March 2020

CORN NEWS 2020

Corn Update: Corn Hybrid and Post-Herbicide

Seed corn companies issue specific ratings for a hybrid's tolerance to four families of herbicides when used in corn production especially with post-emergence applications:

1. Amides
2. Synthetic Auxins
3. Isoxazoles
4. Sulfonylureas

Examples are listed in the table below. Chemical compounds within a herbicide family will vary in their degree of hybrid damage. The potential for hybrid-herbicide interaction is impacted by:

- The herbicide rate used
- The method of application (gals./acre)
- The timing of application

For growth regulator herbicides, certain hybrids may exhibit greater early-season stalk breakage (greensnap) when applied prior to a significant windstorm.

Seed corn companies go to great lengths to rate each hybrid as to the potential damage that a grower may incur when applying certain herbicides post-emergence.

Corn injured by post-emergence herbicide compounded by shallow germination

Fortunately, most hybrids are pretty remarkable in their ability to withstand post-chemical rates and timing but some clearly are not.

Post-herbicides put a lot of stress on corn plants. Cooler weather and wet soil conditions compound this stress. Corn seed planted into loose beds, even at 2" deep, may end up germinating at shallower depths.

Herbicide Families	Example of Products In Herbicide Family
Amides (Group 15)	Harness Surpass, Dual II Magnum, Outlook, Lasso, Topnotch, Degree, Define, Ramrod, Cinch, Breakfree, Fulltime and several generics
Benzoic Acid, Phenoxy (Synthetic Auxins) Group 4	Clarity, 2,4-D, Banvel, Distinct, Status (Group 19)
Isoxazoles (4-HPPD Inhibitors) Group 27	Balance Pro, Balance Flexx, Callisto, Impact, Laudis, Capreno, Corvus
Sulfonylureas (ALS Inhibitors) Group 2	Accent, Basis, Beacon, Permit, Steadfast, Resolve Q, Python, Capreno, Corvus, Leadoff

RENWOOD FARMS
17303 SANDY POINT RD.
CHARLES CITY, VA 23030
HTTP://WWW.RENWOODSEED.COM/

Please call us if we can help:

Jeff Hula (production and shipping)
Office: 804-829-2450
Cell: 804-385-6843

Paul Bodenstine (agronomist):
Cell: 804-314-7463

High performing soybean seed still available from Renwood Farms

Corn Hybrid-Herbicide Interaction

Even if hybrids are rated as tolerant, there are some general rules that can help avoid crop stress/ damage from post-emergence chemicals:

- Plant 2” deep: plant into a firm seed-bed that doesn’t settle during hard rains which allows seeds to “rise”.
- Make sure generic herbicides contain safeners
- Make sure corn is at the right stage of growth: generally earlier is better for less stress
- Note; the atrazine label states that atrazine should be applied before corn is 12” tall. Most of this concern is about carryover but stress is still likely.
- Adding humic/ fluvic acid biologicals have been reported to mitigate herbicide stress in corn when used with post-emergence herbicides.
- All herbicide ratings are listed in the seed corn catalogs for each hybrid and it would be worthwhile to check before planting and spraying.

Early-Season Stinkbugs

We remind growers that if you are making a post-emergence application you can add a pyrethroid to this mix to stop brown stinkbug damage to the young corn if you have had a history of this problem.

Stink bug feeding causes three types of damage. They may kill small seedlings, produce stunted plants, or cause "suckering" (the production of tillers from the base of damaged plants) as shown in this photo. Stinkbugs are very difficult to find in corn.

Stinkbug damage in corn.

Generally, the pressure is greatest on later planted corn; think late April /early May. A low labeled rate of pyrethroids usually will stop these brown stinkbugs.

Remember, each plant lost in 1/1,000th of an acre equals about a seven bushel /acre yield loss.