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EC69-1522 Common Forage Legume Insects

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COMMON FORAGE LEGUME INSECTS

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1. ALFALFA WEEVIL: The alfalfa weevil is a major pest in the United States. The western strain of the weevil, now present in central and western Nebraska, has not been as serious as the eastern strain which is moving toward the state from the southeast. The two strains of the weevil should meet somewhere in eastern Nebraska sometime in the next few years. Adult weevils are greyish brown to black, have a medium-sized "beak", and are 1/8 to 1/4 inch long. Adults overwinter in the field, emerging in the spring when they lay eggs in the stems of young alfalfa. Larvae are green with black heads and have a prominent white stripe down the back. They concentrate their feeding near the growing tips which become ragged and stripped. When mature, larvae pupate either on the plant or on the soil surface in a loosely-woven silken cocoon.

2. CLOVER LEAF WEEVIL: Adult weevils are dark brown, flecked with black on the back and pale brown beneath, and have a robust "snout." Larvae are green, resembling those of the alfalfa weevil, except that clover leaf weevil larvae have brown heads. This insect usually does not cause serious damage.

3. SWEETCLOVER WEEVIL: Adult beetles overwinter, emerge from hibernation in the spring and begin to feed on sweetclover plants, often causing serious defoliation. Larvae are root feeders but do not usually cause extensive damage. Beetles are dark grey and about 3/16 inch long; they feed at night, eating crescent-shaped notches into leaves, and hide in the soil by day. This insect is one of the primary limiting factors to sweetclover production in Nebraska because adult weevils often destroy seedling stands.

4. VARIEGATED CUTWORM: This is one of the most common cutworms that damages legumes. Variegated cutworms are easy to recognize, since they have a row of yellow spots down the middle of the back. Mature variegated cutworms are about 2 inches long and grey in color. Most cutworms feed at night and hide in debris in the soil during the daytime. Look for them around the crown of the plants. Damage by this cutworm occurs primarily in the spring.

5. GRASSHOPPERS: Nebraska has had a long history of grasshopper damage since the days of the early pioneers. Most grasshoppers breed in undisturbed land, such as rangeland, pastures and fence rows where they lay their eggs in the soil in late summer. These hatch the following spring and the young hoppers feed on foliage of grasses and other plants. Gradually, some species move into cultivated land where they damage crops. Grasshopper damage to field crops, therefore, is usually confined to the field margins.

6. GREEN CLOVERWORM: A common defoliator found in alfalfa and clover fields across the state. Usually these are not present in large enough numbers to be a problem. They are light green, about 1 inch long when mature and walk with a looping motion. Adult moths are dark brown and have an irregular, darting flight when disturbed.

7. POTATO LEAFHOPPER: These small, sucking insects are very common inhabitants of legume fields, where they imbibe plant juices from the leaves and stems. Damage is usually not serious to alfalfa, although occasionally rather severe leaf yellowing may result. Damage is accentuated on light soils and in dry seasons.

8. MEADOW SPITTLEBUG: As yet, this insect is not a Nebraska resident. It does occur as far west as eastern Iowa and northeastern Missouri. Damage occurs in the spring when young spittlebugs suck juices from the stems. As they feed, the nymphs produce masses of spittle—a white, frothy substance. Heavy infestations will retard normal plant growth. Adult spittlebugs resemble leafhoppers, but are somewhat stubbier and heavier bodied. Other similar but less damaging species are present in Nebraska.

9. SPOTTED ALFALFA APHID: A rather small (1/8 inch long) sucking insect, yellow, with six rows of black spots on its back. It has been found on alfalfa in most Nebraska counties. This aphid is a common pest in the southwestern U.S., but is not of great importance in the east. It occasionally causes economic loss to alfalfa growers in Nebraska by reducing seed yield, causing drop of leaves and by killing newly established stands. Feeding injury is accentuated by the injection of a toxic saliva into the leaves which kills surrounding leaf tissue.

10. PEA APHID: This insect also sucks juices from legume leaves and stems. Feeding activity is not as serious as that of the spotted alfalfa aphid because the pea aphid does not inject a toxic saliva into the plants. Consequently, the plants can withstand large populations of pea aphids with little or no apparent injury. It is a large green aphid, and has rather long legs. Heavy populations tend to develop in the spring when prolonged periods of cool weather prevail. In such circumstances, aphids can still reproduce quite rapidly, while their natural enemies (lady beetles, syrphid flies, parasitic wasps, etc.) cannot.

CONTROL INFORMATION: These color illustrations are designed to help identify some of the more important forage legume insects. University of Nebraska Entomologists prepare control leaflets that are revised each year. For the latest control leaflets, visit your local county agent, or write to the Department of Entomology, University of Nebraska, Lincoln, Nebraska 68503.

COMMON FORAGE LEGUME INSECTS

For safe and effective use of insecticides, always identify the problem correctly.



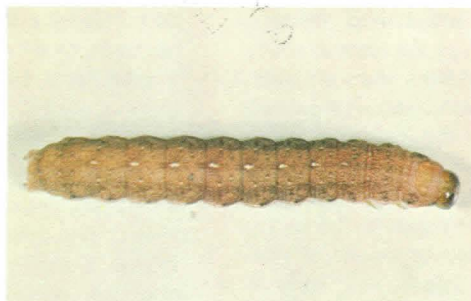
1. Alfalfa weevil adult, and larvae and damage



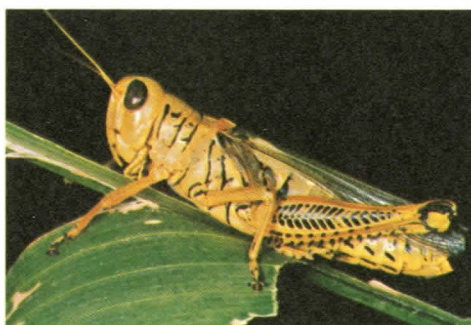
2. Clover leaf weevil larva



3. Sweet clover weevil and typical damage



4. Variegated cutworm



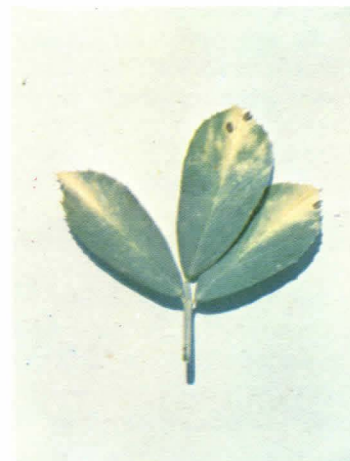
5. Grasshopper



6. Green clover worm



7. Potato leafhopper (greatly enlarged) and leafhopper damage to alfalfa



8. Meadow spittlebug and nymphs



9. Spotted alfalfa aphid



10. Pea aphid