REFERENCES

- Allen, W. R. and W. L. Askew. 1970. A simple technique for mass-rearing the onion maggot (Diptera: Anthomyiidae) on artificial diet. Can. Ent. 102:1554-1558.
- Perron, J. P. and J. Lafrance. 1961. Notes on the life-history of the onion maggot, Hylemya antiqua (Meig.) (Diptera: Anthomyiidae) reared in field cages. Can. Ent. 93:101-106.
- Perron, J. P., J. Lafrance and M. Hudon. 1953. Notes on behavior of the adult of the onion maggot, Hylemya antiqua (Meig.) in captivity. Reps. Quebec Soc. Prot. P1. (1950-1951) pp. 144-148.
- Pierce, H. D., Jr., R. S. Vernon, J. H. Borden and A. C. Oehlschlager. 1978. Host selection by Hylemya antiqua (Meigen). Identification of three new attractants and oviposition stimulants. J. Chem. Ecol. 4:65-72.
- Ticheler, J. 1971. Rearing of the onion fly, Hylemya antiqua (Meigen) with a view to release of sterilized insects. In: Sterility principle for insect control or eradication. (Proc. Symp., Athens, 1970). IAEA, Vienna, pp. 341-346.
- Vernon, R. S., J. H. Borden, H. D. Pierce, Jr., and A. C. Oehlschlager. 1977. Host selection by Hylemya antiqua. Laboratory bioassay and methods of obtaining host volatiles. J. Chem. Ecol. 3:359-368.

NORTHERLY RANGE EXTENSION FOR CRAMPTONOMYIA SPENCERI ALEXANDER (DIPTERA: PACHYNEURIDAE)

ROBERT A. CANNINGS AND RICHARD J. CANNINGS

Department of Zoology, University of British Columbia

Vancouver, British Columbia

Cramptonomyia spenceri Alexander is a distinctive nematocerous fly of the Pacific coast, discovered by Professor G. J. Spencer at Vancouver on 30 March 1930 (Alexander, 1931; Jacob, 1937; Vockeroth, 1974). It is the only described Nearctic and Canadian species of the family Pachineuridae (McAlpine et al., 1979). The fly is especially prevalent in red alder (Alnus rubra) woods where the larva tunnels under the bark of rotten alder logs (Vockeroth, 1974). Vockeroth lists all the known localities for Cramptonomyia spenceri. These range from Wallace Bridge and Castle Rock, Oregon north to Hope and Mount Seymour, British Columbia.

On 26 March 1979, one of us (RJC) collected a male *Cramptonomyia* at Kaien Station, Kaien Island, 5 km south of Prince Rupert, British Columbia. This is approximately 700 km northwest of the previous most northerly locality for the species. At 1200 h, males were common among the drift logs and shrubbery along the railway tracks paralleling the shoreline of the sea. Stands of red alder grew 20 m away from the collection site. The weather was warm and sunny; the temperature was about 12°C. No adults were observed at the same location on 16 April 1979.

On 10 March 1979, one male, and on 31 March 1979, 21 males and two females were collected in a pure stand of young red alders at the University of British Columbia in Vancouver. Eggs (see Vockeroth, 1974) were found on rotting alder logs on the latter date; in one case the egg density was 1 per 2 cm². On 18 April 1979 no adults were seen at the same location: Vockeroth (1974) also noted a disappearance of adults from this Vancouver locality in the first half of April, 1973.

Although the Prince Rupert record represents a considerable northerly extension of the known range of *Cramptonomyia spenceri*, the above observations suggest there is little difference in its period of activity at the two latitudes.

ACKNOWLEDGEMENTS

Adrian Belshaw, Sydney Cannings and Earl Mansfield helped in the collecting of *Cramptonomyia* at Vancouver. Dr. G. G. E. Scudder read the manuscript.

REFERENCES

- Alexander, C. P. 1931. A new genus and species of Bibionid Diptera. Bull. Brooklyn Entomol. Soc. 26:7-11.
- Jacob, J. K. 1937. Winter insects in British Columbia. Diptera: Cramptonomyia spenceri Alexander. Proc. Entomol. Soc. Brit. Columbia (1936) 33:30-31.
- McAlpine, J. F. et al. 1979. Diptera (in) Danks, H. V. (ed.) Canada and its insect fauna. Mem. ent. Soc. Can. 108:389-424.
- Vockeroth, J. R. 1974. Notes on the biology of Cramptonomyia spenceri Alexander (Diptera: Cramptonomyiidae). J. Entomol. Soc. Brit. Columbia 71:38-42.