

FIELD EXPERIMENT HISTORY

Exp. Number: 13 Herbicide* Plant Depth **Year:** 1997
Title: Seeding Depth and Herbicide Effects on Corn
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Location: Arlington Research Station, Arlington, WI
Supported by: Hatch and American Cyanamid

FIELD INFORMATION

Field: 396 East
Soil Type: Plano Silt Loam
Soil Test Results: Test Date: 10/97 pH: 7.0 P (ppm): 48 K (ppm): 24 C.O.M. 3.0%
Tillage Operations: Chisel Plow
Field Cultivator
Fertilizer: 24- April 150 lbs N/A 46-0-0
12- May 150 lbs/A 6-24-24 starter
Previous Crop: Soybean
Irrigation: None

EXPERIMENTAL PROCEDURE

Exp. Design: RCB-Split
Replicates: 4
Variables: 4 Planting Depths: 0.5", 1.0", 1.5", 2.0"
5 Treatments: Prowl @ 3.6pts/A
Surpass 2.5pts/A
Surpass + Banvel @ 2.5 + 1pt/A
Banvel + 1pt/A
Control

Hybrid: Pioneer 37511R
Row Spacing: 30"
Planting Date: 12-May
Area Planted: 10' x 25'
Planting Equip: Kinze Plot Planter w/seed cones
Date Harvested: 10-Nov.
Area Harvested: 5' x25'
Harvesting Equip: Kincaid Plot Combine

Results: Table E-43.

**Table E-43. Seeding Depth and Herbicide Effects on Corn Grain
Arlington, WI - 1997**

Plant Depth inches	Herbicide	Harvest Population	Broken Stalks %	Yield bu/A	Moist %	Test Weight lbs/bu	Plant Emergence (Day of Year)			
							(147) 27- May plants/A	(150) 30- May plants/A	(153) 2- June plants/A	(156) 5- June plants/A
	Banvel @ 1 pt/A	25047	7.4	173.1	24.1	54	15494	23414	24428	25542
	Control	23859	9.7	165.7	23.5	53	15766	23191	24750	25765
	Prowl @ 3.6 pt/A	25641	11.9	177.5	24.2	53	14974	23290	25121	25641
	Surpass @ 2.5 pt/A	25963	6.3	184.4	23.8	54	16187	23983	25121	25864
	Surpass+Banvel @ 2.5+1 pt/A	26532	7.3	184.4	24.6	54	16731	22597	24503	25517
0.5		21443	22.8	136.9	27.2	50	1782	1940	4792	7940
1.0		26750	3.6	186.2	22.9	55	28670	29641	30532	30710
1.5		26888	3.0	193.8	22.8	55	20156	31185	31937	31918
2.0		26552	4.6	191.2	23.2	54	12712	30413	31878	32096
0.5	Banvel @ 1 pt/A	20295	20.2	119.7	27.0	51	1683	1881	3465	7623
0.5	Control	16434	29.0	96.9	25.9	50	1683	1386	5247	8910
0.5	Prowl @ 3.6 pt/A	22473	25.2	145.8	27.6	49	1782	2376	6435	8217
0.5	Surpass @ 2.5 pt/A	23463	18.0	156.4	26.6	51	2574	2772	5445	9207
0.5	Surpass+Banvel @ 2.5+1 pt/A	24552	21.5	165.5	28.7	50	1188	1287	3366	5742
1.0	Banvel @ 1 pt/A	27126	2.8	189.4	23.0	55	27918	29106	30690	30789
1.0	Control	26334	3.0	183.7	22.8	54	27423	28710	29601	29601
1.0	Prowl @ 3.6 pt/A	26235	6.7	181.8	22.9	55	28710	29898	30591	30888
1.0	Surpass @ 2.5 pt/A	26532	3.8	188.2	22.8	55	29007	29997	30195	30294
1.0	Surpass+Banvel @ 2.5+1 pt/A	27522	1.8	187.9	23.0	55	30294	30492	31581	31977
1.5	Banvel @ 1 pt/A	25641	4.3	189.5	23.1	54	21285	31581	31383	31581
1.5	Control	27225	2.5	198.2	22.1	54	20691	32769	32868	32868
1.5	Prowl @ 3.6 pt/A	27324	4.7	192.0	23.0	55	18018	29700	31185	31284
1.5	Surpass @ 2.5 pt/A	26037	1.9	192.1	23.0	55	18513	30987	31878	30888
1.5	Surpass+Banvel @ 2.5+1 pt/A	28215	1.7	197.3	23.1	55	22275	30888	32373	32967
2.0	Banvel @ 1 pt/A	27126	2.2	193.8	23.2	54	11088	31086	32175	32175
2.0	Control	25443	4.3	183.9	23.2	54	13266	29898	31284	31680
2.0	Prowl @ 3.6 pt/A	26532	11.0	190.3	23.3	55	11385	31185	32274	32175
2.0	Surpass @ 2.5 pt/A	27819	1.4	200.9	22.8	55	14652	32175	32967	33066
2.0	Surpass+Banvel @ 2.5+1 pt/A	25839	4.3	187.0	23.6	55	13167	27720	30690	31383
Mean		25408	8.5	177.0	24.0	54	15830	23295	24785	25666
Probability(%)										
Seed Depth (D)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Herbicide (H)		11.3	43.5	2.0	7.4	9.8	15.9	33.6	58.1	97.3
DxH		22.8	99.1	1.0	66.9	59.5	10.5	11.7	8.6	6.7
LSD(0.10)										
Seed Depth (D)		6132	22.1	62.4	4.9	5.2	26434	33010	30912	27412
Herbicide (H)		NS	NS	17.3	0.9	0.6	NS	NS	NS	NS
CV(%)										
		11	109	10	5	1	13	8	6	7