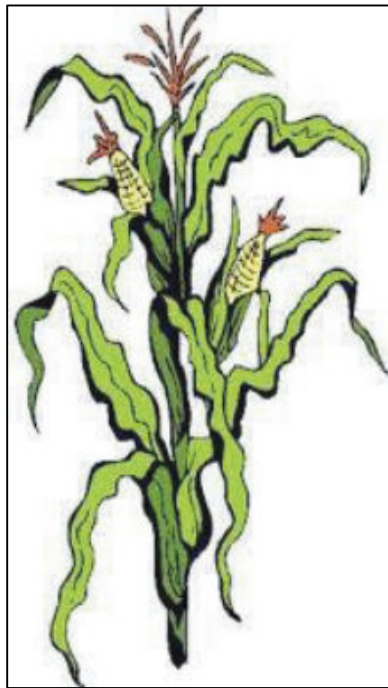


# **Georgia**

## **2023 Corn, Sorghum, and Summer Annual Forages**

### **Performance Tests**

D. Mailhot, D. Dunn, G. Ware, D. Buntin,  
X. Ni, and M. Toews, *Authors*



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Nick Place

*Dean and Director*

Harshavardhan Thippareddi

*Associate Dean for Research*

Michael Toews

*Assistant Dean  
Southern Region*

Robert N. Stougaard

*Assistant Dean of Research*



Jeffrey F.D. Dean

*Assistant Provost and  
Griffin Campus Director*

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# Georgia

## 2023 Corn, Sorghum, and Summer Annual Forages Performance Tests

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## Statewide Yield Summary: Corn Grain Performance, Georgia, 2023

| Company or Brand Name | Hybrid Name      | RM  | Bt  | Tifton     | Tifton     | Midville   | Plains     | Griffin    | Rome       | Rome       | Blairsville | Statewide  |
|-----------------------|------------------|-----|-----|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
|                       |                  |     |     | Irrigated  | Dryland    | Irrigated  | Irrigated  | Irrigated  | Irrigated  | Dryland    | Dryland     | Average    |
| ----- bu/acre -----   |                  |     |     |            |            |            |            |            |            |            |             |            |
| Revere Seed           | Revere 1839 TC   | 118 | Yes | <b>296</b> | 154        | 288        | <b>277</b> | <b>258</b> | 215        | 161        | <b>359</b>  | <b>251</b> |
| INTEGRA               | CX301119 TRE     | 119 | Yes | <b>277</b> | <b>201</b> | <b>300</b> | <b>274</b> | 205        | <b>236</b> | 165        | <b>333</b>  | <b>249</b> |
| INTEGRA               | 6493 VT2P        | 114 | Yes | 244        | <b>172</b> | <b>306</b> | <b>292</b> | <b>236</b> | 215        | 159        | <b>337</b>  | <b>248</b> |
| Dyna-Gro              | D56TC44          | 116 | Yes | <b>282</b> | 148        | <b>300</b> | 258        | <b>254</b> | 225        | 160        | <b>346</b>  | <b>245</b> |
| Dyna-Gro              | D58VC74          | 118 | Yes | <b>271</b> | 163        | <b>304</b> | 263        | 197        | <b>241</b> | 155        | 305         | <b>243</b> |
| DEKALB                | DKC68-35 VT2P    | 118 | Yes | <b>288</b> | 128        | <b>302</b> | <b>279</b> | 176        | <b>246</b> | <b>178</b> | <b>336</b>  | <b>243</b> |
| Revere Seed           | Revere 1577 VT2P | 115 | Yes | <b>277</b> | 132        | <b>306</b> | 266        | <b>257</b> | 210        | 163        | 290         | <b>240</b> |
| Inn victis            | A1542T           | 115 | Yes | 263        | <b>175</b> | 275        | 254        | <b>237</b> | 218        | <b>186</b> | 293         | <b>239</b> |
| DEKALB                | DKC70-45 VT2P    | 120 | Yes | <b>277</b> | 152        | 287        | 269        | 185        | <b>235</b> | 161        | <b>338</b>  | <b>239</b> |
| DEKALB                | DKC66-06 TRE     | 116 | Yes | <b>289</b> | 152        | 283        | 263        | 168        | 224        | 158        | <b>340</b>  | <b>239</b> |
| Revere Seed           | Revere 1307 TC   | 113 | Yes | 254        | <b>182</b> | <b>290</b> | 272        | <b>243</b> | 200        | 168        | 294         | <b>239</b> |
| Pioneer               | P1289YHR         | 112 | Yes | 256        | 162        | <b>299</b> | 266        | 191        | 209        | <b>175</b> | <b>339</b>  | <b>239</b> |
| NK Brand              | NK1838-3110      | 118 | Yes | <b>283</b> | 136        | <b>294</b> | 260        | 199        | 223        | 138        | <b>321</b>  | <b>238</b> |
| Pioneer               | P1608YHR         | 116 | Yes | 246        | 156        | 282        | 255        | <b>233</b> | 224        | 158        | 316         | <b>237</b> |
| INTEGRA               | 6641 SS          | 116 | Yes | 246        | 154        | <b>303</b> | 228        | <b>234</b> | 225        | <b>175</b> | 305         | <b>236</b> |
| BH Genetics           | BH 8412VT2P      | 114 | Yes | 243        | 137        | <b>295</b> | 243        | 209        | 216        | 165        | 317         | 234        |
| AgraTech              | 711VT2P          | 112 | Yes | 262        | 137        | <b>296</b> | 260        | <b>261</b> | 209        | 131        | 318         | 233        |
| Croplan               | CP5678 VT2P      | 116 | Yes | 267        | <b>173</b> | <b>297</b> | 267        | 180        | 184        | 167        | 314         | 232        |
| Dyna-Gro              | D58TC94          | 118 | Yes | <b>283</b> | 113        | <b>294</b> | <b>279</b> | 198        | 207        | 166        | 305         | 231        |
| Dyna-Gro              | D58VC65          | 118 | Yes | 260        | 147        | <b>305</b> | 249        | 202        | 217        | 151        | 294         | 231        |
| Croplan               | CP5893 TRE       | 118 | Yes | 246        | 164        | <b>296</b> | <b>279</b> | <b>216</b> | 202        | 136        | <b>339</b>  | 231        |
| INTEGRA               | 6624 TRE         | 116 | Yes | 269        | <b>174</b> | 276        | 270        | 168        | 205        | 168        | 295         | 231        |
| INTEGRA               | 6864 VT2P        | 118 | Yes | 256        | 156        | 287        | 244        | 201        | 219        | 159        | 287         | 230        |
| BH Genetics           | BH 8566VT2P      | 115 | Yes | 254        | 142        | 283        | 212        | 143        | <b>226</b> | 170        | <b>343</b>  | 226        |
| Revere Seed           | Revere 1627 TC   | 116 | Yes | 250        | 147        | <b>290</b> | 244        | 194        | <b>229</b> | <b>193</b> | 269         | 226        |
| Progeny               | PGY 2118 VT2P    | 118 | Yes | 257        | 138        | 278        | 239        | <b>220</b> | 202        | 154        | 298         | 226        |
| BH Genetics           | BH 8721VT2P      | 117 | Yes | 240        | 129        | <b>301</b> | 234        | 175        | <b>226</b> | 150        | <b>344</b>  | 226        |
| Progeny               | PGY 2215 TRE     | 115 | Yes | 259        | 120        | 261        | 255        | 185        | 206        | 154        | 315         | 225        |
| Inn victis            | A1689T           | 116 | Yes | 256        | 148        | 285        | 266        | 189        | 209        | <b>175</b> | 284         | 225        |
| Inn victis            | X1993            | 117 | Yes | <b>287</b> | 111        | <b>300</b> | 261        | 182        | 188        | 167        | 302         | 224        |
| INTEGRA               | 6342 TRE         | 113 | Yes | 261        | 169        | 285        | 248        | 176        | 215        | 158        | 234         | 223        |
| Inn victis            | A1551VT2P        | 115 | Yes | 265        | 100        | <b>299</b> | 251        | 174        | 203        | 156        | 288         | 223        |
| AgriGold              | A6659 RR         | 116 | No  | <b>292</b> | 144        | 284        | 257        | 187        | 172        | 138        | 311         | 223        |
| DEKALB                | DKC70-25 RR2     | 120 | No  | 236        | 137        | 288        | 247        | 157        | 221        | 159        | <b>328</b>  | 222        |
| INTEGRA               | 6709 VT2P        | 117 | Yes | 249        | 123        | 275        | 236        | 193        | 213        | 147        | 294         | 221        |
| AgraTech              | 83VT2P           |     | Yes | 233        | 140        | 285        | 257        | <b>231</b> | 206        | 166        | 271         | 221        |
| Croplan               | CP5760 TRE       | 117 | Yes | 264        | 145        | <b>292</b> | 256        | 143        | 218        | <b>177</b> | 298         | 221        |
| Progeny               | PGY 9114 VT2P    | 114 | Yes | 247        | 138        | 248        | 255        | <b>223</b> | 195        | 158        | 309         | 219        |
| Progeny               | PGY 2010 TRE     | 110 | Yes | 265        | <b>172</b> | <b>291</b> | 243        | 194        | 211        | 162        | 219         | 216        |
| Dyna-Gro              | D57VC53          | 117 | Yes | 247        | 116        | 264        | 244        | <b>221</b> | 205        | 139        | 298         | 215        |
| INTEGRA               | 6410 RR          | 114 | No  | 253        | 150        | 286        | 256        | <b>216</b> | 199        | 145        | 158         | 211        |
| Progeny               | PGY 9117 VT2P    | 117 | Yes | 244        | 113        | 280        | 242        | 128        | 193        | 148        | 298         | 209        |
| INTEGRA               | 6533 RR          | 115 | No  | 225        | 106        | 286        | 249        | 150        | 204        | 142        | 264         | 207        |
| INTEGRA               | 6891 3110        | 118 | Yes | 227        | 110        | 263        | 225        | 144        | 189        | 159        | 318         | 202        |
| AgraTech              | 69RR             | 114 | No  | 242        | 130        | 262        | 245        | 199        | 165        | 148        | 219         | 201        |
| DEKALB                | DKC62-05 RR2     | 112 | No  | 237        | 121        | 277        | 234        | 202        | 169        | 118        | 159         | 195        |
| NK Brand              | NK1188-AA-EZ1    | 111 | Yes | 204        | 92         | 253        | 237        | 158        | 181        | 148        | 314         | 194        |
| DEKALB                | DKC66-94 RR2     | 116 | No  | 244        | 63         | 268        | 211        | 119        | 189        | 146        | 269         | 191        |

## Statewide Yield Summary: Corn Grain Performance, Georgia, 2023

| Company or<br>Brand Name | Hybrid<br>Name | RM | Bt | Tifton<br>Irrigated | Tifton<br>Dryland | Midville<br>Irrigated | Plains<br>Irrigated | Griffin<br>Irrigated | Rome<br>Irrigated | Rome<br>Dryland | Blairsville<br>Dryland | Statewide<br>Average |
|--------------------------|----------------|----|----|---------------------|-------------------|-----------------------|---------------------|----------------------|-------------------|-----------------|------------------------|----------------------|
| ----- bu/acre -----      |                |    |    |                     |                   |                       |                     |                      |                   |                 |                        |                      |
| Average                  |                |    |    | 258                 | 141               | 286                   | 254                 | 196                  | 209               | 158             | 298                    | 218                  |
| LSD                      |                |    |    | 25                  | 31                | 18                    | 19                  | 46                   | 20                | 22              | 40                     | 17                   |
| Model R-square           |                |    |    | 0.68                | 0.68              | 0.64                  | 0.80                | 0.96                 | 0.77              | 0.42            | 0.75                   | 0.67                 |
| C.V.                     |                |    |    | 9.2                 | 20.9              | 5.8                   | 7.1                 | 21.9                 | 9.2               | 13.1            | 12.6                   | 21.09                |

**Bolded** yields are statistically non-significant (p = 0.10 level) from the highest yielding test entry.

Yields are calculated as 56 pounds per bushel at 15.5% moisture.

## Tifton, Georgia: Corn Grain Performance, 2023, Irrigated

| Company or<br>Brand Name | Hybrid<br>Name   | Relative         |                  | Grain         |        | Test<br>Weight | Ears/<br>100 plants | Actual                    |              |
|--------------------------|------------------|------------------|------------------|---------------|--------|----------------|---------------------|---------------------------|--------------|
|                          |                  | Maturity<br>days | Yield<br>bu/acre | Moisture<br>% | lbs/bu |                |                     | Population<br>plants/acre | Lodging<br>% |
| Revere Seed              | Revere 1839 TC   | 118              | <b>296</b>       | 13.8          | 58.8   | .              | .                   | .                         |              |
| AgriGold                 | A6659 RR         | 116              | <b>292</b>       | 14.0          | 59.2   | .              | .                   | .                         |              |
| DEKALB                   | DKC66-06 TRE     | 116              | <b>289</b>       | 13.4          | 58.9   | .              | .                   | .                         |              |
| DEKALB                   | DKC68-35 VT2P    | 118              | <b>288</b>       | 13.6          | 59.6   | .              | .                   | .                         |              |
| Innvictis                | X1993            | 117              | <b>287</b>       | 13.9          | 58.9   | .              | .                   | .                         |              |
| Dyna-Gro                 | D58TC94          | 118              | <b>283</b>       | 13.6          | 59.0   | .              | .                   | .                         |              |
| NK Brand                 | NK1838-3110      | 118              | <b>283</b>       | 13.8          | 57.6   | .              | .                   | .                         |              |
| Dyna-Gro                 | D56TC44          | 116              | <b>282</b>       | 13.5          | 59.5   | .              | .                   | .                         |              |
| DEKALB                   | DKC70-45 VT2P    | 120              | <b>277</b>       | 13.9          | 59.4   | .              | .                   | .                         |              |
| INTEGRA                  | CX301119 TRE     | 119              | <b>277</b>       | 13.4          | 58.9   | .              | .                   | .                         |              |
| Revere Seed              | Revere 1577 VT2P | 115              | <b>277</b>       | 12.4          | 59.5   | .              | .                   | .                         |              |
| Dyna-Gro                 | D58VC74          | 118              | <b>271</b>       | 13.4          | 59.1   | .              | .                   | .                         |              |
| INTEGRA                  | 6624 TRE         | 116              | 269              | 13.4          | 59.3   | .              | .                   | .                         |              |
| Croplan                  | CP5678 VT2P      | 116              | 267              | 13.2          | 59.8   | .              | .                   | .                         |              |
| Progeny                  | PGY 2010 TRE     | 110              | 265              | 12.1          | 57.6   | .              | .                   | .                         |              |
| Innvictis                | A1551VT2P        | 115              | 265              | 13.0          | 58.6   | .              | .                   | .                         |              |
| Croplan                  | CP5760 TRE       | 117              | 264              | 13.5          | 59.4   | .              | .                   | .                         |              |
| Innvictis                | A1542T           | 115              | 263              | 13.0          | 59.5   | .              | .                   | .                         |              |
| AgraTech                 | 711VT2P          | 112              | 262              | 12.7          | 59.5   | .              | .                   | .                         |              |
| INTEGRA                  | 6342 TRE         | 113              | 261              | 12.9          | 59.8   | .              | .                   | .                         |              |
| Dyna-Gro                 | D58VC65          | 118              | 260              | 13.3          | 59.7   | .              | .                   | .                         |              |
| Progeny                  | PGY 2215 TRE     | 115              | 259              | 13.2          | 59.6   | .              | .                   | .                         |              |
| Progeny                  | PGY 2118 VT2P    | 118              | 257              | 14.3          | 59.8   | .              | .                   | .                         |              |
| Pioneer                  | P1289YHR         | 112              | 256              | 12.8          | 59.6   | .              | .                   | .                         |              |
| Innvictis                | A1689T           | 116              | 256              | 13.1          | 58.8   | .              | .                   | .                         |              |
| INTEGRA                  | 6864 VT2P        | 118              | 256              | 14.6          | 59.4   | .              | .                   | .                         |              |
| BH Genetics              | BH 8566VT2P      | 115              | 254              | 13.0          | 58.9   | .              | .                   | .                         |              |
| Revere Seed              | Revere 1307 TC   | 113              | 254              | 12.3          | 59.3   | .              | .                   | .                         |              |
| INTEGRA                  | 6410 RR          | 114              | 253              | 12.6          | 59.4   | .              | .                   | .                         |              |
| Revere Seed              | Revere 1627 TC   | 116              | 250              | 13.0          | 59.0   | .              | .                   | .                         |              |
| INTEGRA                  | 6709 VT2P        | 117              | 249              | 13.4          | 59.2   | .              | .                   | .                         |              |
| Dyna-Gro                 | D57VC53          | 117              | 247              | 14.2          | 59.4   | .              | .                   | .                         |              |
| Progeny                  | PGY 9114 VT2P    | 114              | 247              | 12.6          | 59.3   | .              | .                   | .                         |              |
| INTEGRA                  | 6641 SS          | 116              | 246              | 13.4          | 59.9   | .              | .                   | .                         |              |
| Pioneer                  | P1608YHR         | 116              | 246              | 13.1          | 59.6   | .              | .                   | .                         |              |
| Croplan                  | CP5893 TRE       | 118              | 246              | 13.3          | 59.1   | .              | .                   | .                         |              |
| INTEGRA                  | 6493 VT2P        | 114              | 244              | 12.9          | 59.1   | .              | .                   | .                         |              |
| Progeny                  | PGY 9117 VT2P    | 117              | 244              | 13.3          | 59.9   | .              | .                   | .                         |              |
| DEKALB                   | DKC66-94 RR2     | 116              | 244              | 13.2          | 59.4   | .              | .                   | .                         |              |
| BH Genetics              | BH 8412VT2P      | 114              | 243              | 12.5          | 59.5   | .              | .                   | .                         |              |
| AgraTech                 | 69RR             | 114              | 242              | 13.6          | 59.2   | .              | .                   | .                         |              |
| BH Genetics              | BH 8721VT2P      | 117              | 240              | 14.1          | 59.4   | .              | .                   | .                         |              |
| DEKALB                   | DKC62-05 RR2     | 112              | 237              | 12.7          | 59.2   | .              | .                   | .                         |              |
| DEKALB                   | DKC70-25 RR2     | 120              | 236              | 13.6          | 59.0   | .              | .                   | .                         |              |
| AgraTech                 | 83VT2P           |                  | 233              | 13.0          | 58.8   | .              | .                   | .                         |              |
| INTEGRA                  | 6891 3110        | 118              | 227              | 15.7          | 59.5   | .              | .                   | .                         |              |
| INTEGRA                  | 6533 RR          | 115              | 225              | 13.3          | 59.6   | .              | .                   | .                         |              |
| NK Brand                 | NK1188-AA-EZ1    | 111              | 204              | 12.2          | 58.8   | .              | .                   | .                         |              |

**Tifton, Georgia:**  
**Corn Grain Performance, 2023, Irrigated (Continued)**

| Company or<br>Brand Name | Hybrid<br>Name | Relative<br>Maturity<br>days | Yield<br>bu/acre | Grain<br>Moisture<br>% | Test<br>Weight<br>lbs/bu | Ears/<br>100 plants<br>no. | Actual<br>Population<br>plants/acre | Lodging<br>% |
|--------------------------|----------------|------------------------------|------------------|------------------------|--------------------------|----------------------------|-------------------------------------|--------------|
| Average                  |                |                              | 258              | 13.3                   | 59.2                     | -                          | -                                   | -            |
| LSD at 10% Level         |                |                              | 25               | 0.5                    | 0.6                      | -                          | -                                   | -            |
| Model R-squared          |                |                              | 0.68             | 0.80                   | 0.52                     | -                          | -                                   | -            |
| C.V.                     |                |                              | 9.2              | 3.7                    | 1.0                      | -                          | -                                   | -            |

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: April 6, 2023.

Harvested: August 28, 2023.

Seeding Rate: 34,000 seeds per acre in 36-inch rows.

Soil Type: Tifton loamy sand.

Previous Crop: Soybeans.

Soil Test:  $P_2O_5 = 61$  lbs,  $K_2O = 138$  lbs, and pH = 6.5.

Fertilization: Preplant: 130 lb N, 10 lb S, 310 lb  $P_2O_5$ , and 210 lb  $K_2O$ /acre. Sidedress: 260 lb N and 46 lb S/acre.

Tillage: Conventional.

Herbicides: Atrazine, Warrant, and Zidua.

Irrigation: 9 inches.

Test conducted by M. Cofield, W. Mosteller, and D. Dunn.

