

Lateroligia ophiogramma (Esper) (Lepidoptera: Erebidae) in Nova Scotia, Canada

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On 15 July 1993, a male specimen of the Palaearctic moth *Lateroligia ophiogramma* (Esper, 1793) (Lepidoptera: Erebidae) was collected at a 15-watt filtered ultra-violet light. The trap was operated by the Atlantic Food and Horticulture Research Centre every night from March to November in Kentville, Kings County, Nova Scotia. A comparison with voucher specimens in the Nova Scotia Museum confirmed its identity. The specimen represents a species previously unrecorded from Nova Scotia and is the most easterly record of Lateroligia ophiogramma in North America. Lateroligia ophiogramma is a widespread Palaearctic species, occurring from England and western Europe (Bretherton et al. 1983) west to Japan (Inoue et al. 1982). Troubridge et al. (1992) first recorded it in North America based on four specimens collected at Langley, British Columbia in 1989. Mikkola and Lafontaine (1994) reported specimens from eastern North America including records from Vermont, New York, Quebec, and New Brunswick. Lateroligia ophiogramma is a small moth with a wingspan of 26-33 mm. It is easily recognized by the longitudinal snakelike white line that separates the brownish posterior portion of the forewing from the darker blackish anterior portion (Figure 1). In the melanic form "maerens" (Staudinger 1882) (Figure 2), the forewing ground color is smoky gray and the contrast with the longitudinal white line is correspondingly weaker (Mikkola and Lafontaine 1994). In Helsinki, Finland, the melanic form constitutes about 40% of the population (Mikkola and Jalas 1979), however, this form is not mentioned as being found in Japan (Inoue et al. 1982) or in western North America (Troubridge et al. 1992). In Nova Scotia, four specimens of the melanic form have been collected, 12% of the specimens collected to date in the province (Fig.2). Specimen records are as follows (KNC, K. Neil Collection; NSMC, Nova Scotia Museum Collection; BWC, Bev Wigney Collection):

NOVA SCOTIA: Kings County: Agriculture Canada Research Station, Kentville, 15 July1993, K. Neil ($1 \circlearrowleft$, KNC); Kentville, 13 August 1996, K. Neil ($1 \circlearrowleft$, NSMC); Kentville, 23 July 1998, K. Neil ($1 \circlearrowleft$, KNC); Coldbrook, 13 July 2000, K. Neil ($1 \circlearrowleft$, KNC); Sheffield Mills, 16 July 2002, K. Neil ($1 \circlearrowleft$, KNC); Sheffield Mills, 16 July 2002, K. Neil ($1 \circlearrowleft$, KNC); Sheffield Mills, 31 June 2003, K. Neil ($1 \circlearrowleft$, KNC); Sheffield Mills, 19 July 2004, K. Neil ($1 \circlearrowleft$, KNC); Coldbrook, 24 July 2004, K. Neil ($2 \circlearrowleft$, KNC); Sheffield Mills, 16 & 26 July 2007, K. Neil ($1 \circlearrowleft$, KNC); Sheffield Mills, 7 July 2008, K. Neil ($1 \hookrightarrow$, KNC); New Minas, 23 July 2009, K. Neil ($1 \hookrightarrow$, f "maerens", KNC); Sheffield Mills, 25 July 2009, K. Neil ($1 \hookrightarrow$, KNC); Sheffield Mills, 25 & 29 August 2009, K. Neil ($2 \circlearrowleft$, 1 f. "maerens", KNC); Sheffield Mills, 7, 16, &17 July 2010, K. Neil ($7 \circlearrowleft$, $1 \hookrightarrow$ f. "maerens", KNC); Sheffield Mills, 29 July 2010, K. Neil ($1 \hookrightarrow$, RNC); Annapolis County: Round Hill, 9 July 2010, B. Wigney ($1 \circlearrowleft$, BWC).

In Europe, the larvae of *Lateroligia ophiogramma* have been recorded as feeding on a variety of grasses including wild and cultivated canary grass (*Phalaris arundinacae* (Linnaeus), (Poaceae)), reed sweet grass (*Glyceria maxima* (Hartm.),

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(Poaceae)), (Bretherton et al. 1979) as well as wild iris (*Iris* pseudacorus Linnaeus, (Iridaceae)) (Forster and Wohlfahrt 1971). In England, eggs are deposited near old blades of grass and hatch in about ten days (Bretherton et al. 1979). Caterpillars live within host plant stems, leave them to overwinter in soil and return to the host plants in spring to feed until the caterpillars are mature. Larvae pupate in soil (Bretherton et al. 1979). In Nova Scotia, Lateroligia ophiogramma is likely single brooded, with adults flying from late June to late August. Adults occur most commonly near marshes or wet areas and have been collected most commonly in the eastern end of the Annapolis Valley. Additional collecting may reveal its presence in other areas of southern mainland Nova Scotia. The first North American specimens, collected at Langley, British Columbia, by Troubridge et al. (1992) were found in well-drained forested areas without any nearby stands of the host plants.

The monomorphic population of *Lateroligia* ophiogramma that occurs in western North America has evidently been imported from the Far East or Japan where the melanic form does not occur. The eastern North American population of *Lateroligia ophiogramma* probably originated in the industrial areas of western Europe, where the melanic form is fairly common, indicating that in North America two separate introductions of this species have occurred (Lafontaine et al. 2010).

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Figure 1. Adult *Lateroligia ophiogramma* (a), melanic form (b).

