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The TGA Insight

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What Are You Fighting Out There?

- Danielle Chamberland

Have you started to notice an increase in the weeds that are escaping control these days? There are many factors at play when a weed escapes control including: environmental conditions, inadequate contact and coverage, shading by other plants, growth behavior and ability to flush multiple times throughout the year, or the possibility of resistance. Weed resistance is growing in the Top Gro trading area in both target and non-target site (metabolic).

Target site based resistance is usually due to mutation in the gene for the herbicide target site, which in turn prevents binding of the herbicide and therefore does not result in death. This form of resistance is very much like a lock and key, if your key is no longer working, we can deploy another key, or chemistry or group to take care of the problem.

Non-target site resistance involves metabolic processes not related to the target site. These processes prevent the herbicide from reaching the target site as the plant works to break down the chemistry before it gets to its target site for efficacy. This form of resistance is much harder to control because it not only affects one type of chemistry but impacts how well the weed can resist ALL FORMS of chemistry at the same time. This form of resistance is on the rise in all weed groups including Wild Oats.

So, what can you do? Rotate your chemistries and crop types; the more diversity in your rotation, the less likely any form of resistance is to form. Monitor patches in the field and don't only rely on the chemical crop protection products to do all the work. In many cases there are also mechanical options to help reduce the weed population as well.