## Tifton, Georgia: Corn Grain Performance, 2023, Dryland

| Company or<br>Brand Name | Hybrid<br>Name   | Relative         |                  | Grain         |        | Test<br>Weight | Ears/<br>100 plants | Actual                    |              |
|--------------------------|------------------|------------------|------------------|---------------|--------|----------------|---------------------|---------------------------|--------------|
|                          |                  | Maturity<br>days | Yield<br>bu/acre | Moisture<br>% | lbs/bu |                |                     | Population<br>plants/acre | Lodging<br>% |
| INTEGRA                  | CX301119 TRE     | 119              | <b>201</b>       | 14.7          | 57.6   | .              | .                   | .                         |              |
| Revere Seed              | Revere 1307 TC   | 113              | <b>182</b>       | 12.3          | 59.1   | .              | .                   | .                         |              |
| Innvictis                | A1542T           | 115              | <b>175</b>       | 12.8          | 60.5   | .              | .                   | .                         |              |
| INTEGRA                  | 6624 TRE         | 116              | <b>174</b>       | 12.4          | 60.5   | .              | .                   | .                         |              |
| Croplan                  | CP5678 VT2P      | 116              | <b>173</b>       | 12.0          | 59.5   | .              | .                   | .                         |              |
| INTEGRA                  | 6493 VT2P        | 114              | <b>172</b>       | 13.1          | 60.4   | .              | .                   | .                         |              |
| Progeny                  | PGY 2010 TRE     | 110              | <b>172</b>       | 12.0          | 58.0   | .              | .                   | .                         |              |
| INTEGRA                  | 6342 TRE         | 113              | 169              | 12.4          | 60.0   | .              | .                   | .                         |              |
| Croplan                  | CP5893 TRE       | 118              | 164              | 14.0          | 59.8   | .              | .                   | .                         |              |
| Dyna-Gro                 | D58VC74          | 118              | 163              | 13.5          | 60.4   | .              | .                   | .                         |              |
| Pioneer                  | P1289YHR         | 112              | 162              | 12.1          | 61.0   | .              | .                   | .                         |              |
| INTEGRA                  | 6864 VT2P        | 118              | 156              | 13.7          | 60.1   | .              | .                   | .                         |              |
| Pioneer                  | P1608YHR         | 116              | 156              | 12.2          | 60.7   | .              | .                   | .                         |              |
| INTEGRA                  | 6641 SS          | 116              | 154              | 12.6          | 57.5   | .              | .                   | .                         |              |
| Revere Seed              | Revere 1839 TC   | 118              | 154              | 14.3          | 59.2   | .              | .                   | .                         |              |
| DEKALB                   | DKC70-45 VT2P    | 120              | 152              | 14.7          | 60.7   | .              | .                   | .                         |              |
| DEKALB                   | DKC66-06 TRE     | 116              | 152              | 12.5          | 60.8   | .              | .                   | .                         |              |
| INTEGRA                  | 6410 RR          | 114              | 150              | 12.2          | 60.8   | .              | .                   | .                         |              |
| Innvictis                | A1689T           | 116              | 148              | 12.7          | 60.5   | .              | .                   | .                         |              |
| Dyna-Gro                 | D56TC44          | 116              | 148              | 12.7          | 60.5   | .              | .                   | .                         |              |
| Revere Seed              | Revere 1627 TC   | 116              | 147              | 13.6          | 59.6   | .              | .                   | .                         |              |
| Dyna-Gro                 | D58VC65          | 118              | 147              | 12.5          | 60.1   | .              | .                   | .                         |              |
| Croplan                  | CP5760 TRE       | 117              | 145              | 13.1          | 59.4   | .              | .                   | .                         |              |
| AgriGold                 | A6659 RR         | 116              | 144              | 13.1          | 60.3   | .              | .                   | .                         |              |
| BH Genetics              | BH 8566VT2P      | 115              | 142              | 13.9          | 60.1   | .              | .                   | .                         |              |
| AgraTech                 | 83VT2P           |                  | 140              | 13.4          | 60.2   | .              | .                   | .                         |              |
| Progeny                  | PGY 2118 VT2P    | 118              | 138              | 13.7          | 60.0   | .              | .                   | .                         |              |
| Progeny                  | PGY 9114 VT2P    | 114              | 138              | 12.5          | 60.4   | .              | .                   | .                         |              |
| AgraTech                 | 711VT2P          | 112              | 137              | 12.3          | 61.0   | .              | .                   | .                         |              |
| BH Genetics              | BH 8412VT2P      | 114              | 137              | 12.7          | 61.0   | .              | .                   | .                         |              |
| DEKALB                   | DKC70-25 RR2     | 120              | 137              | 12.8          | 59.0   | .              | .                   | .                         |              |
| NK Brand                 | NK1838-3110      | 118              | 136              | 13.2          | 58.0   | .              | .                   | .                         |              |
| Revere Seed              | Revere 1577 VT2P | 115              | 132              | 12.3          | 60.6   | .              | .                   | .                         |              |
| AgraTech                 | 69RR             | 114              | 130              | 12.7          | 59.9   | .              | .                   | .                         |              |
| BH Genetics              | BH 8721VT2P      | 117              | 129              | 12.8          | 60.3   | .              | .                   | .                         |              |
| DEKALB                   | DKC68-35 VT2P    | 118              | 128              | 13.1          | 61.6   | .              | .                   | .                         |              |
| INTEGRA                  | 6709 VT2P        | 117              | 123              | 12.4          | 59.4   | .              | .                   | .                         |              |
| DEKALB                   | DKC62-05 RR2     | 112              | 121              | 12.2          | 60.5   | .              | .                   | .                         |              |
| Progeny                  | PGY 2215 TRE     | 115              | 120              | 12.5          | 60.8   | .              | .                   | .                         |              |
| Dyna-Gro                 | D57VC53          | 117              | 116              | 14.2          | 61.7   | .              | .                   | .                         |              |
| Dyna-Gro                 | D58TC94          | 118              | 113              | 13.4          | 60.5   | .              | .                   | .                         |              |
| Progeny                  | PGY 9117 VT2P    | 117              | 113              | 11.8          | 60.0   | .              | .                   | .                         |              |
| Innvictis                | X1993            | 117              | 111              | 13.7          | 58.6   | .              | .                   | .                         |              |
| INTEGRA                  | 6891 3110        | 118              | 110              | 14.3          | 56.6   | .              | .                   | .                         |              |
| INTEGRA                  | 6533 RR          | 115              | 106              | 12.8          | 59.8   | .              | .                   | .                         |              |
| Innvictis                | A1551VT2P        | 115              | 100              | 12.9          | 58.8   | .              | .                   | .                         |              |
| NK Brand                 | NK1188-AA-EZ1    | 111              | 92               | 12.5          | 59.9   | .              | .                   | .                         |              |
| DEKALB                   | DKC66-94 RR2     | 116              | 63               | 12.3          | 58.7   | .              | .                   | .                         |              |



**Tifton, Georgia:  
Corn Grain Performance, 2023, Dryland (Continued)**

| Company or<br>Brand Name | Hybrid<br>Name | Relative<br>Maturity<br>days | Yield<br>bu/acre | Grain<br>Moisture<br>% | Test<br>Weight<br>lbs/bu | Ears/<br>100 plants<br>no. | Actual<br>Population<br>plants/acre | Lodging<br>% |
|--------------------------|----------------|------------------------------|------------------|------------------------|--------------------------|----------------------------|-------------------------------------|--------------|
| Average                  |                |                              | 141              | 12.9                   | 59.9                     | -                          | -                                   | -            |
| LSD at 10% Level         |                |                              | 31               | 0.5                    | 0.8                      | -                          | -                                   | -            |
| Model R-squared          |                |                              | 0.68             | 0.86                   | 0.76                     | -                          | -                                   | -            |
| C.V.                     |                |                              | 20.9             | 3.6                    | 1.3                      | -                          | -                                   | -            |

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: March 31, 2023.

Harvested: August 28, 2023.

Seeding Rate: 34,000 seeds per acre in 36-inch rows.

Soil Type: Tifton loamy sand.

Previous Crop: Grain sorghum.

Soil Test:  $P_2O_5 = 78$  lbs,  $K_2O = 72$  lbs, and  $pH = 5.6$ .

Fertilization: Preplant: 100 lb N, 10 lb S, 140 lb  $P_2O_5$ , and 60 lb  $K_2O$ /acre. Sidedress: 130 lb N and 23 lb S/acre.

Tillage: Conventional.

Herbicides: Atrazine, Warrant, and Zidua.

Irrigation: 9 inches.

Test conducted by M. Cofield, W. Mosteller, and D. Dunn.

## Midville, Georgia: Corn Grain Performance, 2023, Irrigated

| Company or<br>Brand Name | Hybrid<br>Name   | Relative         |                  | Grain         | Test             | Ears/        | Actual                    |              |
|--------------------------|------------------|------------------|------------------|---------------|------------------|--------------|---------------------------|--------------|
|                          |                  | Maturity<br>days | Yield<br>bu/acre | Moisture<br>% | Weight<br>lbs/bu | plant<br>no. | Population<br>plants/acre | Lodging<br>% |
| INTEGRA                  | 6493 VT2P        | 114              | <b>306</b>       | 16.0          | 59.1             | 1.03         | 32,456                    | 0            |
| Revere Seed              | Revere 1577 VT2P | 115              | <b>306</b>       | 14.8          | 60.2             | 0.98         | 34,165                    | 0            |
| Dyna-Gro                 | D58VC65          | 118              | <b>305</b>       | 15.2          | 59.5             | 1.01         | 32,314                    | 0            |
| Dyna-Gro                 | D58VC74          | 118              | <b>304</b>       | 16.3          | 59.3             | 1.00         | 33,453                    | 0            |
| INTEGRA                  | 6641 SS          | 116              | <b>303</b>       | 15.6          | 58.1             | 1.02         | 32,599                    | 0            |
| DEKALB                   | DKC68-35 VT2P    | 118              | <b>302</b>       | 15.8          | 59.8             | 1.02         | 33,168                    | 0            |
| BH Genetics              | BH 8721VT2P      | 117              | <b>301</b>       | 15.7          | 59.7             | 1.01         | 31,175                    | 0            |
| INTEGRA                  | CX301119 TRE     | 119              | <b>300</b>       | 17.6          | 56.9             | 1.04         | 31,887                    | 0            |
| Innvictis                | X1993            | 117              | <b>300</b>       | 17.3          | 57.5             | 1.03         | 29,894                    | 1            |
| Dyna-Gro                 | D56TC44          | 116              | <b>300</b>       | 15.3          | 57.9             | 0.97         | 33,453                    | 0            |
| Pioneer                  | P1289YHR         | 112              | <b>299</b>       | 15.4          | 60.5             | 1.05         | 31,887                    | 0            |
| Innvictis                | A1551VT2P        | 115              | <b>299</b>       | 15.9          | 57.5             | 0.99         | 31,033                    | 0            |
| Croplan                  | CP5678 VT2P      | 116              | <b>297</b>       | 15.5          | 59.3             | 1.00         | 33,453                    | 0            |
| AgraTech                 | 711VT2P          | 112              | <b>296</b>       | 14.5          | 60.1             | 0.99         | 31,602                    | 0            |
| Croplan                  | CP5893 TRE       | 118              | <b>296</b>       | 16.7          | 60.0             | 1.01         | 32,314                    | 0            |
| BH Genetics              | BH 8412VT2P      | 114              | <b>295</b>       | 14.5          | 59.9             | 1.02         | 32,314                    | 0            |
| Dyna-Gro                 | D58TC94          | 118              | <b>294</b>       | 17.1          | 59.7             | 1.01         | 32,741                    | 1            |
| NK Brand                 | NK1838-3110      | 118              | <b>294</b>       | 15.9          | 56.7             | 1.03         | 32,314                    | 0            |
| Croplan                  | CP5760 TRE       | 117              | <b>292</b>       | 16.2          | 58.3             | 1.00         | 32,456                    | 0            |
| Progeny                  | PGY 2010 TRE     | 110              | <b>291</b>       | 14.6          | 57.2             | 1.00         | 33,311                    | 0            |
| Revere Seed              | Revere 1627 TC   | 116              | <b>290</b>       | 15.6          | 58.2             | 1.00         | 32,884                    | 0            |
| Revere Seed              | Revere 1307 TC   | 113              | <b>290</b>       | 15.1          | 57.6             | 1.00         | 32,884                    | 0            |
| Revere Seed              | Revere 1839 TC   | 118              | 288              | 18.0          | 56.6             | 1.01         | 29,182                    | 0            |
| DEKALB                   | DKC70-25 RR2     | 120              | 288              | 16.3          | 59.4             | 1.03         | 31,033                    | 0            |
| INTEGRA                  | 6864 VT2P        | 118              | 287              | 16.7          | 57.6             | 1.00         | 32,172                    | 0            |
| DEKALB                   | DKC70-45 VT2P    | 120              | 287              | 16.4          | 59.3             | 0.99         | 31,033                    | 0            |
| INTEGRA                  | 6533 RR          | 115              | 286              | 15.4          | 59.9             | 1.00         | 31,887                    | 0            |
| INTEGRA                  | 6410 RR          | 114              | 286              | 15.6          | 58.9             | 0.99         | 31,318                    | 0            |
| AgraTech                 | 83VT2P           |                  | 285              | 16.4          | 57.9             | 1.00         | 32,599                    | 0            |
| Innvictis                | A1689T           | 116              | 285              | 15.5          | 58.0             | 1.02         | 32,741                    | 0            |
| INTEGRA                  | 6342 TRE         | 113              | 285              | 14.4          | 58.4             | 0.99         | 31,602                    | 1            |
| AgriGold                 | A6659 RR         | 116              | 284              | 15.6          | 59.8             | 0.99         | 31,745                    | 1            |
| BH Genetics              | BH 8566VT2P      | 115              | 283              | 15.3          | 59.2             | 0.99         | 33,311                    | 1            |
| DEKALB                   | DKC66-06 TRE     | 116              | 283              | 15.0          | 59.1             | 0.98         | 31,460                    | 1            |
| Pioneer                  | P1608YHR         | 116              | 282              | 15.8          | 60.8             | 1.00         | 31,460                    | 0            |
| Progeny                  | PGY 9117 VT2P    | 117              | 280              | 16.0          | 59.2             | 1.00         | 30,891                    | 1            |
| Progeny                  | PGY 2118 VT2P    | 118              | 278              | 16.6          | 59.5             | 0.99         | 30,748                    | 0            |
| DEKALB                   | DKC62-05 RR2     | 112              | 277              | 14.5          | 59.1             | 0.99         | 32,741                    | 0            |
| INTEGRA                  | 6624 TRE         | 116              | 276              | 15.5          | 59.3             | 0.98         | 32,029                    | 1            |
| Innvictis                | A1542T           | 115              | 275              | 15.7          | 59.9             | 0.98         | 32,172                    | 0            |
| INTEGRA                  | 6709 VT2P        | 117              | 275              | 15.7          | 58.3             | 1.00         | 29,609                    | 0            |
| DEKALB                   | DKC66-94 RR2     | 116              | 268              | 15.0          | 60.3             | 1.00         | 30,179                    | 0            |
| Dyna-Gro                 | D57VC53          | 117              | 264              | 17.0          | 60.6             | 0.99         | 30,748                    | 1            |
| INTEGRA                  | 6891 3110        | 118              | 263              | 18.5          | 58.6             | 1.00         | 31,318                    | 0            |
| AgraTech                 | 69RR             | 114              | 262              | 16.1          | 59.1             | 0.96         | 31,033                    | 0            |
| Progeny                  | PGY 2215 TRE     | 115              | 261              | 16.7          | 58.7             | 1.00         | 30,464                    | 0            |
| NK Brand                 | NK1188-AA-EZ1    | 111              | 253              | 13.9          | 59.4             | 0.98         | 32,314                    | 0            |
| Progeny                  | PGY 9114 VT2P    | 114              | 248              | 14.9          | 58.5             | 1.03         | 28,044                    | 0            |

**Midville, Georgia:  
Corn Grain Performance, 2023, Irrigated (Continued)**

| Company or<br>Brand Name | Hybrid<br>Name | Relative<br>Maturity<br>days | Yield<br>bu/acre | Grain<br>Moisture<br>% | Test<br>Weight<br>lbs/bu | Ears/<br>100 plants<br>no. | Actual<br>Population<br>plants/acre | Lodging<br>% |
|--------------------------|----------------|------------------------------|------------------|------------------------|--------------------------|----------------------------|-------------------------------------|--------------|
| Average                  |                |                              | 286              | 15.8                   | 58.9                     | 1.00                       | 31,825                              | 0.2          |
| LSD at 10% Level         |                |                              | 18               | 0.5                    | 0.7                      | 0.03                       | NS                                  | NS           |
| Model R-squared          |                |                              | 0.64             | 0.91                   | 0.80                     | 0.48                       | 0.35                                | 0.60         |
| C.V.                     |                |                              | 5.8              | 3.0                    | 1.1                      | 2.4                        | 6.5                                 | 287.8        |

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: April 11, 2023.

Harvested: September 5, 2023.

Seeding Rate: 34,000 seeds per acre in 36-inch rows.

Soil Type: Dothan sandy loam.

Test conducted by M. Cofield, W. Mosteller, D. Dunn, J. Lanier, R. Milton and T. Woodward.

## Plains, Georgia: Corn Grain Performance, 2023, Irrigated

| Company or<br>Brand Name | Hybrid<br>Name   | Relative         |                  | Grain         |        | Test<br>Weight | Ears/<br>100 plants | Actual                    |              |
|--------------------------|------------------|------------------|------------------|---------------|--------|----------------|---------------------|---------------------------|--------------|
|                          |                  | Maturity<br>days | Yield<br>bu/acre | Moisture<br>% | lbs/bu |                |                     | Population<br>plants/acre | Lodging<br>% |
| INTEGRA                  | 6493 VT2P        | 114              | <b>292</b>       | 14.9          | 57.7   | 1.01           | 32,718              | 1                         |              |
| Croplan                  | CP5893 TRE       | 118              | <b>279</b>       | 15.8          | 58.7   | 0.99           | 34,611              | 1                         |              |
| DEKALB                   | DKC68-35 VT2P    | 118              | <b>279</b>       | 15.4          | 58.5   | 1.00           | 33,816              | 1                         |              |
| Dyna-Gro                 | D58TC94          | 118              | <b>279</b>       | 16.1          | 59.6   | 0.99           | 32,593              | 0                         |              |
| Revere Seed              | Revere 1839 TC   | 118              | <b>277</b>       | 17.2          | 55.0   | 0.99           | 31,971              | 0                         |              |
| INTEGRA                  | CX301119 TRE     | 119              | <b>274</b>       | 16.7          | 55.6   | 1.00           | 33,262              | 0                         |              |
| Revere Seed              | Revere 1307 TC   | 113              | 272              | 13.8          | 56.5   | 1.00           | 33,756              | 0                         |              |
| INTEGRA                  | 6624 TRE         | 116              | 270              | 14.7          | 58.3   | 1.01           | 33,038              | 2                         |              |
| DEKALB                   | DKC70-45 VT2P    | 120              | 269              | 16.6          | 59.0   | 1.01           | 33,172              | 1                         |              |
| Croplan                  | CP5678 VT2P      | 116              | 267              | 14.3          | 57.7   | 1.01           | 33,885              | 2                         |              |
| Innvictis                | A1689T           | 116              | 266              | 14.8          | 57.6   | 1.00           | 34,420              | 0                         |              |
| Pioneer                  | P1289YHR         | 112              | 266              | 14.1          | 58.8   | 1.05           | 34,144              | 2                         |              |
| Revere Seed              | Revere 1577 VT2P | 115              | 266              | 14.1          | 59.9   | 0.98           | 33,684              | 0                         |              |
| DEKALB                   | DKC66-06 TRE     | 116              | 263              | 14.4          | 57.6   | 1.00           | 33,255              | 0                         |              |
| Dyna-Gro                 | D58VC74          | 118              | 263              | 15.8          | 58.6   | 1.01           | 33,324              | 0                         |              |
| Innvictis                | X1993            | 117              | 261              | 16.7          | 55.9   | 1.01           | 32,747              | 0                         |              |
| NK Brand                 | NK1838-3110      | 118              | 260              | 14.8          | 55.3   | 0.99           | 32,244              | 4                         |              |
| AgraTech                 | 711VT2P          | 112              | 260              | 13.4          | 58.4   | 1.01           | 29,880              | 0                         |              |
| Dyna-Gro                 | D56TC44          | 116              | 258              | 14.1          | 58.4   | 1.00           | 32,978              | 0                         |              |
| AgriGold                 | A6659 RR         | 116              | 257              | 14.7          | 58.5   | 0.99           | 32,579              | 5                         |              |
| AgraTech                 | 83VT2P           |                  | 257              | 15.5          | 57.4   | 1.00           | 34,045              | 0                         |              |
| INTEGRA                  | 6410 RR          | 114              | 256              | 15.3          | 58.2   | 1.01           | 32,137              | 0                         |              |
| Croplan                  | CP5760 TRE       | 117              | 256              | 14.8          | 56.5   | 1.00           | 33,082              | 3                         |              |
| Progeny                  | PGY 2215 TRE     | 115              | 255              | 15.3          | 57.6   | 1.00           | 33,584              | 0                         |              |
| Pioneer                  | P1608YHR         | 116              | 255              | 15.3          | 59.9   | 1.02           | 33,858              | 1                         |              |
| Progeny                  | PGY 9114 VT2P    | 114              | 255              | 14.1          | 59.2   | 0.99           | 32,497              | 0                         |              |
| Innvictis                | A1542T           | 115              | 254              | 14.5          | 58.4   | 0.98           | 31,977              | 0                         |              |
| Innvictis                | A1551VT2P        | 115              | 251              | 15.4          | 56.4   | 1.07           | 31,638              | 1                         |              |
| INTEGRA                  | 6533 RR          | 115              | 249              | 15.5          | 58.0   | 1.01           | 33,012              | 1                         |              |
| Dyna-Gro                 | D58VC65          | 118              | 249              | 14.2          | 57.9   | 0.99           | 33,081              | 1                         |              |
| INTEGRA                  | 6342 TRE         | 113              | 248              | 14.3          | 57.3   | 1.01           | 31,729              | 0                         |              |
| DEKALB                   | DKC70-25 RR2     | 120              | 247              | 16.2          | 57.4   | 1.02           | 33,065              | 1                         |              |
| AgraTech                 | 69RR             | 114              | 245              | 15.4          | 56.9   | 0.96           | 32,550              | 0                         |              |
| INTEGRA                  | 6864 VT2P        | 118              | 244              | 17.5          | 56.9   | 1.01           | 33,706              | 0                         |              |
| Revere Seed              | Revere 1627 TC   | 116              | 244              | 14.8          | 57.6   | 0.99           | 32,932              | 1                         |              |
| Dyna-Gro                 | D57VC53          | 117              | 244              | 16.1          | 59.3   | 0.99           | 33,077              | 0                         |              |
| Progeny                  | PGY 2010 TRE     | 110              | 243              | 13.7          | 54.6   | 0.99           | 33,144              | 0                         |              |
| Progeny                  | PGY 2010 TRE     | 110              | 243              | 13.7          | 54.6   | 0.99           | 33,144              | 0                         |              |
| BH Genetics              | BH 8412VT2P      | 114              | 243              | 14.4          | 59.4   | 1.01           | 33,073              | 0                         |              |
| Progeny                  | PGY 9117 VT2P    | 117              | 242              | 13.7          | 58.6   | 1.01           | 32,176              | 0                         |              |
| Progeny                  | PGY 2118 VT2P    | 118              | 239              | 16.1          | 58.7   | 1.00           | 31,368              | 2                         |              |
| NK Brand                 | NK1188-AA-EZ1    | 111              | 237              | 14.3          | 57.9   | 0.98           | 33,178              | 0                         |              |
| INTEGRA                  | 6709 VT2P        | 117              | 236              | 14.7          | 55.5   | 1.01           | 31,980              | 0                         |              |
| DEKALB                   | DKC62-05 RR2     | 112              | 234              | 13.7          | 58.0   | 1.01           | 32,972              | 2                         |              |
| BH Genetics              | BH 8721VT2P      | 117              | 234              | 14.3          | 58.3   | 0.99           | 31,829              | 1                         |              |
| INTEGRA                  | 6641 SS          | 116              | 228              | 14.3          | 55.9   | 0.99           | 33,514              | 0                         |              |
| INTEGRA                  | 6891 3110        | 118              | 225              | 17.1          | 58.1   | 0.99           | 32,172              | 1                         |              |
| BH Genetics              | BH 8566VT2P      | 115              | 212              | 14.2          | 56.0   | 1.05           | 32,228              | 1                         |              |
| DEKALB                   | DKC66-94 RR2     | 116              | 211              | 14.6          | 59.4   | 1.01           | 32,302              | 1                         |              |

