# FIELD EXPERIMENT HISTORY

**Title:** **Plant Density, Planting Date, and Hybrid Influence on Corn Grain and Silage**

**Experiment:** 04 PD x DOP **Trial ID** 2733 **Year:** 2005

**Personnel:** J. G. Lauer, K.D. Kohn, P.J. Flannery

**Location:** Arlington, WI **County:** Columbia

**Supported By:** HATCH

## Site Information

**Field:** ARS357 **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam

**Soil Test:** **Date:** 10/1 /05 **pH:** 6.1 **OM (%)** 3.4 **P (ppm)** 28 **K (ppm)** 78

## Plot Management

**Tillage Operations:** Fall Chisel Plow Field Cultivator Soil Finisher

| | | Analysis: | Rate lbs/A: | Date: |
|---|---|---|---|---|
| **Fertilizer:** | **Preplant :** | 46-0-0 | 325 | 4 /14/04 |
| | **Starter :** | 9-24-24 | 150 | Each DOP |
| | **Post plant :** | N/A | N/A | N/A |
| | **Manure:** | N/A | N/A | N/A |

**Herbicide:** Outlook 20.0 oz/A
Hornet 4.0 oz/A
Accent 0.66 oz/A
Callisto 3.0 oz/A

**Insecticide:** None

**Hybrid:** See Factors

**Irrigation:** None

**Planting Date:** See Factors **Planting Depth:** 1.5" **Row Width:** 30"

**Target Plant Density:** See Factors **Planting Method:** Kinze Plot Planter

**Harvest Date:** S: 9/21/05
G: 10/25/05

**Harvest Method:** S:New Holland Plot Chopper
G:Massey Ferguson 8XP

## Experimental Design

**Design:** RCB split plot **Replications:** 3

**Plot Size Seeded** 20' x 25' **Experiment Size:** 1.19 Acre

**Harvest Plot Size:** S: 2.5' x 22' **Harvest Plant Density:** Varies

**Factors/Treatments:**

**Planting Dates:**
April 29, May 23,
and June 10

**Plant Densities: (plants/A)**
15000, 30000,
and 45000

**Hybrids:**
Dekalb DKC5878(YGCB)
Pioneer 37R71

**Results: Table C-43.**

## Table C-43. Plant Density, Planting Date, and Hybrid Influence on Corn Silage Yield and Quality and Corn Grain Arlington, WI - 2005

