

Reference Guide for Common Insect Associated with Defoliation.

Insect	Appearance	Damage	Action
<p>Colorado Potato Beetle (CPB)</p>	<p>Adult: round, hard-shelled, yellow with black stripes, half inch long. Eggs: oval, yellow to bright orange, clustered. Larva: soft-shell, slug-like, red-orange-tan with black dots in a row on each side.</p>	<p>The adults eat foliage making increasingly larger holes until foliage is gone leaving behind the stem tissue. When completely defoliated, plant appears as a collection of naked branches.</p>	<p>It easily develops resistance to insecticides ('super bug'). Non-resistant populations are susceptible to most insecticides that may be applied on seed-pieces, in furrow or to foliage. Mechanical means of control such as flaming are available. Several predatory insects feed on eggs and larvae. In the 1990s, genetically altered potato were resistant to it but are no longer available in USA.</p>
<p>European Corn Borer (ECB)</p>	<p>Adult: triangular at rest, (female) creamy to light yellow to tan wings the outside of which are marked by two dark serrated lines running across, and stout bodies about ¾ inch long. Egg: smaller than the head of a pin, white or creamy changing to yellow and darken, clustered and covered with waxy film. Larva: one-inch long, capsule-shaped with segmented legs, light gray to faint pink with a brown to black head, small brown to black spots along the sides on each segment, and a faint stripe along its back. Pupa: smooth, cylindrical, reddish-brown, half inch long, found in a chamber burrowed into the stem.</p>	<p>The larvae burrow into the stem eating out the pith and, in the process, also eat the vascular tissue thereby disrupting nutrient flow and resulting in reduced vigor. Depending on where the larva burrows, leaves appear rolled. Tunnels have been associated with infection by bacteria (especially the pathogen causing black leg) and fungi.</p>	<p>Broad-spectrum foliar insecticides are effective on adults. Treatment should begin about a week after peak moth flight in corn and a second application made a week to 10 days later. Due to tunneling, effectiveness on larvae is poor. After adults are first detected, examine stems for small entry holes and start applications if 15% of the plants have stems with entry holes. Biological control is spotty. Ladybird beetles will eat eggs.</p>
<p>False Chinch Bug</p>	<p>Adult: cylindrical-shaped, ½ inch long, brownish-gray with silvery-gray wings. Nymph: brownish-gray head and thorax with a light-tan longitudinal stripe and light tan abdomen with some tiny reddish spots, smaller than adults and wingless.</p>	<p>Plants look wind burned. Young top leaves appear wilting and slightly curled. These leaves then turn brown along the edges and curl tightly, and finally dry out completely. Adults congregate on young leaves at the top of the plant and suck the sap. A 100 may be on a single leaflet which appears tightly curled. The adults crawl or fly to other plants after killing the plant top.</p>	<p>Little is known insecticide efficacy. Endosulfan is the only ingredient specifically labeled. Dimethoate also works well. The time to apply is during the week after nearby grains or alfalfa are harvested since the insect prefers these crops and go looking for a temporary home. Damage to affected young leaves will remain after their departure.</p>