

ENTOMOLOGICAL NEWS

- host record for *Anisotoma basalis* (Coleoptera: Leiodidae)
 reeding in sporocarps of slime mold *Lycogala flavofuscum*
 Myxomycetes: Liceales) Q.D. Wheeler, E.R. Hoebeke 129
- Antennal anomaly in *Oxyptoda opaca* (Coleoptera: Staphylinidae)
 from New York E. Richard Hoebeke 133
- A new species and new record of water-penny genus *Psephenops*
 (Coleoptera: Psephenidae) from Costa Rica
 Paul J. Spangler 137
- New record and range extension for *Rhyacophila wallowa*
 (Trichoptera: Rhyacophilidae) from Rocky Mountain
 National Park, Colorado Scott J. Herrmann 141
- HPLABEL: a program and microfont for the generation of
 date/locality labels using a laser printer
 D.C. Darling, R.C. Plowright 143
- Microcylloepus formicoideus* (Coleoptera: Elmidae), a new
 riffle beetle from Death Valley National Monument,
 California William D. Shepard 147
- The status of *Pison doggonum* (Hymenoptera: Sphecidae)
 Arnold S. Menke 154
- Distributional notes on North and Central American
 Dilaridae (Neuroptera) Kevin M. Hoffman 155
- First United States record of *Ascalobyas* (Neuroptera:
 Ascalaphidae), a range extension from northeastern
 Mexico to Texas Roy C. Vogtsberger 158
- Biological notes on *Drosophila guttifera* (Diptera:
 Drosophilidae), a consumer of mushrooms
 B. Bunyard, B.A. Foote 161
- Propylea quatuordecimpunctata*: additional U.S. records of
 an adventive lady beetle (Coleoptera: Coccinellidae)
 A.G. Wheeler, Jr. 164
- Additions to the Papilionoidea (Lepidoptera) of the
 Revillagigedo Islands, Mexico John W. Brown 167
- Invertebrate populations in the nests of a screech owl
 (*Otus asio*) and an American kestrel (*Falco sparverius*)
 in central New York J.R. Phillips, D.L. Dindal 170
- SOCIETY MEETING OF MARCH 28, 1990 153
- SOCIETY MEETING OF APRIL 25, 1990 160
- BOOK REVIEWS 136, 146, 157, 169

 QL
 461
 E831
 Ent.

**PROPYLEA QUATUORDECIMPUNCTATA:
ADDITIONAL U. S. RECORDS OF AN
ADVENTIVE LADY BEETLE
(COLEOPTERA: COCCINELLIDAE)¹**

A. G. Wheeler, Jr.²

ABSTRACT: The distribution of *Propylea quatuordecimpunctata*, an Old World aphidophagous coccinellid known in North America from Quebec, New York, and Vermont, is extended to Maine. Occurrence of this adventive predator is attributed to spread of populations along the St. Lawrence River in Quebec rather than to intentional releases for biocontrol purposes. The native and exotic plants on which *P. quatuordecimpunctata* was collected in Maine and at an additional site in Vermont are listed; probable aphid prey are noted.

The Palearctic coccinellid *Propylea quatuordecimpunctata* (L.) feeds on numerous European aphid species associated with diverse crops and habitats. Evaluated in Oklahoma for its biocontrol potential against the greenbug, *Schizaphis graminum* (Rondani) (Rogers *et al.* 1972 a,b), it was released in Delaware, New Jersey, and Oklahoma beginning in 1970. Attempts to establish this predator were unsuccessful (Gordon 1985, Dysart 1988).

At about the time that *P. quatuordecimpunctata* was imported from France by the U. S. Department of Agriculture (Rogers *et al.* 1971), an established population was detected in North America during 1968 near Ste. Foy, Quebec (Chantal 1972). Its fortuitous introduction into eastern Canada thus predated intentional releases in the United States.

Subsequent collections in Quebec, mostly along the St. Lawrence River, led Larochelle and Larivière (1980) to suggest that it had been introduced with ship traffic associated with the St. Lawrence Seaway. Dysart (1988) and Schaefer and Dysart (1988) concurred that this coccinellid probably was accidentally introduced into the New World. By 1987, *P. quatuordecimpunctata* had been collected in 14 counties in Quebec, Chittenden and Grand Isle counties in northern Vermont, and at Plattsburgh (Clinton County) in northeastern New York (Dysart 1988). Gordon's (1985) diagnosis and illustration of the adult facilitate recognition of this distinctive species in the Nearctic fauna.

Larochelle and Larivière (1980) and Dysart (1988) suggested that this aphidophagous coccinellid, having adapted to Quebec's harsh climate, probably will spread throughout most of North America. Herein, I extend the known Nearctic distribution to Maine, cite an additional Ver-

¹Received September 9, 1989. Accepted October 21, 1989.