**Plains, Georgia:  
Corn Grain Performance, 2023, Irrigated (Continued)**

| Company or<br>Brand Name | Hybrid<br>Name | Relative<br>Maturity<br>days | Yield<br>bu/acre | Grain<br>Moisture<br>% | Test<br>Weight<br>lbs/bu | Ears/<br>100 plants<br>no. | Actual<br>Population<br>plants/acre | Lodging<br>% |
|--------------------------|----------------|------------------------------|------------------|------------------------|--------------------------|----------------------------|-------------------------------------|--------------|
| Average                  |                |                              | 254              | 15.0                   | 57.7                     | 1.00                       | 32,875                              | 1            |
| LSD at 10% Level         |                |                              | 19               | 0.6                    | 0.9                      | NS                         | NS                                  | NS           |
| Model R-squared          |                |                              | 0.80             | 0.88                   | 0.83                     | 0.53                       | 0.68                                | 0.74         |
| C.V.                     |                |                              | 7.1              | 3.6                    | 1.5                      | 2.5                        | 3.7                                 | 221.0        |

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: April 12, 2023.

Harvested: September 7, 2023.

Seeding Rate: 34,000 seeds per acre in 36-inch rows.

Soil Type: Greenville sandy clay loam.

Previous Crop:

Soil Test:  $P_2O_5 = 120$  lbs,  $K_2O = 140$  lbs, and  $pH = 5.9$ .

Fertilization: Preplant: 120 lb N, 10 lb S, 175 lb  $P_2O_5$ , and 230 lb  $K_2O$ /acre. Sidedress: 270 lb N and 100 lb S/acre.

Tillage: Conventional.

Herbicides: Atrazine, Warrant, and Zidua.

Test conducted by M. Cofield, W. Mosteller, D. Dunn, W. Jones and D. Pearce.

## Griffin, Georgia: Corn Grain Performance, 2023, Irrigated

| Company or<br>Brand Name | Hybrid<br>Name   | Relative         |                  | Grain         | Test             | Ears/             | Actual                    | Lodging |
|--------------------------|------------------|------------------|------------------|---------------|------------------|-------------------|---------------------------|---------|
|                          |                  | Maturity<br>days | Yield<br>bu/acre | Moisture<br>% | Weight<br>lbs/bu | 100 plants<br>no. | Population<br>plants/acre |         |
| AgraTech                 | 711VT2P          | 112              | <b>261</b>       | 13.5          | 60.1             | .                 | .                         | .       |
| Revere Seed              | Revere 1839 TC   | 118              | <b>258</b>       | 14.2          | 57.5             | .                 | .                         | .       |
| Revere Seed              | Revere 1577 VT2P | 115              | <b>257</b>       | 13.1          | 59.8             | .                 | .                         | .       |
| Dyna-Gro                 | D56TC44          | 116              | <b>254</b>       | 13.3          | 59.5             | .                 | .                         | .       |
| Revere Seed              | Revere 1307 TC   | 113              | <b>243</b>       | 13.0          | 58.2             | .                 | .                         | .       |
| Innvictis                | A1542T           | 115              | <b>237</b>       | 13.4          | 59.6             | .                 | .                         | .       |
| INTEGRA                  | 6493 VT2P        | 114              | <b>236</b>       | 12.6          | 58.0             | .                 | .                         | .       |
| INTEGRA                  | 6641 SS          | 116              | <b>234</b>       | 13.7          | 58.8             | .                 | .                         | .       |
| Pioneer                  | P1608YHR         | 116              | <b>233</b>       | 13.0          | 61.7             | .                 | .                         | .       |
| AgraTech                 | 83VT2P           |                  | <b>231</b>       | 13.6          | 60.3             | .                 | .                         | .       |
| Progeny                  | PGY 9114 VT2P    | 114              | <b>223</b>       | 13.3          | 59.6             | .                 | .                         | .       |
| Dyna-Gro                 | D57VC53          | 117              | <b>221</b>       | 13.7          | 60.7             | .                 | .                         | .       |
| Progeny                  | PGY 2118 VT2P    | 118              | <b>220</b>       | 14.5          | 60.7             | .                 | .                         | .       |
| INTEGRA                  | 6410 RR          | 114              | <b>216</b>       | 13.4          | 59.1             | .                 | .                         | .       |
| Croplan                  | CP5893 TRE       | 118              | <b>216</b>       | 13.7          | 61.3             | .                 | .                         | .       |
| BH Genetics              | BH 8412VT2P      | 114              | 209              | 12.9          | 58.5             | .                 | .                         | .       |
| INTEGRA                  | CX301119 TRE     | 119              | 205              | 13.7          | 58.3             | .                 | .                         | .       |
| Dyna-Gro                 | D58VC65          | 118              | 202              | 12.3          | 60.2             | .                 | .                         | .       |
| DEKALB                   | DKC62-05 RR2     | 112              | 202              | 12.5          | 58.6             | .                 | .                         | .       |
| INTEGRA                  | 6864 VT2P        | 118              | 201              | 13.7          | 59.3             | .                 | .                         | .       |
| AgraTech                 | 69RR             | 114              | 199              | 12.9          | 59.9             | .                 | .                         | .       |
| NK Brand                 | NK1838-3110      | 118              | 199              | 13.8          | 57.9             | .                 | .                         | .       |
| Dyna-Gro                 | D58TC94          | 118              | 198              | 14.0          | 61.4             | .                 | .                         | .       |
| Dyna-Gro                 | D58VC74          | 118              | 197              | 13.5          | 60.2             | .                 | .                         | .       |
| Revere Seed              | Revere 1627 TC   | 116              | 194              | 14.2          | 59.7             | .                 | .                         | .       |
| Progeny                  | PGY 2010 TRE     | 110              | 194              | 13.1          | 58.2             | .                 | .                         | .       |
| INTEGRA                  | 6709 VT2P        | 117              | 193              | 13.2          | 58.3             | .                 | .                         | .       |
| Pioneer                  | P1289YHR         | 112              | 191              | 13.0          | 57.8             | .                 | .                         | .       |
| Innvictis                | A1689T           | 116              | 189              | 12.8          | 59.3             | .                 | .                         | .       |
| AgriGold                 | A6659 RR         | 116              | 187              | 13.7          | 60.0             | .                 | .                         | .       |
| DEKALB                   | DKC70-45 VT2P    | 120              | 185              | 14.1          | 60.6             | .                 | .                         | .       |
| Progeny                  | PGY 2215 TRE     | 115              | 185              | 13.6          | 60.0             | .                 | .                         | .       |
| Innvictis                | X1993            | 117              | 182              | 13.3          | 50.3             | .                 | .                         | .       |
| Croplan                  | CP5678 VT2P      | 116              | 180              | 13.0          | 62.0             | .                 | .                         | .       |
| INTEGRA                  | 6342 TRE         | 113              | 176              | 12.5          | 59.1             | .                 | .                         | .       |
| DEKALB                   | DKC68-35 VT2P    | 118              | 176              | 13.5          | 60.5             | .                 | .                         | .       |
| BH Genetics              | BH 8721VT2P      | 117              | 175              | 13.7          | 58.8             | .                 | .                         | .       |
| Innvictis                | A1551VT2P        | 115              | 174              | 13.0          | 51.3             | .                 | .                         | .       |
| INTEGRA                  | 6624 TRE         | 116              | 168              | 13.7          | 59.0             | .                 | .                         | .       |
| DEKALB                   | DKC66-06 TRE     | 116              | 168              | 13.1          | 58.8             | .                 | .                         | .       |
| NK Brand                 | NK1188-AA-EZ1    | 111              | 158              | 12.8          | 56.3             | .                 | .                         | .       |
| DEKALB                   | DKC70-25 RR2     | 120              | 157              | 13.5          | 59.6             | .                 | .                         | .       |
| INTEGRA                  | 6533 RR          | 115              | 150              | 12.7          | 55.9             | .                 | .                         | .       |
| INTEGRA                  | 6891 3110        | 118              | 144              | 16.7          | 58.9             | .                 | .                         | .       |
| BH Genetics              | BH 8566VT2P      | 115              | 143              | 13.5          | 59.3             | .                 | .                         | .       |
| Croplan                  | CP5760 TRE       | 117              | 143              | 13.3          | 51.5             | .                 | .                         | .       |
| Progeny                  | PGY 9117 VT2P    | 117              | 128              | 12.3          | 54.4             | .                 | .                         | .       |
| DEKALB                   | DKC66-94 RR2     | 116              | 119              | 12.3          | 43.0             | .                 | .                         | .       |

**Griffin, Georgia:  
Corn Grain Performance, 2023, Irrigated (Continued)**

| Company or<br>Brand Name | Hybrid<br>Name | Relative<br>Maturity<br>days | Yield<br>bu/acre | Grain<br>Moisture<br>% | Test<br>Weight<br>lbs/bu | Ears/<br>100 plants<br>no. | Actual<br>Population<br>plants/acre | Lodging<br>% |
|--------------------------|----------------|------------------------------|------------------|------------------------|--------------------------|----------------------------|-------------------------------------|--------------|
| Average                  |                |                              | 196              | 13.4                   | 58.4                     | -                          | -                                   | -            |
| LSD at 10% Level         |                |                              | 46               | 0.8                    | 2.7                      | -                          | -                                   | -            |
| Model R-squared          |                |                              | 0.96             | 0.75                   | 1.00                     | -                          | -                                   | -            |
| C.V.                     |                |                              | 21.9             | 5.7                    | 4.4                      | -                          | -                                   | -            |

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: May 11, 2023.

Harvested: October 3, 2023.

Seeding Rate: 34,000 seeds per acre in 30-inch rows.

Soil Type: Cecil sandy loam.

Previous Crop: Wheat.

Soil Test:  $P_2O_5 = 59$  lbs,  $K_2O = 306$  lbs, and  $pH = 6.0$ .

Fertilization: Preplant: 70 lb N, 191 lb  $P_2O_5$ , and 270 lb  $K_2O$ /acre. Sidedress: 286 lb N/acre.

Tillage: Conventional.

Herbicides: Atrazine, Warrant, and Round-up.

Irrigation: 9 inches.

Test conducted by J. Arrington, G. Ware, and S. Brannon.

## Rome, Georgia: Corn Grain Performance, 2023, Irrigated

| Company or<br>Brand Name | Hybrid<br>Name   | Relative<br>Maturity<br>days | Yield<br>bu/acre | Grain<br>Moisture<br>% | Test<br>Weight<br>lbs/bu | Ears/<br>100 plants<br>no. | Actual<br>Population<br>plants/acre | Lodging<br>% |
|--------------------------|------------------|------------------------------|------------------|------------------------|--------------------------|----------------------------|-------------------------------------|--------------|
| DEKALB                   | DKC68-35 VT2P    | 118                          | <b>246</b>       | 13.0                   | 61.0                     | .                          | .                                   | .            |
| Dyna-Gro                 | D58VC74          | 118                          | <b>241</b>       | 12.5                   | 61.0                     | .                          | .                                   | .            |
| INTEGRA                  | CX301119 TRE     | 119                          | <b>236</b>       | 12.5                   | 58.1                     | .                          | .                                   | .            |
| DEKALB                   | DKC70-45 VT2P    | 120                          | <b>235</b>       | 12.7                   | 61.0                     | .                          | .                                   | .            |
| Revere Seed              | Revere 1627 TC   | 116                          | <b>229</b>       | 12.9                   | 59.9                     | .                          | .                                   | .            |
| BH Genetics              | BH 8721VT2P      | 117                          | <b>226</b>       | 12.3                   | 60.0                     | .                          | .                                   | .            |
| BH Genetics              | BH 8566VT2P      | 115                          | <b>226</b>       | 12.7                   | 59.3                     | .                          | .                                   | .            |
| INTEGRA                  | 6641 SS          | 116                          | 225              | 13.0                   | 59.2                     | .                          | .                                   | .            |
| Dyna-Gro                 | D56TC44          | 116                          | 225              | 12.5                   | 58.5                     | .                          | .                                   | .            |
| DEKALB                   | DKC66-06 TRE     | 116                          | 224              | 12.7                   | 59.2                     | .                          | .                                   | .            |
| Pioneer                  | P1608YHR         | 116                          | 224              | 13.0                   | 62.0                     | .                          | .                                   | .            |
| NK Brand                 | NK1838-3110      | 118                          | 223              | 13.6                   | 58.5                     | .                          | .                                   | .            |
| DEKALB                   | DKC70-25 RR2     | 120                          | 221              | 12.9                   | 60.5                     | .                          | .                                   | .            |
| INTEGRA                  | 6864 VT2P        | 118                          | 219              | 13.0                   | 60.2                     | .                          | .                                   | .            |
| Croplan                  | CP5760 TRE       | 117                          | 218              | 12.5                   | 57.7                     | .                          | .                                   | .            |
| Innvictis                | A1542T           | 115                          | 218              | 12.6                   | 59.8                     | .                          | .                                   | .            |
| Dyna-Gro                 | D58VC65          | 118                          | 217              | 12.4                   | 60.3                     | .                          | .                                   | .            |
| BH Genetics              | BH 8412VT2P      | 114                          | 216              | 12.3                   | 60.1                     | .                          | .                                   | .            |
| Revere Seed              | Revere 1839 TC   | 118                          | 215              | 12.4                   | 57.5                     | .                          | .                                   | .            |
| INTEGRA                  | 6342 TRE         | 113                          | 215              | 12.5                   | 58.3                     | .                          | .                                   | .            |
| INTEGRA                  | 6493 VT2P        | 114                          | 215              | 12.6                   | 58.9                     | .                          | .                                   | .            |
| INTEGRA                  | 6709 VT2P        | 117                          | 213              | 12.4                   | 57.9                     | .                          | .                                   | .            |
| Progeny                  | PGY 2010 TRE     | 110                          | 211              | 12.2                   | 55.7                     | .                          | .                                   | .            |
| Revere Seed              | Revere 1577 VT2P | 115                          | 210              | 12.5                   | 60.0                     | .                          | .                                   | .            |
| Pioneer                  | P1289YHR         | 112                          | 209              | 12.7                   | 61.1                     | .                          | .                                   | .            |
| AgraTech                 | 711VT2P          | 112                          | 209              | 12.5                   | 59.1                     | .                          | .                                   | .            |
| Innvictis                | A1689T           | 116                          | 209              | 12.5                   | 59.4                     | .                          | .                                   | .            |
| Dyna-Gro                 | D58TC94          | 118                          | 207              | 12.8                   | 60.6                     | .                          | .                                   | .            |
| Progeny                  | PGY 2215 TRE     | 115                          | 206              | 12.7                   | 60.3                     | .                          | .                                   | .            |
| AgraTech                 | 83VT2P           |                              | 206              | 12.7                   | 59.2                     | .                          | .                                   | .            |
| INTEGRA                  | 6624 TRE         | 116                          | 205              | 12.6                   | 58.6                     | .                          | .                                   | .            |
| Dyna-Gro                 | D57VC53          | 117                          | 205              | 13.0                   | 60.4                     | .                          | .                                   | .            |
| INTEGRA                  | 6533 RR          | 115                          | 204              | 12.9                   | 59.4                     | .                          | .                                   | .            |
| Innvictis                | A1551VT2P        | 115                          | 203              | 12.4                   | 58.0                     | .                          | .                                   | .            |
| Progeny                  | PGY 2118 VT2P    | 118                          | 202              | 13.0                   | 60.9                     | .                          | .                                   | .            |
| Croplan                  | CP5893 TRE       | 118                          | 202              | 12.5                   | 57.8                     | .                          | .                                   | .            |
| Revere Seed              | Revere 1307 TC   | 113                          | 200              | 12.2                   | 57.2                     | .                          | .                                   | .            |
| INTEGRA                  | 6410 RR          | 114                          | 199              | 12.5                   | 59.6                     | .                          | .                                   | .            |
| Progeny                  | PGY 9114 VT2P    | 114                          | 195              | 12.4                   | 59.8                     | .                          | .                                   | .            |
| Progeny                  | PGY 9117 VT2P    | 117                          | 193              | 12.3                   | 59.2                     | .                          | .                                   | .            |
| INTEGRA                  | 6891 3110        | 118                          | 189              | 13.3                   | 59.5                     | .                          | .                                   | .            |
| DEKALB                   | DKC66-94 RR2     | 116                          | 189              | 12.7                   | 59.8                     | .                          | .                                   | .            |
| Innvictis                | X1993            | 117                          | 188              | 12.2                   | 56.3                     | .                          | .                                   | .            |
| Croplan                  | CP5678 VT2P      | 116                          | 184              | 12.4                   | 59.0                     | .                          | .                                   | .            |
| NK Brand                 | NK1188-AA-EZ1    | 111                          | 181              | 12.7                   | 57.9                     | .                          | .                                   | .            |
| AgriGold                 | A6659 RR         | 116                          | 172              | 12.1                   | 58.1                     | .                          | .                                   | .            |
| DEKALB                   | DKC62-05 RR2     | 112                          | 169              | 12.1                   | 57.4                     | .                          | .                                   | .            |
| AgraTech                 | 69RR             | 114                          | 165              | 12.6                   | 59.3                     | .                          | .                                   | .            |



**Rome, Georgia:**  
**Corn Grain Performance, 2023, Irrigated (Continued)**

| Company or<br>Brand Name | Hybrid<br>Name | Relative<br>Maturity<br>days | Yield<br>bu/acre | Grain<br>Moisture<br>% | Test<br>Weight<br>lbs/bu | Ears/<br>100 plants<br>no. | Actual<br>Population<br>plants/acre | Lodging<br>% |
|--------------------------|----------------|------------------------------|------------------|------------------------|--------------------------|----------------------------|-------------------------------------|--------------|
| Average                  |                |                              | 209              | 12.6                   | 59.2                     | -                          | -                                   | -            |
| LSD at 10% Level         |                |                              | 20               | 0.2                    | 1.1                      | -                          | -                                   | -            |
| Model R-squared          |                |                              | 0.77             | 0.92                   | 0.99                     | -                          | -                                   | -            |
| C.V.                     |                |                              | 9.2              | 1.4                    | 1.8                      | -                          | -                                   | -            |

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: June 1, 2023.

Harvested: October 24, 2023.

Seeding Rate: 34,000 seeds per acre in 30-inch rows.

Soil Type: Wax loam.

Previous Crop: Soybeans.

Soil Test:  $P_2O_5 = 106$  lbs,  $K_2O = 421$  lbs, and  $pH = 6.0$ .

Fertilization: Preplant: 70 lb N, 0 lb  $P_2O_5$ , and 0 lb  $K_2O$ /acre. Sidedress: 280 lb N/acre.

Tillage: Conventional.

Herbicides: Atrazine, Warrant, and Round-up.

Test conducted by J. Arrington, G. Ware, M. Tucker, and T. Turnquist.

