Dandelion - Weed Of The Year

Dandelion is a simple perennial weed that is most associated with undisturbed sites such a lawns and continuous no-till fields. The plant is commonly recognized for its bright yellow flowers and pappus attached to seeds that aid in wind-born movement. Above- ground foliage is arranged in a rosette and the large taproot below the soil surface allows the plant to overwinter and continue growth the following year.

Methods of Control

Mechanical Control:

Dandelion is a problem in reduced or no-till fields. Regular aggressive disturbance of the soil root zone by tillage may decrease establishment of dandelion. No-tillage fields that are infested with a dense population of dandelion may benefit from periodic deep cultivation.

Chemical Control:

Herbicide applications of either glyphosate or 2,4-D ester are more effective in the fall than in the spring. Glyphosate applied at 0.75 ae lb/A + AMS at 8.5 to 17 lb/100 gallons water in the fall following crop removal provides approximately 80% control (Table 1). Spring applications are less effective. 2,4-D ester applied at 1 lb ae/A is less effective than glyphosate regardless of application timing.

Tribenuron plus glyphosate and/or 2,4-D ester may provide more consistent control of established dandelion. Because of plant regrowth and new seedling emergence, sequential applications of glyphosate applied POST to Roundup Ready corn, soybean, canola, or sugarbeet will be needed to reduce the population of dandelion.

Table 1. Dandelion control rated at planting in spring.

	Glyphosate	2,4-D ester
Timing	0.75 lb ae/A	1 lb ae/A
	---------- % control ----------	
EFall	78	60
LFall	82	58
ESpring	65	35
LSpring	58	30

Data averaged over years, 2000-2003.

Residual Herbicide Combinations:

Residual herbicides used with glyphosate or 2,4-D can reduce emergence of seedling dandelion and may improve control of established dandelion. Unfortunately, some of these herbicides cannot be used in North Dakota because of their long residual interfering with crop rotation. FirstRate will suppress seedling dandelion and give short-term residual control. Valor can provide seedling dandelion control, however, it will antagonize the control of glyphosate or 2,4-D on established dandelion.

POST Dandelion Control:

Table 2 gives some POST herbicides providing some control of dandelion. Herbicides listed in Table 2 must be applied according to label and crop rotation restrictions must be followed. HPPD inhibitor herbicides like Callisto, Impact, and Laudis will initially provide excellent control but regrowth will occur later.

Table 2. POST options for dandelion control.

Glyphosate + NIS + AMS (Fall-applied)	0.75 lb ae/A + 0.25% + 8.5 lb/100 gal	F-G
Glyphosate + NIS + AMS (Spring-applied)	0.75 lb ae/A + 0.25% + 8.5 lb/100 gal	P-F
Glyphosate + NIS + AMS (Spring-applied)	1.5 to 2.25 lb ae/A + 0.25% + 8.5 lb/100 gal	G
Glyphosate + 2,4-D ester + AMS (Fall-applied)	0.75 lb ae/A + 1 pt/A + 8.5 lb/100 gal	G
Glyphosate + 2,4-D ester + AMS (Spring-applied)	1.5 lb ae/A + 1 pt/A + 8.5 lb/100 gal	G
Glyphosate + 2,4-D ester + Valor + AMS	0.75 lb ae/A + 1 pt/A + 2 to 3 oz/A	P-F (Established plants)
Glyphosate + 2,4-D ester + Valor + AMS	0.75 lb ae/A + 1 pt/A + 2 to 3 oz/A	G (Seedling plant)
2,4-D	1 qt/A	P-F
2,4-D + dicamba	1 qt/A + 0.5 pt/A	G
2,4-D + tribenuron	1 qt/A + 0.3 oz/A	F
Curtail	2 to 4 pt/A	G-E
WideMatch	1 to 1.33 pt/A	G-E
Distinct + NIS + UAN	6 oz/A + 0.25% + 2.5%	G
Status + PO + UAN	5 oz/A + 1 qt/A + 2.5%	G
Ignite 280 + AMS	29 to 36 fl oz/A + 3 lb/A	G-E
Liberty + AMS	24 fl oz/A + 3 lb/A	G
Liberty + atrazine + AMS	24 fl oz/A + 1 pt/A + AMS	G
Callisto + atrazine + Oil + UAN	3 fl oz/A + 0.5 pt + 1% + 2.5%	G
Impact + atrazine + Oil + UAN	0.5 to 0.75 fl oz/A + 0.5 pt + 1% + 2.5%	G
Laudis + atrazine + Oil + UAN	3 fl oz/A + 0.5 pt + 1% + 2.5%	G

Dicamba, Callisto, Impact, Laudis, Curtail, Distinct, and WideMatch may leave a residue in the following cropping season and has crop rotation restrictions.