

Field Connections

Corn at Tasseling Stage

Corn Insects at Tasseling

Corn Leaf Aphid (CLA)

Identification Corn leaf aphids are small (1/8 inch or less) pear shaped insects that vary from blue-green to gray in color (Figure 1). A pair of cornicles (tailpipes) is found on the rear of the body and wings may be present on some adults.

Scouting Scout for CLA three weeks prior to tasseling and one week after tasseling begins. Estimate the number



Figure 1

of aphids from four consecutive plants in five locations per field. Look for aphids by removing the whorl of these plants and unrolling the leaves.

Treatment Treatment may be warranted if 15 or more aphids per whorl are found three weeks prior to tasseling or over 30 aphids per whorl are found a week later. Insecticide application can be supported if less than 50% of pollination has occurred, honeydew- sap-like waste excreted from their cornicles- covers tassels, and plants are otherwise stressed. When treating tasseled corn, application should be within 48 hours of tassel emergence.

Corn Rootworm Beetle (CRW)

Identification Northern CRW beetles are yellow to tan in color when they emerge from the soil, but turn light green soon after they emerge (Figure 2). Alternatively, western CRW beetles have black and yellow stripes, or nearly an entirely black pattern running the length of the wing covers.

Scouting Because CRW prefer pollen as a food source, fields that were planted late or plants pollinating later could attract more beetles. Select five plants from five different areas of the field. Observations of silk clipping and the timing of pollination is what matters when considering treating for corn rootworm beetles.

Treatment Foliar insecticide application may be warranted in fields with pollination less than 50% complete and CRW have clipped silks to within 1/2 inch of the tip of the ear. Treatment can help to protect silks that are still viable to receive pollen.



Figure 2 Adult Western (left) and Northern (right) corn rootworms. Photos courtesy of Jim Kalisch, UNL, Dept. of Entomology.

Fungicide Application in Corn

Depending on disease pressure and hybrid resistance, applying a fungicide could result in a positive yield response. Here's some tips to help determine if applications are needed on your fields:

Prioritize Fields Hybrids susceptible or moderately susceptible should be monitored for disease prior to tasseling. Because many foliar diseases survive on corn residue and begin producing spores when conditions are favorable, scouting fields in a continuous corn rotation is important. It is also practical to scout fields with a history of foliar disease.

Scouting Fungicides can work better at preventing rather than curing disease, as lesions may take up to two weeks to become visible after infection so scouting when the weather conditions favor disease development is important. A treatment guideline is to spray when disease symptoms have developed on the third leaf below the ear leaf and above on 50% of the plants at tasseling.

Fungicides Active ingredients from the strobilurin and triazole chemical groups can be helpful when treating fungal diseases. Strobilurins help offer activity on a broad range of foliar corn diseases. These products are intended to be used as a preventative treatment with approximately 21 days of residual activity. For fields with early foliar-disease infection, triazoles may be the better treatment. Although this class of chemistry has a shorter residual compared to strobilurins, some triazoles can help slow the spread of disease by inhibiting the production of spores.

Timing If applying a fungicide to corn, wait until VT stage (when all branches of the tassel are exposed) or later. Some applications are made with respect to plant health benefits. These applications are best when targeting the VT through R2 stage. If an application is made prior to VT, definitely do NOT use any adjuvant.

Depending on the active ingredient, fungicide movement within plants can vary. It is still important to set up sprayers so plants get adequate spray coverage. Resistance to fungicides may be managed by rotating active ingredients each year, as well as using full-labeled fungicide rates.

Always read and follow pesticide label directions.

