

Respect PGR safety labels

September 29, 2016

Too often, I hear turfgrass managers talk about plant growth regulators as if they are not pesticides. This thought may occur because PGRs are understood to promote plant health and not kill a pest. However, plant growth regulators are labeled pesticides and still need to be treated with respect. I was reminded of this when applying PGRs for our research this week when I saw “Warning” as the signal word on the Cutless MEC.

While PGRs rarely kill grass, they work in a similar fashion as most pesticides or medicines – they block or disrupt a particular biochemical pathway. The Class A and B PGRs listed in the table inhibit the production of the hormone Gibberellin. This results in slower leaf elongation and reduced clipping yield. Class B PGRs also share similarity with DMI fungicides and can even have weak fungicidal activity. The risk is that these active ingredients, or inert ingredients within a product, may affect non-target pathways, which could be hazardous to the applicator or the environment.

The overwhelming majority of pesticides have a signal word on the label to indicate the potential hazard of a pesticide. A notable exception in the turf world is Acelepryn, which does not carry a signal word because of its extremely low hazard. The signal word “Caution” is the least hazardous while “Warning” is more hazardous, and “Danger” is the most hazardous. As with many pesticides, formulation can have a big impact on the hazard of a particular pesticide. For example, the wettable powder formulation of Cutless 50W has a signal word of label of “Caution” while the microemulsifiable concentrate (MEC) has a signal word of “Warning.” This was also the case with the prior Primo formulation compared to the newer Primo Maxx formulation.

All pesticides, including PGRs, can be used safely when used as specified on the product label. Make sure to use the proper personal protective equipment when handling PGRs and other pesticides to reduce the risk of accidental exposure. Treat PGRs with the same level of respect as other pesticides.

Plant Growth Regulator Trade Name & Formulation	Label Signal Word
Anuew	Caution
Cutless 50W	Caution
Cutless MEC	Warning
Legacy	Warning
Musketeer	Warning
Primo Maxx – Current label	Caution
Primo – Old formulation	Warning
Trimmit 2SC	Caution



Plant growth regulators require the same amount of respect to safety as other pesticides. Always read the label and use the required Personal Protective Equipment (PPE) when making PGR applications. The Primo Maxx label requires gloves, shoes, socks, pants, and a long-sleeve shirt.

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