

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 short-lived 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.



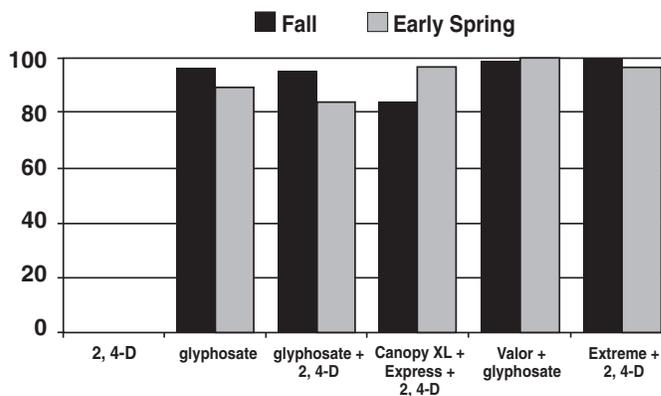
Key Identifying Characteristics

- 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 no-tillage production 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 0.75 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.

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

