

BRIEF NOTE

New Apple Pest, *Hedya nubiferana* (Haworth), Discovered in Ohio¹

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ABSTRACT. The green budworm, *Hedya nubiferana* (Haworth), was collected in Ohio for the first time in 1991. A total of five specimens was collected at three sites in Portage County, OH. The collection of the green budworm at these widespread localities in Portage County in such numbers indicates that this potential pest species is now well established in Ohio, at least in the northeastern part. The identification of this species was made by Dr. William E. Miller, Department of Entomology, University of Minnesota, St. Paul, MN. Further studies in unsprayed, abandoned orchards and arboretums are suggested to more accurately determine the geographical distribution of this new species in Ohio.

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INTRODUCTION

The green budworm, *Hedya nubiferana* (Haworth), was collected by the author in Ohio for the first time in 1991. This event was one of the results of a research project designed to inventory moth species in three bogs in Portage County and to monitor a number of threatened and endangered species.²

MATERIALS AND METHODS

The procedures and collecting techniques used in the present study were the same as those used by Rings (1989) in 1988.

RESULTS

The first Ohio specimens of the green budworm, *Hedya nubiferana* Haworth, were collected in a black light trap on 20 May 1991 in an abandoned apple orchard near the residence of the manager of Kent Bog State Nature Preserve.³ This preserve is located in Brimfield Township, Portage County, 0.5 mile south of the city of Kent. The exact preserve location is 41° 7' 40" north latitude and 81° 20' 16" west longitude. Additional specimens were taken on 12 June and 13 August at the same location. A fourth specimen was collected on 14 June at the Triangle Lake Bog State Nature Preserve in a black light trap.³ Triangle Lake is also located in Portage County (41° 5' 14" latitude and 81° 15' 44" longitude). Another specimen was collected on 16 August at Eagle Creek State Nature Preserve (41° 17' 40" latitude and 81° 3' 28" longitude) near Garrettsville in Portage County.³

The moths, which are very small (wing expanse 20 mm), emerge from late May to mid-June. A female moth is shown in color in Plate 2 of Chapman and Lienk (1971). The species overwinters as a third instar larva within a

hibernaculum on small twigs of the host tree. Plate 20 of the above publication illustrates the head and thorax of the larva.

DISCUSSION

The collection of the green budworm at three different localities in Portage County in such numbers indicates that this potential pest species is now well established in Ohio, at least in the northeastern part. The author is not aware of any serious damage done by this insect in commercial or private orchards in Ohio. Because of its small size and difficulty in identification it may be recognized only by a trained technician or entomologist. The only reports of populations of sufficient size to cause economic damage have come from Nova Scotia and Europe.

Chapman and Lienk (1971) reported that the available evidence suggests that this species came from Europe and was first established in the coastal areas of North America, including Nova Scotia, Rhode Island, and British Columbia. Apparently the species was accidentally introduced to North America prior to 1913. The budworm was first found in New York in 1961, and later found from the tip of Long Island to upstate New York.

Chapman and Lienk (1971) are of the opinion that *H. nubiferana* probably limits its feeding largely to the Rosaceae. The known hosts are apple, hawthorn, *Prunus*, and *Sorbus*. In Italy the species also feeds on almond, pear, and medlar.

The identification of this species was made by Dr. William E. Miller at the Department of Entomology, University of Minnesota, St. Paul, MN. Dr. Miller is a specialist in the Olethreutinae, a subfamily of leaf rollers, Tortricidae. All specimens have been deposited in the Insect Reference Collection at the Ohio Agricultural Research and Development Center at Wooster, OH.

Further studies in unsprayed, abandoned orchards and arboretums are suggested to more accurately determine the geographical distribution of this new species in Ohio.

LITERATURE CITED

- Chapman, P. J. and S. E. Lienk 1971 Tortricid fauna of apple in New York (Lepidoptera: Tortricidae). New York State Agr. Exp. Sta., Spec. Pub. 1-122.
- Rings, Roy W. and Eric H. Metzler 1989 A preliminary list of the Lepidoptera of Mohican State Forest and Mohican State Park, Ashland County, Ohio. Ohio J. Sci. 89: 78-88.

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³The collection of specimens in state nature preserves requires written permission from the Division of Natural Areas and Preserves.