| Brand | Hybrid | Date of planting | Target plant density | Grain | | | | Grower return | Seeds planted | Stand | | Harvest ears | Silking Date | Flag leaf height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Yield | Moisture | Test Wt | Lodging | | | Emerged | Harvest | | | |
| | | | | bu/A | % | lbs/bu | % | $/A | seeds/A | seeds/A | plants/A | ears/A | doy | inches |
| | | | 15000 | 179 | 21.7 | 56 | 0 | 268 | 23760 | 23683 | 16456 | 16475 | 206 | 86 |
| | | | 30000 | 217 | 21.2 | 57 | 4 | 327 | 43560 | 40942 | 30712 | 30714 | 206 | 86 |
| | | | 45000 | 212 | 21.0 | 56 | 22 | 321 | 59400 | 54417 | 44946 | 44947 | 207 | 85 |
| | | April 29 | | 197 | 17.1 | 59 | 7 | 314 | 42240 | 39309 | 29832 | 29839 | 199 | 81 |
| | | May 23 | | 205 | 18.9 | 58 | 9 | 320 | 42240 | 40530 | 30800 | 30807 | 204 | 83 |
| | | June 10 | | 205 | 27.9 | 52 | 11 | 283 | 42240 | 39204 | 31482 | 31489 | 216 | 94 |
| | | April 29 | 15000 | 174 | 17.2 | 59 | 1 | 276 | 23760 | 23678 | 15378 | 15397 | 198 | 83 |
| | | April 29 | 30000 | 206 | 17.1 | 59 | 5 | 329 | 43560 | 40277 | 29634 | 29637 | 199 | 82 |
| | | April 29 | 45000 | 211 | 17.1 | 59 | 15 | 337 | 59400 | 53972 | 44484 | 44485 | 200 | 78 |
| | | May 23 | 15000 | 184 | 19.0 | 57 | 0 | 285 | 23760 | 25047 | 16632 | 16650 | 204 | 84 |
| | | May 23 | 30000 | 223 | 19.0 | 58 | 3 | 348 | 43560 | 41663 | 30954 | 30955 | 204 | 82 |
| | | May 23 | 45000 | 208 | 18.7 | 58 | 23 | 326 | 59400 | 54879 | 44814 | 44815 | 205 | 83 |
| | | June 10 | 15000 | 180 | 28.9 | 53 | 0 | 244 | 23760 | 22325 | 17358 | 17378 | 215 | 92 |
| | | June 10 | 30000 | 221 | 27.6 | 53 | 5 | 305 | 43560 | 40887 | 31548 | 31549 | 216 | 93 |
| | | June 10 | 45000 | 216 | 27.2 | 52 | 27 | 301 | 59400 | 54401 | 45540 | 45541 | 217 | 96 |
| Dekalb | DKC58-78(YGCB) | | | 214 | 24.0 | 56 | 9 | 312 | 42240 | 39094 | 30727 | 30735 | 209 | 87 |
| Pioneer | 37R71 | | | 191 | 18.6 | 57 | 9 | 299 | 42240 | 40267 | 30683 | 30688 | 204 | 84 |
| Dekalb | DKC58-78(YGCB) | | 15000 | 201 | 24.7 | 56 | 0 | 291 | 23760 | 24002 | 17072 | 17095 | 208 | 87 |
| Dekalb | DKC58-78(YGCB) | | 30000 | 232 | 23.8 | 56 | 3 | 340 | 43560 | 40216 | 30316 | 30319 | 209 | 87 |
| Dekalb | DKC58-78(YGCB) | | 45000 | 209 | 23.3 | 56 | 24 | 306 | 59400 | 53064 | 44792 | 44793 | 209 | 88 |
| Pioneer | 37R71 | | 15000 | 158 | 18.6 | 57 | 1 | 246 | 23760 | 23364 | 15840 | 15855 | 203 | 85 |
| Pioneer | 37R71 | | 30000 | 201 | 18.6 | 57 | 6 | 315 | 43560 | 41668 | 31108 | 31109 | 204 | 84 |
| Pioneer | 37R71 | | 45000 | 215 | 18.7 | 57 | 20 | 336 | 59400 | 55770 | 45100 | 45101 | 205 | 83 |
| Dekalb | DKC58-78(YGCB) | April 29 | | 213 | 18.6 | 59 | 9 | 333 | 42240 | 38192 | 29128 | 29136 | 201 | 82 |
| Dekalb | DKC58-78(YGCB) | May 23 | | 217 | 20.6 | 57 | 9 | 331 | 42240 | 40821 | 30800 | 30809 | 207 | 83 |
| Dekalb | DKC58-78(YGCB) | June 10 | | 213 | 32.7 | 52 | 9 | 273 | 42240 | 38269 | 32252 | 32261 | 218 | 97 |
| Pioneer | 37R71 | April 29 | | 181 | 15.7 | 59 | 6 | 295 | 42240 | 40425 | 30536 | 30542 | 196 | 80 |
| Pioneer | 37R71 | May 23 | | 194 | 17.2 | 58 | 8 | 309 | 42240 | 40238 | 30800 | 30804 | 201 | 83 |
| Pioneer | 37R71 | June 10 | | 198 | 23.1 | 53 | 12 | 293 | 42240 | 40139 | 30712 | 30718 | 214 | 90 |

continued

**Table C-43.** **Plant Density, Planting Date, and Hybrid Influence on Corn Silage Yield and Quality and Corn Grain**
(continued) **Arlington, WI - 2005**

