

# CONE AND SEED INSECT PEST LEAFLET No. 12

British Columbia Ministry of Forests and Range, Tree Improvement Branch, Saanichton, BC

## LOGEPOLE PINE CONE BORER (*Eucosma rescissoriana*)



*Eucosma rescissoriana* adult

### TAXONOMY:

Order (Family): Lepidoptera (Tortricidae)

**HOST:** Principally lodgepole and western white pine but also grand and subalpine fir and possibly whitebark pine.

**DISTRIBUTION:** From southern Yukon Territory through British Columbia and western Alberta south through the Rockies into northern New Mexico and through the coastal ranges and Sierra Nevada into California.

**DAMAGE:** The lodgepole pine cone borer is not generally considered a serious pest in British Columbia seed orchards.



Western white pine cones with evidence of *E. rescissoriana* feeding

Larvae tunnel into second year cones and feed on cone scales and seeds. They leave frass covered exit holes on cone surfaces, and may leave severely damaged cones to continue feeding on other nearby cones. This damage may be confused with *Dioryctria* feeding. (Is this true?) [RB1]

**IMPORTANCE:** This insect is not considered to be a major pest in seed orchards in British Columbia at this time. It has occasionally been noticed in western white pine cones in Interior seed orchards.

### DESCRIPTION

**Life History:** Adults emerge in spring (mid-late April). Eggs are laid in clusters on cone scales (usually one cluster per cone). Larvae hatch in about one week and tunnel into cones, feeding on scale tissue and seeds. Mature larvae exit cones to pupate in the soil or litter, where they overwinter until the following spring.

**Egg:** The eggs are laid in small clusters on cone scales (usually one cluster per cone).



*E. rescissoriana* eggs on western white pine cone scale

**Larva:** Greyish-white [RB2] with dark head and thoracic shield, approximately 13 mm at maturity. Larvae go through 5 instars.



Mature *E. rescissoriana* larvae in dissected cone

**Pupa:** Dark brown, inside a cocoon in the duff or litter layer of the soil.

**Adult:** Medium-sized moth (wingspan 17-28 mm). Forewings have contrasting brownish-red and light yellow bands.

Need a photo of a live lodgepole pine cone borer

#### DETECTION AND MONITORING

Aside from recording observations of damage symptoms, no management of the lodgepole pine cone borer is currently practised in British Columbia. [RB3]



Fresh damage by the lodgepole pine cone borer

**Insect stage calendar to be added**

#### CONTROL

No control measures are taken for lodgepole pine cone borer activity in seed orchards in British Columbia.

#### KEY REFERENCES

Hedlin AF, Yates III HO, Tovar DC, Ebel BH, Koerver TW, Merkel EP. 1980. Cone and seed insects of North American conifers.

Environment Canada, Canadian Forest Service; USDA Forest Service; Subsecretaria Forestal y de la Fauna, Secretaria de Agricultura y Recursos Hidraulicos, Mexico.

Furniss RL and VM Carolin. 1977. Western Forest Insects. USDA Forest Service, Misc. Pub. No.1339. 654 pp.

**PHOTOGRAPHS:** Ward Strong

Maybe we will get some more this spring?