

## FIELD EXPERIMENT HISTORY

**Title:** Corn Hybrid Growth and Development  
**Experiment:** 01GD **Trial ID:** 6612 **Year:** 2022  
**Personnel:** Joe Lauer, Kent Kohn, Thierno Diallo  
**Location:** Arlington, WI **County:** Columbia  
**Supported By:** HATCH

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### Site Information

**Field:** ARS406 **Previous Crop:** Alfalfa **Soil Type:** Plano Silt Loam  
**Soil Test:** **Date:** 10/1 /22 **pH:** 6.1 **OM (%)** 2.8 **P (ppm)** 40 **K (ppm)** 127

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### Plot Management

**Tillage Operations:** Field Cultivator

**Fertilizer:** **Preplant Analysis:** 32-0-0 **Rate lbs/A:** 43 lbs/A **Date:** N/A  
**Starter Analysis:** 9-11-30-6S-1Z **Rate lbs/A:** 200 lbs/A **Date:** 5 /9 /22  
**Post plant Analysis:** N/A **Rate lbs/A:** N/A **Date:** N/A  
**Manure:** N/A

**Herbicide:** Bellum 6.0 oz/A **Insecticide:** Force 3G 4.4 lbs/A  
 Medal II EC 24 oz/A **Hybrid:** Factor

**Irrigation:** None

**Planting Date:** 5/9/22 **Planting Depth:** 1.5" **Row Width:** 30"

**Target Plant Density:** 35000 plants per acre **Planting Method:** Almaco Precision Planter

**Harvest Date:** 10/24/22 **Harvest Method:** Massey 8XP

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### Experimental Design

**Design:** RCB **Replications:** 3  
**Plot Size Seeded:** 10' x 25' **Experiment Size:** 0.25 A  
**Harvest Plot Size:** 5' x 23' **Harvest Plant Density:** 33332 plants per acre

#### **Factors/Treatments:**

##### Hybrid (RM):

- |                                |                                  |
|--------------------------------|----------------------------------|
| 1) Dekalb DKC31-10RIB (81)     | 9) Renk RK579DGV2P (99)          |
| 2) Jung 33DP303 (83)           | 10) Dairyland DS-4018AM (101)    |
| 3) LG Seeds LG35C41VT2RIB (85) | 11) AgriGold A633-14STXRIB (103) |
| 4) NK Brand NK8760-3220 (87)   | 12) Dairyland DS-4510Q (105)     |
| 5) Brunner 3911GT-3110A (91)   | 13) Legend LR9106 PCE (106)      |
| 6) Federal 4225R (92)          | 14) Jung 59SS581 (109)           |
| 7) Dairyland DS-3366AM (93)    | 15) FS InVision FS6217XRIB (112) |
| 8) Jung 47DP429 (97)           | 16) Dekalb DKC65-94RIB (115)     |
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**Results: Table 2201-01 & 2201-02.**