| Brand | Hybrid | Date of planting | Target plant density | Grain | | | | Grower return | Seeds planted | Stand | | Harvest ears | Silking Date | Flag leaf height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Yield | Moisture | Test Wt | Lodging | | | Emerged | Harvest | | | |
| | | | | bu/A | % | lbs/bu | % | $/A | seeds/A | seeds/A | plants/A | ears/A | doy | inches |
| Dekalb | DKC58-78(YGCB) | April 29 | 15000 | 197 | 19 | 58.7 | 0 | 308 | 23760 | 24057 | 15444 | 15464 | 201 | 81 |
| Dekalb | DKC58-78(YGCB) | April 29 | 30000 | 229 | 19 | 58.9 | 4 | 358 | 43560 | 38841 | 28512 | 28517 | 201 | 87 |
| Dekalb | DKC58-78(YGCB) | April 29 | 45000 | 212 | 18 | 59.1 | 21 | 333 | 59400 | 51678 | 43428 | 43428 | 202 | 78 |
| Dekalb | DKC58-78(YGCB) | May 23 | 15000 | 214 | 21 | 57.1 | 1 | 327 | 23760 | 26202 | 17556 | 17581 | 207 | 83 |
| Dekalb | DKC58-78(YGCB) | May 23 | 30000 | 234 | 21 | 57.4 | 3 | 357 | 43560 | 41646 | 30360 | 30362 | 206 | 79 |
| Dekalb | DKC58-78(YGCB) | May 23 | 45000 | 201 | 20 | 57.5 | 22 | 308 | 59400 | 54615 | 44484 | 44485 | 208 | 85 |
| Dekalb | DKC58-78(YGCB) | June 10 | 15000 | 190 | 35 | 51.5 | 0 | 237 | 23760 | 21747 | 18216 | 18238 | 217 | 95 |
| Dekalb | DKC58-78(YGCB) | June 10 | 30000 | 234 | 32 | 52.0 | 0 | 304 | 43560 | 40161 | 32076 | 32078 | 219 | 96 |
| Dekalb | DKC58-78(YGCB) | June 10 | 45000 | 213 | 31 | 51.4 | 28 | 278 | 59400 | 52899 | 46464 | 46465 | 219 | 100 |
| Pioneer | 37R71 | April 29 | 15000 | 151 | 16 | 58.9 | 2 | 245 | 23760 | 23298 | 15312 | 15329 | 195 | 84 |
| Pioneer | 37R71 | April 29 | 30000 | 184 | 16 | 59.1 | 6 | 299 | 43560 | 41712 | 30756 | 30757 | 196 | 78 |
| Pioneer | 37R71 | April 29 | 45000 | 210 | 16 | 58.8 | 9 | 340 | 59400 | 56265 | 45540 | 45541 | 198 | 78 |
| Pioneer | 37R71 | May 23 | 15000 | 153 | 17 | 57.0 | 0 | 244 | 23760 | 23892 | 15708 | 15718 | 201 | 84 |
