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Importance of timely scouting for weeds

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Importance of timely scouting for weeds

Abstract

Timely application of postemergence products is critical to protect corn yields, especially in fields relying solely on postemergence herbicides. Weeds can begin to affect yields as early as two weeks after crop emergence. The specific time at which weeds begin to reduce yields varies widely depending upon many factors, but the longer application is delayed, the greater the risk of a yield penalty.

Keywords

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Disciplines

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INTEGRATED CROP MANAGEMENT

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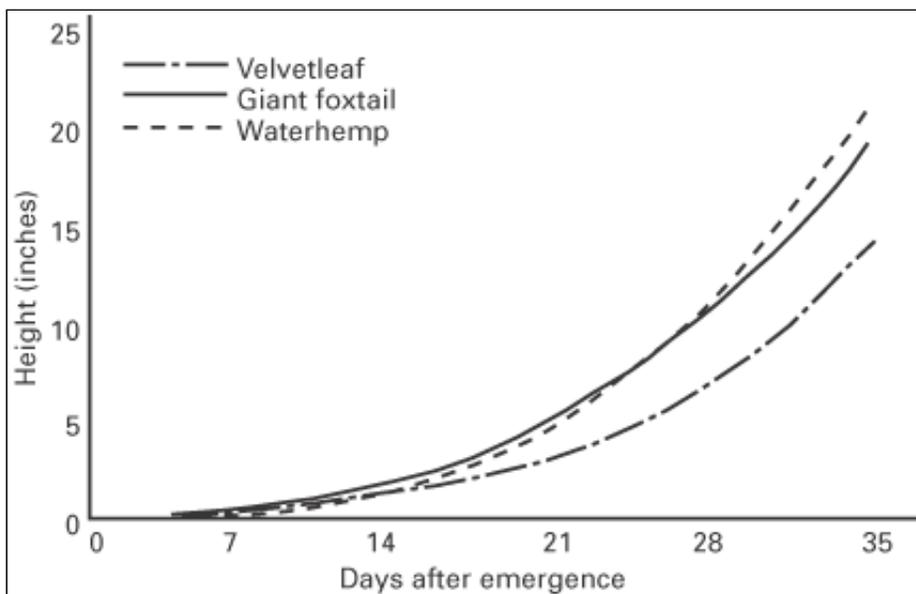


Figure 1. Growth rates of three annual weeds in corn

The initial growth of weeds is relatively slow, but after a sluggish start, their growth rate increases rapidly (Figure 1). Weeds as small as 2 inches can affect corn yields if present at high densities (>10 sq. ft.). The crop yield lost per day increases as control tactics are delayed due to the increasing growth rate and greater impact of large weeds (Table 1). Weeds 2 to 4 inches tall may reduce yields by 0.5 percent for each day application is delayed, whereas 6-inch weeds can reduce yields by 1 percent or more per day.



Fields should be scouted within the first two weeks after crop emergence to determine the need and appropriate timing of postemergence weed control. While many of today's herbicides are able to kill large weeds, application delays can result in reduced yield and profitability due to early-season competition.

Table 1. Giant foxtail growth rates and impact on corn yields as affected by plant height

Weed Height (Inches)	Growth Rate (Inches per Day)	Yield Loss¹ (% per Day)
2-4	0.4	0.5
4-6	0.5	0.8
6-8	0.7	1.5

¹Adapted from Gower et al. 2003. *Weed Technology*.

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