Fomesafen Carryover Injury to Corn

Robert G. Hartzler
Iowa State University, hartzler@iastate.edu

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Fomesafen Carryover Injury to Corn

Abstract
We have received several calls regarding suspected fomesafen carryover injury to corn. Fomesafen is a group 14 herbicide (PPO inhibitor), and the active ingredient in Reflex, Flexstar, Prefix, Marvel and other products. Carryover is typically associated with applications made after late June and/or when the season turns dry following application. Labels of most products containing fomesafen specify a 10-month rotation interval for planting corn. The primary symptom of fomesafen injury is striped leaves due to chlorotic or necrotic veins on the leaves. Other factors can cause striping on leaves, but fomesafen is unique in that the veins are affected rather than interveinal tissue. Some of the leaves may fold over midway due to loss of integrity of the leaf midvein.

Keywords
Agronomy

Disciplines
Agricultural Science | Agriculture | Agronomy and Crop Sciences

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Fomesafen Carryover Injury to Corn

June 3, 2014

By Bob Hartzler, Department of Agronomy

We have received several calls regarding suspected fomesafen carryover injury to corn. Fomesafen is a group 14 herbicide (PPO inhibitor), and the active ingredient in Reflex, Flexstar, Prefix, Marvel and other products.

Carryover is typically associated with applications made after late June and/or when the season turns dry following application. Labels of most products containing fomesafen specify a 10-month rotation interval for planting corn.

The primary symptom of fomesafen injury is striped leaves due to chlorotic or necrotic veins on the leaves. Other factors can cause striping on leaves, but fomesafen is unique in that the veins are affected rather than interveinal tissue. Some of the leaves may fold over midway due to loss of integrity of the leaf midvein.
Frequently only two or three leaves are affected and injured plants recover quickly. However, at times there can be stand loss and the only way to determine the potential impact is to determine the percentage of plants affected and closely monitor the rate of recovery.

The spread of glyphosate resistant waterhemp has led to an increase in 'rescue' applications with group 14 herbicides such as fomesafen, lactofen (Cobra, etc.) and acifluorfen (UltraBlazer, etc.). Of these products, only fomesafen poses a threat to rotational corn. A switch to alternative herbicides later in the season can avoid this risk. However, keep in mind that late applications of group 14 herbicides usually are ineffective against the large waterhemp present at these times. Ideally, develop integrated strategies that minimize the need for mid-season rescue operations.

Bob Hartzler is a professor of agronomy and weed science extension specialist with responsibilities in weed management and herbicide use. He can be reached at hartzler@iastate.edu or 515-294-1923.

Category: Weeds

Crop: Corn

Tags: Weeds, fomesafen, fomesafen carryover injury, symptom of fomesafen, herbicide

Author:
Bob Hartzler Professor

Bob Hartzler is a Professor of Agronomy and an Extension Weed Specialist. Hartzler conducts research on weed biology and how it impacts the efficacy of weed management programs in corn and soybean. He also teaches undergraduate classes in weed science and weed iden...