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PLATANTHERA CRISTATA (MICHX.) LINDL., A NEW HOST FOR THE RED-BANDED LEAF ROLLER[1]

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Abstract.—Larvae of the tortricid, *Argyrotaenia velutinana* Wlk., have been recorded feeding on the seeds of the orchid, *Platanthera cristata* (Michx.) Lindl., on Long Island, New York.

Four plants of the orchid, *Platanthera cristata* (Michx.) Lindl., were collected August 15, 1979 from pitch pine barrens on Long Island, New York, and were subsequently cultivated at Albany. Within ten days two plants showed webbing and frass resulting from the activity of a caterpillar in each inflorescence. By October 28th, a mature larva of the red-banded leaf roller, *Argyrotaenia velutinana* Wlk., was found feeding within a seed capsule. Normal larval behavior is leaf rolling, i.e., it feeds and rests from within a curled leaf (Forbes 1923).

Chapman and Lienk (1971) gave host records for a great many deciduous and coniferous trees. They stated that the moth is of low incidence in nature making it difficult to identify native primary hosts and that virtually all reports of secondary hosts have been from the immediate vicinity of apple orchards, where it is a major pest. The present collection was made in an undisturbed community. The orchid is a coastal plain species that reaches its northern limits on Long Island. The moth is found throughout the East.

The larvae were first noticed toward the end of the orchid's period of bloom, indicating that the eggs were laid in the mature inflorescence at about the peak of flowering. This suggests that the moths were attracted to the flowers. The moth proboscis is less than two millimeters long, and, as the orchid's nectariferous spur is about five millimeters long, the moth probably does not serve as a pollinator. The larvae constructed a loose silken tube running nearly the length of the inflorescence, and ate the contents of six or seven seed capsules, entering each at the middle, before pupating. One larva pupated within a seed capsule on 8 October and was refrigerated on 28 November. The pupa was reintroduced to room temperature on 16 February and a male emerged on 2 March 1980. The pupal exuvia protruded from the capsule.

Pupal exuvia, mature larval head capsule, reared adult, and specimens of

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the orchid are coded tlm 79-78 and CJS 1606, respectively, and are deposited in the New York State Museum.

Literature Cited

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