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## Performance of Corn Seed Treatments during 2012

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Numerous new corn seed treatments and their combinations are available to farmers. Little performance data for these seed treatments are published so that farmers can make management decisions regarding their efficacy.

Fungicide seed treatments are nearly always required for corn production in Wisconsin due to cool, wet spring planting conditions. Soil borne diseases including *Rhizoctonia, Pythium, Fusarium, Helminthosporium, Penicillium,* and *Aspergillus* can reduce plant stand significantly. The objective of this article is to present preliminary results of seed treatment performance using data derived from the UW Corn Hybrid Performance Trials. Companies that enter the UW trials must disclose which seed treatment is applied to the corn seed. Hybrid seed is planted, managed and harvested as part of the normal process involved with testing hybrids. Seed treatments tested in more than 100 plots are analyzed in relation to the trial mean.

We assume that seed treatments are applied randomly to corn hybrids. The more test plots (N) of a seed treatment, the better the estimate of differences between seed treatment products.

Significant differences are measured between seed treatment products (Table 1).

## Table 1. Performance of selected corn seed treatments in 2012. Assumption: Seed treatments are randomly applied to hybrids. Grain yield difference (Bu/A) = Seed treatment average – Trial mean

Seed Treatment (Brand: Fungicide   Insecticide   Nematicide)	Ν	Bu/A
Acceleron 250: Apron+Stratego+Vortex   Poncho250	420	3.5
Acceleron IC-609: Poncho	423	-0.4
Acceleron+Poncho250+VOTiVO: Apron+Stratego+Vortex   Poncho250   VOTiVO	258	* 8.2
Acceleron+Poncho500+VOTiVO: Apron+Stratego+Vortex   Poncho500   VOTiVO	324	5.3
Allegiance+Trilex+Vortex   Poncho500   VOTiVO	168	1.5
Avicta Complete Corn: ApronXL+Dynasty+MaximXL   Cruiser   Avicta	396	-5.4
CruiserMaxx Corn250: Cruiser 5FS   Maxim Quattro	690	-4.3
Dynasty+MaximXL   Cruiser250	1257	0.8
Ipcanazole+Metalaxyl+Trilex   Poncho250	120	0.4
MaximXL   Cruiser	279	-7.2
Poncho1250+VOTiVO	279	* 12.0
LSD (0.10)	213	6.0

\* Seed treatment products that performed statistically similar to the highest seed treatment product.