**Table: 2201-01. Determining Corn Hybrid Maturity - Comparison of Hybrids.  
Arlington, WI - 2022.**

Hybrid	Relative maturity	Grain yield bu/A	Grain moisture %	Test wt lb/bu	Lodged			AGI \$6.09 \$/A	Silking date	Early dent	Kernel Milk			Black layer
					Total %	Stalk %	Root %				75% doy	50% doy	25% doy	
Dekalb DKC31-10RIB	81	189	19.4	56	4	4	0	929	191	226	229	236	244	249
Jung 33DP303	83	170	18.3	52	2	2	0	839	192	227	229	242	249	256
LG Seeds LG35C41VT2RI	85	212	19.1	57	2	2	0	1043	193	225	232	247	254	265
NK Brand NK8760-3220	87	202	20.7	56	3	3	0	988	196	227	235	243	249	257
Brunner 3911GT-3110A	91	235	19.3	53	0	0	0	1157	196	229	237	246	252	264
Federal 4225R	92	227	18.1	54	3	3	0	1123	196	229	234	242	245	250
Dairyland DS-3366AM	93	240	19.3	54	1	1	0	1181	197	231	240	244	251	262
Jung 47DP429	97	266	19.8	55	3	3	0	1307	198	231	240	248	254	264
Renk RK579DGVT2P	99	258	20.6	54	1	1	0	1263	197	228	241	248	255	266
Dairyland DS-4018AM	101	286	23.2	53	0	0	0	1382	199	237	243	250	257	269
AgriGold A633-14STXRIB	103	260	24.6	56	1	1	0	1249	203	236	245	255	264	272
Dairyland DS-4510Q	105	269	27.4	54	1	1	0	1277	199	237	244	252	267	277
Legend LR9106 PCE	106	260	26.8	51	1	1	0	1239	199	233	247	255	262	269
Jung 59SS581	109	262	31.6	54	1	1	0	1225	202	239	245	253	263	277
FS InVision FS6217XRIB	112	271	29.7	54	0	0	0	1275	202	235	243	251	262	276
Dekalb DKC65-94RIB	115	236	30.2	56	0	0	0	1110	203	236	241	253	261	278
		240	23.0	54	2	1	0	1162	198	232	239	248	256	266
<b><u>Probability(%)</u></b>														
Hybrid (H)		0.0	0.0	6.1	22.4	28.9	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b><u>LSD(0.10)</u></b>														
Hybrid (H)		16	1.8	3	NS	NS	NS	78	1	4	6	5	5	5

**Table: 2201-02. Determining Corn Hybrid Maturity - Comparison of Hybrids.  
Arlington, WI - 2022.**

Hybrid	Observation		Leaf Development			Plant height inches
	Relative maturity	Day of year	Leaf collars no./plant	Hail adjusters method no./plant	Total leaves no./plant	
		151	2.8	3.8	5.1	6.1
		165	3.5	6.8	8.2	16.5
		179	8.4	12.7	14.1	44.4
		193	15.2	16.4	17.4	91.9
		207	19.1	19.1	19.1	107.5
Dekalb DKC31-10RIB	81		10.0	12.0	13.0	53.7
Jung 33DP303	83		9.5	11.6	12.5	52.8
LG Seeds LG35C41VT2RIB	85		9.0	11.0	12.1	49.6
NK Brand NK8760-3220	87		10.3	12.2	13.4	51.7
Brunner 3911GT-3110A	91		9.5	11.5	12.5	52.3
Federal 4225R	92		9.8	11.6	12.7	51.2
Dairyland DS-3366AM	93		9.5	11.7	12.6	53.1
Jung 47DP429	97		9.9	11.8	12.7	55.9
Renk RK579DGVT2P	99		9.9	11.8	12.9	55.4
Dairyland DS-4018AM	101		10.1	12.1	13.2	55.7
AgriGold A633-14STXRIB	103		9.7	11.7	12.6	54.2
Dairyland DS-4510Q	105		9.7	11.7	12.7	55.8
Legend LR9106 PCE	106		9.9	12.0	13.0	52.9
Jung 59SS581	109		10.2	12.4	13.5	54.8
FS InVision FS6217XRIB	112		9.4	11.4	12.3	52.4
Dekalb DKC65-94RIB	115		9.9	11.9	12.9	50.8
Dekalb DKC31-10RIB	81	151	2.7	4.2	5.5	6.4
Dekalb DKC31-10RIB	81	165	3.5	7.5	8.7	15.3
Dekalb DKC31-10RIB	81	179	8.8	13.0	14.5	46.3
Dekalb DKC31-10RIB	81	193	16.2	16.8	17.8	96.5
Dekalb DKC31-10RIB	81	207	18.7	18.7	18.7	104.2
Jung 33DP303	83	151	3.2	4.2	5.7	6.9
Jung 33DP303	83	165	3.7	6.2	7.7	16.7
Jung 33DP303	83	179	7.3	13.3	14.5	49.3
Jung 33DP303	83	193	15.5	16.2	16.7	93.2
Jung 33DP303	83	207	18.0	18.0	18.0	97.7
LG Seeds LG35C41VT2RIB	85	151	2.2	3.0	4.5	4.3
LG Seeds LG35C41VT2RIB	85	165	3.0	5.3	7.0	13.3
LG Seeds LG35C41VT2RIB	85	179	6.5	12.2	13.3	40.2
LG Seeds LG35C41VT2RIB	85	193	15.0	16.2	17.0	89.0
LG Seeds LG35C41VT2RIB	85	207	18.5	18.5	18.5	101.2

