# **Controlling White Campion in No-Tillage Systems**

Christy Sprague, Karen Renner, and Gary Powell Department of Crop and Soil Sciences, Michigan State University

### **DESCRIPTION OF WHITE CAMPION**

White campion (Silene alba) or more commonly referred to as white cockle is a biennial or shortperennial weed. White campion commonly found along roadsides, and is a weed of small grains and legume forage crops. However, with the general increase in no-tillage production systems white campion has more recently become a problem in no-tillage soybean and corn production. White campion grows from roots that overwinter, but only reproduces by seed. Seedlings can emerge in mid- to late spring and again in late summer. Since white campion is usually a biennial it produces only leaves its first year, then overwinters and produces flowers and seed the following year.



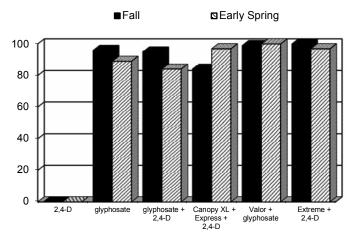
# **KEY IDENTIFYING CHARACTERISTICS**

- Cotyledons are narrow to egg-shaped
- Young plants are hairy and form a rosette
- Leaves are soft, hairy and opposite
- Stems are hairy and swollen where the leaves are attached
- Flowers are generally white, but can also be light pink and appear from June to October

#### **CONTROL OF WHITE CAMPION**

Since white campion is primarily a problem in notillage productions fields, frequent tillage will stop the establishment of white campion. However, this strategy doesn't work in no-tillage production systems. To control white campion apply glyphosate at 1.13 lb a.e./A + ammonium sulfate (AMS) at 17 lb/100 gal in the late fall (late October November) or early spring (Figure 1). These applications need to be made before white campion is much greater than 4 inches tall in the spring or control may be reduced. Late fall applications of Canopy XL (3.5 oz/A) + Express (1/6 oz/A) + 2,4-D ester (1 pt/A) + crop oilconcentrate (1.0% v/v) also provided good to excellent control of white campion. 2,4-D ester alone will <u>NOT</u> control white campion.

**Figure 1.** White campion control in early June with fall and early spring applications of various herbicide programs.



## **ACKNOWLEDGMENTS**

Research supported by the Michigan Soybean Promotion Committee.