INTERPRETING HERBICIDE RESISTANCE TEST RESULTS

PART 1 :

PUTTING THE RESULTS IN CONTEXT

Was the sample taken from a patch, or across the entire field?

A patch represents a specific subsample of the field. Those results will be useful for managing that patch, but may not represent the entire field. A sample from across the entire field better represents the average population and will give you a better idea of the utility of active ingredients across the whole field.



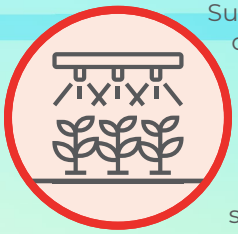
Were the plants sprayed in-crop?

Plants that reach maturity after herbicide application are more likely to be resistant to the ingredient used. Plants that were susceptible to that ingredient were likely killed by spraying. This skews upward the proportion of a test sample showing resistance to that ingredient. If the plants were not sprayed, the sample better represents the entire field population, and better represents the actual resistance profile.

Are you testing for every ingredient available to your farm?

If not, you are not getting the whole picture. Herbicide resistance in wild oat is complex, and generalizations based on one test may not be accurate. It is important to know which ingredients your population is still susceptible to, in addition to those that are showing high resistance, so that you know what herbicide options remain effective. The only way to do this is to test for a spectrum of active ingredients.

Survival does not always equal resistance.



Survival can be due to sprayer problems, late emerging wild oat, decreased efficacy due to environmental stress or wash-off, or sub-lethal doses in corners or field margins. This is why testing a surviving population will not necessarily show extremely high resistance to an ingredient that was used on that population. These factors should be considered in context when evaluating resistance test results.

For more information on Wild Oat management, visit: **weedscience.ca/wild-oat-action-committee/** or scan the QR code with your smartphone.

RESISTANT WILD OAT ACTION COMMITTEE

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