continued

**Table: 2201-02. Determining Corn Hybrid Maturity - Comparison of Hybrids.**  
**Arlington, WI - 2022.**

(continued)

Hybrid	Observation		Leaf Development			Plant height inches
	Relative maturity	Day of year	Leaf collars no./plant	Hail adjusters method no./plant	Total leaves no./plant	
NK Brand NK8760-3220	87	151	3.0	3.8	5.3	7.0
NK Brand NK8760-3220	87	165	3.3	8.2	9.7	17.6
NK Brand NK8760-3220	87	179	10.0	13.0	14.7	42.5
NK Brand NK8760-3220	87	193	16.3	17.2	18.3	91.7
NK Brand NK8760-3220	87	207	19.0	19.0	19.0	99.8
Brunner 3911GT-3110A	91	151	2.5	3.3	4.5	5.9
Brunner 3911GT-3110A	91	165	3.2	6.5	7.8	16.4
Brunner 3911GT-3110A	91	179	7.8	12.8	14.2	48.0
Brunner 3911GT-3110A	91	193	15.2	16.3	17.3	90.2
Brunner 3911GT-3110A	91	207	18.7	18.7	18.7	100.8
Federal 4225R	92	151	2.2	3.5	4.8	5.0
Federal 4225R	92	165	3.8	6.5	8.0	16.0
Federal 4225R	92	179	8.5	12.2	13.7	38.8
Federal 4225R	92	193	15.5	16.7	17.7	90.8
Federal 4225R	92	207	19.2	19.2	19.2	105.5
Dairyland DS-3366AM	93	151	2.7	4.2	5.3	5.7
Dairyland DS-3366AM	93	165	3.2	6.0	7.5	17.5
Dairyland DS-3366AM	93	179	7.7	13.3	14.3	47.7
Dairyland DS-3366AM	93	193	15.2	16.2	17.2	91.3
Dairyland DS-3366AM	93	207	18.7	18.7	18.7	103.2
Jung 47DP429	97	151	2.8	4.0	5.2	6.5
Jung 47DP429	97	165	3.8	5.8	7.5	17.2
Jung 47DP429	97	179	8.0	13.2	14.2	46.2
Jung 47DP429	97	193	15.2	16.3	17.3	96.2
Jung 47DP429	97	207	19.5	19.5	19.5	113.7
Renk RK579DGVT2P	99	151	3.2	4.2	5.7	7.1
Renk RK579DGVT2P	99	165	3.3	6.3	8.0	18.6
Renk RK579DGVT2P	99	179	8.7	12.8	14.2	49.7
Renk RK579DGVT2P	99	193	15.5	16.5	17.7	92.7
Renk RK579DGVT2P	99	207	19.0	19.0	19.0	109.2
Dairyland DS-4018AM	101	151	3.0	4.0	5.2	6.7
Dairyland DS-4018AM	101	165	3.7	7.7	9.3	17.5
Dairyland DS-4018AM	101	179	8.5	12.8	14.2	47.0
Dairyland DS-4018AM	101	193	15.5	16.5	17.5	94.5
Dairyland DS-4018AM	101	207	19.7	19.7	19.7	112.7
AgriGold A633-14STXRIB	103	151	3.0	3.8	5.0	6.1
AgriGold A633-14STXRIB	103	165	3.7	6.3	7.3	16.5
AgriGold A633-14STXRIB	103	179	7.5	12.3	13.5	45.5

continued

**Table: 2201-02. Determining Corn Hybrid Maturity - Comparison of Hybrids.**  
**Arlington, WI - 2022.**

(continued)

