Controlling White Campion in No-Tillage Systems

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DESCRIPTION OF WHITE CAMPION

White campion (Silene alba) or more commonly referred to as white cockle is a biennial or shortlived perennial weed. White campion is 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.

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 oil concentrate (1.0% v/v) also provided good to excellent control of white campion. 2,4-D ester alone will NOT control white campion.



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

■Fall Early Spring 100 80 60 40 20 0 2,4-D glyphosate Canopy XL + glyphosate + Valor + Extreme + . 2.4-D Expre glyphosate 2.4-D 2.4-D

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