| Pioneer | 37R71 | May 23 | 30000 | 213 | 17 | 58.9 | 2 | 339 | 43560 | 41679 | 31548 | 31549 | 201 | 84 |
| Pioneer | 37R71 | May 23 | 45000 | 215 | 17 | 58.2 | 23 | 344 | 59400 | 55143 | 45144 | 45145 | 202 | 80 |
| Pioneer | 37R71 | June 10 | 15000 | 169 | 23 | 54.0 | 0 | 250 | 23760 | 22902 | 16500 | 16518 | 213 | 88 |
| Pioneer | 37R71 | June 10 | 30000 | 207 | 23 | 53.4 | 10 | 306 | 43560 | 41613 | 31020 | 31020 | 214 | 90 |
| Pioneer | 37R71 | June 10 | 45000 | 219 | 23 | 52.7 | 26 | 323 | 59400 | 55902 | 44616 | 44616 | 215 | 92 |
| Mean | | | | 203 | 21 | 56.4 | 9 | 306 | 42240 | 39681 | 30705 | 30712 | 206 | 86 |
| **Probability(%)** | | | | | | | | | | | | | | |
| Hybrid (H) | | | | 10.8 | 1.3 | 9.2 | 98.4 | 30.3 | - | 2.2 | 83.3 | 82.1 | 0.0 | 32.3 |
| Date of Planting (P) | | | | 13.1 | 0.0 | 0.0 | 36.4 | 0.2 | - | 2.4 | 1.0 | 1.0 | 0.0 | 0.0 |
| H x P | | | | 19.8 | 0.0 | 4.6 | 53.2 | 1.1 | - | 2.0 | 1.8 | 1.8 | 5.6 | 10.7 |
| Plant Density (D) | | | | 0.0 | 2.4 | 26.2 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 89.0 |
| P x D | | | | 64.5 | 5.7 | 13.3 | 73.0 | 56.7 | - | 8.0 | 72.9 | 73.0 | 1.7 | 8.5 |
| H x D | | | | 0.0 | 2.3 | 65.2 | 68.6 | 0.0 | - | 0.0 | 2.3 | 2.2 | 0.6 | 50.1 |
| H x P x D | | | | 35.1 | 12.4 | 28.3 | 88.2 | 16.1 | - | 25.9 | 52.3 | 52.0 | 0.3 | 5.3 |
| **LSD(0.10)** | | | | | | | | | | | | | | |
| Hybrid (H) | | | | NS | 2 | 1 | NS | NS | - | 518 | NS | NS | 0 | NS |
| Date of Planting (P) | | | | NS | 1 | 1 | NS | 14 | - | 778 | 740 | 739 | 0 | 3 |
| H x P | | | | NS | 1 | 1 | NS | 19 | - | 1100 | 1047 | 1046 | 1 | NS |
| Plant Density (D) | | | | 9 | 0 | NS | 7 | 13 | - | 612 | 607 | 607 | 0 | NS |
| P x D | | | | NS | 1 | NS | NS | NS | - | 1060 | NS | NS | 0 | 4 |
| H x D | | | | 13 | 1 | NS | NS | 18 | - | 865 | 858 | 858 | 0 | NS |
| H x P x D | | | | NS | NS | NS | NS | NS | - | NS | NS | NS | 1 | 5 |
| **CV(%)** | | | | 8 | 3 | 1 | 144 | 7 | - | 3 | 3 | 3 | 0 | 5 |