Hybrid	Observation		Leaf Development			Plant height inches
	Relative maturity	Day of year	Leaf collars no./plant	Hail adjusters method no./plant	Total leaves no./plant	
AgriGold A633-14STXRIB	103	193	14.3	16.0	17.0	89.3
AgriGold A633-14STXRIB	103	207	20.2	20.2	20.2	113.5
Dairyland DS-4510Q	105	151	2.8	3.5	5.0	5.8
Dairyland DS-4510Q	105	165	3.5	6.8	8.2	15.8
Dairyland DS-4510Q	105	179	8.3	12.2	13.5	45.5
Dairyland DS-4510Q	105	193	14.7	16.5	17.5	92.7
Dairyland DS-4510Q	105	207	19.3	19.3	19.3	119.0
Legend LR9106 PCE	106	151	2.7	3.8	5.0	5.7
Legend LR9106 PCE	106	165	4.0	7.5	8.7	16.7
Legend LR9106 PCE	106	179	9.0	13.0	14.5	39.3
Legend LR9106 PCE	106	193	15.0	16.7	17.7	91.7
Legend LR9106 PCE	106	207	19.0	19.0	19.0	111.0
Jung 59SS581	109	151	3.0	4.0	5.2	6.7
Jung 59SS581	109	165	3.7	8.5	10.0	20.2
Jung 59SS581	109	179	9.8	13.2	15.0	45.2
Jung 59SS581	109	193	15.2	17.2	18.2	93.3
Jung 59SS581	109	207	19.3	19.3	19.3	108.3
FS InVision FS6217XRIB	112	151	2.7	3.8	4.8	5.6
FS InVision FS6217XRIB	112	165	2.8	6.3	7.3	14.8
FS InVision FS6217XRIB	112	179	8.0	11.7	13.0	41.8
FS InVision FS6217XRIB	112	193	14.3	16.0	17.0	90.5
FS InVision FS6217XRIB	112	207	19.2	19.2	19.2	109.3
Dekalb DKC65-94RIB	115	151	2.8	3.8	4.8	5.6
Dekalb DKC65-94RIB	115	165	3.5	7.5	9.0	14.4
Dekalb DKC65-94RIB	115	179	9.2	12.5	14.0	37.3
Dekalb DKC65-94RIB	115	193	14.2	15.8	17.0	86.2
Dekalb DKC65-94RIB	115	207	19.7	19.7	19.7	110.5
Mean			9.8	11.8	12.8	53.3

**Probability(%)**

Hybrid (H)	0.0	0.0	0.0	0.1
Day Of Year (D)	0.0	0.0	0.0	0.0
H x D	0.7	4.6	8.0	0.7

**LSD(0.10)**

Hybrid (H)	0.4	0.4	0.4	2.7
Day Of Year (D)	0.2	0.2	0.2	1.5
H x D	1.0	1.0	1.0	5.9

## FIELD EXPERIMENT HISTORY

**Title:** Corn Hybrid Growth and Development  
**Experiment:** 01GD **Trial ID:** 6613 **Year:** 2022  
**Personnel:** Joe Lauer, Kent Kohn, Thierno Diallo  
**Location:** Marshfield, WI **County:** Marathon  
**Supported By:** HATCH

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### Site Information

**Field:** **Previous Crop:** Soybean **Soil Type:** Owen Withee Silt Loam  
**Soil Test:** **Date:** 10/1 /21 **pH:** 6.6 **OM (%)** 2.7 **P (ppm)** 31 **K (ppm)** 113

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### Plot Management

**Tillage Operations:** Field Cultivator

**Fertilizer:** **Preplant Analysis:** N/A **Rate lbs/A:** N/A **Date:** N/A  
**Starter Analysis:** 9-11-30-6S-1Z **Rate lbs/A:** 200 lbs/A **Date:** 5 /16/22  
**Post plant Analysis:** 32-0-0 **Rate lbs/A:** 170 lbs/A **Date:** N/A  
**Manure:** N/A

