



Insecticide Seed Treatments for Winter Wheat

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Tests have shown a reduction on insect pests and yield protection from the use of seed treatment insecticides. In situations where green bugs and Bird-Oat Cherry Aphids occur they often transmit Barley Yellow Dwarf Disease (BYD) to wheat. When the aphids and BYD are present the effect on yield is greater than when aphid damage is present without the disease. In past evaluations by Dr. Bob Hunger, OSU Wheat Plant Pathologist, significant differences has been shown between treated and untreated seed wheat.

Effect of Wheat Seed Treatment Insecticide on Yield 2000		
Seed Treatment	BYD Incidence*	Yield (bu/A)
Untreated	50.8 a	64.4 a
Insecticide Treated	23.1 b	77.0 a

- Means followed by the same letter are not significantly different (LSD, 0.05)

Rates of application have an impact on the benefit provided. With the products available the highest rate has the greatest effect on aphid control.

Effect of Rate on Aphid Control		
Rate fl oz/cwt	Nov 30, 1999*	Feb 16, 2000
0	27	17
0.4	12.3	13.4
0.8	8	6.3
1.2	5.6	5.4
1.6	2.5	2
2.4	0.4	0.4

- Planted Sep 17

Improved stand establishment has been shown as an additional benefit from seed treatment insecticides. Planting treated seed in areas where white grubs have destroyed 1st plantings has resulted in successful stand establishment.

White Grub Evaluation on Wheat			
Treatment	Rate	No. of Grubs/shovel @ 51 DAP	Damage Rating* @ 37 Dap
Untreated	0	1.12 bc	4.5 a
Gaucho	0.8	2.52 a	2.87 bc
Gaucho	1.6	0.37 c	1.62 c
Cruiser	0.8	1.37 ab	3.68 ab
*Damage rating 1-5; 1=normal plants, 5=dead or severe stunting with dry leaves			



Stand Establishment at test site with Insecticide Seed Treatment

It could be important to consider seed treatment insecticide applications to your seed wheat this planting season as the above test results show benefits. When considering this option the added cost should be important. As noted below the approximate cost of the highest rate of application is approximately 1.6 bushels.

Cost Benefit of Insecticide Seed Treatment on Wheat		
Rate (fl oz/bu)	Estimated Cost/Bu	No. of Bu Increase to Pay cost of Insecticide (\$7.50/bu wheat)
0.8	\$ 4	0.53
1.6	\$ 8	1.06
2.4	\$ 12	1.6

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