continued

**Table C-43. Plant Density, Planting Date, and Hybrid Influence on Corn Silage Yield and Quality and Corn Grain**
(continued) **Arlington, WI - 2005**

| | | | | Whole Plant | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Target | | | | | | | Harvest | | *In Vitro* | | | | | | Milk per | |
| Brand | Hybrid | Date of planting | plant density | Dry Matter yield | Moisture | Kernel milk | KMR 0-5 | SMR 0-5 | VMR 0-10 | plants | ears | CP | ADF | NDF | Digest | NDFD | Starch | Ton | Acre |
| | | | | tons/A | % | % | # | # | # | plants/A | ears/A | % | % | % | % | % | % | lbs/T | lbs/A |
| | | | 15000 | 7.5 | 54.1 | 32.5 | 1.6 | 2.5 | 4.1 | 15356 | 25960 | 7.7 | 19.6 | 42.2 | 82.1 | 57.5 | 32.6 | 1272 | 9570 |
| | | | 30000 | 9.0 | 51.6 | 33.3 | 1.7 | 1.9 | 3.6 | 30140 | 31416 | 7.0 | 20.0 | 42.1 | 81.7 | 56.4 | 34.5 | 1101 | 9957 |
| | | | 45000 | 9.0 | 49.1 | 32.2 | 1.6 | 1.5 | 3.1 | 42460 | 43296 | 6.8 | 19.5 | 40.8 | 81.3 | 54.2 | 37.2 | 860 | 7751 |
| | | April 29 | | 8.3 | 53.8 | 37.2 | 1.9 | 2.3 | 4.2 | 29612 | 33484 | 7.1 | 18.2 | 39.6 | 83.0 | 57.1 | 36.3 | 1075 | 8902 |
| | | May 23 | | 8.5 | 46.8 | 27.2 | 1.4 | 1.4 | 2.7 | 28820 | 32912 | 7.1 | 19.7 | 42.2 | 81.4 | 55.9 | 34.5 | 1072 | 9099 |
| | | June 10 | | 8.6 | 54.2 | 33.6 | 1.7 | 2.2 | 3.8 | 29524 | 34276 | 7.2 | 21.2 | 43.2 | 80.6 | 55.1 | 33.5 | 1086 | 9278 |
| | | April 29 | 15000 | 7.3 | 55.2 | 36.7 | 1.8 | 2.8 | 4.6 | 15312 | 25344 | 7.6 | 18.3 | 40.1 | 83.1 | 57.8 | 34.7 | 1195 | 8806 |
| | | April 29 | 30000 | 8.4 | 53.9 | 38.3 | 1.9 | 2.3 | 4.3 | 29832 | 31020 | 6.8 | 18.9 | 40.7 | 82.7 | 57.5 | 35.6 | 1104 | 9333 |
| | | April 29 | 45000 | 9.2 | 52.2 | 36.7 | 1.8 | 1.9 | 3.7 | 43692 | 44088 | 7.0 | 17.3 | 38.0 | 83.3 | 56.0 | 38.5 | 926 | 8566 |
| | | May 23 | 15000 | 7.7 | 49.2 | 28.3 | 1.4 | 1.9 | 3.3 | 15180 | 25476 | 7.5 | 18.8 | 41.6 | 82.6 | 58.1 | 33.7 | 1233 | 9521 |
| | | May 23 | 30000 | 9.1 | 47.3 | 26.7 | 1.3 | 1.4 | 2.8 | 29700 | 30492 | 7.1 | 20.0 | 42.7 | 81.2 | 55.8 | 34.1 | 1091 | 10040 |
| | | May 23 | 45000 | 8.6 | 43.9 | 26.7 | 1.3 | 0.8 | 2.2 | 41580 | 42768 | 6.8 | 20.2 | 42.4 | 80.4 | 53.7 | 35.8 | 894 | 7737 |
| | | June 10 | 15000 | 7.5 | 58.0 | 32.5 | 1.6 | 2.8 | 4.4 | 15576 | 27060 | 7.9 | 21.6 | 44.8 | 80.7 | 56.7 | 29.5 | 1388 | 10383 |