## Rome, Georgia: Corn Grain Performance, 2023, Dryland

| Company or<br>Brand Name | Hybrid<br>Name   | Relative<br>Maturity<br>days | Yield<br>bu/acre | Grain<br>Moisture<br>% | Test<br>Weight<br>lbs/bu | Ears/<br>100 plants<br>no. | Actual<br>Population<br>plants/acre | Lodging<br>% |
|--------------------------|------------------|------------------------------|------------------|------------------------|--------------------------|----------------------------|-------------------------------------|--------------|
| Revere Seed              | Revere 1627 TC   | 116                          | <b>193</b>       | 12.2                   | 59.9                     | .                          | .                                   | .            |
| Innvictis                | A1542T           | 115                          | <b>186</b>       | 12.4                   | 59.1                     | .                          | .                                   | .            |
| DEKALB                   | DKC68-35 VT2P    | 118                          | <b>178</b>       | 11.9                   | 55.9                     | .                          | .                                   | .            |
| Croplan                  | CP5760 TRE       | 117                          | <b>177</b>       | 12.4                   | 55.0                     | .                          | .                                   | .            |
| INTEGRA                  | 6641 SS          | 116                          | <b>175</b>       | 11.4                   | 56.4                     | .                          | .                                   | .            |
| Innvictis                | A1689T           | 116                          | <b>175</b>       | 11.6                   | 50.1                     | .                          | .                                   | .            |
| Pioneer                  | P1289YHR         | 112                          | <b>175</b>       | 11.2                   | 55.3                     | .                          | .                                   | .            |
| BH Genetics              | BH 8566VT2P      | 115                          | 170              | 12.2                   | 60.5                     | .                          | .                                   | .            |
| Revere Seed              | Revere 1307 TC   | 113                          | 168              | 11.8                   | 56.4                     | .                          | .                                   | .            |
| INTEGRA                  | 6624 TRE         | 116                          | 168              | 11.8                   | 57.5                     | .                          | .                                   | .            |
| Croplan                  | CP5678 VT2P      | 116                          | 167              | 12.1                   | 56.7                     | .                          | .                                   | .            |
| Innvictis                | X1993            | 117                          | 167              | 11.8                   | 55.2                     | .                          | .                                   | .            |
| AgraTech                 | 83VT2P           |                              | 166              | 11.1                   | 53.8                     | .                          | .                                   | .            |
| Dyna-Gro                 | D58TC94          | 118                          | 166              | 11.8                   | 58.5                     | .                          | .                                   | .            |
| INTEGRA                  | CX301119 TRE     | 119                          | 165              | 11.4                   | 53.8                     | .                          | .                                   | .            |
| BH Genetics              | BH 8412VT2P      | 114                          | 165              | 11.3                   | 59.4                     | .                          | .                                   | .            |
| Revere Seed              | Revere 1577 VT2P | 115                          | 163              | 11.0                   | 62.3                     | .                          | .                                   | .            |
| Progeny                  | PGY 2010 TRE     | 110                          | 162              | 11.1                   | 53.3                     | .                          | .                                   | .            |
| DEKALB                   | DKC70-45 VT2P    | 120                          | 161              | 11.8                   | 59.7                     | .                          | .                                   | .            |
| Revere Seed              | Revere 1839 TC   | 118                          | 161              | 11.3                   | 53.1                     | .                          | .                                   | .            |
| Dyna-Gro                 | D56TC44          | 116                          | 160              | 11.7                   | 60.8                     | .                          | .                                   | .            |
| INTEGRA                  | 6493 VT2P        | 114                          | 159              | 11.0                   | 59.1                     | .                          | .                                   | .            |
| DEKALB                   | DKC70-25 RR2     | 120                          | 159              | 11.8                   | 56.6                     | .                          | .                                   | .            |
| INTEGRA                  | 6864 VT2P        | 118                          | 159              | 12.3                   | 58.8                     | .                          | .                                   | .            |
| INTEGRA                  | 6891 3110        | 118                          | 159              | 13.4                   | 46.9                     | .                          | .                                   | .            |
| DEKALB                   | DKC66-06 TRE     | 116                          | 158              | 12.1                   | 63.3                     | .                          | .                                   | .            |
| Pioneer                  | P1608YHR         | 116                          | 158              | 12.1                   | 54.9                     | .                          | .                                   | .            |
| Progeny                  | PGY 9114 VT2P    | 114                          | 158              | 11.0                   | 51.1                     | .                          | .                                   | .            |
| INTEGRA                  | 6342 TRE         | 113                          | 158              | 11.2                   | 56.5                     | .                          | .                                   | .            |
| Innvictis                | A1551VT2P        | 115                          | 156              | 11.7                   | 55.7                     | .                          | .                                   | .            |
| Dyna-Gro                 | D58VC74          | 118                          | 155              | 11.7                   | 58.3                     | .                          | .                                   | .            |
| Progeny                  | PGY 2118 VT2P    | 118                          | 154              | 12.9                   | 57.4                     | .                          | .                                   | .            |
| Progeny                  | PGY 2215 TRE     | 115                          | 154              | 11.9                   | 60.1                     | .                          | .                                   | .            |
| Dyna-Gro                 | D58VC65          | 118                          | 151              | 11.2                   | 54.4                     | .                          | .                                   | .            |
| BH Genetics              | BH 8721VT2P      | 117                          | 150              | 12.1                   | 57.0                     | .                          | .                                   | .            |
| Progeny                  | PGY 9117 VT2P    | 117                          | 148              | 11.4                   | 50.2                     | .                          | .                                   | .            |
| NK Brand                 | NK1188-AA-EZ1    | 111                          | 148              | 11.4                   | 47.9                     | .                          | .                                   | .            |
| AgraTech                 | 69RR             | 114                          | 148              | 12.0                   | 56.8                     | .                          | .                                   | .            |
| INTEGRA                  | 6709 VT2P        | 117                          | 147              | 11.4                   | 59.8                     | .                          | .                                   | .            |
| DEKALB                   | DKC66-94 RR2     | 116                          | 146              | 10.9                   | 44.4                     | .                          | .                                   | .            |
| INTEGRA                  | 6410 RR          | 114                          | 145              | 11.5                   | 57.0                     | .                          | .                                   | .            |
| INTEGRA                  | 6533 RR          | 115                          | 142              | 11.6                   | 57.8                     | .                          | .                                   | .            |
| Dyna-Gro                 | D57VC53          | 117                          | 139              | 12.2                   | 50.7                     | .                          | .                                   | .            |
| NK Brand                 | NK1838-3110      | 118                          | 138              | 12.4                   | 58.5                     | .                          | .                                   | .            |
| AgriGold                 | A6659 RR         | 116                          | 138              | 11.6                   | 47.9                     | .                          | .                                   | .            |
| Croplan                  | CP5893 TRE       | 118                          | 136              | 11.9                   | 54.9                     | .                          | .                                   | .            |
| AgraTech                 | 711VT2P          | 112                          | 131              | 11.6                   | 47.0                     | .                          | .                                   | .            |
| DEKALB                   | DKC62-05 RR2     | 112                          | 118              | 11.2                   | 60.7                     | .                          | .                                   | .            |

**Rome, Georgia:**  
**Corn Grain Performance, 2023, Dryland (Continued)**

| Company or<br>Brand Name | Hybrid<br>Name | Relative<br>Maturity | Yield   | Grain<br>Moisture | Test<br>Weight | Ears/<br>100 plants | Actual<br>Population | Lodging |
|--------------------------|----------------|----------------------|---------|-------------------|----------------|---------------------|----------------------|---------|
|                          |                | days                 | bu/acre | %                 | lbs/bu         | no.                 | plants/acre          | %       |
| Average                  |                |                      | 158     | 11.7              | 55.8           | -                   | -                    | -       |
| LSD at 10% Level         |                |                      | 22      | 0.5               | 6.1            | -                   | -                    | -       |
| Model R-squared          |                |                      | 0.42    | 0.63              | 0.43           | -                   | -                    | -       |
| C.V.                     |                |                      | 13.1    | 4.1               | 10.4           | -                   | -                    | -       |

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: June 1, 2023.

Harvested: October 24, 2023.

Seeding Rate: 34,000 seeds per acre in 30-inch rows.

Soil Type: Wax loam.

Previous Crop: Soybeans.

Soil Test:  $P_2O_5 = 58$  lbs,  $K_2O = 368$  lbs, and  $pH = 6.1$ .

Fertilization: Preplant: 97 lb N, 69 lb  $P_2O_5$ , and 0 lb  $K_2O$ /acre. Sidedress: 140 lb N/acre.

Tillage: Conventional.

Herbicides: Atrazine, Warrant, and Round-up.

Test conducted by J. Arrington, G. Ware, M. Tucker, and T. Turnquist.

## Blairsville, Georgia: Corn Grain Performance, 2023, Dryland

| Company or<br>Brand Name | Hybrid<br>Name   | Relative         | Grain            | Test          | Ears/            | Actual            | Lodging |                           |
|--------------------------|------------------|------------------|------------------|---------------|------------------|-------------------|---------|---------------------------|
|                          |                  | Maturity<br>days | Yield<br>bu/acre | Moisture<br>% | Weight<br>lbs/bu | 100 plants<br>no. |         | Population<br>plants/acre |
| Revere Seed              | Revere 1839 TC   | 118              | <b>359</b>       | 16.2          | 57.9             | .                 | .       | .                         |
| Dyna-Gro                 | D56TC44          | 116              | <b>346</b>       | 14.3          | 57.9             | .                 | .       | .                         |
| BH Genetics              | BH 8721VT2P      | 117              | <b>344</b>       | 14.7          | 59.6             | .                 | .       | .                         |
| BH Genetics              | BH 8566VT2P      | 115              | <b>343</b>       | 15.6          | 58.8             | .                 | .       | .                         |
| DEKALB                   | DKC66-06 TRE     | 116              | <b>340</b>       | 14.7          | 59.4             | .                 | .       | .                         |
| Pioneer                  | P1289YHR         | 112              | <b>339</b>       | 15.0          | 59.2             | .                 | .       | .                         |
| Croplan                  | CP5893 TRE       | 118              | <b>339</b>       | 15.0          | 60.4             | .                 | .       | .                         |
| DEKALB                   | DKC70-45 VT2P    | 120              | <b>338</b>       | 15.6          | 60.0             | .                 | .       | .                         |
| INTEGRA                  | 6493 VT2P        | 114              | <b>337</b>       | 14.7          | 59.7             | .                 | .       | .                         |
| DEKALB                   | DKC68-35 VT2P    | 118              | <b>336</b>       | 15.7          | 60.8             | .                 | .       | .                         |
| INTEGRA                  | CX301119 TRE     | 119              | <b>333</b>       | 16.0          | 57.6             | .                 | .       | .                         |
| DEKALB                   | DKC70-25 RR2     | 120              | <b>328</b>       | 16.5          | 59.6             | .                 | .       | .                         |
| NK Brand                 | NK1838-3110      | 118              | <b>321</b>       | 16.3          | 57.5             | .                 | .       | .                         |
| AgraTech                 | 711VT2P          | 112              | 318              | 14.0          | 60.0             | .                 | .       | .                         |
| INTEGRA                  | 6891 3110        | 118              | 318              | 18.2          | 58.6             | .                 | .       | .                         |
| BH Genetics              | BH 8412VT2P      | 114              | 317              | 13.9          | 60.0             | .                 | .       | .                         |
| Pioneer                  | P1608YHR         | 116              | 316              | 16.3          | 60.6             | .                 | .       | .                         |
| Progeny                  | PGY 2215 TRE     | 115              | 315              | 14.4          | 59.5             | .                 | .       | .                         |
| Croplan                  | CP5678 VT2P      | 116              | 314              | 14.4          | 59.1             | .                 | .       | .                         |
| NK Brand                 | NK1188-AA-EZ1    | 111              | 314              | 15.3          | 59.3             | .                 | .       | .                         |
| AgriGold                 | A6659 RR         | 116              | 311              | 15.1          | 59.0             | .                 | .       | .                         |
| Progeny                  | PGY 9114 VT2P    | 114              | 309              | 14.6          | 59.9             | .                 | .       | .                         |
| INTEGRA                  | 6641 SS          | 116              | 305              | 14.8          | 58.3             | .                 | .       | .                         |
| Dyna-Gro                 | D58VC74          | 118              | 305              | 14.7          | 59.5             | .                 | .       | .                         |
| Dyna-Gro                 | D58TC94          | 118              | 305              | 15.0          | 60.4             | .                 | .       | .                         |
| Innvictis                | X1993            | 117              | 302              | 16.0          | 57.7             | .                 | .       | .                         |
| Progeny                  | PGY 2118 VT2P    | 118              | 298              | 16.0          | 61.2             | .                 | .       | .                         |
| Progeny                  | PGY 9117 VT2P    | 117              | 298              | 14.6          | 59.0             | .                 | .       | .                         |
| Dyna-Gro                 | D57VC53          | 117              | 298              | 15.4          | 61.2             | .                 | .       | .                         |
| Croplan                  | CP5760 TRE       | 117              | 298              | 15.7          | 57.7             | .                 | .       | .                         |
| INTEGRA                  | 6624 TRE         | 116              | 295              | 13.9          | 58.0             | .                 | .       | .                         |
| Revere Seed              | Revere 1307 TC   | 113              | 294              | 13.9          | 57.6             | .                 | .       | .                         |
| Dyna-Gro                 | D58VC65          | 118              | 294              | 14.3          | 59.3             | .                 | .       | .                         |
| INTEGRA                  | 6709 VT2P        | 117              | 294              | 14.5          | 57.7             | .                 | .       | .                         |
| Innvictis                | A1542T           | 115              | 293              | 14.2          | 59.5             | .                 | .       | .                         |
| Revere Seed              | Revere 1577 VT2P | 115              | 290              | 14.0          | 59.7             | .                 | .       | .                         |
| Innvictis                | A1551VT2P        | 115              | 288              | 15.4          | 57.7             | .                 | .       | .                         |
| INTEGRA                  | 6864 VT2P        | 118              | 287              | 15.5          | 57.6             | .                 | .       | .                         |
| Innvictis                | A1689T           | 116              | 284              | 14.8          | 60.3             | .                 | .       | .                         |
| AgraTech                 | 83VT2P           |                  | 271              | 15.0          | 59.0             | .                 | .       | .                         |
| Revere Seed              | Revere 1627 TC   | 116              | 269              | 14.7          | 58.2             | .                 | .       | .                         |
| DEKALB                   | DKC66-94 RR2     | 116              | 269              | 15.7          | 59.3             | .                 | .       | .                         |
| INTEGRA                  | 6533 RR          | 115              | 264              | 14.4          | 59.9             | .                 | .       | .                         |
| INTEGRA                  | 6342 TRE         | 113              | 234              | 13.6          | 58.4             | .                 | .       | .                         |
| AgraTech                 | 69RR             | 114              | 219              | 14.5          | 59.9             | .                 | .       | .                         |
| Progeny                  | PGY 2010 TRE     | 110              | 219              | 13.6          | 56.6             | .                 | .       | .                         |
| DEKALB                   | DKC62-05 RR2     | 112              | 159              | 13.3          | 58.2             | .                 | .       | .                         |
| INTEGRA                  | 6410 RR          | 114              | 158              | 14.3          | 58.6             | .                 | .       | .                         |

**Blairsville, Georgia:**  
**Corn Grain Performance, 2023, Dryland (Continued)**

| Company or<br>Brand Name | Hybrid<br>Name | Relative<br>Maturity<br>days | Yield<br>bu/acre | Grain<br>Moisture<br>% | Test<br>Weight<br>lbs/bu | Ears/<br>100 plants<br>no. | Actual<br>Population<br>plants/acre | Lodging<br>% |
|--------------------------|----------------|------------------------------|------------------|------------------------|--------------------------|----------------------------|-------------------------------------|--------------|
| Average                  |                |                              | 298              | 15.0                   | 59.1                     | -                          | -                                   | -            |
| LSD at 10% Level         |                |                              | 40               | 0.6                    | 0.8                      | -                          | -                                   | -            |
| Model R-squared          |                |                              | 0.75             | 0.90                   | 1.00                     | -                          | -                                   | -            |
| C.V.                     |                |                              | 12.6             | 3.6                    | 1.3                      | -                          | -                                   | -            |

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: April 25, 2023.

Harvested: October, 26, 2023.

Seeding Rate: 32,938 seeds per acre in 30-inch rows.

Soil Type: Suches loam.

Previous Crop: Soybean.

Soil Test:  $P_2O_5 = 50$  lbs,  $K_2O = 402$  lbs, and  $pH = 6.1$ .

Fertilization: Preplant: 120 lb N, 10 lb S, 30 lb  $P_2O_5$ , and 20 lb  $K_2O$ /acre. Sidedress: 280 lb N/acre.

Tillage: Conventional.

Herbicides: Atrazine, Warrant, and Round-up.

Test conducted by J. Arrington, G. Ware, C. Graham, L. Lee, D. Patterson, and D. Rogers.

## Statewide Harvest Moisture Summary: Corn Grain Performance, Georgia, 2023

| Company or Brand Name             | Hybrid Name             | RM  | Arranged from highest to lowest moisture at harvest |                  |                     |                   |                  |                |                |              |
|-----------------------------------|-------------------------|-----|---|------------------|---------------------|-------------------|------------------|----------------|----------------|--------------|
|                                   |                         |     | Midville Irrigated                                  | Plains Irrigated | Blairsville Dryland | Griffin Irrigated | Tifton Irrigated | Tifton Dryland | Rome Irrigated | Rome Dryland |
| ----- % Moisture at harvest ----- |                         |     |   |                  |                     |                   |                  |                |                |              |
| INTEGRA                           | 6891 3110               | 118 | 18.5  | 17.1             | 18.2                | 16.7              | 15.7             | 14.3           | 13.3           | 13.4         |
| Revere Seed                       | <b>Revere 1839 TC</b>   | 118 | 18.0  | 17.2             | 16.2                | 14.2              | 13.8             | 14.3           | 12.4           | 11.3         |
| INTEGRA                           | <b>CX301119 TRE</b>     | 119 | 17.6  | 16.7             | 16.0                | 13.7              | 13.4             | 14.7           | 12.5           | 11.4         |
| Innvictis                         | X1993                   | 117 | 17.3  | 16.7             | 16.0                | 13.3              | 13.9             | 13.7           | 12.2           | 11.8         |
| Dyna-Gro                          | D58TC94                 | 118 | 17.1  | 16.1             | 15.0                | 14.0              | 13.6             | 13.4           | 12.8           | 11.8         |
| Dyna-Gro                          | D57VC53                 | 117 | 17.0  | 16.1             | 15.4                | 13.7              | 14.2             | 14.2           | 13.0           | 12.2         |
| Progeny                           | PGY 2215 TRE            | 115 | 16.7  | 15.3             | 14.4                | 13.6              | 13.2             | 12.5           | 12.7           | 11.9         |
| Croplan                           | CP5893 TRE              | 118 | 16.7  | 15.8             | 15.0                | 13.7              | 13.3             | 14.0           | 12.5           | 11.9         |
| INTEGRA                           | 6864 VT2P               | 118 | 16.7  | 17.5             | 15.5                | 13.7              | 14.6             | 13.7           | 13.0           | 12.3         |
| Progeny                           | PGY 2118 VT2P           | 118 | 16.6  | 16.1             | 16.0                | 14.5              | 14.3             | 13.7           | 13.0           | 12.9         |
| DEKALB                            | <b>DKC70-45 VT2P</b>    | 120 | 16.4  | 16.6             | 15.6                | 14.1              | 13.9             | 14.7           | 12.7           | 11.8         |
| AgraTech                          | 83VT2P                  |     | 16.4  | 15.5             | 15.0                | 13.6              | 13.0             | 13.4           | 12.7           | 11.1         |
| DEKALB                            | DKC70-25 RR2            | 120 | 16.3  | 16.2             | 16.5                | 13.5              | 13.6             | 12.8           | 12.9           | 11.8         |
| Dyna-Gro                          | <b>D58VC74</b>          | 118 | 16.3  | 15.8             | 14.7                | 13.5              | 13.4             | 13.5           | 12.5           | 11.7         |
| Croplan                           | CP5760 TRE              | 117 | 16.2  | 14.8             | 15.7                | 13.3              | 13.5             | 13.1           | 12.5           | 12.4         |
| AgraTech                          | 69RR                    | 114 | 16.1  | 15.4             | 14.5                | 12.9              | 13.6             | 12.7           | 12.6           | 12.0         |
| Progeny                           | PGY 9117 VT2P           | 117 | 16.0  | 13.7             | 14.6                | 12.3              | 13.3             | 11.8           | 12.3           | 11.4         |
| INTEGRA                           | <b>6493 VT2P</b>        | 114 | 16.0  | 14.9             | 14.7                | 12.6              | 12.9             | 13.1           | 12.6           | 11.0         |
| Innvictis                         | A1551VT2P               | 115 | 15.9  | 15.4             | 15.4                | 13.0              | 13.0             | 12.9           | 12.4           | 11.7         |
| NK Brand                          | NK1838-3110             | 118 | 15.9  | 14.8             | 16.3                | 13.8              | 13.8             | 13.2           | 13.6           | 12.4         |
| DEKALB                            | <b>DKC68-35 VT2P</b>    | 118 | 15.8  | 15.4             | 15.7                | 13.5              | 13.6             | 13.1           | 13.0           | 11.9         |
| Pioneer                           | P1608YHR                | 116 | 15.8  | 15.3             | 16.3                | 13.0              | 13.1             | 12.2           | 13.0           | 12.1         |
| BH Genetics                       | BH 8721VT2P             | 117 | 15.7  | 14.3             | 14.7                | 13.7              | 14.1             | 12.8           | 12.3           | 12.1         |
| Innvictis                         | <b>A1542T</b>           | 115 | 15.7  | 14.5             | 14.2                | 13.4              | 13.0             | 12.8           | 12.6           | 12.4         |
| INTEGRA                           | 6709 VT2P               | 117 | 15.7  | 14.7             | 14.5                | 13.2              | 13.4             | 12.4           | 12.4           | 11.4         |
| AgriGold                          | A6659 RR                | 116 | 15.6  | 14.7             | 15.1                | 13.7              | 14.0             | 13.1           | 12.1           | 11.6         |
| INTEGRA                           | 6641 SS                 | 116 | 15.6  | 14.3             | 14.8                | 13.7              | 13.4             | 12.6           | 13.0           | 11.4         |
| Revere Seed                       | Revere 1627 TC          | 116 | 15.6  | 14.8             | 14.7                | 14.2              | 13.0             | 13.6           | 12.9           | 12.2         |
| INTEGRA                           | 6410 RR                 | 114 | 15.6  | 15.3             | 14.3                | 13.4              | 12.6             | 12.2           | 12.5           | 11.5         |
| INTEGRA                           | 6624 TRE                | 116 | 15.5  | 14.7             | 13.9                | 13.7              | 13.4             | 12.4           | 12.6           | 11.8         |
| Croplan                           | CP5678 VT2P             | 116 | 15.5  | 14.3             | 14.4                | 13.0              | 13.2             | 12.0           | 12.4           | 12.1         |
| Innvictis                         | A1689T                  | 116 | 15.5  | 14.8             | 14.8                | 12.8              | 13.1             | 12.7           | 12.5           | 11.6         |
| INTEGRA                           | 6533 RR                 | 115 | 15.4  | 15.5             | 14.4                | 12.7              | 13.3             | 12.8           | 12.9           | 11.6         |
| Pioneer                           | P1289YHR                | 112 | 15.4  | 14.1             | 15.0                | 13.0              | 12.8             | 12.1           | 12.7           | 11.2         |
| Dyna-Gro                          | <b>D56TC44</b>          | 116 | 15.3  | 14.1             | 14.3                | 13.3              | 13.5             | 12.7           | 12.5           | 11.7         |
| BH Genetics                       | BH 8566VT2P             | 115 | 15.3  | 14.2             | 15.6                | 13.5              | 13.0             | 13.9           | 12.7           | 12.2         |
| Dyna-Gro                          | D58VC65                 | 118 | 15.2  | 14.2             | 14.3                | 12.3              | 13.3             | 12.5           | 12.4           | 11.2         |
| Revere Seed                       | Revere 1307 TC          | 113 | 15.1  | 13.8             | 13.9                | 13.0              | 12.3             | 12.3           | 12.2           | 11.8         |
| DEKALB                            | <b>DKC66-06 TRE</b>     | 116 | 15.0  | 14.4             | 14.7                | 13.1              | 13.4             | 12.5           | 12.7           | 12.1         |
| DEKALB                            | DKC66-94 RR2            | 116 | 15.0  | 14.6             | 15.7                | 12.3              | 13.2             | 12.3           | 12.7           | 10.9         |
| Progeny                           | PGY 9114 VT2P           | 114 | 14.9  | 14.1             | 14.6                | 13.3              | 12.6             | 12.5           | 12.4           | 11.0         |
| Revere Seed                       | <b>Revere 1577 VT2P</b> | 115 | 14.8  | 14.1             | 14.0                | 13.1              | 12.4             | 12.3           | 12.5           | 11.0         |
| Progeny                           | PGY 2010 TRE            | 110 | 14.6  | 13.7             | 13.6                | 13.1              | 12.1             | 12.0           | 12.2           | 11.1         |
| BH Genetics                       | BH 8412VT2P             | 114 | 14.5  | 14.4             | 13.9                | 12.9              | 12.5             | 12.7           | 12.3           | 11.3         |
| AgraTech                          | 711VT2P                 | 112 | 14.5  | 13.4             | 14.0                | 13.5              | 12.7             | 12.3           | 12.5           | 11.6         |
| DEKALB                            | DKC62-05 RR2            | 112 | 14.5  | 13.7             | 13.3                | 12.5              | 12.7             | 12.2           | 12.1           | 11.2         |
| INTEGRA                           | 6342 TRE                | 113 | 14.4  | 14.3             | 13.6                | 12.5              | 12.9             | 12.4           | 12.5           | 11.2         |
| NK Brand                          | NK1188-AA-EZ1           | 111 | 13.9  | 14.3             | 15.3                | 12.8              | 12.2             | 12.5           | 12.7           | 11.4         |

