MIDGE TOLERANT WHEAT
Plant · Protect · Preserve

One Gene. One Goal. Midge Tolerant Wheat.

Why stewardship of Midge Tolerant Wheat matters

Midge Tolerant Wheat remains a valuable tool for managing wheat midge across Western Canada.

Without stewardship, we risk losing the only genetic tool we have against wheat midge. With it, we secure the future of Canadian wheat.

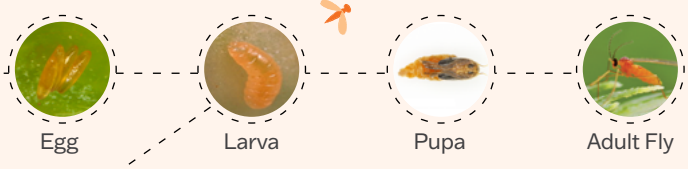
Key stewardship principles to preserve midge tolerance:

- ☑ Limit the use of farm-saved seed to one generation past Certified
- ☑ Follow stewardship guidelines to prevent destruction of the Sm1 gene
- ☑ Encourage clear communication across your team and customers to ensure stewardship practices are implemented consistently

What your team needs to know about Midge Tolerant Wheat

Wheat midge life cycle

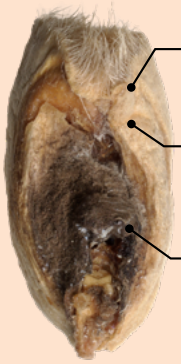
Four stages



The Sm1 gene is the only tool we have against wheat midge. Together, we all share the responsibility of preserving it.

Wheat midge damage

Occurs when larvae feed on developing wheat kernels



Shriveled, deformed or aborted seeds

Yield loss & grade downgrades

Up to 50% kernel loss during harvest

Photo credit: CFIA

How Midge Tolerant Wheat technology works

Boosts yield & grade – an approximate **$70 /acre benefit**

Uses Sm1 gene to stop larvae from feeding

Reduces need for insecticides

45 spring wheat varieties available

Interspersed Refuge System

Plant a varietal blend (VB):

90% **MTW variety**

+ 10% **midge** susceptible wheat

= a lot less midge developing resistance

Extends MTW effectiveness from **10 years** → **90+ years**

Remember

Sm1 is the only known resistance gene, and stewardship of the Sm1 gene takes a team. Your conversations and advice are essential in helping farmers make informed decisions that will protect Midge Tolerant Wheat for years to come.

For more information, visit **midgetolerantwheat.ca.**