



Michigan Wheat Field Day Field Notes

# Wheat and red clover tolerance to fall and spring herbicide applications

Christy Sprague, Professor, Weed Extension Specialist

## **Problem Statement:**

There are many potential benefits to frost-seeding red clover in winter wheat. However, several spring-applied herbicides currently used can significantly reduce or completely wipe out a stand of red clover. Fall herbicide applications may provide an opportunity for red clover survival.

### **Research Questions:**

- What impacts do fall and spring herbicide applications have on:
  - Frost-seeded clover survival?
  - Weed control?
  - Wheat yield?

## Field Procedures:

- 'Sunburst' soft red wheat planted: Oct. 10, 2014
- Fall herbicide applications: Oct. 23, 2014
- Medium red clover seeded: March 18, 2015
- Spring herbicide applications: April 28, 2015 (Feeke's 5)

## **Observations:**

- Very little wheat injury was observed from fall herbicide applications, with one exception.
  - Fall-applications of 2,4-D caused extensive injury to winter wheat. Fall applications of 2,4-D are not labeled.
- Clover was able to tolerate fall applications of all herbicides.
  - However, there was some stunting and slightly lower clover populations compared with the untreated control from some of the treatments.
- All spring herbicide applications, with the exception of MCPA, caused significant injury and stand reduction of clover.

## Measurements left to be taken:

- Wheat yields
- Clover stand counts and biomass after harvest
- Weed control after harvest



Department of Plant, Soil, and Microbial Sciences East Lansing, MI 48824-1325 www.msuweeds.com June 17, 2015