta: Hemiptera). pp. 39-52. *In* M. Reemer, P.J. van Helsdingen, and R.M.J.C. Kleukers (eds). Changes in Ranges: Invertebrates on the Move. Proceedings of the 13th International Colloquium of the European Invertebrate Survey, Leiden, 2-5 September 2001. European Invertebrate Survey, Leiden.
- Bruers, J. and G. Viskens. 1997. *Metopoplax ditomoides* (Costa, 1847) België nieuw sp. (Heteroptera, Lygaeidae, Oxycareninae). Bulletin et Annales de la Société Royale Belge d'Entomologie 133: 469.
- Deckert, J. 2004. Zum Vorkommen von Oxycareninae (Heteroptera, Lygaeidae) in Berlin und Brandenburg. *Insecta* 9: 67-75.
- Gaimari, S. (ed.). 2005. Significant records in Entomology: Hemiptera: Heteroptera: *Metopoplax* [sic] *ditomoides* (Costa) (Oxycarenidae), a seed bug. California Plant Pest & Disease Report 22 (1): 9-10.
- Kirby, P., A.J.A. Stewart and M.R. Wilson. 2001. True bugs, leaf- and planthoppers, and their allies. pp. 262-299. *In* D.L. Hawksworth (ed.). The Changing Wildlife of Great Britain and Ireland. Taylor & Francis, London.
- LaGasa, E. and T. Murray. 2007. Exotic seed-bugs (Lygaeoidea [sic]: Rhyparochromidae and Oxycarenidae) new to the Pacific Northwest. pp. 5-6. *In* Proceedings of the 66th Annual Pacific Northwest Insect Management Conference, Portland, Oregon, January 8-9, 2007. [http://www.ipmnet.org/PNWIMC/2009\\_PNW\\_Conference\\_Proceedings.pdf](http://www.ipmnet.org/PNWIMC/2009_PNW_Conference_Proceedings.pdf). Accessed 2 September 2012.
- Lattin, J.D. and K. Wetherill. 2002. *Metopoplax ditomoides* (Costa), a species of Oxycarenidae new to North America (Lygaeoidea: Hemiptera: Heteroptera). *Pan-Pacific Entomologist* 78: 63-65.
- Péricart, J. 1999. Hémiptères Lygaeidae Euro-Méditerranéens. 2. Faune de France 84B [1998]: 1-453.
- Péricart, J. 2001. Superfamily Lygaeoidea Schilling, 1829. Family Lygaeidae Schilling, 1829 – seed bugs. pp. 35-220. *In* B. Aukema and C. Rieger (eds.). Catalogue of the Heteroptera of the Palearctic Region. Vol. 4. Pentatomomorpha I. Netherlands Entomological Society, Amsterdam.
- Rabitsch, W. 2008. Alien true bugs of Europe (Insecta: Hemiptera: Heteroptera). *Zootaxa* 1827: 1-44.
- Slater, J.A. 1964. A Catalogue of the Lygaeidae of the World. Vol. I. University of Connecticut, Storrs.
- Woodroffe, G.E. 1953a. Notes on some Hemiptera-Heteroptera from Hounslow Heath, Middlesex. *Entomologist* 86: 34-40.
- Woodroffe, G.E. 1953b. On the occurrence at Hounslow, Middlesex, of *Metopoplax ditomoides* Costa (Hem., Lygaeidae) new to Britain. *Entomologist* 86: 224-225.