

WIREWORM MANAGEMENT IN FALL SEEDED WINTER WHEAT 2004-2005

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A winter wheat trial, sponsored by Bayer Crop Science, was planted 10-11-04 in RCBD 4 replicates per treatment w/ 5 ft. between all sides each replicate of 10 x 20 feet. Row spacing was on 7 inches = 60 lbs seed per acre equivalent using a Hegi Cone Seeder. Variety Mix = 50/50 Rod/Madsen SWWW. Soil type = Chard. Previous crop = sweet corn. Trial was rated for wire worm injury 4-8-05 by counts of plant stand in 22" of (1/3 meter sq.) row per replicate per treatment due to long dry winter. Rated for BYDV expression on 4-8-05 by percent plants infected. Harvest was by Winter Steiger Small Plot Combine on 7-25-05. Total irrigation not measured daily but enhanced rainfall totaling 6 inches to total 17" moisture per crop season. Wireworm (*Limonius canus*) did reduce stand and yield in this trial as shown in Table 1. Bu/ac data LSD t Test. The Gaucho and higher Poncho treatments had the best yields compared to the other treatments and the UTC of Raxil XT. Aphid activity may have influenced the UTC treatment, but stand reduction due to wire worm damage seems to be the SD factor related to yield and stand (Table 2. LST t Test for plant stand.)

Table1. LSD All-Pairwise Comparisons Test for 2005 Winter Wheat Yield Bu/Ac converted from lbs/treatment/replicate at 60 lbs TW 7-25-05 281 DPE

Treatment	Rate/Cwt	Mean Bu/AC
Gaucho	1.50	126.00A
Gaucho	1.00	121.75A
Poncho	0.77	119.25AB
Poncho	0.26	113.75B
Cruiser	0.80	107.00C
Poncho	0.52	104.00C
UTC	----	94.25D
Alpha 0.1		Standard Error for Comparison 6.4310
Critical T Value 1.721		Critical Value for Comparison 11.0660

Table 2. LSD All-Pairwise Comparisons Test Plant Stand per 22 “ foot row winter wheat taken 4-08-05 = 212 DPE

Treatment	Rate/CWT	Mean Plant Stand
Poncho	0.77	12.75A
Cruiser	0.80	12.25A
Poncho	0.52	12.00A
Poncho	0.26	11.75A
Gaucho	1.5	10.75B
Gaucho	1.0	10.25C
UTC (RXT)		7.00D

Alpha 0.1 Standard Error for Comparison 0.6501
 Critical T Value 1.721 Critical Value for Comparison 1.1186

Table 3. LSD All-Pairwise Comparisons Test for BYDV Expression in winter wheat 2005 Trial rated on 4-8-05 = 212 DPE

Table 3. Treatment	Rate/cwt	Mean % Tillers Showing BYDV
UTC	----	34.75A
Cruiser	0.80	1.00B
Gaucho 480	1.50	1.00B
Gaucho 480	1.00	1.00B
Poncho	0.77	1.00B
Poncho	0.52	1.00B
Poncho	0.26	1.00B

Alpha 0.1 Standard Error for Comparison 0.1336
 Critical T Value 1.721 Critical Value for Comparison 0.2299

All treatments were effective in managing BCOA during the fall into late winter as compared to the check.