

## FIELD EXPERIMENT HISTORY

**Title:** Performance of Corn Hybrids in Organically Certified Fields  
**Experiment:** 01 Organic Hybrid **Trial ID:** 2572 **Year:** 2004  
**Personnel:** J.G. Lauer, J. Posner, P.J. Flannery, K.D. Kohn and J. Hedtcke  
**Location:** Arlington, WI **County:** Columbia  
**Supported By:** HATCH and Josh Posner

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### Site Information

**Field:** ARS403H **Previous Crop:** Alfalfa **Soil Type:** Plano Silt Loam  
**Soil Test:** **Date:** 10/15/01 **pH** 6.9 **OM (%)** 4.1 **P (ppm)** 95 **K (ppm)** 143

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### Plot Management

**Tillage Operations:** Moldboard Plow Disk - 5/17 Cultivated (3x) 6/29, 7/9, 7/13  
Field Cultivator - 5/27 Rotary Hoe (2x) 6/16  
Soil Finisher - 6/3

**Fertilizer:** **Preplant Analysis:** N/A **Rate lbs/A:** N/A **Date:** N/A  
**Starter Analysis:** N/A **Rate lbs/A:** N/A **Date:** N/A  
**Post plant Analysis:** N/A **Rate lbs/A:** N/A **Date:** N/A  
**Manure:** N/A

**Herbicide:** None **Insecticide:** None  
**Hybrid:** See Factors

**Irrigation:** None

**Planting Date:** 6/3/04 **Planting Depth:** 1.5" **Row Width** 30"

**Target Plant Density:** 30000 plants per acre **Planting Method:** Kinze Plot Planter

**Harvest Date:** 11/15/04 **Harvest Method:** Kincaid Plot Combine

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### Experimental Design

**Design:** RCB **Replications:** 4  
**Plot Size Seeded:** 10' x 25' **Experiment Size:** 1.7 Acres  
**Harvest Plot Size:** 5' x 22' **Harvest Plant Density:** 28500 plants per acre

### Factors/Treatments:

#### Hybrids:

Brown 3020	NC+ 34C17
Brown 5335	NC+ 41F00
Brunner OR1053	NC+ 42A32
Brunner OR8702	NC+ 48F37
Brunner OR9802	NC+ 53F37
Gold Country 9401	Prairie Hybrid 0383
Merit Seeds 0535	Prairie Hybrid 1673

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**Results: Table C-9.**

**Table C-9. Performance of corn hybrids grown in organically certified production fields during 2004 at Arlington, WI.**

Hybrid	RM	Population plants/A	Lodging %	Yield bu/A	Moisture %	Test Weight lbs/bu	**Grower Return	
							2.09/bu \$/A	4.00/bu \$/A
Brunner OR8702	87	28413	1	144	20.5	50	253	527
Prairie Hybrid 0383	92	27720	1	141	20.3	49	249	518
NC+ 34C17	93	28413	0	150	19.7	49	267	553
Brown 3020	94	29997	1	150	20.3	50	264	550
Gold Country 9401	94	27522	0	154	20.8	49	271	565
NC+ 41F00	97	27522	1	122	22.5	47	210	443
Brunner OR9802	98	28413	1	139	21.3	49	243	509
NC+ 42A32	98	28611	0	166	21.4	48	289	606
Brown 5335	101	28215	0	135	29.3	46	215	473
NC+ 48F37	102	29205	1	144	29.3	46	228	503
Prairie Hybrid 1673	102	29304	0	154	27.4	47	250	545
Merit Seeds 0535	103	28116	0	139	30.7	46	216	482
NC+ 53F37	104	28116	0	139	31.7	46	213	478
Brunner OR1053	105	28710	0	121	33.4	46	181	412
Mean		28448	0	143	25.0	48	238	511
<b>Probability(%)</b>								
Hybrid (H)		80.8	30.7	0.0	0.0	0.0	0.0	0.0
<b>LSD (0.10)</b>								
Hybrid (H)		NS	NS	11	1.2	1.1	19	40
<b>CV(%)</b>								
		6	172	6	4	2	7	7

\*\*Grower return= (price\*yield)-(yield\*(handling+hauling+trucking))-(storage\*0.02)- (yield\*(mst-15.5)\*0.02);

handling = 0.02, \$/bu; hauling = 0.04, \$/bu; trucking = 0.11, \$/bu.100miles; storage = (yield\*0.25\*4)+(yield\*0.25\*8); \* On-farm \$0.02/bu.30days; drying = 0.02; On-farm \$/bu.point; Corn prices = 2.09 and 4.00.