

# Agronomy Spotlight



## Corn Leaf Aphids

Corn leaf aphids and bird cherry-oat aphids can both attack corn. Both species are pear shaped. The corn leaf aphid is bluish green with black legs and cornicles—the two structures that protrude at the tip of an aphid's abdomen (Figure 1). The bird cherry-oat aphid is reddish green with matching legs and cornicles (Figure 2). Both species may be found in the same field. Dry weather seems to favor increases in corn leaf aphid populations and consequently in plant injury. Dry conditions result in additional stress to corn and prevent the development of the fungal pathogens that infect and kill the aphids.

Both species are often found in colonies. Prior to tasseling, aphids are usually found in the whorl, on the developing tassel, and/or on the upper leaves. During grain fill, they can be found on the husks, ear leaf, or directly on the stalk.



Figure 1. Corn leaf aphid.



Figure 2. Bird cherry-oat aphid. Photo courtesy of and used with the permission of Frank Peairs, Colorado State University, Bugwood.org.

## Corn Leaf Aphids

### Scouting and Evaluating Economic Injury Thresholds

Aphid population densities are often highest along field margins and lower within the interior of the field. Because of the varying population densities, it is important to scout at least 50 plants across each field. The number of infested plants and the severity of each infestation should be recorded.<sup>1</sup>

Symptoms of aphid feeding include wilting, curling, and yellowing, particularly if the plant is under additional stress. Aphid infestations can also cause honeydew (the sugary liquid waste excreted by aphids) to accumulate and encourage the growth of sooty mold, which can interfere with photosynthesis and pollination.<sup>1</sup>

If aphid infestations are found, determine if the infestations are occurring before or after pollination. Aphid feeding does the most damage within the whorl prior to tassel emergence. Treatment may be needed if more than half of the corn tassels are covered in aphids before pollination is half complete. There are no research-based treatment thresholds for aphids in corn after pollination, and economic injury is less likely after pollination has completed. However, treatment may be economical if the corn was planted later and its development is consequently behind surrounding fields, fields are experiencing other stress factors, 80% or more of the plants are infested, and/or if aphid populations increase over time. Severe damage to leaves or tassels, the excessive presence of black sooty mold, or a lack of aphids' natural predators (i.e., ladybugs, lacewings) may also indicate a need for treatment even after pollination. If an insecticide application is needed, consult with your local chemical provider or extension office for current recommendations.1

#### Sources

<sup>1</sup>Peterson, J. and Wright, B. 2023. Watch for aphids in corn. University of Nebraska–Lincoln, CROPWATCH. https://cropwatch.unl.edu/2023/watch-aphids-corn

### Legal Statements

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS.

Performance may vary, from location to location and from year to year, as local growing, soil and environmental conditions may vary. Growers should evaluate data from multiple locations and years whenever possible and should consider the impacts of these conditions on their growing environment.

The recommendations in this material are based upon trial observations and feedback received from a limited number of growers and growing environments. These recommendations should be considered as one reference point and should not be substituted for the professional opinion of agronomists, entomologists or other relevant experts evaluating specific conditions.

Bayer and Bayer Cross are registered trademarks of Bayer Group. All other trademarks are the property of their respective owners. ©2024 Bayer Group. All rights reserved. 1215\_437801.

