

New Host and Distributional Record for *Dichrorampha incanana* (Clemens, 1860) (Tortricidae: Olethreutinae)

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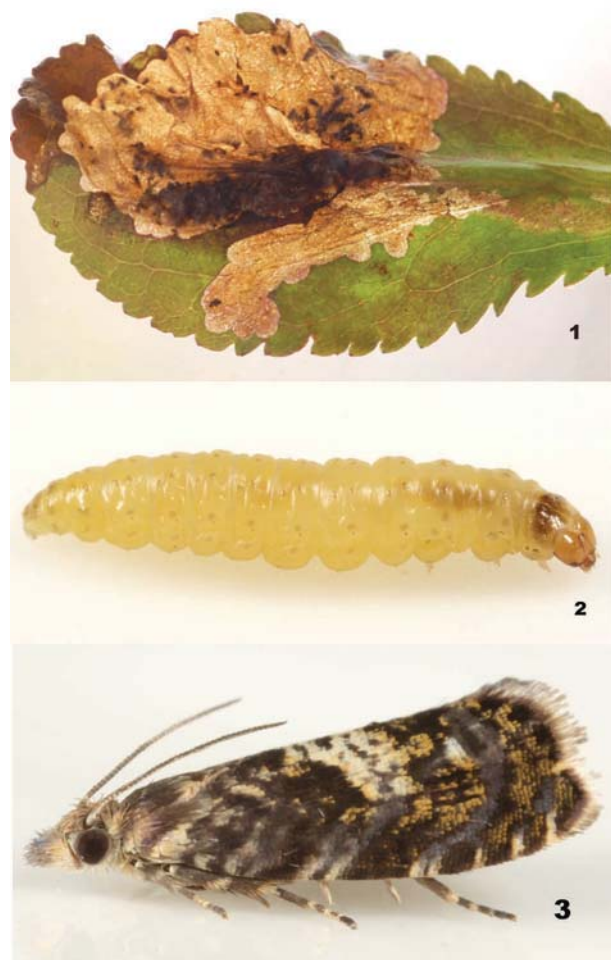
NEW HOST AND DISTRIBUTIONAL RECORD FOR *DICHRORAMPHA INCANANA* (CLEMENS, 1860)
(TORTRICIDAE: OLETHREUTINAE)**Additional key words:** leaf mining, *Packera obovata*, Asteraceae, Senecioneae

The known larvae of moths in the genus *Dichrorampha* Guenée (Tortricidae) are mostly root borers in Asteraceae (Heinrich 1926; Brown et al. 2008). Two Florida species are clear exceptions among the North American fauna, feeding instead on flowers of *Manilkara* Adans. (Sapotaceae) (Heppner 1981). In addition, *D. radicolana* Walsingham feeds in roots of a plant questionably identified as *Scrophularia* L. (Scrophulariaceae), and *D. leopardana* (Busck) is said to pupate within the rolled leaf of *Verbesina* L. (Asteraceae) but its feeding habits are unclear (Heinrich 1926).

Dichrorampha incanana (Clemens) is the only known leafminer in this genus, and its larval habits were only recently discovered. Priest (2008) found larvae mining leaves of *Arnoglossum atriplicifolium* (L.) H. Rob. (Asteraceae) in Michigan from late August to late September. His larval collections yielded an adult female in early October and a male the following spring. Because *D. incanana* adults had previously been collected in mid-July in Michigan and Wisconsin (Miller 1987), he suspected that this species is bivoltine in the northern US.

On 5 April 2012 in Canaan, Connecticut, I found full-depth blotch mines in two basal leaves of round-leaved ragwort (Asteraceae: *Packera obovata* (Muhl. ex Willd.) W.A. Weber & Á. Löve) (Fig. 1). I placed the leaves in a sealed plastic bag. On 8 April, one 7 mm-long larva had emerged and spun a flat, thin, oval cocoon of white silk on one side of the bag. On 10 April, it abandoned the cocoon and was found wandering in the bag (Fig. 2). I transferred it, along with the still-occupied leaf, to a small jar containing a damp, crumpled paper towel resting on a layer of soil. The second, somewhat smaller larva soon emerged and spun its cocoon in the paper. The first larva likewise showed no interest in burrowing and entered the crumpled paper within a few hours. Close examination of photographs revealed parasitoid oviposition scars in this larva's thorax.

On 3 June, a female adult moth appeared in the jar (Fig. 3), leaving its pupal exuviae protruding from the cocoon. No parasitoids were recovered from the first larva. J. W. Brown dissected the moth and reported that it was identical with *D. incanana* specimens in the National Collection, where it is now deposited. This



FIGS. 1–3. *Dichrorampha incanana*. 1) Completed mine of in a *Packera obovata* leaf; 2) Mature larva; 3) Reared adult.

Connecticut record, along with those from Michigan and Wisconsin noted above, expands the range for this species reported by Gilligan et al. (2008). They stated that it occurs from Pennsylvania to Ohio, south to North Carolina and Kentucky, noting that little is known about its distribution because it is poorly represented in collections.

This rearing would seem to confirm that *D. incanana* has at least two generations per year in northern states. It also indicates that this moth is oligophagous, suggesting that additional hosts might be sought among other genera of the tribe Senecioneae. *Phyllocnistis*

insignis Frey & Boll (Gracillariidae), the other moth Priest (2008) found mining leaves of *Arnoglossum atriplicifolium*, was also found mining *Packera obovata* leaves when I collected the *D. incanana* larvae. I have also reared *P. insignis* from *Erechtites hieraciifolia* (L.) Raf. ex DC., *Petasites japonicus* (Siebold & Zucc.) Maxim., and *Tussilago farfara* L., so it is conceivable that some of these plants are likewise suitable hosts for this little-known tortricid.

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