Rotary Hoe Can be an Effective Weed Control Tool

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During the past decade, the rotary hoe has enjoyed a renewed popularity among all types of farm operations with all types of weed control programs. A rotary hoe can complement current cultural weed control practices and has the potential to reduce chemical inputs.

The rotary hoe serves two basic functions: 1) removing small weeds, and 2) loosening crusted or compacted soil to aid in crop emergence. Its use is generally limited to large-seeded crops such as corn and soybeans. These crops are planted

relatively deep and have root systems that develop fast enough to anchor the young seedlings. Experienced rotary hoe users tell us that "timing is everything" when it comes to effectively utilizing this implement to control weeds. If you can see the weeds—you're too late. Hoeing should begin when weed seeds have germinated but are still "in the white." Large-seeded, broadleaf weeds need to be controlled before they have a chance to develop a taproot.

Depending upon the moisture and weather conditions, rotary hoeing should begin 5-7 days after planting or just before crop emergence. If cool weather follows planting, this will probably be too early. A better gauge for determining the best time to rotary how is to monitor crop development. Current recommendations are to begin hoeing when the corn shoot is about one-half inch below the soil surface (assuming a 1.5-inch planting depth). For those relying heavily on the rotary hoe to control weeds (e.g. in an organic system), another pass 5-10 days later is also recommended.

Don't be bashful when it comes to ground speed as you hoe. Best results are obtained in the 7-10 mph range. It is also important that soils be relatively dry so when weeds are "flipped out" they do not reestablish. Hoe in hot, sunny, windy weather during the warmest part of the day. As you hoe, start and stop abruptly so that weeds are effectively controlled at field ends. Also, do not make sharp turns unless the hoe is raised completely out of the ground. This will save both on the implement and reduce crop seedling loss. Generally, figure on about 10% crop seedling loss with rotary hoeing, making it important to adjust seeding rates accordingly.

If you're planning to purchase a rotary hoe, size the hoe width in multiples of your planter size. Driving in the same wheel tracks will minimize compaction.

In summary, a rotary hoe can be a valuable addition to any weed control program. Their effectiveness, however, will be limited to operator skill, timeliness, and weather conditions.



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