

## FIELD EXPERIMENT HISTORY

**Expt. Number:** 08 Intellicoat **Year:** 1997  
**Title:** INTELLICOAT Corn Seed Treatment Study  
**Personnel:** J.G. Lauer, K.D. Kohn, P.J. Flannery, K.D. Hudelson and H.M. Darby  
**Location:** Arlington Research Station, Arlington, WI  
**Supported by:** Intellicoat, Inc.

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### FIELD INFORMATION

Field: 427  
Soil Type: Plano Silt Loam  
Soil Test Results: Test Date: 4/95      pH: 6.7      P (ppm): 60      K (ppm): 170      OM (%): 4.0  
Fertilizer: 24-Apr 150 lbs N/A 46-0-0  
24-Apr 150 lbs/A 6-24-24 starter  
13-May 150 lbs/A 6-24-24 starter  
Herbicide: Frontier @ 20oz/A & Bladex 90DF @ 2.2lbs/A  
Tillage Operations: Chisel Plow, Field Cultivator  
Field Cultivate prior to each planting  
Previous Crop: Soybeans  
Irrigation: None

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### EXPERIMENTAL PROCEDURE

Exp. Design: RCB Split Plot  
Replicates: 4  
Variables: A: Planting Date, B: Seed Treatment  
Planting Dates: Early: 24-Apr  
Late: 13-May  
Seed Treatments: Hybrid1 CoatA  
Hybrid1 UTC  
Hybrid2 CoatA  
Hybrid2 CoatB  
Hybrid2 UTC  
Hybrid4 CoatA  
Hybrid4 UTC  
Hybrid5A CoatA  
Hybrid5A UTC  
Hybrid19 CoatA  
Hybrid19 UTC  
Area Planted: 10' x 30'  
Area Harvested: 5.0' x 22.5'  
Row Spacing: 30"  
Planting Equip: JD 7000 Planter w/ 1 fluted and 2 ripple coulters  
Planting Rate: 32,000 seeds/acre  
Harvesting Date: 5-Nov  
Harvesting Equip: Kincaid Plot Combine

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Results: Table E-40.

**Table E-40. INTELLICOAT Corn Seed Treatment Study.  
Arlington, WI 1997**

Date of Planting	Hybrid Seed Treatment	Yield bu/A	Moist %	Test Wt lbs.	Broken Stalks %	Harv Pop plants/A	Date (Day of Year)										Plant Height inches	Silk 8/2 (214) %
							5/15 (135)	5/19 (139)	5/21 (141)	5/23 (143)	5/27 (147)	5/30 (150)	6/2 (153)	6/4 (155)	6/25 (176)	11/5 (309)		
							% emergence											
	Hybrid01 CoatA	122.9	21.3	55	13.9	24206	0.3	3.1	10.6	47.8	56.3	40.2	51.7	78.3	82.0	88.1	29.4	89
	Hybrid01 UTC	127.4	20.2	56	18.6	24503	11.9	74.4	80.3	90.3	95.3	87.2	91.1	92.5	93.1	96.4	33.7	100
	Hybrid02 CoatA	147.0	20.6	57	7.4	24305	0.0	15.0	38.8	75.6	79.7	62.2	78.8	91.3	92.5	91.3	31.5	100
	Hybrid02 CoatB	142.0	19.8	56	10.8	23166	0.3	8.1	23.1	64.1	64.4	57.3	71.4	87.3	88.3	90.2	30.9	100
	Hybrid02 UTC	145.0	19.7	56	13.8	24552	21.6	71.3	79.4	90.6	87.5	74.4	90.5	91.6	91.7	94.5	34.1	100
	Hybrid04 CoatA	173.1	29.6	51	41.3	25542	0.3	7.2	20.3	63.4	69.1	45.5	69.5	88.0	89.8	91.7	29.2	63
	Hybrid04 UTC	181.1	29	51	40.6	24998	3.1	57.5	74.1	92.2	90.3	76.4	93.1	95.6	95.8	95.3	31.1	66
	Hybrid05A CoatA	167.0	32.7	50	43.8	25443	0.0	1.3	6.3	45.9	56.3	44.1	65.0	84.4	87.8	92.3	26.7	56
	Hybrid05A UTC	173.6	28.3	52	40.5	27324	2.5	53.8	66.3	86.6	85.9	87.8	95.2	95.3	96.9	96.4	30.6	59
	Hybrid19 CoatA	169.4	25.3	55	11.9	24107	0.9	2.5	12.5	48.4	57.2	39.4	52.0	68.4	71.4	76.6	30.3	84
	Hybrid19 UTC	181.3	23.9	55	4.9	22275	13.1	58.1	66.9	74.7	74.7	77.8	72.3	77.5	74.4	76.1	34.9	81
24-Apr		161.2	22.8	54	17.7	24264	4.9	32.0	43.4	70.9	74.2	73.0	85.2	85.2	85.2	87.7	34.1	87
13-May		153.3	26.3	55	27.3	24903	-	-	-	-	-	52.8	65.9	87.6	90.1	92.1	28.2	77
24-Apr	Hybrid01 CoatA	121.0	19.5	55	4.3	23958	0.3	3.1	10.6	47.8	56.3	57.5	86.3	86.3	86.3	86.3	33.4	78
24-Apr	Hybrid01 UTC	131.1	19.1	56	7.1	23562	11.9	74.4	80.3	90.3	95.3	89.4	88.4	88.4	88.4	96.9	36.0	100
24-Apr	Hybrid02 CoatA	152.4	20	57	10.6	23067	0.0	15.0	38.8	75.6	79.7	85.0	88.1	88.1	88.1	87.5	35.3	100
24-Apr	Hybrid02 CoatB	149.5	18.2	55	10.8	24552	0.3	8.1	23.1	64.1	64.4	84.1	85.3	85.3	85.3	88.8	35.1	100
24-Apr	Hybrid02 UTC	151.9	18.8	55	5.6	23958	21.6	71.2	79.4	90.6	87.5	69.7	85.6	85.6	85.6	91.6	35.4	100
24-Apr	Hybrid04 CoatA	188.5	28.1	52	48.9	25542	0.3	7.2	20.3	63.4	69.1	63.8	90.6	90.6	90.6	89.1	32.3	81
24-Apr	Hybrid04 UTC	192.5	26.8	51	16.7	25047	3.1	57.5	74.1	92.2	90.3	71.3	94.1	94.1	94.1	93.8	33.8	75
24-Apr	Hybrid05A CoatA	165.0	31	47	34.0	25740	0.0	1.3	6.3	45.9	56.3	64.7	84.7	84.7	84.7	90.3	29.3	69
24-Apr	Hybrid05A UTC	166.3	24.2	52	38.9	26037	2.5	53.8	66.3	86.6	85.9	85.9	91.3	91.3	91.3	91.3	32.8	63
24-Apr	Hybrid19 CoatA	172.9	23.2	54	14.6	23265	0.9	2.5	12.5	48.4	57.2	53.8	68.8	68.8	68.8	73.1	34.8	100
24-Apr	Hybrid19 UTC	182.1	22.4	55	3.4	22176	13.1	58.1	66.9	74.7	74.7	78.1	73.8	73.8	73.8	76.3	37.3	88

