

Weed Survey Says to Watch for Yellow Foxtail!

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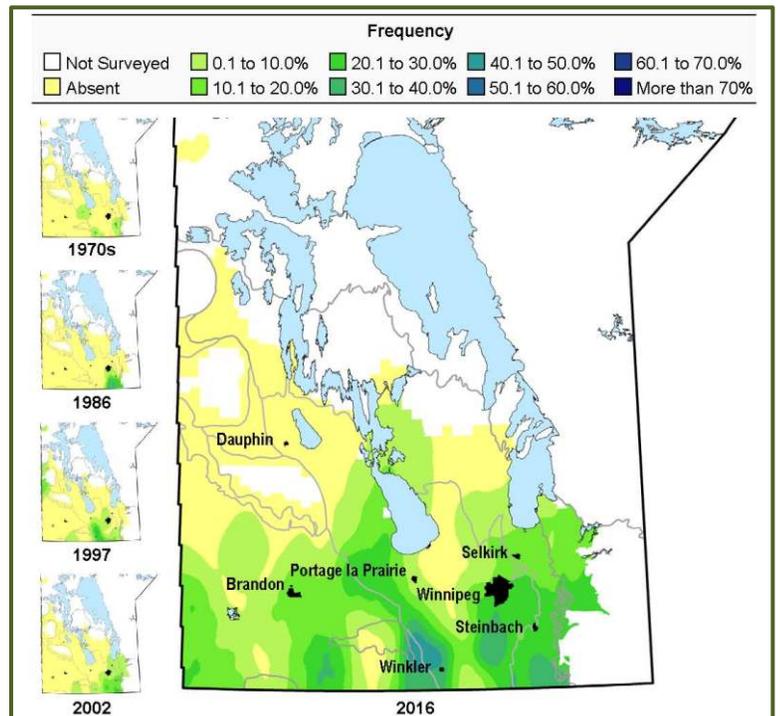
The 2016 Manitoba Weed Survey, funded in part by the Manitoba Corn Growers Association, yielded some surprising results. Yellow foxtail, for one, jumped twenty-four ranks since the 2002 weed survey to take 6th place – right behind volunteer canola! It also rounded out the top ten most abundant weed species in corn last growing season (see Table 1). This is a significant finding because yellow foxtail has never ranked highly in previous Manitoba weed surveys (1978 to 2002).

Rank	Weed Species	
	All Crops* (659 fields)	Corn (41 fields)
1	Green foxtail	Barnyard grass
2	Wild buckwheat	Wild buckwheat
3	Barnyard grass	Canola
4	Wild oat	Lamb's-quarters
5	Canola	Round-leaved mallow
6	Yellow foxtail	Green foxtail
7	Dandelion	Redroot pigweed
8	Redroot pigweed	Purslane
9	Wheat	Broad-leaved plantain
10	Round-leaved mallow	Yellow foxtail

*All crops: barley, canola, corn, flax, oat, soybean, spring wheat and sunflower.

How do we measure weed rank? Weed rank is based on the relative abundance of a weed species, a measure that combines the frequency of finding that weed (as a percent of fields), its field uniformity and weed density (as plants/m²). Survey results show that yellow foxtail has spread across southern Manitoba over the last fourteen years, although it was only found in a small number of fields (Figure 1). The Red River Valley is the exception, where this grassy weed was found in 25 to 60 percent of fields.

Figure 1: Distribution and frequency of yellow foxtail in Manitoba



Do you have yellow foxtail in your fields? Be sure to take a closer look. Green and yellow foxtail (and sometimes barnyard grass) seedlings look alike and have similar emergence patterns. The feature that distinguishes young yellow foxtail from green foxtail, barnyard grass and all other grassy weeds in Manitoba is the presence of long, kinky hairs where the leaf meets the stem (Figure 2).

Foxtails are warm season grasses that are relatively uncompetitive with cool season crops like cereals and canola. For example, you need foxtail densities of 50 to 100 plants/m² to decrease wheat yield by five percent. ***However, if left unmanaged in corn, only 5 yellow foxtail/m² is enough to reduce yield potential by five percent.***

Herbicide management options. Yellow foxtail is slightly less competitive in corn than green foxtail but it can be more difficult to manage. It's important to know which foxtail(s) is in your field since not all corn herbicides work as well on yellow foxtail as they do on green foxtail. Products like Accent, Battalion, Sortan IS and Ultim will control green foxtail but may only suppress yellow foxtail. Research from Ontario indicates that early post-emergent herbicide timing can improve yellow foxtail control compared with pre-emergent applications.

Glyphosate and Liberty will control yellow foxtail in herbicide-tolerant corn varieties. But neither product provides residual control of subsequent weed flushes. Additionally, Liberty needs to be applied when yellow foxtail is at the 4 leaf stage or smaller and in water volumes of at least 12 gallons per acre.

Other corn herbicides, like Focus and Option are registered for yellow foxtail control and have residual activity to help manage flushes.

Regardless of the product selected for specific weed issues such as yellow foxtail, a herbicide program that combines multiple modes of action is recommended in corn and should be used in addition to good agronomic practices.



Figure 2: Yellow foxtail – Hairs that distinguish yellow foxtail from green foxtail and barnyard grass (Manitoba Agriculture)