**Herbicide:** Resicore 2.5 qt/A **Insecticide:** Force 6.5G 2.0 lbs/A  
**Irrigation:** None **Hybrid:** Factor

**Planting Date:** 5/16/22 **Planting Depth:** 1.5" **Row Width:** 30"

**Target Plant Density:** 35000 plants per acre **Planting Method:** Almaco Precision Planter

**Harvest Date:** 11/1/22 **Harvest Method:** Massey 8XP

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### Experimental Design

**Design:** RCB **Replications:** 3  
**Plot Size Seeded:** 10' x 25' **Experiment Size:** 0.25 A  
**Harvest Plot Size:** 5' x 23' **Harvest Plant Density:** 31020 plants per acre

### Factors/Treatments:

#### Hybrid (RM):

- |                                |                                  |
|--------------------------------|----------------------------------|
| 1) Dekalb DKC31-10RIB (81)     | 9) Renk RK579DGVT2P (99)         |
| 2) Jung 33DP303 (83)           | 10) Dairyland DS-4018AM (101)    |
| 3) LG Seeds LG35C41VT2RIB (85) | 11) AgriGold A633-14STXRIB (103) |
| 4) NK Brand NK8760-3220 (87)   | 12) Dairyland DS-4510Q (105)     |
| 5) Brunner 3911GT-3110A (91)   | 13) Legend LR9106 PCE (106)      |
| 6) Federal 4225R (92)          | 14) Jung 59SS581 (109)           |
| 7) Dairyland DS-3366AM (93)    | 15) FS InVision FS6217XRIB (112) |
| 8) Jung 47DP429 (97)           | 16) Dekalb DKC65-94RIB (115)     |
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**Results: Table 2201-03.**

**Table: 2201-03. Determining Corn Hybrid Maturity - Comparison of Hybrids.  
Marshfield, WI - 2022.**

Hybrid	Relative maturity	Harvest density	Grain yield	Grain moisture	Test weight				AGI \$6.09
						Total	Stalk	Root	
		plants/A	bu/A	%	lb/bu	%	%	%	\$/A
Dekalb DKC31-10RIB	81	31565	188	20.1	56	0	0	0	829
Jung 33DP303	83	32323	189	20.3	53	0	0	0	835
LG Seeds LG35C41VT2RIB	85	31818	191	19.9	56	0	0	0	901
NK Brand NK8760-3220	87	26767	170	22.5	53	5	5	0	822
Brunner 3911GT-3110A	91	30681	199	23.4	51	0	0	0	960
Federal 4225R	92	29040	185	23.9	50	0	0	0	892
Dairyland DS-3366AM	93	28787	195	22.3	53	0	0	0	922
Jung 47DP429	97	32702	203	25.2	50	0	0	0	974
Renk RK579DGV2P	99	32828	194	26.7	48	0	0	0	923
Dairyland DS-4018AM	101	31060	187	30.1	48	0	0	0	934
AgriGold A633-14STXRIB	103	31944	169	35.4	48	0	0	0	877
Dairyland DS-4510Q	105	32070	184	31.2	48	0	0	0	883
Legend LR9106 PCE	106	31691	191	33.4	46	0	0	0	854
Jung 59SS581	109	31060	181	34.2	47	0	0	0	836
FS InVision FS6217XRIB	112	31818	180	36.2	49	0	0	0	875
Dekalb DKC65-94RIB	115	30176	158	34.9	49	0	0	0	773
Mean		31021	185	27.5	50	0	0	0	881
<b><u>Probability(%)</u></b>									
Hybrid (H)		21.2	0.4	0.0	0.0	49.0	48.0	48.0	12.1
<b><u>LSD(0.10)</u></b>									
Hybrid (H)		NS	16	2.2	2.1	NS	NS	NS	NS