



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.

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 Stewardship Agreement for Midge Tolerant Wheat limits the use of farm-saved seed to one generation past Certified seed. It’s a simple step that keeps the interspersed refuge system at the proper level, preventing build-up of resistant midge. Without the refuge, we risk losing the one and only tolerant gene.

Midge Tolerant Wheat varieties, sold as varietal blends (VB), are available in all classes:

Midge Tolerant Varieties as of October 1, 2022

CWRS

AAC Alida VB
AAC CAMERON VB
AAC JATHARIA VB
AAC LeRoy VB
AAC RUSSELL VB
AAC Starbuck VB
AAC Warman VB
AAC Wheatland VB
AC® FIELDSTAR VB
AC® GOODEVE VB
AC® SHAW VB
CDC Adamant VB
CDC HUGHES VB
CDC LANDMARK VB
CDC TITANIUM VB
CDC UTMOST VB
SY Chert VB
AC® VESPER VB
SY Brawn VB
CDC Succession CL Plus VB

CPSR

AC® ENCHANT VB
AAC FORAY VB

CWSWS

AAC INDUS VB
AC® SADASH VB
AAC CHIFFON VB
AAC PARAMOUNT VB

DURUM

AAC MARCHWELL VB
CDC CARBIDE VB
AAC Succeed VB
AAC Weyburn VB

CNHR

AC® UNITY VB
AC® CONQUER VB
CDC Cordon CL Plus VB

CWSP

KWS® CHARING VB
KWS® SPARROW VB
AAC AWESOME VB

CWES

AC® GLEN