

BIOLOGY AND MANGEMENT OF CUT-LEAVED TEASEL (*Dipsacus laciniatus* L.)
IN CENTRAL MISSOURI

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ABSTRACT

Cut-leaved teasel is a biennial invasive weed that grows along roadsides and low disturbed areas. This research was to determine growth characteristics, herbicide efficacy, and seed production of teasel. Growth characteristics were evaluated at two locations by measuring plant dry weight and leaf area. Herbicide efficacy experiments were conducted with four modes of action: amino acid biosynthesis inhibitors, growth regulators, acetolactate synthase (ALS) inhibitors, and cell membrane disrupters. Total seedheads, seeds per primary seedhead and plant were estimated under two levels of intraspecific competition.

Plant rosettes stored resources in the taproot and produced larger and fewer leaves compared with reproductive stage plants. Most of the herbicides were highly effective for teasel control (>90%), but ALS inhibitors such as sulfosulfuron and sulfometuron-methyl were ineffective (less 80%). Seed production reached 33,500 in plants growing alone and was affected by location, year and growth habit. Primary seedheads produced more than 1000 seeds.