## Statewide Harvest Moisture Summary: Corn Grain Performance, Georgia, 2023 (Continued)

| Company or<br>Brand Name   | Hybrid<br>Name | Arranged from highest to lowest moisture at harvest |                     |                        |                      |                     |                   |                   |                 |
|--|----------------|---|---------------------|------------------------|----------------------|---------------------|-------------------|-------------------|-----------------|
|  |                | Midville<br>RM                                      | Plains<br>Irrigated | Blairsville<br>Dryland | Griffin<br>Irrigated | Tifton<br>Irrigated | Tifton<br>Dryland | Rome<br>Irrigated | Rome<br>Dryland |
|  |                | ----- % Moisture at harvest -----                   |                     |                        |                      |                     |                   |                   |                 |
| Average  |                | 15.8  | 15.0                | 15.0                   | 13.4                 | 13.3                | 12.9              | 12.6              | 11.7            |
| LSD at 10% Leve  |                | 0.5   | 0.6                 | 0.6                    | 0.8                  | 0.5                 | 0.5               | 0.2               | 0.5             |
| Model R-squared  |                | 0.91  | 0.88                | 0.90                   | 0.75                 | 0.80                | 0.86              | 0.92              | 0.63            |
| C.V.   |                | 3.0   | 3.6                 | 3.6                    | 5.7                  | 3.7                 | 3.6               | 1.4               | 4.1             |
|  |                |   |                     |                        |                      |                     |                   |                   |                 |
| Average Yield (bu/ac)  |                | 286   | 254                 | 298                    | 196                  | 258                 | 141               | 209               | 158             |
| Planting date  |                | 4/11  | 4/12                | 4/25                   | 5/11                 | 4/6                 | 3/31              | 6/1               | 6/1             |
| Estimated physiological maturity (black layer)<br>for RM 115 hybrid (2,650 GDUs) |                | 7/31  | 8/1                 | 9/13                   | 8/11                 | 7/28                | 7/25              | 9/7               | 9/7             |
| Harvest date   |                | 9/5   | 9/7                 | 10/26                  | 10/3                 | 8/28                | 8/28              | 10/24             | 10/24           |
| Days from estimated black layer to harvest                                       |                | 36  | 37                  | 43                     | 53                   | 31                  | 34                | 47                | 47              |

Names of the 10 highest-yielding hybrids statewide are **bolded** and underlined.

Note: Estimated days from black layer to harvest was not predictive of harvest moisture like in 2022. The Griffin and Rome tests were planted late, resulting in lower yields. Reduced grain fill leads to a higher moisture content at black layer, requiring additional days to reach a typical harvest moisture.

## Statewide Yield Summary: Corn Silage Performance, Georgia, 2022-2023

| Company or<br>Brand Name | Hybrid<br>Name | Relative<br>Maturity<br>days | 2023          |              |         |               | 2022         |              |              |               |
|--------------------------|----------------|------------------------------|---------------|--------------|---------|---------------|--------------|--------------|--------------|---------------|
|                          |                |                              | Griffin       |              | Tifton  |               | Griffin      |              | Tifton       |               |
|                          |                |                              | Forage        | Yield        | Milk/To | Milk/Ac       | Forage       | Yield        | Milk/To      | Milk/Ac       |
|                          |                |                              | dry tons/acre | lb/ton       | lb/acre | dry tons/acre | lb/ton       | lb/acre      |              |               |
| AgraTech                 | 708VIP         | 113                          | .             | 11.5         | 3,331   | 38,178        | .            | 9.95         | <b>3,537</b> | 34,981        |
| AgraTech                 | 79VIP          | 115                          | .             | 11.23        | 3,228   | 36,249        | .            | .            | .            | .             |
| AgraTech                 | 83VT2P         |                              | .             | 12.16        | 3,384   | 41,362        | .            | .            | .            | .             |
| AgraTech                 | 87VT2P         |                              | .             | 12.05        | 3,297   | 39,649        | .            | .            | .            | .             |
| AgriGold                 | A646-30 VT2Pro | 116                          | .             | 12.11        | 3,227   | 38,913        | 10.39        | <b>11.79</b> | 3,484        | <b>40,369</b> |
| BH Genetics              | BH 8420VIP3110 | 114                          | <b>11.90</b>  | 12.70        | 3,259   | 41,445        | 10.41        | <b>12.91</b> | 3,285        | <b>43,452</b> |
| BH Genetics              | BH 8690VIP3110 | 116                          | <b>11.11</b>  | 12.84        | 3,381   | 43,298        | <b>11.52</b> | 11.05        | 3,254        | 36,269        |
| BH Genetics              | BH 8705VIP3110 | 117                          | <b>11.10</b>  | 11.95        | 3,273   | 38,895        | <b>12.11</b> | 9.65         | <b>3,550</b> | 34,957        |
| BH Genetics              | BH 8721VT2P    | 117                          | <b>11.34</b>  | 12.62        | 3,264   | 41,460        | .            | .            | .            | .             |
| BH Genetics              | BH 8732VT2P    | 117                          | <b>10.87</b>  | 12.38        | 3,301   | 41,094        | .            | .            | .            | .             |
| Croplan                  | CP5550 VT2P    | 115                          | 9.86          | 11.73        | 3,363   | 39,697        | .            | .            | .            | .             |
| Croplan                  | CP5893 TRE     | 118                          | <b>11.77</b>  | 11.68        | 3,135   | 36,422        | .            | .            | .            | .             |
| Croplan                  | CP5900 VT2P    | 119                          | <b>11.94</b>  | 12.85        | 3,111   | 39,607        | .            | .            | .            | .             |
| DEKALB                   | DKC66-06 TRE   | 116                          | <b>10.74</b>  | 12.63        | 3,403   | 42,843        | .            | .            | .            | .             |
| DEKALB                   | DKC68-35 VT2P  | 118                          | <b>12.07</b>  | <b>12.99</b> | 3,411   | <b>44,603</b> | .            | .            | .            | .             |
| DEKALB                   | DKC70-45 VT2P  | 120                          | <b>10.75</b>  | <b>13.25</b> | 3,249   | 43,220        | 10.08        | 10.32        | 3,405        | 35,495        |
| Dyna-Gro                 | D57VC53        | 117                          | <b>11.47</b>  | 11.74        | 3,359   | 39,570        | .            | .            | .            | .             |
| Dyna-Gro                 | D58TC94        | 118                          | 10.22         | 12.87        | 3,299   | 42,230        | 10.18        | 10.64        | <b>3,507</b> | 37,320        |
| Dyna-Gro                 | D58VC65        | 118                          | 8.57          | 12.18        | 3,244   | 40,049        | .            | .            | .            | .             |
| Dyna-Gro                 | D58VC74        | 118                          | 9.83          | 12.16        | 3,106   | 37,989        | .            | .            | .            | .             |
| INTEGRA                  | 6533 RR        | 115                          | 8.06          | 11.68        | 3,386   | 39,461        | 9.63         | 8.67         | 3,470        | 30,375        |
| INTEGRA                  | 6588 VT2P      | 115                          | 7.47          | 12.44        | 3,162   | 39,509        | <b>11.52</b> | 10.84        | 3,424        | 37,550        |
| INTEGRA                  | 6709 VT2P      | 117                          | <b>11.65</b>  | 12.37        | 3,142   | 38,677        | 9.55         | 10.23        | 3,366        | 34,447        |
| INTEGRA                  | 6720 VT2P      | 117                          | .             | 11.82        | 3,128   | 36,761        | .            | .            | .            | .             |
| INTEGRA                  | 6864 VT2P      | 118                          | <b>10.97</b>  | 11.32        | 3,228   | 36,652        | .            | .            | .            | .             |
| INTEGRA                  | 6891 3110      | 118                          | <b>11.29</b>  | 12.76        | 3,253   | 41,058        | .            | .            | .            | .             |
| INTEGRA                  | CX301119 TRE   | 119                          | <b>11.54</b>  | 11.59        | 3,322   | 38,473        | .            | .            | .            | .             |
| NK Brand                 | E117Z7-D-EZ1   | 117                          | <b>11.79</b>  | <b>12.97</b> | 3,326   | 42,847        | <b>11.40</b> | <b>11.25</b> | 3,468        | <b>39,859</b> |
| NK Brand                 | NK1677-3110    | 116                          | <b>11.73</b>  | 12.82        | 3,239   | 41,284        | <b>11.43</b> | 10.11        | 3,377        | 34,510        |
| NK Brand                 | NK1748-3110    | 117                          | 9.19          | 12.44        | 3,225   | 40,332        | .            | .            | .            | .             |
| Pioneer                  | P1289YHR       | 112                          | 9.30          | 12.82        | 3,366   | 43,222        | 10.59        | 8.03         | 3,362        | 27,272        |
| Pioneer                  | P2042VYHR      | 120                          | 9.77          | <b>13.85</b> | 3,362   | <b>46,733</b> | .            | .            | .            | .             |
| Progeny                  | PGY 2118 VT2P  | 118                          | <b>10.40</b>  | 11.95        | 3,253   | 38,983        | .            | .            | .            | .             |
| Progeny                  | PGY 9117 VT2P  | 117                          | 9.44          | 11.49        | 3,210   | 36,725        | .            | .            | .            | .             |
| Revere Seed              | Revere 1524 DV | 115                          | .             | 10.94        | 3,370   | 36,894        | .            | .            | .            | .             |
| Revere Seed              | Revere 1839 TC | 118                          | .             | 12.62        | 3,346   | 42,347        | .            | .            | .            | .             |
| Average                  |                |                              | 10.58         | 12.26        | 3,276   | 40,187        | 10.31        | 10.39        | 3,443        | 35,743        |
| LSD at 10% Leve          |                |                              | 1.83          | 0.93         | NS      | 3,029         | 1.29         | 1.67         | 161          | 5,765         |
| Model R-squared          |                |                              | 0.93          | 0.73         | 0.85    | 0.77          | 0.84         | 0.77         | 0.92         | 0.76          |

**Bolded** yields are statistically non-significant (p = 0.10 level) from the highest yielding test entry.  
Mean and LSD from 2022 reflect whole tests, and are not restricted to hybrids that returned for 2023.



## Tifton, Georgia: Evaluation of Corn Hybrids for Silage, 2023, Irrigated

| Company or Brand Name | Hybrid Name    | Relative Maturity days | Forage Yield  |                    | Percent Moisture % | Ear Count #/100 plts | Lodging | Population |
|-----------------------|----------------|------------------------|---------------|--------------------|--------------------|----------------------|---------|------------|
|                       |                |                        | Dry tons/acre | Green <sup>1</sup> |                    |                      |         |            |
| Pioneer               | P2042VYHR      | 120                    | <b>13.85</b>  | <b>39.58</b>       | 60.2               | 102                  | 0       | 33,026     |
| DEKALB                | DKC70-45 VT2P  | 120                    | <b>13.25</b>  | <b>37.85</b>       | 55.6               | 101                  | 0       | 35,304     |
| DEKALB                | DKC68-35 VT2P  | 118                    | <b>12.99</b>  | <b>37.12</b>       | 58.6               | 102                  | 1       | 33,026     |
| NK Brand              | E117Z7-D-EZ1   | 117                    | <b>12.97</b>  | <b>37.05</b>       | 57.8               | 100                  | 0       | 33,880     |
| Dyna-Gro              | D58TC94        | 118                    | 12.87         | 36.78              | 54.6               | 100                  | 0       | 33,595     |
| Croplan               | CP5900 VT2P    | 119                    | 12.85         | 36.73              | 61.4               | 99                   | 1       | 33,026     |
| BH Genetics           | BH 8690VIP3110 | 116                    | 12.84         | 36.68              | 56.7               | 100                  | 0       | 33,026     |
| Pioneer               | P1289YHR       | 112                    | 12.82         | 36.63              | 56.6               | 104                  | 0       | 33,595     |
| NK Brand              | NK1677-3110    | 116                    | 12.82         | 36.64              | 58.7               | 102                  | 1       | 32,456     |
| INTEGRA               | 6891 3110      | 118                    | 12.76         | 36.47              | 60.9               | 100                  | 0       | 33,595     |
| BH Genetics           | BH 8420VIP3110 | 114                    | 12.70         | 36.28              | 56.4               | 100                  | 0       | 33,595     |
| DEKALB                | DKC66-06 TRE   | 116                    | 12.63         | 36.08              | 57.7               | 100                  | 0       | 33,880     |
| BH Genetics           | BH 8721VT2P    | 117                    | 12.62         | 36.05              | 57.2               | 101                  | 0       | 34,165     |
| Revere Seed           | Revere 1839 TC | 118                    | 12.62         | 36.06              | 57.4               | 101                  | 0       | 33,026     |
| INTEGRA               | 6588 VT2P      | 115                    | 12.44         | 35.54              | 59.3               | 100                  | 0       | 33,311     |
| NK Brand              | NK1748-3110    | 117                    | 12.44         | 35.54              | 58.3               | 98                   | 0       | 32,172     |
| BH Genetics           | BH 8732VT2P    | 117                    | 12.38         | 35.36              | 61.4               | 98                   | 0       | 33,880     |
| INTEGRA               | 6709 VT2P      | 117                    | 12.37         | 35.35              | 62.6               | 100                  | 0       | 32,741     |
| Dyna-Gro              | D58VC65        | 118                    | 12.18         | 34.81              | 58.6               | 101                  | 0       | 33,880     |
| AgraTech              | 83VT2P         |                        | 12.16         | 34.73              | 55.8               | 100                  | 0       | 33,880     |
| Dyna-Gro              | D58VC74        | 118                    | 12.16         | 34.75              | 59.3               | 97                   | 0       | 33,595     |
| AgriGold              | A646-30 VT2Pro | 116                    | 12.11         | 34.59              | 61.8               | 99                   | 0       | 33,311     |
| AgraTech              | 87VT2P         |                        | 12.05         | 34.43              | 57.7               | 100                  | 0       | 34,165     |
| BH Genetics           | BH 8705VIP3110 | 117                    | 11.95         | 34.13              | 58.6               | 102                  | 0       | 30,748     |
| Progeny               | PGY 2118 VT2P  | 118                    | 11.95         | 34.15              | 55.3               | 102                  | 0       | 32,741     |
| INTEGRA               | 6720 VT2P      | 117                    | 11.82         | 33.78              | 58.9               | 101                  | 0       | 33,880     |
| Dyna-Gro              | D57VC53        | 117                    | 11.74         | 33.54              | 56.7               | 100                  | 0       | 34,449     |
| Croplan               | CP5550 VT2P    | 115                    | 11.73         | 33.53              | 56.8               | 97                   | 0       | 32,741     |
| INTEGRA               | 6533 RR        | 115                    | 11.68         | 33.38              | 59.3               | 98                   | 0       | 33,880     |
| Croplan               | CP5893 TRE     | 118                    | 11.68         | 33.36              | 62.8               | 101                  | 0       | 33,880     |
| INTEGRA               | CX301119 TRE   | 119                    | 11.59         | 33.13              | 60.2               | 100                  | 0       | 35,304     |
| AgraTech              | 708VIP         | 113                    | 11.50         | 32.87              | 55.8               | 101                  | 0       | 33,595     |
| Progeny               | PGY 9117 VT2P  | 117                    | 11.49         | 32.84              | 60.2               | 99                   | 0       | 33,311     |
| INTEGRA               | 6864 VT2P      | 118                    | 11.32         | 32.35              | 57.0               | 99                   | 0       | 33,880     |
| AgraTech              | 79VIP          | 115                    | 11.23         | 32.07              | 61.2               | 99                   | 0       | 35,019     |
| Revere Seed           | Revere 1524 DV | 115                    | 10.94         | 31.27              | 53.6               | 100                  | 1       | 33,311     |
| Average               |                |                        | 12.26         | 35.04              | 58.4               | 100                  | 0       | 33,524     |
| LSD at 10% Level      |                |                        | 0.93          | 2.65               | 0.8                | NS                   | NS      | NS         |
| Model R-squared       |                |                        | 0.73          | 0.73               | 0.97               | 0.69                 | 0.66    | 0.38       |
| C.V.                  |                |                        | 7.1           | 7.1                | 1.23               | 1.98                 | 519.18  | 4          |

1. Green yields are standardized to 65% moisture.

**Bolded** yields are statistically non-significant (p = 0.10 level) from the highest yielding test entry.

Planted: April 6, 2023.

Harvested: July 25, 2023. Accumulated 2,571 GDD units. 50 <= Temp <= 86 °F

Seeding Rate: 34,000 seeds per acre in 36-inch rows.

Soil Type: Tifton loamy sand.

Previous Crop: Soybeans.

Soil Test: P<sub>2</sub>O<sub>5</sub> = 43 lbs, K<sub>2</sub>O = 126 lbs, and pH = 6.6.

Fertilization: Preplant: 130 lb N, 10 lb S, 310 lb P<sub>2</sub>O<sub>5</sub>, and 210 lb K<sub>2</sub>O/acre. Sidedress: 260 lb N and 46 lb S/acre.

Tillage: Conventional.

Herbicides: Atrazine, Warrant, and Zidua.

Irrigation: 9 inches.

Test conducted by M. Cofield, W. Mosteller, and D. Dunn.

