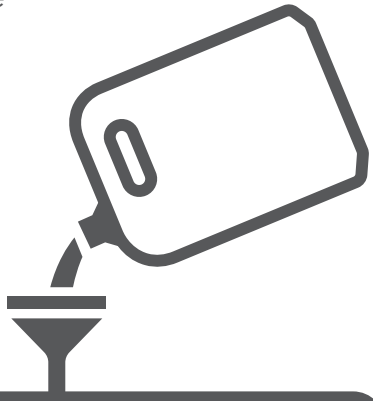
HERBICIDE GROUPS AND SITES OF ACTION

PART I OF IV:

KNOW YOUR GROUPS

Repeated application of herbicides within the same Group can select for plants that are resistant to that site of action. **Some resistant plants naturally occur in very low numbers to begin with, but their percentage increases over time as other, susceptible biotypes are controlled.** This genetic change within a population from reoccurring use of the same herbicide group is known as selection pressure.



Rotating, mixing, and layering herbicide Groups is a critical first step in delaying and managing herbicide resistance. A diverse crop rotation and use of soil-applied as well as post-emergence herbicides from differing groups, provides the most options for delaying resistance.

Herbicides sold in Canada always have their Herbicide Group number listed on their product label.

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There are **26 herbicide groups** worldwide; however, only **15 are currently used on cropland in Western Canada**. For wild oat, only 6 unique herbicide groups are available (1, 2, 3, 9, 10, & 15). Several herbicides within these six groups control or suppress a range of other grass and broadleaf weeds, as well as wild oat.

IT IS NOT RECOMMENDED

that Group 1 and Group 2 graminicides be tank-mixed for managing HR wild oat in cereals. These mixes can be antagonistic, and they increase selection pressure of non-target (metabolic) resistance. If using more than one in-crop cereal graminicide, rotate groups and apply in separate passes several days apart.

For more information on Wild Oat management,
- visit: **weedscience.ca/wild-oat-action-committee/**
- scan: the QR code with your smartphone.
- email: wildoataction@gmail.com
- twitter: @RWildOat.

RESISTANT WILD OAT ACTION COMMITTEE

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