

A NEW SYNONYMY IN *DICHRORAMPHA* THAT REVEALS AN OVERLOOKED
IMMIGRANT RECORD FOR NORTH AMERICA (TORTRICIDAE)

Additional key words: *D. vancouverana*, *D. gueneeana*, Grapholitini, Olethreutinae, holarctic.

The holarctic genus *Dichrorampha* currently includes nine representatives in North America (Miller 1983, Powell 1983) and several dozen in Eurasia (Obraztsov 1958, Razowski 1996). In revising Palearctic *Dichrorampha*, Obraztsov (1953) proposed the new name *D. gueneeana* for a long-known species to which no available name clearly applied. Male *D. gueneeana* have a distally upturned valva, a small sharp-pointed process on the ventroposterior edge of the cucullus, and a long, distally curved aedeagus, these characters together forming a diagnostic suite (Figs. 35, 15, respectively, in Obraztsov 1953, 1958; Fig. 4 in Roberts 1991). The sharp-pointed process on the cucullus is sometimes partially obscured in genital slide preparations.

Unknown to Obraztsov, McDunnough (1935) had earlier described the same moth as *D. vancouverana* based on one male captured on Vancouver Island, BC. The *D. vancouverana* holotype male and its genitalia (Fig. 5 in McDunnough 1935) match illustrations and specimens of both Palearctic and Nearctic *D. gueneeana* in all respects.

The new synonymy is formalized in the following nomenclatural review.

Dichrorampha vancouverana McDunnough

Dichrorampha vancouverana McDunnough (1935).

D. gueneeana Obraztsov (1953). **New Synonymy.**

This new synonymy and specimen examinations resulting from it have four implications beyond taxonomy. (1) *D. vancouverana* is a previously unsuspected immigrant in North America. (2) The year of McDunnough's description of *D. vancouverana*, 1935, is more than five decades earlier than the first published record of *D. vancouverana* in North America (Roberts 1991); Roberts found adults at two Maine sites in 1988 and 1991. (3) The moth occurs in western as well as eastern North America; besides the type specimen from Vancouver, *D. vancouverana* is now recorded from four counties in Washington State, as shown by the specimens enumerated below. These specimens suggest that the species was established in Washington in the 1940s. The moth was not seen there again for half a century; it reappeared during the 1990s in surveys for exotic pests in western Washington (LaCasa 1998, LaCasa et al. 1998). Powell (1988) reported a similar collection hiatus for *Clepsis consimilana* (Hübner), another Pacific Northwest tortricid immigrant. (4) The synonymy brings to 12 the number of North American immigrant tortricids first detected in coastal British Columbia (W. E. Miller unpubl.), a number that spotlights the area as a premier immigrant entry portal.

Larval foodplants of *D. vancouverana* in North America have not been reported, but in Britain and Europe, the larva feeds in rootstocks of milfoil (*Achillea millefolium* L.) and ox-eye daisy (*Chrysanthemum leucanthemum* L.) (both Asteraceae) (Bradley et al. 1979, Kuznetsov 1987). The latter plant has become naturalized in North America (Fernald 1950), and the former also according to some authors (Fernald 1950), but others argue that American *Achillea millefolium* is actually the very similar native *A. lanulosa* Nutt. (Woodward & Rickett 1979).

D. vancouverana is widely distributed in the Palearctic (Kuznetsov 1987, Razowski 1996). In the Nearctic, its presently known distribution by states and provinces is British Columbia (McDunnough 1935), Maine (Roberts 1991), New Hampshire (W. Kiel in Winter 1993), New York (R. L. Brown pers. comm.), and Washington State (LaCasa 1998, specimens listed below). As suggested by Roberts (1991), further searching of North American collections might uncover additional specimens and locality records because adults superficially resemble and could be mixed with more common congeners such as *D. sedatana* (Busck). Indeed, R. L. Brown (pers. comm.) recently found *D. vancouverana* specimens captured

in 1975 at Ithaca, New York, thus pushing back the earliest eastern North American record by more than a decade.

Depository abbreviations used in the specimen enumerations below are as follows: CNC, Canadian National Collection of Arthropods, Ottawa, ON; USNM, National Museum of Natural History, Washington, DC; WDA, Washington State Dept. of Agriculture, Olympia. I thank P. T. Dang, Ottawa, ON, J. W. Brown, Washington, DC, and E. LaCasa for the opportunity to examine specimens in their care. I also thank J. A. Powell, D. P. Prowell, and an unnamed reader for useful manuscript reviews, and R. L. Brown and M. A. Roberts for helpful information.