## Quality Factors of Corn Hybrids for Silage Tifton, Georgia, 2023

| Company or<br>Brand Name | Hybrid<br>Name | Dry<br>Yield | UW Milk 2006 Model Calculated Values |               |      |                 |                 |                 | Quality Components |         |        |       |       |        |
|--------------------------|----------------|--------------|--------------------------------------|---------------|------|-----------------|-----------------|-----------------|--------------------|---------|--------|-------|-------|--------|
|                          |                |              | Milk production                      |               | TDN  | NE <sub>L</sub> | NE <sub>G</sub> | NE <sub>M</sub> | ADF                | aNDF    | aNDFom | Ligni | NDFD3 | NDFD24 |
|                          |                | tons/ac      | lb/ton                               | lb/acre       | % DM | Mcal/cwt        |                 | % DM            |                    | % NDFom |        |       |       |        |
| Pioneer                  | P2042VYHR      | <b>13.85</b> | 3,362                                | <b>46,733</b> | 72.2 | 67.0            | 53.8            | 82.3            | 20.8               | 37.5    | 36.6   | 2.4   | 56.3  | 69.9   |
| DEKALB                   | DKC68-35 VT2P  | <b>12.99</b> | 3,411                                | <b>44,603</b> | 72.4 | 66.9            | 55.3            | 84.0            | 17.7               | 32.0    | 31.2   | 2.5   | 51.2  | 66.6   |
| BH Genetics              | BH 8690VIP3110 | 12.84        | 3,381                                | 43,298        | 72.2 | 66.7            | 54.8            | 83.4            | 19.8               | 34.3    | 33.4   | 2.1   | 53.2  | 66.9   |
| Pioneer                  | P1289YHR       | 12.82        | 3,366                                | 43,222        | 71.8 | 66.3            | 54.7            | 83.4            | 18.5               | 32.2    | 31.2   | 2.3   | 50.5  | 65.8   |
| DEKALB                   | DKC70-45 VT2P  | <b>13.25</b> | 3,249                                | 43,220        | 70.2 | 65.3            | 52.0            | 80.2            | 21.0               | 37.4    | 36.7   | 2.8   | 50.4  | 64.0   |
| NK Brand                 | E117Z7-D-EZ1   | <b>12.97</b> | 3,326                                | 42,847        | 71.5 | 66.2            | 53.8            | 82.3            | 19.5               | 35.1    | 34.2   | 2.4   | 52.7  | 68.4   |
| DEKALB                   | DKC66-06 TRE   | 12.63        | 3,403                                | 42,843        | 72.2 | 67.2            | 55.5            | 84.3            | 16.5               | 30.7    | 29.8   | 2.4   | 47.7  | 63.3   |
| Revere Seed              | Revere 1839 TC | 12.62        | 3,346                                | 42,347        | 71.6 | 66.2            | 53.9            | 82.5            | 19.1               | 34.4    | 33.5   | 2.4   | 50.7  | 66.9   |
| Dyna-Gro                 | D58TC94        | 12.87        | 3,299                                | 42,230        | 70.9 | 65.5            | 53.7            | 82.2            | 19.4               | 33.9    | 33.0   | 2.4   | 49.3  | 63.9   |
| BH Genetics              | BH 8721VT2P    | 12.62        | 3,264                                | 41,460        | 70.4 | 65.5            | 51.7            | 79.9            | 21.0               | 37.0    | 36.1   | 2.6   | 49.8  | 64.1   |
| BH Genetics              | BH 8420VIP3110 | 12.70        | 3,259                                | 41,445        | 70.3 | 65.6            | 52.1            | 80.4            | 20.5               | 36.1    | 35.2   | 2.7   | 48.4  | 63.8   |
| AgraTech                 | 83VT2P         | 12.16        | 3,384                                | 41,362        | 72.2 | 67.1            | 54.3            | 82.9            | 19.2               | 35.8    | 34.9   | 2.8   | 53.3  | 67.7   |
| NK Brand                 | NK1677-3110    | 12.82        | 3,239                                | 41,284        | 70.5 | 65.1            | 51.9            | 80.2            | 22.6               | 39.6    | 38.5   | 2.7   | 54.0  | 68.7   |
| BH Genetics              | BH 8732VT2P    | 12.38        | 3,301                                | 41,094        | 71.3 | 66.0            | 52.7            | 81.0            | 21.7               | 37.5    | 36.4   | 2.7   | 54.4  | 68.1   |
| INTEGRA                  | 6891 3110      | 12.76        | 3,253                                | 41,058        | 70.3 | 65.5            | 52.7            | 81.0            | 20.7               | 36.0    | 34.7   | 2.4   | 49.9  | 64.0   |
| NK Brand                 | NK1748-3110    | 12.44        | 3,225                                | 40,332        | 70.0 | 65.2            | 50.8            | 78.9            | 22.7               | 39.6    | 38.6   | 2.8   | 51.6  | 66.7   |
| Dyna-Gro                 | D58VC65        | 12.18        | 3,244                                | 40,049        | 70.2 | 65.6            | 51.1            | 79.2            | 22.0               | 39.6    | 38.8   | 2.8   | 51.7  | 66.1   |
| Croplan                  | CP5550 VT2P    | 11.73        | 3,363                                | 39,697        | 71.9 | 66.7            | 54.2            | 82.8            | 19.1               | 35.1    | 34.3   | 2.3   | 53.2  | 65.7   |
| AgraTech                 | 87VT2P         | 12.05        | 3,297                                | 39,649        | 70.8 | 66.2            | 53.0            | 81.4            | 19.7               | 35.9    | 35.0   | 2.7   | 49.2  | 63.2   |
| Croplan                  | CP5900 VT2P    | 12.85        | 3,111                                | 39,607        | 68.5 | 63.8            | 51.7            | 79.9            | 21.2               | 37.2    | 36.2   | 2.6   | 49.5  | 65.4   |
| Dyna-Gro                 | D57VC53        | 11.74        | 3,359                                | 39,570        | 71.9 | 66.7            | 53.8            | 82.3            | 20.8               | 37.9    | 37.0   | 2.5   | 53.7  | 67.8   |
| INTEGRA                  | 6588 VT2P      | 12.44        | 3,162                                | 39,509        | 69.2 | 64.3            | 50.3            | 78.3            | 22.4               | 38.9    | 37.8   | 2.5   | 50.7  | 65.2   |
| INTEGRA                  | 6533 RR        | 11.68        | 3,386                                | 39,461        | 72.2 | 67.2            | 54.5            | 83.1            | 19.7               | 35.8    | 34.9   | 2.5   | 53.8  | 67.0   |
| Progeny                  | PGY 2118 VT2P  | 11.95        | 3,253                                | 38,983        | 70.4 | 65.4            | 52.0            | 80.3            | 21.2               | 38.2    | 37.5   | 3.0   | 51.6  | 64.9   |
| AgriGold                 | A646-30 VT2Pro | 12.11        | 3,227                                | 38,913        | 70.0 | 65.0            | 52.3            | 80.6            | 20.4               | 35.2    | 34.1   | 2.7   | 49.5  | 66.0   |
| BH Genetics              | BH 8705VIP3110 | 11.95        | 3,273                                | 38,895        | 70.7 | 65.3            | 53.1            | 81.5            | 20.8               | 36.0    | 35.1   | 2.6   | 52.0  | 68.1   |
| INTEGRA                  | 6709 VT2P      | 12.37        | 3,142                                | 38,677        | 69.1 | 64.3            | 50.2            | 78.2            | 23.7               | 40.8    | 39.7   | 3.0   | 52.3  | 66.2   |
| INTEGRA                  | CX301119 TRE   | 11.59        | 3,322                                | 38,473        | 71.5 | 65.9            | 53.6            | 82.1            | 21.2               | 37.6    | 36.6   | 2.5   | 53.7  | 68.3   |
| AgraTech                 | 708VIP         | 11.5         | 3,331                                | 38,178        | 71.6 | 66.2            | 53.7            | 82.2            | 20.1               | 36.0    | 35.1   | 2.5   | 53.0  | 67.7   |
| Dyna-Gro                 | D58VC74        | 12.16        | 3,106                                | 37,989        | 68.3 | 63.8            | 50.2            | 78.2            | 21.2               | 36.8    | 35.7   | 2.9   | 47.5  | 62.3   |
| Revere Seed              | Revere 1524 DV | 10.94        | 3,370                                | 36,894        | 72.1 | 66.6            | 54.1            | 82.7            | 20.3               | 36.5    | 35.7   | 2.4   | 54.4  | 69.8   |
| INTEGRA                  | 6720 VT2P      | 11.82        | 3,128                                | 36,761        | 68.9 | 63.7            | 50.3            | 78.3            | 22.1               | 40.1    | 39.0   | 2.8   | 51.8  | 66.2   |
| Progeny                  | PGY 9117 VT2P  | 11.49        | 3,210                                | 36,725        | 70.2 | 65.0            | 52.0            | 80.2            | 22.2               | 40.3    | 39.4   | 2.9   | 55.3  | 67.7   |
| INTEGRA                  | 6864 VT2P      | 11.32        | 3,228                                | 36,652        | 70.2 | 65.2            | 51.3            | 79.5            | 22.5               | 40.0    | 39.3   | 2.7   | 52.7  | 66.6   |
| Croplan                  | CP5893 TRE     | 11.68        | 3,135                                | 36,422        | 69.1 | 64.0            | 50.2            | 78.2            | 22.9               | 41.0    | 39.4   | 2.7   | 53.2  | 66.4   |
| AgraTech                 | 79VIP          | 11.23        | 3,228                                | 36,249        | 70.5 | 65.1            | 52.7            | 81.0            | 21.9               | 39.0    | 38.1   | 2.4   | 56.6  | 70.9   |
| Average                  |                | 12.26        | 3,276                                | 40,187        | 70.8 | 65.6            | 52.7            | 81.1            | 20.7               | 36.9    | 35.9   | 2.6   | 51.9  | 66.4   |
| LSD at 10% Level         |                | 0.93         | NS                                   | 3,029         | NS   | NS              | NS              | NS              | NS                 | NS      | NS     | NS    | NS    | NS     |
| Model R-squared          |                | 0.73         | 0.85                                 | 0.77          | 0.85 | 0.84            | 0.86            | 0.86            | 0.87               | 0.85    | 0.85   | 0.89  | 0.87  | 0.86   |
| C.V.                     |                | 7.1          | 3.9                                  | 7.1           | 2.4  | 2.3             | 4.8             | 3.6             | 12.4               | 10.7    | 10.7   | 14.4  | 5.4   | 4.1    |

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Sample analysis conducted by Dairyland Laboratories, Arcadia, WI.

Data above assumes no kernal processing was conducted prior to ensiling.  
Doing so would increase digestability and nutrient values.

Note: Data for mutple columns is non-significant. Plots of each hybrid performed consistently as seen from the high R-squared values, but the differences between hybrids were too small to achieve statistical significance.

## Nutrient and Elemental Analysis of Corn Hybrids for Silage Tifton, Georgia, 2023

| Company or<br>Brand Name | Hybrid<br>Name | Dry<br>Yield | Milk<br>Production | Crude<br>Protein | Starch | Sugar<br>(WSC) | Fat<br>(EE) | Fat<br>(TFA) | Ash  | P    | K    | Ca   | Mg   | S    |      |
|--------------------------|----------------|--------------|--------------------|------------------|--------|----------------|-------------|--------------|------|------|------|------|------|------|------|
|                          |                | tons/ac      | lb/ton             | lb/acre          | % DM   |                |             |              |      |      |      |      |      |      |      |
| Pioneer                  | P2042VYHR      | <b>13.85</b> | 3,362              | <b>46,733</b>    | 8.5    | 32.3           | 8.8         | 2.5          | 2.2  | 3.7  | 0.23 | 1.05 | 0.21 | 0.13 | 0.11 |
| DEKALB                   | DKC68-35 VT2P  | <b>12.99</b> | 3,411              | <b>44,603</b>    | 7.5    | 43.7           | 6.7         | 2.5          | 2.4  | 3.0  | 0.21 | 0.84 | 0.22 | 0.14 | 0.10 |
| BH Genetics              | BH 8690VIP3110 | 12.84        | 3,381              | 43,298           | 7.6    | 39.1           | 8.4         | 2.7          | 2.4  | 3.3  | 0.21 | 0.91 | 0.21 | 0.13 | 0.10 |
| Pioneer                  | P1289YHR       | 12.82        | 3,366              | 43,222           | 7.6    | 43.3           | 7.1         | 2.5          | 2.3  | 3.2  | 0.21 | 0.93 | 0.24 | 0.15 | 0.10 |
| DEKALB                   | DKC70-45 VT2P  | <b>13.25</b> | 3,249              | 43,220           | 8.0    | 37.3           | 7.3         | 2.3          | 2.3  | 3.2  | 0.21 | 1.05 | 0.23 | 0.13 | 0.10 |
| NK Brand                 | E117Z7-D-EZ1   | <b>12.97</b> | 3,326              | 42,847           | 7.9    | 36.7           | 8.6         | 2.1          | 2.0  | 3.3  | 0.21 | 0.91 | 0.22 | 0.14 | 0.09 |
| DEKALB                   | DKC66-06 TRE   | 12.63        | 3,403              | 42,843           | 8.0    | 43.0           | 7.6         | 2.5          | 2.5  | 3.0  | 0.23 | 0.83 | 0.21 | 0.14 | 0.10 |
| Revere Seed              | Revere 1839 TC | 12.62        | 3,346              | 42,347           | 7.2    | 41.0           | 7.0         | 2.4          | 2.3  | 3.0  | 0.19 | 0.83 | 0.23 | 0.16 | 0.09 |
| Dyna-Gro                 | D58TC94        | 12.87        | 3,299              | 42,230           | 7.5    | 41.8           | 6.6         | 2.5          | 2.4  | 3.0  | 0.20 | 0.78 | 0.22 | 0.15 | 0.10 |
| BH Genetics              | BH 8721VT2P    | 12.62        | 3,264              | 41,460           | 7.3    | 37.7           | 7.6         | 2.3          | 2.2  | 3.2  | 0.19 | 1.12 | 0.23 | 0.15 | 0.09 |
| BH Genetics              | BH 8420VIP3110 | 12.70        | 3,259              | 41,445           | 8.1    | 37.5           | 7.9         | 2.5          | 2.4  | 3.2  | 0.21 | 1.00 | 0.24 | 0.15 | 0.10 |
| AgraTech                 | 83VT2P         | 12.16        | 3,384              | 41,362           | 8.0    | 37.4           | 7.5         | 2.6          | 2.4  | 3.2  | 0.21 | 0.82 | 0.23 | 0.16 | 0.10 |
| NK Brand                 | NK1677-3110    | 12.82        | 3,239              | 41,284           | 7.5    | 33.2           | 8.7         | 2.2          | 2.0  | 3.4  | 0.19 | 0.97 | 0.23 | 0.14 | 0.09 |
| BH Genetics              | BH 8732VT2P    | 12.38        | 3,301              | 41,094           | 7.8    | 34.4           | 8.8         | 2.4          | 2.1  | 3.5  | 0.20 | 0.94 | 0.23 | 0.15 | 0.09 |
| INTEGRA                  | 6891 3110      | 12.76        | 3,253              | 41,058           | 8.1    | 35.0           | 8.7         | 2.0          | 2.1  | 3.3  | 0.20 | 1.09 | 0.22 | 0.13 | 0.10 |
| NK Brand                 | NK1748-3110    | 12.44        | 3,225              | 40,332           | 7.6    | 33.3           | 8.7         | 2.3          | 2.1  | 3.3  | 0.19 | 1.18 | 0.24 | 0.15 | 0.10 |
| Dyna-Gro                 | D58VC65        | 12.18        | 3,244              | 40,049           | 8.0    | 33.5           | 8.1         | 2.3          | 2.2  | 3.4  | 0.21 | 1.09 | 0.24 | 0.15 | 0.10 |
| Croplan                  | CP5550 VT2P    | 11.73        | 3,363              | 39,697           | 8.5    | 37.9           | 7.0         | 2.5          | 2.4  | 3.5  | 0.22 | 1.14 | 0.24 | 0.14 | 0.11 |
| AgraTech                 | 87VT2P         | 12.05        | 3,297              | 39,649           | 8.1    | 36.8           | 8.2         | 2.4          | 2.4  | 3.0  | 0.21 | 1.09 | 0.22 | 0.12 | 0.10 |
| Croplan                  | CP5900 VT2P    | 12.85        | 3,111              | 39,607           | 8.0    | 31.7           | 10.3        | 2.1          | 2.0  | 3.2  | 0.20 | 0.79 | 0.24 | 0.16 | 0.09 |
| Dyna-Gro                 | D57VC53        | 11.74        | 3,359              | 39,570           | 7.7    | 36.5           | 7.8         | 2.4          | 2.3  | 2.9  | 0.20 | 0.88 | 0.21 | 0.14 | 0.10 |
| INTEGRA                  | 6588 VT2P      | 12.44        | 3,162              | 39,509           | 8.1    | 34.0           | 8.0         | 2.2          | 2.0  | 3.8  | 0.20 | 1.01 | 0.24 | 0.15 | 0.10 |
| INTEGRA                  | 6533 RR        | 11.68        | 3,386              | 39,461           | 8.6    | 35.5           | 8.3         | 2.5          | 2.4  | 3.4  | 0.22 | 0.93 | 0.22 | 0.14 | 0.11 |
| Progeny                  | PGY 2118 VT2P  | 11.95        | 3,253              | 38,983           | 8.1    | 35.7           | 7.5         | 2.4          | 2.3  | 3.3  | 0.21 | 1.03 | 0.25 | 0.16 | 0.10 |
| AgriGold                 | A646-30 VT2Pro | 12.11        | 3,227              | 38,913           | 8.7    | 36.9           | 6.8         | 2.2          | 2.1  | 3.8  | 0.22 | 1.09 | 0.23 | 0.12 | 0.10 |
| BH Genetics              | BH 8705VIP3110 | 11.95        | 3,273              | 38,895           | 7.4    | 38.2           | 7.8         | 2.1          | 2.0  | 3.2  | 0.19 | 0.82 | 0.23 | 0.15 | 0.09 |
| INTEGRA                  | 6709 VT2P      | 12.37        | 3,142              | 38,677           | 8.1    | 29.5           | 9.7         | 2.1          | 1.9  | 3.5  | 0.20 | 1.11 | 0.24 | 0.15 | 0.10 |
| INTEGRA                  | CX301119 TRE   | 11.59        | 3,322              | 38,473           | 7.3    | 38.2           | 7.0         | 2.4          | 2.3  | 3.0  | 0.19 | 0.85 | 0.21 | 0.14 | 0.09 |
| AgraTech                 | 708VIP         | 11.5         | 3,331              | 38,178           | 7.5    | 37.0           | 8.1         | 2.1          | 2.1  | 3.2  | 0.20 | 0.98 | 0.22 | 0.15 | 0.10 |
| Dyna-Gro                 | D58VC74        | 12.16        | 3,106              | 37,989           | 8.2    | 33.7           | 9.0         | 2.2          | 2.0  | 3.6  | 0.20 | 1.33 | 0.26 | 0.16 | 0.10 |
| Revere Seed              | Revere 1524 DV | 10.94        | 3,370              | 36,894           | 7.2    | 38.5           | 8.1         | 2.1          | 2.1  | 2.9  | 0.19 | 0.84 | 0.20 | 0.14 | 0.09 |
| INTEGRA                  | 6720 VT2P      | 11.82        | 3,128              | 36,761           | 8.3    | 33.2           | 7.1         | 2.1          | 2.0  | 3.8  | 0.21 | 1.00 | 0.25 | 0.16 | 0.11 |
| Progeny                  | PGY 9117 VT2P  | 11.49        | 3,210              | 36,725           | 8.9    | 30.4           | 8.0         | 2.3          | 2.1  | 3.9  | 0.22 | 1.12 | 0.25 | 0.16 | 0.11 |
| INTEGRA                  | 6864 VT2P      | 11.32        | 3,228              | 36,652           | 7.8    | 33.5           | 8.2         | 2.3          | 2.2  | 3.4  | 0.20 | 0.99 | 0.22 | 0.15 | 0.09 |
| Croplan                  | CP5893 TRE     | 11.68        | 3,135              | 36,422           | 8.5    | 30.5           | 7.9         | 2.2          | 2.0  | 4.1  | 0.21 | 1.20 | 0.26 | 0.16 | 0.11 |
| AgraTech                 | 79VIP          | 11.23        | 3,228              | 36,249           | 8.5    | 30.6           | 9.0         | 2.1          | 1.9  | 3.8  | 0.21 | 1.00 | 0.24 | 0.14 | 0.10 |
| Average                  |                | 12.26        | 3,276              | 40,187           | 7.9    | 36.1           | 8.0         | 2.3          | 2.2  | 3.3  | 0.21 | 0.99 | 0.23 | 0.15 | 0.10 |
| LSD at 10% Level         |                | 0.93         | NS                 | 3,029            | 0.5    | NS             | 1.0         | NS           | NS   | NS   | NS   | 0.18 | NS   | NS   | NS   |
| Model R-squared          |                | 0.73         | 0.85               | 0.77             | 0.70   | 0.87           | 0.91        | 0.50         | 0.83 | 0.92 | 0.84 | 0.96 | 0.91 | 0.90 | 0.91 |
| C.V.                     |                | 7.1          | 3.9                | 7.1              | 5.2    | 12.4           | 9.4         | 10.6         | 10.7 | 12.3 | 6.6  | 13.6 | 8.5  | 13.6 | 6.8  |

**Bolded** yields are statistically non-significant (p = 0.10 level) from the highest yielding test entry.

Silage analysis conducted by Dairyland Laboratories, Arcadia, WI.

