



FARMERS

Seed Varieties

Midge Tolerant Wheat varieties protect growers from damage caused by the orange wheat blossom midge, which can result in grade and yield losses. Seed is sold as a varietal blend, with 90% made up of a midge tolerant variety and the remaining 10% midge susceptible. Midge Tolerant Wheat growers report significant yield and grade benefits – approximately \$36 per acre (based on wheat priced at \$6 bu/ac). Midge Tolerant Wheat varieties, sold as varietal blends (VB), are available in all classes:

Producers achieve

\$36 per acre

in yield & grade benefits

based on wheat priced at \$6/bu

midgetolerantwheat.ca

Preserve Midge Tolerance

The varietal blends provide an “interspersed refuge system” that disrupts the midge’s ability to produce resistant offspring, preventing a buildup of a resistant midge population. Without an interspersed refuge system, midge tolerance could break down within 10 years.

Farmers and seed growers are responsible for maintaining this refuge system to preserve midge tolerance because:

- The tolerance is based on a single gene – *Sm1* – the only known source of midge tolerance.
- It took researchers more than 15 years to move this single gene into spring wheat varieties using traditional plant breeding techniques.

Stewardship Responsibilities

If you grow Midge Tolerant Wheat, you must sign an online Stewardship Agreement with your retailer and follow the requirements in order to protect the midge tolerance gene for future use.

By signing the Stewardship Agreement, you agree that you’ll use the technology responsibly – **that means limiting the use of farm-saved seed to one generation past Certified**. Why? We can’t be sure the refuge is still at the required level beyond one generation.

The online Stewardship Agreement is evergreen – you only need to sign it once – and your obligations last as long as you grow Midge Tolerant Wheat.

The graphic features a large number '1' at the top, followed by the text 'There's only 1 midge tolerant gene. Stewardship is vital.' Below this, it says 'There is NO Plan B' with 'NO' in orange and 'Plan B' in black. At the bottom left is a logo of a midge with the text 'MIDGE TOLERANT WHEAT' and 'Plant - Protect - Preserve'. The website 'midgetolerantwheat.ca' is at the bottom.

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midge tolerant gene.
Stewardship is vital.

There is
NO Plan B

 **MIDGE TOLERANT WHEAT**
Plant - Protect - Preserve

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