Field Corn

Corn Leaf Aphid

Frank B. Peairs

Identification (and life cycle/seasonal history)

Corn leaf aphids are small, 1.5 to 2.5 millimeters (1/16 to 3/32 inch), bluish-green insects with a purplish patch around the base of the cornicles. They are usually wingless with short antennae and prominent cornicles. The aphids feed in groups, first appearing in the whorl. Later, as they increase in abundance, they may completely cover tassels and upper leaves. Adult females give birth to live young, they do not lay eggs.

Plant Response and Damage

These aphids suck plant juices but damage is usually minor, however they are a vector of barley yellow dwarf and known to transmit maize dwarf mosaic virus to corn. Heavily infested leaves may wilt and have yellow or dead areas. Also, honeydew secreted by the aphid may accumulate on the plant facilitating mold growth and giving the leaves a purplish-black appearance. Infestations on the tassel may interfere with pollen shed, especially in drought-stressed corn.

Management Approaches

Biological Control

Many predators and parasites attack corn leaf aphids, such as lady bird beetles and several small parasitic wasps. Many predators attack the aphids and consume them. Parasitoid wasps may sting the aphids and lay eggs inside its body. These eggs later hatch and the parasitic larvae consume the aphid from the inside. These beneficial insects often keep corn leaf aphid populations below economic levels. Before applying insecticides for corn leaf aphid control, the relative abundance of beneficial insects should be considered.

Chemical Control

Corn leaf aphids rarely build up enough on the tassel to interfere with pollination and thus justify a control measure. Consider treatment if at least 50% of the plants are infested with at least several hundred aphids prior to tassel emergence, and the crop is drought stressed. Treatments more than 48 hours after tassel emergence will be of little benefit. Use Asana XL\textsuperscript{R}, Baythroid XL\textsuperscript{R}, chlorpyrifos\textsuperscript{R}
(several products, not for use on popcorn), Cobalt\textsuperscript{R} (not for use on popcorn), Hero\textsuperscript{R}, lambda cyhalothrin\textsuperscript{R} (several products), Lannate\textsuperscript{R}, methyl parathion 4\textsuperscript{E}R, Mustang Max ECR, Penncap-MR, or Proaxis\textsuperscript{R} according to label directions.

\textbf{R}estricted use pesticide.

\textit{The information herein is supplied with the understanding that no discrimination is intended and that listing of commercial products, necessary to this guide, implies no endorsement by the authors or the Extension Services of Nebraska, Colorado, Wyoming or Montana. Criticism of products or equipment not listed is neither implied nor intended. Due to constantly changing labels, laws and regulations, the Extension Services can assume no liability for the suggested use of chemicals contained herein. Pesticides must be applied legally complying with all label directions and precautions on the pesticide container and any supplemental labeling and rules of state and federal pesticide regulatory agencies. State rules and regulations and special pesticide use allowances may vary from state to state: contact your State Department of Agriculture for the rules, regulations and allowances applicable in your state and locality.}

Categories: Field corn, Insects, Corn leaf aphid

Date: 5/16/2008