"Milk Production" reprinted from Quality Factors table, based on UW Milk 2006 predicted milk model.

## Griffin, Georgia: Evaluation of Corn Hybrids for Silage, 2023, Irrigated

| Company or<br>Brand Name | Hybrid<br>Name | Relative<br>Maturity<br>days | Forage Yield |                    | Percent<br>Moisture<br>% |
|--------------------------|----------------|------------------------------|--------------|--------------------|--------------------------|
|                          |                |                              | Dry          | Green <sup>1</sup> |                          |
|                          |                |                              | tons/acre    |                    |                          |
| DEKALB                   | DKC68-35 VT2P  | 118                          | <b>12.07</b> | <b>34.49</b>       | 64.3                     |
| Croplan                  | CP5900 VT2P    | 119                          | <b>11.94</b> | <b>34.11</b>       | 65.6                     |
| BH Genetics              | BH 8420VIP3110 | 114                          | <b>11.90</b> | <b>34.01</b>       | 63.6                     |
| NK Brand                 | E117Z7-D-EZ1   | 117                          | <b>11.79</b> | <b>33.70</b>       | 64.6                     |
| Croplan                  | CP5893 TRE     | 118                          | <b>11.77</b> | <b>33.64</b>       | 63.9                     |
| NK Brand                 | NK1677-3110    | 116                          | <b>11.73</b> | <b>33.51</b>       | 66.4                     |
| INTEGRA                  | 6709 VT2P      | 117                          | <b>11.65</b> | <b>33.28</b>       | 66.0                     |
| INTEGRA                  | CX301119 TRE   | 119                          | <b>11.54</b> | <b>32.96</b>       | 63.2                     |
| Dyna-Gro                 | D57VC53        | 117                          | <b>11.47</b> | <b>32.78</b>       | 58.7                     |
| BH Genetics              | BH 8721VT2P    | 117                          | <b>11.34</b> | <b>32.39</b>       | 64.2                     |
| INTEGRA                  | 6891 3110      | 118                          | <b>11.29</b> | <b>32.27</b>       | 65.8                     |
| BH Genetics              | BH 8690VIP3110 | 116                          | <b>11.11</b> | <b>31.73</b>       | 62.5                     |
| BH Genetics              | BH 8705VIP3110 | 117                          | <b>11.10</b> | <b>31.72</b>       | 61.3                     |
| INTEGRA                  | 6864 VT2P      | 118                          | <b>10.97</b> | <b>31.35</b>       | 60.8                     |
| BH Genetics              | BH 8732VT2P    | 117                          | <b>10.87</b> | <b>31.05</b>       | 66.0                     |
| DEKALB                   | DKC70-45 VT2P  | 120                          | <b>10.75</b> | <b>30.73</b>       | 64.3                     |
| DEKALB                   | DKC66-06 TRE   | 116                          | <b>10.74</b> | <b>30.69</b>       | 66.6                     |
| Progeny                  | PGY 2118 VT2P  | 118                          | <b>10.40</b> | <b>29.72</b>       | 60.9                     |
| Dyna-Gro                 | D58TC94        | 118                          | 10.22        | 29.19              | 65.4                     |
| Croplan                  | CP5550 VT2P    | 115                          | 9.86         | 28.17              | 63.0                     |
| Dyna-Gro                 | D58VC74        | 118                          | 9.83         | 28.08              | 66.5                     |
| Pioneer                  | P2042VYHR      | 120                          | 9.77         | 27.91              | 61.2                     |
| Progeny                  | PGY 9117 VT2P  | 117                          | 9.44         | 26.96              | 58.5                     |
| Pioneer                  | P1289YHR       | 112                          | 9.30         | 26.57              | 64.6                     |
| NK Brand                 | NK1748-3110    | 117                          | 9.19         | 26.27              | 65.9                     |
| Dyna-Gro                 | D58VC65        | 118                          | 8.57         | 24.48              | 65.2                     |
| INTEGRA                  | 6533 RR        | 115                          | 8.06         | 23.04              | 65.1                     |
| INTEGRA                  | 6588 VT2P      | 115                          | 7.47         | 21.35              | 61.4                     |
| Average                  |                |                              | 10.58        | 30.22              | 63.8                     |
| LSD at 10% Level         |                |                              | 1.83         | 5.22               | 3.1                      |
| Model R-squared          |                |                              | 0.93         | 0.87               | 0.99                     |
| C.V.                     |                |                              | 16.28        | 16.28              | 4.38                     |

1. Green yields are standardized to 65% moisture.

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: May 11, 2023.

Harvested: August 23, 2023.

Seeding Rate: 34,000 seeds per acre in 30-inch rows.

Soil Type: Cecil sandy loam.

Previous Crop: Wheat.

Soil Test:  $P_2O_5 = 59$  lbs,  $K_2O = 306$  lbs, and  $pH = 6.0$ .

Fertilization: Preplant: 70 lb N, 191 lb  $P_2O_5$ , and 270 lb  $K_2O$ /acre. Sidedress: 286 lb N/acre.

Tillage: Conventional.

Herbicides: Atrazine, Warrant, and Round-up.

Irrigation: 9 inches.

Test conducted by J. Arrington, G. Ware, and S. Brannon.

# Insect Screening Results

## Multiple Insect Resistance in 64 Commercial Corn Hybrids, 2023 Xinzhi Ni, Daniel Mailhot, Michael D. Toews, and G. David Buntin

Commercial corn hybrids were screened for ear- and kernel-feeding insect resistance under field conditions at Tifton, GA, and the results are summarized in the following table. A total of 64 transgenic Bt hybrids were included in this year's trial; 14 hybrids were rated Very Good (VG), the highest rating for multiple insect resistance in 2023; 17 were Good (G); 14 were Fair (F), and 19 were Poor (P) as shown in Table 1.

Eight hybrids are non-Bt, which has only herbicide-resistant roundup ready (RR) trait; one has SmartStax™ (SS); two have YHR traits (also known as Optimum® Intrasect™); 25 have VC trait, or VT2P, denoting for vector-stacked transformation (VecTran or VT), which combines two (double) Bt traits into a single DNA insertion process; 13 have TC or TRE (denotes for Trecepta Technology); and 25 contains Vip3A trait, which is shown as 3110, TC or TRE (Trecepta), VIP(or Viptera), or VYHR as shown in Table 1.

SmartStax™ combined multiple transgenic technologies to control both above- and below-ground insect pests, as well as for herbicide tolerance. The Optimum® Intrasect™ insect protection traits (or YHR) include a combination of two insect protection traits – Herculex® I and YieldGard® Corn Borer, while the VC or VT2P (denoted for Genuity Double PRO®) trait contains a stack of two Bt genes (Cry1A.105 + Cry2Ab2), which target foliar- and ear-feeding lepidopteran pests. Four hybrids contain Vip3A trait as shown in Table 1, 3110 in hybrid names denotes for CRY1Ab + Vip3A; TC or TRE for Cry1A.105 + Cry2Ab2 + Vip3A; VIP for Viptera (Cry1Ab + Cry1F + Vip3A); and VYHR for Intrasect + Vip3A. Please refer to column of “Bt designation” in Table 1 for Bt trait packages in each hybrid.

Flowering time of all entries was between 55 and 63 days after a relatively late planting (April 20, 2023) due to precipitation in April. In comparison to 2022 (53-60 days after planting), the later flowering in 2023 reflected the relatively cooler weather conditions before pollination at the Tifton location. The data from 2021 and 2022 were used for multiple year performance assessment in Table 1. Overall insect damage on corn ears in 2023 was very high on the UGA-Gibbs Research Farm when compared to the observed damage in 2021 and 2022. The six types of ear- and/or kernel-feeding insects in order of damage severity were: corn earworm and fall armyworm, stink bugs, the pink scavenger caterpillar, maize weevil, and sap beetles. Corn earworm and fall armyworm damage was measured by the length (cm) of feeding damage penetrated from the tip of the ear toward the base. Feeding penetration by natural infestation of these lepidopteran pests (from the means of the five sampled ears per plot) was between 0.3 and 5.63 cm per ear, which was much greater than the damage observed in 2022 (0-2.03 cm). Kernel-feeding insect damage was assessed by percentage (%) of damaged kernels per ear. The number of kernels per ear were estimated by multiplying the number of kernels per row by the number of rows from a representative ear for each plot. Because of individual kernel feeding insect damage was relatively low, maize weevil, stink bug, sap beetle, and pink scavenger caterpillar damage was combined, which ranged between

0.4-12.01% of the damaged kernels in 2023. The data related to insect damage were subjected to the principal component analysis using percentage of damaged kernels and three traits related to corn earworm and fall to the principal component analysis using percentage of damaged kernels and three traits related to corn earworm and fall armyworm damage, that is, husk tightness and extension, and pest penetration on corn cobs. During the field season of 2023, corn rootworm and corn borer damage was not detected at the Tifton trial.

Because corn husk tightness and extension are considered important traits for ear- and kernel-feeding insect resistance, the husk features of the sampled ears were examined. Husk tightness was assigned using a scale of 1 to 5, in which 1 = very loose and 5 = very tight. Average ratings for husk tightness were between 4 and 5, which were all considered medium (< 4) to tight (between 2.2 and 3.5) for husk tightness rating. Husk extension ranged from 1 to 6.9 cm. Husk tightness was negatively correlated to corn earworm damage ( $r = -0.21$ ,  $P = 0.0006$ ), but not to kernel feeding insect damage ( $P$  values > 0.05). Nor was husk extension correlated to either ear- or kernel-feeding insect damage ( $P$  values > 0.05). The corn earworm damage on cob was positively correlated to the combined kernel-feeding insect damage ( $r = 0.4$ ,  $P < 0.0001$ ). This finding demonstrated that husk features are varied among years, which might be influenced by environmental conditions. Multiple insect resistance was categorized in four groups according to the insect damage ratings on corn cobs and kernels; they are very good (VG), good (G), fair (F), and poor (P). VG represents the least amount of insect damage, while P represents the greatest amount of insect damage. The rankings of all hybrids for multiple insect resistance were based on the results of a principal component analysis using husk tightness and extension along with ear damage (by corn earworm and fall armyworm penetration) and kernel damage (percentage of kernels damaged by stink bugs, pink scavenger caterpillar, maize weevil, and sap beetles) as summarized in Table 1. Data in this report are not indicative to yield. Yield data are available on the UGA Statewide Variety Testing webpage found at: [www.swvt.uga.edu](http://www.swvt.uga.edu).

Hybrids resistant to multiple insects are highly recommended for planting and are one of the most economical insect management strategies, especially in late plantings. Increased insect damage can lead to yield loss, as well as quality loss related to ear rot and aflatoxin contamination. Consult with your local county agent and/or extension entomologist for additional control recommendations for a specific pest in your area.

The trial was planted on the University of Georgia Gibbs Research Farm near Tifton, GA on April 20th and harvested between September 8<sup>th</sup> and 13<sup>th</sup> of 2023 when kernel moisture was 15%. Experimental plots were thinned to 20,000 plants per acre and maintained following local extension publication-recommended agronomic practices. This trial was managed and data collection was performed by Penny Tapp (USDA-ARS, Tifton), Annalyn Burnham, John Branch, and Emily Purvis (UGA, Tifton).

## Ear-Feeding Insect Resistance in 64 Commercial Corn Hybrids, Tifton, Georgia, 2023

| Company or<br>Brand Name | Hybrid Name    | Days to<br>Anthesis <sup>a</sup> | Husk<br>Extensio<br>n (cm) | Husk<br>Tightnes<br>s (1-5) <sup>b</sup> | 2023  | 2023                                 | Bt Traits                             | Overall Resistance<br>to Insect Damage <sup>e</sup> |                    |
|--------------------------|----------------|----------------------------------|----------------------------|--|---|--------------------------------------|---------------------------------------|---|--------------------|
|                          |                |                                  |                            |  | FAW +<br>CEW<br>Damage<br>(cm) <sup>c</sup> | Kernel<br>Damage<br>(%) <sup>d</sup> |                                       | 2023  | 2 or more<br>years |
| NK Brand                 | NK1838-3110    | 62                               | 3.90                       | 2.90                                     | 1.38  | 3.67                                 | Viptera                               | VG  | .                  |
| AgraTech                 | 708VIP         | 61                               | 5.55                       | 2.85                                     | 0.75  | 1.39                                 | Viptera                               | VG  | .                  |
| AgraTech                 | 87VT2P         | 59                               | 2.10                       | 2.75                                     | 1.10  | 4.45                                 | VT2Pro                                | VG  | .                  |
| BH Genetics              | BH 8420VIP3110 | 59                               | 4.10                       | 3.15                                     | 1.08  | 4.80                                 | Viptera                               | VG  | .                  |
| BH Genetics              | BH8690VIP3110  | 61                               | 4.00                       | 2.75                                     | 0.68  | 5.80                                 | Viptera                               | VG  | .                  |
| BH Genetics              | BH 8705VIP3110 | 62                               | 0.95                       | 2.95                                     | 1.83  | 4.84                                 | Viptera                               | VG  | .                  |
| Croplan                  | 5760 TRE       | 58                               | 4.95                       | 2.80                                     | 0.40  | 4.10                                 | Trecepta                              | VG  | .                  |
| Dyna-Gro                 | D58TC94        | 60                               | 2.95                       | 2.85                                     | 0.85  | 1.53                                 | Trecepta                              | VG  | .                  |
| Dyna-Gro                 | D58VC74        | 59                               | 3.55                       | 2.90                                     | 1.65  | 5.29                                 | VT2Pro                                | VG  | .                  |
| Innictis                 | A1689T         | 61                               | 3.00                       | 2.50                                     | 0.55  | 4.51                                 | Trecepta                              | VG  | .                  |
| INTEGRA                  | 6624 TRE       | 60                               | 5.55                       | 2.70                                     | 1.31  | 3.92                                 | Trecepta                              | VG  | .                  |
| INTEGRA                  | 6891 3110      | 61                               | 4.70                       | 2.30                                     | 1.93  | 4.46                                 | Viptera                               | VG  | .                  |
| Revere Seed              | Revere 1524 DV | 60                               | 4.45                       | 2.75                                     | 0.30  | 4.83                                 | Duracade Viptera<br>(Agrisure 5222EZ) | VG  | .                  |
| Revere Seed              | Revere 1627 TC | 59                               | 3.50                       | 2.80                                     | 1.78  | 5.72                                 | Trecepta                              | VG  | .                  |
| AgraTech                 | 79VIP          | 59                               | 4.65                       | 2.80                                     | 1.42  | 0.81                                 | Viptera                               | G   | .                  |
| Croplan                  | 5893 TRE       | 61                               | 3.50                       | 2.75                                     | 1.05  | 1.32                                 | Trecepta                              | G   | .                  |
| Croplan                  | 5900 VT2P      | 60                               | 6.50                       | 2.75                                     | 2.70  | 3.26                                 | VT2Pro                                | G   | .                  |
| DEKALB                   | DKC66-06TRE    | 60                               | 2.40                       | 3.25                                     | 2.50  | 4.02                                 | Trecepta                              | G   | .                  |
| Dyna-Gro                 | D56TC44        | 58                               | 4.90                       | 2.65                                     | 1.65  | 0.84                                 | Trecepta                              | G   | .                  |
| Innictis                 | A1542T         | 59                               | 5.75                       | 2.90                                     | 1.65  | 0.51                                 | Trecepta                              | G   | .                  |
| INTEGRA                  | 6342 TRE       | 56                               | 2.10                       | 2.85                                     | 1.78  | 1.71                                 | Trecepta                              | G   | VG-                |
| INTEGRA                  | CX301119 TRE   | 60                               | 4.45                       | 2.55                                     | 2.00  | 3.79                                 | Trecepta                              | G   | .                  |
| NK Brand                 | NK1677-3110    | 61                               | 5.45                       | 2.80                                     | 2.75  | 0.40                                 | Viptera                               | G   | .                  |
| NK Brand                 | NK1748-3110    | 61                               | 6.00                       | 2.50                                     | 1.83  | 0.43                                 | Viptera                               | G   | .                  |
| Pioneer                  | P1608YHR       | 62                               | 4.70                       | 2.80                                     | 2.10  | 4.14                                 | Intrasect                             | G   | .                  |
| Progeny                  | PGY 2010 TRE   | 60                               | 1.80                       | 2.95                                     | 2.20  | 2.80                                 | Trecepta                              | G   | .                  |
| Progeny                  | PGY 2215 TRE   | 60                               | 3.10                       | 2.90                                     | 1.45  | 1.79                                 | Trecepta                              | G   | VG-                |
| Revere Seed              | Revere 1307 TC | 57                               | 2.95                       | 2.65                                     | 2.25  | 3.32                                 | Trecepta                              | G   | .                  |
| DEKALB                   | DKC66-94 RR2   | 59                               | 4.55                       | 2.75                                     | 1.63  | 2.11                                 | non-Bt                                | G   | .                  |
| DEKALB                   | DKC70-25 RR2   | 59                               | 4.25                       | 2.65                                     | 2.93  | 3.48                                 | non-Bt                                | G   | .                  |
| AgriGold                 | A6659 RR       | 60                               | 4.45                       | 3.05                                     | 2.58  | 4.34                                 | non-Bt                                | G   | .                  |
| AgraTech                 | 83VT2P         | 59                               | 2.35                       | 2.60                                     | 2.10  | 7.73                                 | VT2Pro                                | F   | .                  |
| BH Genetics              | BH 8566VT2P    | 58                               | 4.75                       | 2.60                                     | 2.13  | 6.41                                 | VT2Pro                                | F   | .                  |
| Croplan                  | 5500VT2P       | 60                               | 2.75                       | 2.20                                     | 2.55  | 10.06                                | VT2Pro                                | F   | .                  |
| DEKALB                   | DKC70-45 VT2P  | 60                               | 4.70                       | 2.70                                     | 2.33  | 10.05                                | VT2Pro                                | F   | .                  |
| Dyna-Gro                 | D57VC53        | 60                               | 3.35                       | 2.85                                     | 3.23  | 7.40                                 | VT2Pro                                | F   | .                  |
| Innictis                 | A1551VT2P      | 58                               | 4.65                       | 2.15                                     | 3.68  | 8.22                                 | VT2Pro                                | F   | .                  |
| INTEGRA                  | 6493 VT2P      | 60                               | 4.15                       | 2.55                                     | 3.13  | 7.83                                 | VT2Pro                                | F   | .                  |
| INTEGRA                  | 6533 RR        | 58                               | 3.20                       | 2.90                                     | 2.93  | 6.97                                 | non-Bt                                | F   | .                  |
| INTEGRA                  | 6588 VT2P      | 62                               | 3.10                       | 2.90                                     | 3.00  | 7.33                                 | VT2Pro                                | F   | G-                 |

## Ear-Feeding Insect Resistance in 64 Commercial Corn Hybrids, Tifton, Georgia, 2023 (Continued)

| Company or<br>Brand Name | Hybrid Name    | Days to<br>Anthesis <sup>a</sup> | Husk<br>Extensio<br>n (cm) | Husk<br>Tightnes<br>s (1-5) <sup>b</sup> | 2023  |  | Bt Traits                       | Overall Resistance<br>to Insect Damage <sup>e</sup> |                    |
|--------------------------|----------------|----------------------------------|----------------------------|--|---|--|---------------------------------|---|--------------------|
|                          |                |                                  |                            |  | FAW +<br>CEW<br>Damage<br>(cm) <sup>c</sup> | 2023<br>Kernel<br>Damage<br>(%) <sup>d</sup> |                                 | 2023  | 2 or more<br>years |
| Pioneer                  | P2042VYHR      | 61                               | 4.20                       | 2.75                                     | 2.25  | 8.83   | Leptra                          | F   | G                  |
| Progeny                  | PGY 2118 VT2P  | 60                               | 4.80                       | 2.45                                     | 3.78  | 12.01  | VT2Pro                          | F   | .                  |
| Revere Seed              | Revere 1577    | 57                               | 4.00                       | 2.95                                     | 2.83  | 10.55  | non-BT                          | F   | .                  |
| Revere Seed              | Revere 1839 TC | 61                               | 4.05                       | 2.60                                     | 2.93  | 7.18   | Trecepta                        | F   | .                  |
| AgriGold                 | A646-30 VT2P   | 59                               | 3.70                       | 3.10                                     | 3.13  | 7.48   | VT2Pro                          | F   | .                  |
| AgraTech                 | 69RR           | 58                               | 3.00                       | 3.45                                     | 3.70  | 4.89   | non-Bt                          | P   | F                  |
| AgraTech                 | 711VT2P        | 55                               | 4.25                       | 2.65                                     | 3.40  | 5.19   | VT2Pro                          | P   | .                  |
| BH Genetics              | BH 8412VT2P    | 58                               | 4.10                       | 2.70                                     | 2.50  | 5.18   | VT2Pro                          | P   | G                  |
| BH Genetics              | BH 8721VT2P    | 60                               | 3.75                       | 2.55                                     | 3.34  | 4.52   | VT2Pro                          | P   | P                  |
| BH Genetics              | BH 8732VT2P    | 59                               | 4.65                       | 2.80                                     | 3.85  | 4.92   | VT2Pro                          | P   | .                  |
| Croplan                  | 5678 VT2P      | 60                               | 4.00                       | 2.65                                     | 4.55  | 4.88   | VT2Pro                          | P   | .                  |
| DEKALB                   | DKC68-35 VT2P  | 61                               | 3.10                       | 2.70                                     | 3.05  | 4.60   | VT2Pro                          | P   | F-                 |
| Dyna-Gro                 | D58VC65        | 60                               | 3.55                       | 2.90                                     | 3.55  | 7.24   | VT2Pro                          | P   | P                  |
| Innvictis                | X1993 VT2P     | 61                               | 4.65                       | 2.20                                     | 3.63  | 5.38   | VT2Pro                          | P   | .                  |
| INTEGRA                  | 6410 RR        | 58                               | 3.85                       | 2.55                                     | 4.10  | 6.05   | non-Bt                          | P   | .                  |
| INTEGRA                  | 6641 SS        | 57                               | 6.20                       | 2.25                                     | 3.38  | 5.62   | SmartStax                       | P   | F                  |
| INTEGRA                  | 6709 VT2P      | 60                               | 4.15                       | 2.65                                     | 4.55  | 8.35   | VT2Pro                          | P   | .                  |
| INTEGRA                  | 6864 VT2P      | 59                               | 3.50                       | 2.45                                     | 3.35  | 7.26   | VT2Pro                          | P   | .                  |
| NK Brand                 | E117Z7-D-EZ1   | 63                               | 4.55                       | 2.40                                     | 5.63  | 10.46  | Agrisure 5122EZ,<br>EZ = 5% RIB | P   | .                  |
| NK Brand                 | NK1188-AA-EZ1  | 59                               | 6.90                       | 2.45                                     | 3.25  | 5.96   | Agrisure 3120EZ,<br>EZ= 5% RIB  | P   | .                  |
| Pioneer                  | P1289YHR       | 61                               | 6.00                       | 2.45                                     | 3.68  | 4.08   | Intrasect                       | P   | .                  |
| Progeny                  | PGY 9114 VT2P  | 58                               | 3.65                       | 2.65                                     | 3.33  | 7.09   | VT2Pro                          | P   | .                  |
| Progeny                  | PGY 9117 VT2P  | 60                               | 3.25                       | 2.75                                     | 3.25  | 4.69   | VT2Pro                          | P   | .                  |
| DEKALB                   | DKC62-05 RR2   | 58                               | 4.50                       | 2.70                                     | 3.58  | 5.03   | non-Bt                          | P   | .                  |

a. Days to anthesis is the number of days to flowering at Tifton, Georgia in 2023 after all hybrids were planted on April 20, 2023 ( $n = 4$ ).