continued

**Table E-40. INTELLICOAT Corn Seed Treatment Study.  
Arlington, WI 1997**

Date of Planting	Hybrid Seed Treatment	Yield bu/A	Moist %	Test Wt lbs.	Broken Stalks %	Harv Pop plants/A	Date (Day of Year)										Plant Height inches	Silk 8/2 (214) %	
							5/15 (135)	5/19 (139)	5/21 (141)	5/23 (143)	5/27 (147)	5/30 (150)	6/2 (153)	6/4 (155)	6/25 (176)	11/5 (309)			% emergence
13-May	Hybrid01 CoatA	124.7	23.2	56	23.5	24453	-	-	-	-	-	22.8	17.2	70.3	77.8	90.0	25.5	100	
13-May	Hybrid01 UTC	123.6	21.3	56	30.1	25443	-	-	-	-	-	85.0	93.8	96.6	97.8	95.9	31.4	100	
13-May	Hybrid02 CoatA	141.6	21.1	57	4.2	25542	-	-	-	-	-	39.4	69.4	94.4	96.9	95.0	27.8	100	
13-May	Hybrid02 CoatB	134.6	21.4	57	10.9	21780	-	-	-	-	-	30.6	57.5	89.4	91.3	91.6	26.8	100	
13-May	Hybrid02 UTC	138.2	20.6	57	22.1	25146	-	-	-	-	-	79.1	95.3	97.5	97.8	97.5	32.9	100	
13-May	Hybrid04 CoatA	157.7	31.2	51	33.6	25542	-	-	-	-	-	27.2	48.4	85.3	89.1	94.4	26.1	44	
13-May	Hybrid04 UTC	169.8	31.2	50	64.5	24948	-	-	-	-	-	81.6	92.2	97.2	97.5	96.9	28.5	56	
13-May	Hybrid05A CoatA	169.0	34.5	53	53.7	25146	-	-	-	-	-	23.4	45.3	84.1	90.9	94.4	24.1	44	
13-May	Hybrid05A UTC	180.8	32.5	52	42.0	28611	-	-	-	-	-	89.7	99.1	99.4	102.5	101.6	28.5	56	
13-May	Hybrid19 CoatA	166.0	27.4	56	9.2	24948	-	-	-	-	-	25.0	35.3	68.1	74.1	80.0	25.8	69	
13-May	Hybrid19 UTC	180.6	25.5	56	6.4	22374	-	-	-	-	-	77.5	70.9	81.3	75.0	75.9	32.6	75	
Mean		157.3	24.6	54	22.5	24584	4.9	32.0	43.4	70.9	74.2	62.9	75.5	86.4	87.6	89.9	31.1	82	
<u>Probability (%)</u>																			
Date of Planting (D)		15.6	97.5	27.4	31.6	53.5	-	-	-	-	-	40.0	0.1	19.9	3.5	2.7	0.0	8.0	
Seed Treatment (S)		0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DxS		41.0	10.4	41.6	11.5	47.7	-	-	-	-	-	1.5	0.0	0.3	3.4	56.9	18.7	0.2	
<u>LSD (.010)</u>																			
Date of Planting (D)		NS	NS	NS	NS	NS	-	-	-	-	-	NS	2.0	NS	2.2	1.8	0.4	6.2	
Seed Treatment (S)		11.5	1.3	1.7	12.7	1451	3.5	4.6	4.6	4.2	5.5	14.0	4.8	4.0	3.8	3.3	1.5	8.7	
<u>CV%</u>		11	8	5	87	9	109	22	16	9	11	34	10	7	7	6	8	16	