| | | June 10 | 30000 | 9.3 | 53.6 | 35.0 | 1.8 | 2.1 | 3.8 | 30888 | 32736 | 7.0 | 21.0 | 42.9 | 81.1 | 55.9 | 33.8 | 1109 | 10499 |
| | | June 10 | 45000 | 9.1 | 51.0 | 33.3 | 1.7 | 1.7 | 3.3 | 42108 | 43032 | 6.7 | 20.9 | 42.0 | 80.2 | 52.8 | 37.3 | 762 | 6951 |
| Dekalb | DKC58-78(YGCB) | | | 9.2 | 53.7 | 48.3 | 2.4 | 2.1 | 4.5 | 29304 | 33939 | 7.1 | 20.7 | 43.2 | 81.4 | 56.8 | 33.5 | 1155 | 10579 |
| Pioneer | 37R71 | | | 7.8 | 49.4 | 17.0 | 0.9 | 1.8 | 2.6 | 29333 | 33176 | 7.2 | 18.6 | 40.2 | 82.0 | 55.2 | 36.0 | 1000 | 7606 |
| Dekalb | DKC58-78(YGCB) | | 15000 | 8.6 | 55.9 | 47.2 | 2.4 | 2.7 | 5.1 | 15136 | 26664 | 7.5 | 20.3 | 43.0 | 82.1 | 58.4 | 32.4 | 1299 | 11135 |
| Dekalb | DKC58-78(YGCB) | | 30000 | 9.5 | 54.2 | 48.3 | 2.4 | 2.0 | 4.5 | 29744 | 31240 | 6.9 | 21.5 | 44.6 | 81.0 | 57.3 | 32.1 | 1235 | 11818 |
| Dekalb | DKC58-78(YGCB) | | 45000 | 9.5 | 51.2 | 49.4 | 2.5 | 1.6 | 4.0 | 43032 | 43912 | 7.0 | 20.3 | 42.0 | 81.0 | 54.8 | 36.0 | 932 | 8784 |
| Pioneer | 37R71 | | 15000 | 6.5 | 52.3 | 17.8 | 0.9 | 2.2 | 3.1 | 15576 | 25256 | 7.8 | 18.8 | 41.3 | 82.1 | 56.7 | 32.9 | 1244 | 8005 |
| Pioneer | 37R71 | | 30000 | 8.4 | 49.1 | 18.3 | 0.9 | 1.8 | 2.8 | 30536 | 31592 | 7.1 | 18.4 | 39.6 | 82.3 | 55.4 | 36.9 | 968 | 8096 |
| Pioneer | 37R71 | | 45000 | 8.5 | 46.9 | 15.0 | 0.8 | 1.4 | 2.1 | 41888 | 42680 | 6.7 | 18.6 | 39.6 | 81.6 | 53.5 | 38.4 | 789 | 6719 |
| Dekalb | DKC58-78(YGCB) | April 29 | | 9.0 | 55.9 | 54.4 | 2.7 | 2.4 | 5.2 | 29920 | 33440 | 7.1 | 19.3 | 41.1 | 82.5 | 57.3 | 35.0 | 1133 | 10123 |
| Dekalb | DKC58-78(YGCB) | May 23 | | 8.9 | 49.6 | 42.2 | 2.1 | 1.7 | 3.8 | 28336 | 33176 | 7.0 | 20.8 | 43.9 | 81.1 | 56.9 | 33.0 | 1170 | 10456 |
| Dekalb | DKC58-78(YGCB) | June 10 | | 9.7 | 55.8 | 48.3 | 2.4 | 2.2 | 4.6 | 29656 | 35200 | 7.2 | 22.0 | 44.7 | 80.5 | 56.4 | 32.5 | 1163 | 11158 |
| Pioneer | 37R71 | April 29 | | 7.7 | 51.7 | 20.0 | 1.0 | 2.2 | 3.2 | 29304 | 33528 | 7.2 | 17.1 | 38.2 | 83.5 | 56.9 | 37.5 | 1017 | 7680 |
| Pioneer | 37R71 | May 23 | | 8.1 | 44.0 | 12.2 | 0.6 | 1.1 | 1.7 | 29304 | 32648 | 7.2 | 18.5 | 40.5 | 81.7 | 54.8 | 36.1 | 974 | 7742 |
| Pioneer | 37R71 | June 10 | | 7.6 | 52.6 | 18.9 | 0.9 | 2.1 | 3.0 | 29392 | 33352 | 7.2 | 20.3 | 41.8 | 80.7 | 53.9 | 34.5 | 1009 | 7397 |

