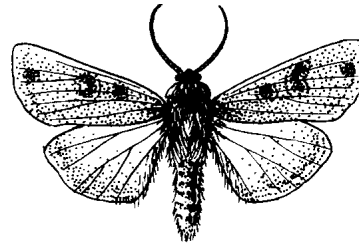


REDBACKED CUTWORM *Lepidoptera: Noctuidae Euxoa ochrogaster*

DESCRIPTION

Mature **larvae** are 35 to 40 mm long, often with a red or reddish-brown top stripe, usually extending the entire length of the body. The top stripe is divided by a dark line and bordered with darker bands. The head and prothoracic shield are yellowish-brown. **Adults** vary in color from pale clay-yellow to dark red. The wingspan is about 40 mm.



ECONOMIC IMPORTANCE

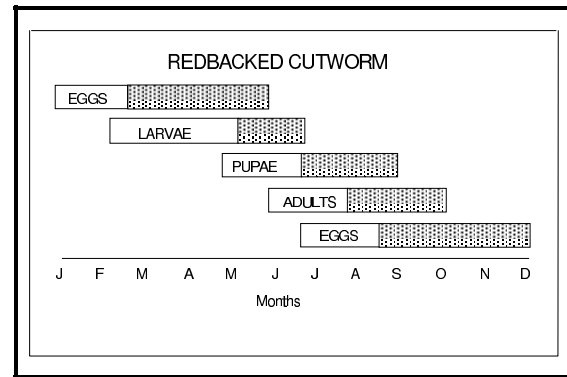
This cutworm can be very damaging even when the population is low because individual cutworms can destroy many plants. Larvae feed beneath the soil surface on roots and stems of plants and on the foliage at night. The most severe damage occurs from about April through early June to such crops as alfalfa, sugarbeets, asparagus, small grains, and mint. There are at least six *Euxoa* species in the northwest and the complex of species varies on different crops--*E. septentrionalis* is the major species on alfalfa, *E. ochrogaster* and *E. olivia* on asparagus and mint, and *E. auxiliaris* on grain. Other species include: *E. messoria* and *E. infracta*.



(original, Hall)

DISTRIBUTION AND LIFE HISTORY

These pests are distributed in the northern United States and Canada. The redbacked cutworm overwinters as a first instar within the egg. Eggs hatch in the spring as soil temperatures increase, usually in late March and April. Larvae feed beneath the soil surface and on foliage for six to eight weeks with most of the damage apparent in May and early June. When mature, the larvae pupate in an earthen cell in the soil. Adults begin emerging in late June and continue emerging until late August and early September. Females lay eggs during late August and early September. These eggs undergo embryonic development immediately, then go into diapause until the following spring.



MANAGEMENT AND CONTROL

Control of redbacked cutworm and other *Euxoa* species is very difficult because of the subterranean habits of the larvae. Larvae are easiest to control when they are small and fields should be checked

regularly to detect the presence of young larvae. The larval population can be estimated by taking soil samples around the bases of host plants or weeds in late April or early May. Natural parasites occur and may reduce the larval population by as much as 80% in some areas. If larvae are parasitized, the treatment threshold can be increased. Samples should be taken from different parts of the fields and along the margins. In newly planted mint, insecticide treatment is justified if an average of one cutworm is found in 25 representative soil samples (square foot). In established fields, treatment may be justified if five cutworms are found in 25 samples. In Canada it has been shown that one cutworm per sample causes about a 25% thinning of grains. At present, few insecticides are registered to control this pest.