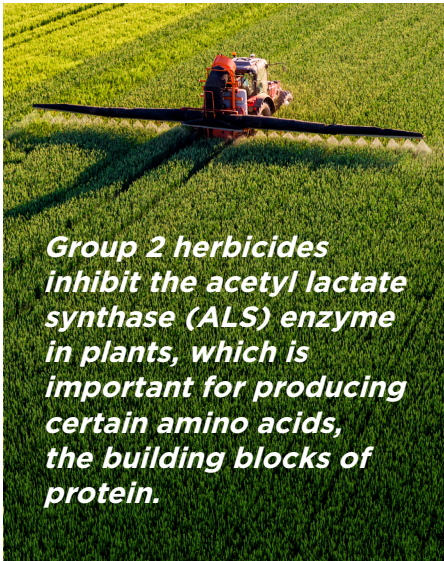


HERBICIDE GROUPS AND SITES OF ACTION  
*PART III OF IV:*

# GROUP 2 HERBICIDE RESISTANCE



There are 7 different herbicide families in **Group 2**. Only 3 of the families contain herbicides that control wild oat in western Canada. They are:

# 3

### 1. Imidazolinone (Imi)

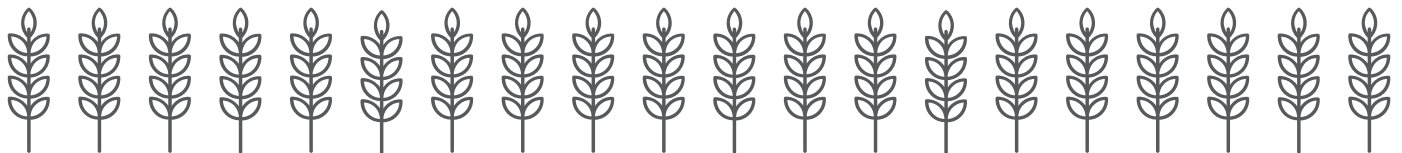
- imazamox (Solo), imazethapyr (Pursuit)

### 2. Triazolinone

- flucarbazone (Everest), propoxycarbazone (Olympus), thienencarbazone (Varro)

### 3. Triazolopyrimidine (TP)

- pyroxsulam (Simplicity)



Target site mutations have been identified in wild oat that leads to Group 2 resistance; however, the primary mechanism of Group 2 resistance in multiple resistant wild oat is **non-target site** resistance. The non-target site resistant plants can metabolize the herbicides into non-toxic compounds.

**The most prevalent wild oat resistance in western Canada is to Group 1; however, Group 2 resistance is increasing.**

The incidence of wild oats that are resistant to both **Group 1** and **Group 2** herbicides is also on the rise. Plants that are resistant to more than one herbicide group are referred to as possessing multiple resistance.



For more information on Wild Oat management, visit: [weedsience.ca/wild-oat-action-committee/](https://weedsience.ca/wild-oat-action-committee/) or scan the QR code with your smartphone.

RESISTANT  WILD OAT  
ACTION COMMITTEE