continued

**Table C-43. Plant Density, Planting Date, and Hybrid Influence on Corn Silage Yield and Quality and Corn Grain**
(continued) **Arlington, WI - 2005**

| | | | Target | Whole Plant | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Date | plant | Dry Matter | | Kernel | KMR | SMR | VMR | Harvest | | *In Vitro* | | | | | | Milk per | |
| Brand | Hybrid | of planting | density | yield | Moisture | milk | 0-5 | 0-5 | 0-10 | plants | ears | CP | ADF | NDF | Digest | NDFD | Starch | Ton | Acre |
| | | | | tons/A | % | % | # | # | # | plants/A | ears/A | % | % | % | % | % | % | lbs/T | lbs/A |
| Dekalb | DKC58-78(YGCB) | April 29 | 15000 | 8.4 | 57.1 | 53.3 | 2.7 | 3.1 | 5.7 | 15312 | 24288 | 7.5 | 19.2 | 41.2 | 82.7 | 58.0 | 33.8 | 1238 | 10413 |
| Dekalb | DKC58-78(YGCB) | April 29 | 30000 | 8.9 | 56.5 | 53.3 | 2.7 | 2.5 | 5.1 | 29568 | 31152 | 6.6 | 20.5 | 43.1 | 81.8 | 57.6 | 33.5 | 1195 | 10724 |
| Dekalb | DKC58-78(YGCB) | April 29 | 45000 | 9.5 | 54.0 | 56.7 | 2.8 | 1.8 | 4.6 | 44880 | 44880 | 7.1 | 18.1 | 39.0 | 82.9 | 56.2 | 37.6 | 965 | 9233 |
| Dekalb | DKC58-78(YGCB) | May 23 | 15000 | 8.3 | 51.3 | 41.7 | 2.1 | 2.2 | 4.3 | 14520 | 26400 | 7.2 | 19.3 | 42.0 | 82.6 | 58.5 | 33.9 | 1225 | 10142 |
| Dekalb | DKC58-78(YGCB) | May 23 | 30000 | 9.7 | 50.6 | 43.3 | 2.2 | 1.7 | 3.9 | 28776 | 29832 | 7.0 | 21.3 | 44.7 | 81.1 | 57.8 | 32.0 | 1253 | 12142 |
| Dekalb | DKC58-78(YGCB) | May 23 | 45000 | 8.8 | 46.7 | 41.7 | 2.1 | 1.1 | 3.2 | 41712 | 43296 | 7.0 | 21.9 | 45.0 | 79.5 | 54.4 | 33.0 | 1033 | 9083 |
| Dekalb | DKC58-78(YGCB) | June 10 | 15000 | 9.0 | 59.1 | 46.7 | 2.3 | 2.9 | 5.3 | 15576 | 29304 | 7.8 | 22.4 | 46.0 | 80.9 | 58.5 | 29.4 | 1436 | 12850 |
| Dekalb | DKC58-78(YGCB) | June 10 | 30000 | 10.0 | 55.5 | 48.3 | 2.4 | 1.9 | 4.3 | 30888 | 32736 | 7.0 | 22.8 | 46.0 | 80.0 | 56.6 | 30.8 | 1255 | 12589 |
| Dekalb | DKC58-78(YGCB) | June 10 | 45000 | 10.1 | 52.8 | 50.0 | 2.5 | 1.8 | 4.3 | 42504 | 43560 | 6.8 | 20.8 | 42.0 | 80.6 | 54.0 | 37.4 | 797 | 8036 |
| Pioneer | 37R71 | April 29 | 15000 | 6.3 | 53.2 | 20.0 | 1.0 | 2.5 | 3.5 | 15312 | 26400 | 7.7 | 17.5 | 39.1 | 83.4 | 57.5 | 35.6 | 1152 | 7199 |
| Pioneer | 37R71 | April 29 | 30000 | 7.8 | 51.4 | 23.3 | 1.2 | 2.2 | 3.4 | 30096 | 30888 | 7.0 | 17.3 | 38.4 | 83.6 | 57.3 | 37.7 | 1013 | 7942 |
| Pioneer | 37R71 | April 29 | 45000 | 8.9 | 50.4 | 16.7 | 0.8 | 2.0 | 2.8 | 42504 | 43296 | 6.9 | 16.5 | 37.0 | 83.7 | 55.8 | 39.4 | 886 | 7899 |
| Pioneer | 37R71 | May 23 | 15000 | 7.2 | 47.0 | 15.0 | 0.8 | 1.5 | 2.3 | 15840 | 24552 | 7.9 | 18.3 | 41.2 | 82.6 | 57.6 | 33.5 | 1241 | 8899 |
