

Three new species of *Lithophane* Hübner (Lepidoptera: Noctuidae: Xyleninae)

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Abstract

Three new species of *Lithophane* Hübner are described: *Lithophane lanei* and *L. scottae* from eastern Ontario, Canada, and *L. boogeri* from the high desert of Oregon, U.S.A. Adults and genitalia are illustrated.

Key words: *Lithophane*, Noctuidae, North America, genitalia, *Juniperus occidentalis*

Introduction

Lithophane is a Holarctic genus with 51 Nearctic species. Adults emerge in the autumn and hibernate over winter. Mating and oviposition occurs in late winter or early spring, and the larvae feed on woody plants. Adults are collected most commonly at bait, but they also come to lights. Due to the large number of species, a generic review of *Lithophane* is beyond the scope of this paper; however, in order that names be available for biodiversity inventories, I describe *L. lanei*, *L. scottae*, and *L. boogeri* below.

Forbes (1954) arranged the species of *Lithophane* into three groups. The first group includes *L. lanei* and is characterized by a differentiated cucullus with an apical corona and a well-developed digitus in the male genitalia; the larvae are associated with deciduous trees and shrubs. The second group includes *L. scottae* and is characterized by the loss of the cucullus and corona and by the distinct digitus, which is modified into a strong terminal spine on the valve; the larvae feed on deciduous trees and shrubs. The third group is characterized by the loss of the cucullus and corona and a vestigial digitus. Within this third group, *L. boogeri* is included in the *L. gausapata* Grote complex, where the uncus is sparsely setose and the digitus is reduced to a slight pollexlike process near the ventral apex of the valve; the larvae feed on Cupressaceae.