Specimens examined. *D. vancouverana* holotype male (CNC); 1 male, "Achil. [probably referring to the *Achillea* foodplant] 4-16-[18]98, Hamfelt Collection" [of known European origin], male genit. slide #2, 2-13-34, C[arl]. H[einrich]., USNM slide 72540; 1 male, "Collection O. Hofmann" [of known European origin], genit. slide # 1, 9-14-22, C[arl]. H[einrich]., USNM slide 72543; 1 male, Sumas, Whatcom Co., WN, 7-12-44, W. H. Baker, Truck Crop No. 5276, genit. slide 12-27-44, C[arl]. H[einrich]., USNM slide 71298; 2 males, Drayton Harbor, Whatcom Co., WN, 7-16-44, W. H. Baker, Truck Crop No. 5278 (diagnostic parts of genitalia revealed by descaling) (all USNM); 1 male, 3.2 km NW Tenino, Thurston Co., WN, 7-9-96, E. LaCasa, genit. slide M 18; 2 females, Port of Seattle, King Co., WN, 7-17 to 28-98, M. Allen (genitalia not examined); 1 male, Shelton, Mason Co., WN, 7-15-98, M. Allen (genitalia not examined) (all WDA).

LITERATURE CITED

- BRADLEY, J. D., W. G. TREMEWAN & A. SMITH. 1979. British tortricoid moths. Tortricidae: Olethreutinae. Ray Society, London, England. 336 pp.
- FERNALD, M. L. 1950. Gray's manual of botany. Ed. 8. 1632 pp. Dioscorides Press, Portland, Oregon. [1987 reprint].
- KUZNETSOV, V. I. 1987. Family Tortricidae (Olethreutidae, Cochyliidae)—tortricid moths, pp. 279–956. In Medvedev, G. S. (ed.), Keys to the insects of the European part of the USSR. Vol. 4. Lepidoptera, Part 1. U.S. Dept. of Agriculture & (US) National Science Foundation, Washington, D.C. [translated from Russian].
- LACASA, E. 1998. Database record summary: Lepidoptera species collected in Washington State. Washington State Dept. Agr. Econ. Ins. Coll. & Entomol. Surv. database (EICES). 4 pp.
- LACASA, E., M. HITCHCOX, T. UNRUH & T. BOYD. 1998. 1997 update-survey and methods development for the apple tortrix *Archips fuscocupreanus* (Lepidoptera: Tortricidae) in Washington State. Washington State Dept. Agr. Lab. Serv. Div. 1997 Entomol. Proj. Rept. 6 pp.
- MCDUNNOUGH, J. 1935. New Canadian eucosmids with notes (Lepidoptera). Can. Entomol. 67:140–149.
- MILLER, W. E. 1983. New synonymies in Nearctic *Dichrorampha* (Lepidoptera: Tortricidae). Proc. Entomol. Soc. Wash. 85: 727–733.
- OBRAZTSOV, N. 1953. Systematische Aufstellung und Bemerkungen über die palaearktischen Arten der Gattung *Dichrorampha* Gn. (Lepidoptera, Tortricidae). Mitt. Münch. Entomol. Ges. 43: 10–101.
- . 1958. Die Gattungen der palaearktischen Tortricidae. II. Die Unterfamilie Olethreutinae. Tijds. Entomol. 101: 229–261.
- POWELL, J. A. 1983. Tortricidae, pp. 31–41. In R. W. Hodges, T. Dominick, D. R. Davis, D. C. Ferguson, J. G. Franclemont, E. G. Munroe & J. A. Powell (eds.), Check list of the Lepidoptera of America north of Mexico including Greenland. E. W. Classey & Wedge Entomological Research Foundation, London, England.
- . 1988. Records of the Palearctic tortricid, *Clepsis consimilana*, in the Pacific Northwest: can an urban moth be overlooked for half a century? Pan-Pac. Entomol. 64:98–99.

- RAZOWSKI, J. 1996. Tortricidae, pp. 130–157. *In* O. Karsholt, & J. Razowski (eds.), *The Lepidoptera of Europe: a distributional checklist*. Apollo, Stenstrup, Denmark.
- ROBERTS, M. A. 1991. Two Palaearctic species of *Dichrorampha* discovered in Maine (Tortricidae). *J. Lepid. Soc.* 45:169–171.
- WINTER, W. D. (ED.). 1993. The Northeast, pp. 46–48. *In* Season summary 1992. *News Lepid. Soc.* 1993, No. 2.
- WOODWARD, C. H. & H. W. RICKETT. 1979. *Common wild flowers of the northeastern United States*. Barron's, Woodbury, New York. 318 pp.
- WILLIAM E. MILLER, *Department of Entomology, University of Minnesota, St. Paul, Minnesota 55108, USA.*
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