| Pioneer | 37R71 | May 23 | 30000 | 8.6 | 44.0 | 10.0 | 0.5 | 1.1 | 1.6 | 30624 | 31152 | 7.2 | 18.7 | 40.6 | 81.3 | 53.9 | 36.1 | 928 | 7937 |
| Pioneer | 37R71 | May 23 | 45000 | 8.5 | 41.0 | 11.7 | 0.6 | 0.6 | 1.2 | 41448 | 42240 | 6.6 | 18.5 | 39.8 | 81.3 | 53.1 | 38.6 | 754 | 6390 |
| Pioneer | 37R71 | June 10 | 15000 | 6.0 | 56.8 | 18.3 | 0.9 | 2.6 | 3.5 | 15576 | 24816 | 7.9 | 20.8 | 43.6 | 80.4 | 55.0 | 29.6 | 1340 | 7917 |
| Pioneer | 37R71 | June 10 | 30000 | 8.7 | 51.7 | 21.7 | 1.1 | 2.2 | 3.3 | 30888 | 32736 | 7.0 | 19.1 | 39.8 | 82.1 | 55.2 | 36.7 | 962 | 8408 |
| Pioneer | 37R71 | June 10 | 45000 | 8.2 | 49.3 | 16.7 | 0.8 | 1.5 | 2.3 | 41712 | 42504 | 6.5 | 20.9 | 42.0 | 79.7 | 51.6 | 37.2 | 726 | 5866 |
| Mean | | | | 8.5 | 51.6 | 32.7 | 1.6 | 2.0 | 3.6 | 29319 | 33557 | 7.2 | 19.7 | 41.7 | 81.7 | 56.0 | 34.8 | 1078 | 9093 |
| **Probability(%)** | | | | | | | | | | | | | | | | | | | |
| Hybrid (H) | | | | 0.0 | 11.6 | 0.3 | 0.3 | 4.7 | 0.6 | 95.5 | 34.0 | 35.0 | 9.0 | 8.1 | 25.0 | 0.0 | 12.7 | 8.5 | 1.4 |
| Date of Planting (P) | | | | 48.0 | 0.0 | 0.4 | 0.4 | 0.1 | 0.0 | 5.5 | 5.9 | 43.6 | 0.0 | 0.2 | 0.0 | 0.5 | 1.5 | 94.3 | 81.9 |
| H x P | | | | 12.4 | 17.8 | 45.9 | 45.9 | 34.0 | 44.5 | 6.5 | 17.9 | 15.2 | 74.2 | 92.1 | 20.8 | 8.3 | 75.3 | 65.4 | 52.4 |
| Plant Density (D) | | | | 0.0 | 0.0 | 68.6 | 68.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 63.5 | 21.0 | 12.1 | 0.0 | 0.1 | 0.0 | 0.0 |
| P x D | | | | 4.8 | 22.3 | 75.7 | 75.7 | 78.1 | 93.2 | 3.3 | 34.4 | 16.0 | 27.4 | 33.7 | 7.6 | 18.2 | 22.2 | 13.0 | 11.4 |
| H x D | | | | 1.5 | 55.8 | 13.9 | 13.9 | 17.4 | 44.1 | 2.2 | 31.4 | 2.2 | 24.9 | 15.2 | 22.7 | 86.0 | 12.3 | 17.5 | 25.3 |
| H x P x D | | | | 38.5 | 98.8 | 31.1 | 31.1 | 36.7 | 36.4 | 77.9 | 13.9 | 56.3 | 46.5 | 45.7 | 18.7 | 30.1 | 51.4 | 72.8 | 39.5 |
| **LSD(0.10)** | | | | | | | | | | | | | | | | | | | |
| Hybrid (H) | | | | 0.0 | NS | 4.7 | 0.2 | 0.2 | 0.4 | NS | NS | NS | 2.0 | 2.7 | NS | 0.1 | NS | 141 | 1053 |
| Date of Planting (P) | | | | NS | 1.1 | 3.9 | 0.2 | 0.3 | 0.4 | 553 | 888 | NS | 0.7 | 1.3 | 0.4 | 0.8 | 1.3 | NS | NS |
| H x P | | | | NS | NS | NS | NS | NS | NS | 782 | NS | NS | NS | NS | NS | 1.1 | NS | NS | NS |
| Plant Density (D) | | | | 0.3 | 1.3 | NS | NS | 0.2 | 0.2 | 586 | 1063 | 0.2 | NS | NS | NS | 0.8 | 1.7 | 94 | 841 |
| P x D | | | | 0.6 | NS | NS | NS | NS | NS | 1016 | NS | NS | NS | NS | 1.1 | NS | NS | NS | NS |
| H x D | | | | 0.5 | NS | NS | NS | NS | NS | 829 | NS | 0.3 | NS | NS | NS | NS | NS | NS | NS |
| H x P x D | | | | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| **CV(%)** | | | | 7 | 4 | 12 | 12 | 17 | 11 | 4 | 6 | 5 | 8 | 6 | 1 | 3 | 9 | 15 | 16 |