²Bureau of Plant Industry, Pennsylvania Department of Agriculture, Harrisburg, PA 17110-9408.

mont record, and give ecological notes on these collections. Voucher specimens have been deposited in the insect collections of Cornell University, Ithaca, New York (CUIC), and Pennsylvania Department of Agriculture, Harrisburg (PDA).

Propylea quatuordecimpunctata: Additional U.S. Records

On 11 June 1988, I collected seven adults on the University of Vermont campus at Burlington, Chittenden County. Two were beaten from terminals of tatarian honeysuckle, *Lonicera tatarica* L., infested with the aphid *Hyadaphis tataricae* (Aizenberg); five were collected from an ornamental cinquefoil, *Potentilla parvifolia* Lehm.

In 1989, I swept four adults on 3 July from hairy vetch, *Vicia villosa* Roth, along Old Coldbrook road near exit 44 of I-95 at Hampden (Penobscot County), Maine. The most likely prey species on vetch was the pea aphid, *Acyrtosiphon pisum* (Harris). Two days later an adult was collected in Houlton (Aroostook County), Maine, by beating branches of speckled alder, *Alnus rugosa* (DuRoi) Spreng., infested with the woolly alder aphid, *Paraprociophilus tessellatus* (Fitch).

R. V. Flanders called my attention to a previous Maine record, one not formally published but cited in the National Pest Happenings newsletter [5 (3): 4, 1989], issued by the Texas Agricultural Extension Service. One adult was collected 7 June 1988 on raspberry at Monmouth (Kennebec County), by M. P. Tully.

DISCUSSION

Schaefer and Dysart (1988) noted that *P. quatuordecimpunctata* is being propagated and redistributed by the USDA APHIS Biological Control Program. No recoveries, however, have been made from any of the release sites, including those in Maryland and Pennsylvania (P. W. Schaefer, personal communication) and North Falmouth, Massachusetts (R. V. Flanders, personal communication). The Maine records probably can be attributed to natural dispersal of the well-established Quebec populations rather than to intentional releases or to a separate introduction with European commerce. The Penobscot County collection near Bangor extends the known U. S. distribution about 350 km east of the Plattsburgh, New York - Burlington, Vermont area. The Houlton site in Aroostook County lies about 240 km from the nearest population recorded in Quebec; Monmouth (Kennebec County) is about 230 km from the nearest Quebec population.

ACKNOWLEDGMENTS

I thank P. W. Schaefer (USDA, Beneficial Insects Research Lab., Newark, Delaware) for allowing me to use recent information relating to releases of *P. quatuordecimpunctata* in eastern North America, R. V. Flanders (USDA Biological Control Lab., Niles, Michigan) for informing me of the Cape Cod releases and the previous Maine record, R. D. Lehman (PDA, BPI) for confirming my identification, and Lehman and K. Valley (PDA, BPI) for reviewing the manuscript.

LITERATURE CITED

- Chantal, C. 1972. Additions à la faune coléoptérique du Québec. *Nat. Can.* 99:243-244.
- Dysart, R. J. 1988. The European lady beetle *Propylea quatuordecimpunctata*: new locality records for North America (Coleoptera: Coccinellidae). *J. New York Entomol. Soc.* 96:119-121.
- Gordon, R. D. 1985. The Coccinellidae (Coleoptera) of America north of Mexico. *J. New York Entomol. Soc.* 93:1-912.
- Larochelle, A. and M.-C. Larivière. 1980. *Propylea quatuordecimpunctata* L. (Coleoptera: Coccinellidae) en Amérique du Nord: établissement, habitat et biologie. *Bull. Invent. Insectes Quebec* 2:1-9.
- Rogers, C. E., H. B. Jackson, G. W. Angalet, and R. D. Eikenbary. 1972. Biology and life history of *Propylea 14 - punctata* (Coleoptera: Coccinellidae), an exotic predator of aphids. *Ann. Entomol. Soc. Am.* 65:648-650.
- Rogers, C. E., H. B. Jackson, and R. D. Eikenbary. 1972. Voracity and survival of *Propylea 14 - punctata* preying upon greenbugs. *J. Econ. Entomol.* 65:1313-1316.
- Rogers, C. E., H. B. Jackson, R. D. Eikenbary, and K. J. Starks. 1971. Sex determination in *Propylea 14 - punctata* (Coleoptera: Coccinellidae), an imported predator of aphids. *Ann. Entomol. Soc. Am.* 64:957-959.
- Schaefer, P. W. and R. J. Dysart. 1988. Palearctic aphidophagous coccinellids in North America. Pages 99-103 in E. Niemczyk and A. F. G. Dixon, eds. *Ecology and effectiveness of Aphidophaga*. SPB Academic Publishing, The Hague, Netherlands.