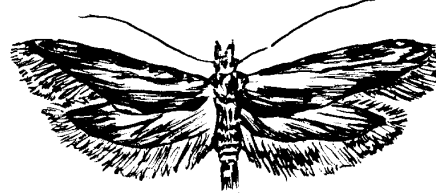


## GRASS GELECHIID *Lepidoptera: Gelechiidae Chionodes psiloptera*

### DESCRIPTION

**Adults** are dark and shiny with upturned labial palps characteristic of the family Gelechiidae. When disturbed, adults make short, darting flights and suddenly hide at the base of vegetation or under clumps of soil. Mature **larvae** are about 12 mm long, and have rusty, red-brown body segments, with a deep tan colored head capsule.

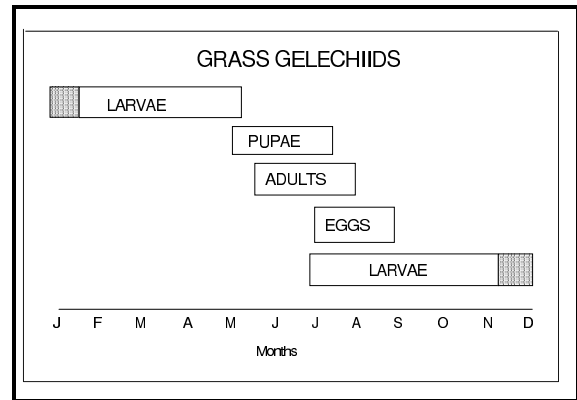


### ECONOMIC IMPORTANCE

Larvae feed on the crowns of grasses, tunneling into and often completely entering the plant crown. Frass is usually found at the feeding site and may be enmeshed in loosely spun webbing. Damage first appears as individual dead tillers progressing to destruction of the plant during August to November. *Chionodes* spp. are serious pests on merion bluegrass and creeping red fescue in eastern Washington and Oregon and western Idaho.

### DISTRIBUTION AND LIFE HISTORY

Grass feeding gelechiids are distributed east of the Cascade Mountains and are important pests in localized areas of the northwest. This pest overwinters a partly grown larva in the soil. Their webbing becomes case-like, and this structure protects them during the winter. Larvae commence feeding in the spring and pupate on the soil surface in late April or early May. Adults begin emerging about two weeks later in mid-May through June and sometimes into July. Eggs are laid on the host plant in clumps of three or four eggs. Eggs hatch in about 10 days and larvae begin feeding in the crown. These larvae form the overwintering stage. There is one generation each year.



### MANAGEMENT AND CONTROL

Gelechiids apparently have few natural enemies that consistently reduce populations. Burning after harvest reduces larval populations, but the value from burning may be because of the destruction of surface residues that increase larval exposure to harsh winter conditions. Insecticides may be used to reduce gelechiid larvae, but timing is very important because much of the feeding damage has occurred if controls are applied only when injury is very apparent. Because of the life history of these pests, late summer

applications are best for established plantings. In some areas there may be severe attacks by the grass gelechiid in the first year before a seed crop is realized. In these instances, some benefits have been realized by preplant treatments. See the Pacific Northwest Insect Control Handbook for a list of registered insecticides and proper timing.