b. Husk Tightness: 1 = loose husk, 3= moderately-tight husk, and 5 = tight husk.

c. Ear-feeding insect damage denotes the ear penetration (cm) by corn earworm (CEW) and fall armyworm (FAW) feeding with natural infestation.

d. All kernel-feeding insect damage was assessed by percentage (%) of damaged kernels per ear. Kernel-feeding insect damage was the combined percentage of stink bug, pink saverger caterpillar, maize weevil, and sap beetle damage. The number of kernels per sampled ear was estimated by counting a representative ear per plot. The total number of kernels per ear were estimated by multiplying the number of kernels per row by the number of rows of an ear.

e. Categorization of insect resistance to key ear- and kernel-feeding insects was based on principal component analysis results. The data were collected from 20 ears per hybrid (5 ears x 4 replications), where VG = very good, G = good, F = fair, and P = poor. The signs of "+" and "-" denote the fluctuation of damage ratings in recent (two or more) years.



# SORGHUM GRAIN

## Statewide Summary:

### Sorghum Grain Performance, Georgia, 2023, Dryland

| Company or<br>Brand Name | Hybrid   | Early Plantings |        |              |       | Early        | Late        |
|--------------------------|----------|-----------------|--------|--------------|-------|--------------|-------------|
|                          |          | Tifton          | Plains | Griffin      | Rome  | Average      | Tifton      |
| ----- bu/acre -----      |          |                 |        |              |       |              |             |
| Dyna-Gro Seed            | GX22934  | .               | 73.5   | <b>140.0</b> | 92.7  | <b>100.8</b> | .           |
| BH Genetics              | BH 5755  | .               | 62.9   | <b>135.8</b> | 100.4 | <b>98.8</b>  | 84.6        |
| Dyna-Gro Seed            | GX22937  | .               | 83.8   | 109.2        | 92.2  | <b>96.3</b>  | .           |
| Dyna-Gro Seed            | GX22932  | .               | 71.3   | <b>124.0</b> | 84.6  | <b>94.7</b>  | .           |
| BH Genetics              | BH 4041  | .               | 67.1   | <b>119.6</b> | 87.9  | <b>93.1</b>  | <b>97.8</b> |
| DEKALB                   | DKS54-07 | .               | 75.4   | 96.6         | 99.0  | <b>90.9</b>  | .           |
| Dyna-Gro Seed            | M71GR91  | .               | 69.7   | <b>126.6</b> | 75.0  | <b>90.4</b>  | .           |
| DEKALB                   | DKS44-07 | .               | 77.1   | 91.2         | 98.3  | <b>89.8</b>  | .           |
| Dyna-Gro Seed            | M67GB87  | .               | 80.4   | 108.1        | 77.7  | <b>88.5</b>  | .           |
| DEKALB                   | DKS50-07 | .               | 75.7   | 91.6         | 83.6  | 85.0         | .           |
| Dyna-Gro Seed            | M72GB71  | .               | 63.6   | 89.3         | 84.0  | 78.1         | .           |
| DEKALB                   | DKS36-07 | .               | 83.5   | 46.5         | 86.9  | 76.8         | .           |
| Sorghum Partners         | SP7715   | .               | 67.0   | 86.7         | 66.8  | 73.5         | .           |
| Dyna-Gro Seed            | GX22936  | .               | 61.9   | 59.1         | 92.8  | 71.7         | .           |
| Dyna-Gro Seed            | M59GB94  | .               | 67.4   | 74.1         | 68.2  | 71.4         | 58.2        |
| Dyna-Gro Seed            | M63GB78  | .               | 74.1   | 24.7         | 79.8  | 71.2         | 79.3        |
| BH Genetics              | BH 4220  | .               | 67.2   | 58.7         | 87.0  | 71.2         | 89.2        |
| Dyna-Gro Seed            | M60GB31  | .               | 70.4   | 57.5         | 75.6  | 67.5         | 86.2        |
| Sorghum Partners         | SP67B17  | .               | 65.4   | 51.6         | 71.2  | 64.5         | .           |
| Sorghum Partners         | SWGS4902 | .               | 74.3   | 55.5         | 66.9  | 63.4         | .           |
| Average                  |          | -               | 71.6   | 87.3         | 83.5  | 68.0         | 82.6        |
| LSD at 10% Level         |          | -               | NS     | 22.0         | NS    | 10.8         | 5.9         |
| Model R-squared          |          | -               | 0.73   | 0.89         | 0.66  | 0.53         | 0.88        |
| C.V.                     |          | -               | 15.7   | 27.3         | 20.5  | 35.0         | 7.5         |

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry. Yields calculated as 56 pounds per bushel at 14% moisture.

Note: The Tifton test was severely damaged by deer feeding.

## Tifton, Georgia: Early-Planted Sorghum Grain Performance, 2023, Dryland

| Company or<br>Brand Name | Hybrid   | Yield<br>bu/acre | Test<br>Weight<br>lb/bu | 50%<br>Bloom <sup>1</sup><br>days | Plant<br>Height<br>in | Head<br>Height<br>in | Lodging<br>% | Bird<br>Damage <sup>2</sup><br>% |
|--------------------------|----------|------------------|-------------------------|-----------------------------------|-----------------------|----------------------|--------------|----------------------------------|
| BH Genetics              | BH 4041  | .                | .                       | 72                                | 37                    | 9                    | .            | 21                               |
| BH Genetics              | BH 4220  | .                | .                       | 75                                | 43                    | 10                   | .            | 28                               |
| BH Genetics              | BH 5755  | .                | .                       | 78                                | 50                    | 12                   | .            | 20                               |
| DEKALB                   | DKS36-07 | .                | .                       | 68                                | 42                    | 11                   | .            | 31                               |
| DEKALB                   | DKS44-07 | .                | .                       | 75                                | 39                    | 10                   | .            | 15                               |
| DEKALB                   | DKS50-07 | .                | .                       | 76                                | 45                    | 9                    | .            | 19                               |
| DEKALB                   | DKS54-07 | .                | .                       | 76                                | 48                    | 10                   | .            | 23                               |
| Dyna-Gro Seed            | GX22932  | .                | .                       | 76                                | 48                    | 11                   | .            | 21                               |
| Dyna-Gro Seed            | GX22934  | .                | .                       | 77                                | 42                    | 9                    | .            | 18                               |
| Dyna-Gro Seed            | GX22936  | .                | .                       | 77                                | 45                    | 9                    | .            | 22                               |
| Dyna-Gro Seed            | GX22937  | .                | .                       | 75                                | 43                    | 10                   | .            | 20                               |
| Dyna-Gro Seed            | M59GB94  | .                | .                       | 68                                | 38                    | 11                   | .            | 18                               |
| Dyna-Gro Seed            | M60GB31  | .                | .                       | 76                                | 39                    | 9                    | .            | 23                               |
| Dyna-Gro Seed            | M63GB78  | .                | .                       | 73                                | 45                    | 11                   | .            | 25                               |
| Dyna-Gro Seed            | M67GB87  | .                | .                       | 76                                | 44                    | 9                    | .            | 17                               |
| Dyna-Gro Seed            | M71GR91  | .                | .                       | 79                                | 50                    | 10                   | .            | 14                               |
| Dyna-Gro Seed            | M72GB71  | .                | .                       | 80                                | 46                    | 9                    | .            | 12                               |
| Sorghum Partners         | SP67B17  | .                | .                       | 75                                | 42                    | 11                   | .            | 12                               |
| Sorghum Partners         | SP7715   | .                | .                       | 83                                | 46                    | 11                   | .            | 6                                |
| Sorghum Partners         | SWGS4902 | .                | .                       | 74                                | 33                    | 8                    | .            | 2                                |
| Average                  |          | 33.3             | 33.6                    | 76                                | 43                    | 10                   |              | 18                               |
| LSD at 10% Level         |          | 7.8              | 11.6                    | 1                                 | 2                     | 1                    |              | 9                                |
| Model R-squared          |          | 0.76             | 0.78                    | 0.99                              | 0.87                  | 0.67                 |              | 0.72                             |
| C.V.                     |          | 25.5             | 37.5                    | 1.1                               | 6.1                   | 12.2                 |              | 51.9                             |

1. Days from planting to 50% bloom.

2. Percent of grain missing from head. Yield adjusted to include missing grain.

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: April 25, 2023.

Harvested: August 21, 2023.

Seeding Rate: 80,000 seeds per acre in 36-inch rows.

Soil Type: Tifton loamy sand.

Previous Crop: Sorghum silage.

Soil Test:  $P_2O_5 = 67$  lbs,  $K_2O = 37$  lbs, and  $pH = 6.6$ .

Fertilization: Preplant: 40 lb N, 10 lb S, 110 lb  $P_2O_5$ , and 80 lb  $K_2O$ /acre. Sidedress: 100 lb N and 23 lb S/acre.

Tillage: Conventional.

Herbicides: Dual Magnum and Atrazine.

Note: This test was severely damaged by deer feeding. Yields and test weights are omitted, but other collected data are reliable.

Test conducted by M. Cofield, D. Dunn, and W. Mosteller.

## Plains, Georgia: Early-Planted Sorghum Grain Performance, 2023, Dryland

| Company or<br>Brand Name | Hybrid   | Yield<br>bu/acre | Test<br>Weight<br>lb/bu | 50%<br>Bloom <sup>1</sup><br>days | Plant<br>Height<br>in | Head<br>Height<br>in | Lodging<br>% | Bird<br>Damage <sup>2</sup><br>% |
|--------------------------|----------|------------------|-------------------------|-----------------------------------|-----------------------|----------------------|--------------|----------------------------------|
| Dyna-Gro Seed            | GX22937  | 83.8             | 50.6                    | .                                 | 57                    | .                    | 1            | .                                |
| DEKALB                   | DKS36-07 | 83.5             | 49.9                    | .                                 | 55                    | .                    | 0            | .                                |
| Dyna-Gro Seed            | M67GB87  | 80.4             | 49.3                    | .                                 | 57                    | .                    | 1            | .                                |
| DEKALB                   | DKS44-07 | 77.1             | 50.4                    | .                                 | 55                    | .                    | 1            | .                                |
| DEKALB                   | DKS50-07 | 75.7             | 50.7                    | .                                 | 57                    | .                    | 1            | .                                |
| DEKALB                   | DKS54-07 | 75.4             | 47.9                    | .                                 | 60                    | .                    | 1            | .                                |
| Sorghum Partners         | SWGS4902 | 74.3             | 44.7                    | .                                 | 42                    | .                    | 3            | .                                |
| Dyna-Gro Seed            | M63GB78  | 74.1             | 47.6                    | .                                 | 48                    | .                    | 1            | .                                |
| Dyna-Gro Seed            | GX22934  | 73.5             | 49.2                    | .                                 | 57                    | .                    | 6            | .                                |
| Dyna-Gro Seed            | GX22932  | 71.3             | 48.5                    | .                                 | 59                    | .                    | 1            | .                                |
| Dyna-Gro Seed            | M60GB31  | 70.4             | 47.2                    | .                                 | 49                    | .                    | 1            | .                                |
| Dyna-Gro Seed            | M71GR91  | 69.7             | 50.9                    | .                                 | 58                    | .                    | 1            | .                                |
| Dyna-Gro Seed            | M59GB94  | 67.4             | 46.2                    | .                                 | 56                    | .                    | 4            | .                                |
| BH Genetics              | BH 4220  | 67.2             | 49.0                    | .                                 | 54                    | .                    | 8            | .                                |
| BH Genetics              | BH 4041  | 67.1             | 47.5                    | .                                 | 54                    | .                    | 2            | .                                |
| Sorghum Partners         | SP7715   | 67.0             | 50.9                    | .                                 | 56                    | .                    | 7            | .                                |
| Sorghum Partners         | SP67B17  | 65.4             | 48.2                    | .                                 | 53                    | .                    | 1            | .                                |
| Dyna-Gro Seed            | M72GB71  | 63.6             | 50.2                    | .                                 | 56                    | .                    | 1            | .                                |
| BH Genetics              | BH 5755  | 62.9             | 50.2                    | .                                 | 59                    | .                    | 1            | .                                |
| Dyna-Gro Seed            | GX22936  | 61.9             | 49.7                    | .                                 | 54                    | .                    | 11           | .                                |
| Average                  |          | 71.6             | 49.0                    | -                                 | 55                    | -                    | 1            | -                                |
| LSD at 10% Level         |          | NS               | 1.4                     | -                                 | 2                     | -                    | NS           | -                                |
| Model R-squared          |          | 0.73             | 0.87                    | -                                 | 0.93                  | -                    | 0.35         | -                                |
| C.V.                     |          | 15.7             | 3.1                     | -                                 | 3.1                   | -                    | 400.5        | -                                |

1. Days from planting to 50% bloom.

2. Percent of grain missing from head. Yield adjusted to include missing grain.

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: May 3, 2023.

Harvested: August 22, 2023.

Seeding Rate: 80,000 seeds per acre in 36-inch rows.

Soil Type: Greenville sandy clay loam.

Previous Crop:

Soil Test:  $P_2O_5 = 45$  lbs,  $K_2O = 248$  lbs, and  $pH = 6.0$ .

Fertilization: Preplant: 25 lb N, 0 lb S, 100 lb  $P_2O_5$ , and 60 lb  $K_2O$ /acre. Sidedress: 50 lb N and 20 lb S/acre.

Tillage: Conventional.

Herbicides: Dual Magnum.

Test conducted by M. Cofield, D. Dunn, W. Mosteller, W. Jones, and D. Pearce.

## Griffin, Georgia: Early-Planted Sorghum Grain Performance, 2023, Dryland

| Company or<br>Brand Name | Hybrid   | Yield<br>bu/acre | Test<br>Weight<br>lb/bu | 50%<br>Bloom <sup>1</sup><br>days | Plant<br>Height<br>in | Head<br>Exertion<br>in | Lodging<br>% | Bird<br>Damage <sup>2</sup><br>% |
|--------------------------|----------|------------------|-------------------------|-----------------------------------|-----------------------|------------------------|--------------|----------------------------------|
| Dyna-Gro Seed            | GX22934  | <b>140.0</b>     | 54.7                    | 62                                | 56                    | 6.4                    | 0            | 15                               |
| BH Genetics              | BH 5755  | <b>135.8</b>     | 58.2                    | 63                                | 55                    | 5.5                    | 0            | 17                               |
| Dyna-Gro Seed            | M71GR91  | <b>126.6</b>     | 55.7                    | 63                                | 55                    | 4.5                    | 0            | 9                                |
| Dyna-Gro Seed            | GX22932  | <b>124.0</b>     | 53.0                    | 61                                | 57                    | 6.1                    | 1            | 12                               |
| BH Genetics              | BH 4041  | <b>119.6</b>     | 50.7                    | 61                                | 50                    | 3.4                    | 0            | 15                               |
| Dyna-Gro Seed            | GX22937  | 109.2            | 54.9                    | 62                                | 53                    | 6.4                    | 0            | 11                               |
| Dyna-Gro Seed            | M67GB87  | 108.1            | 44.6                    | 62                                | 53                    | 5.8                    | 0            | 17                               |
| DEKALB                   | DKS54-07 | 96.6             | 48.7                    | 65                                | 52                    | 5.4                    | 0            | 3                                |
| DEKALB                   | DKS50-07 | 91.6             | 44.6                    | 62                                | 54                    | 6.0                    | 0            | 13                               |
| DEKALB                   | DKS44-07 | 91.2             | 47.4                    | 61                                | 50                    | 5.5                    | 0            | 7                                |
| Dyna-Gro Seed            | M72GB71  | 89.3             | 44.4                    | 65                                | 55                    | 6.2                    | 0            | 3                                |
| Sorghum Partners         | SP7715   | 86.7             | 55.1                    | 65                                | 52                    | 6.2                    | 0            | 7                                |
| Dyna-Gro Seed            | M59GB94  | 74.1             | 40.3                    | 53                                | 49                    | 4.8                    | 0            | 10                               |
| Dyna-Gro Seed            | GX22936  | 59.1             | 35.9                    | 61                                | 50                    | 5.4                    | 0            | 0                                |
| BH Genetics              | BH 4220  | 58.7             | 31.2                    | 61                                | 50                    | 6.3                    | 0            | 3                                |
| Dyna-Gro Seed            | M60GB31  | 57.5             | 31.7                    | 61                                | 48                    | 5.4                    | 14           | 5                                |
| Sorghum Partners         | SWGS4902 | 55.5             | 30.8                    | 60                                | 39                    | 2.9                    | 1            | 1                                |
| Sorghum Partners         | SP67B17  | -                | 32.8                    | 61                                | 48                    | 4.1                    | 0            | 0                                |
| DEKALB                   | DKS36-07 | -                | 14.7                    | 57                                | 51                    | 4.7                    | 0            | 2                                |
| Dyna-Gro Seed            | M63GB78  | -                | 15.9                    | 60                                | 50                    | 4.8                    | 1            | 2                                |
| Average                  |          | 87.3             | 42.3                    | 61                                | 51                    | 5.3                    | 1            | 8                                |
| LSD at 10% Level         |          | 22.0             | 8.8                     | 1                                 | 2                     | 1.4                    | NS           | 7                                |
| Model R-squared          |          | 0.89             | 0.88                    | 0.96                              | 0.91                  | 0.69                   | 0.31         | 0.79                             |
| C.V.                     |          | 27.3             | 22.6                    | 1.5                               | 4.1                   | 29.6                   | 633.0        | 99.1                             |

1. Days from planting to 50% bloom.

2. Percent of grain head damaged.

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

"NS" indicates differences are statistically non-significant ( $p = 0.10$  probability level).

Planted: June 6, 2023.

Harvested: October 5, 2023.

Seeding Rate: 80,000 seeds per acre in 30-inch rows.

Soil Type: Cecil sandy loam.

Previous Crop: Soybeans.

Soil Test:  $P_2O_5 = 53$  lbs,  $K_2O = 230$  lbs, and  $pH = 6.7$ .

Fertilization: Preplant: 23 lb N, 60 lb  $P_2O_5$ , and 120 lb  $K_2O$ /acre. Sidedress: 150 lb N/acre.

Tillage: Conventional.

Herbicides: Dual Magnum and Atrazine.

Hybrids M63GB78, DKS36-07, and SP67B17 were adversely affected by deer feeding. We have observed deer to feed selectively on earlier-maturing hybrids like these. We have no reason to think these are more susceptible to deer feeding under normal commercial production practices.

Test conducted by J. Arrington, G. Ware, and S. Brannon.

## Rome, Georgia: Early-Planted Sorghum Grain Performance, 2023, Dryland

| Company or<br>Brand Name | Hybrid   | Yield<br>bu/acre | Test<br>Weight<br>lb/bu | 50%<br>Bloom <sup>1</sup><br>days | Plant<br>Height<br>in | Head<br>Exertion<br>in | Lodging<br>% | Bird<br>Damage <sup>2</sup><br>% |
|--------------------------|----------|------------------|-------------------------|-----------------------------------|-----------------------|------------------------|--------------|----------------------------------|
| BH Genetics              | BH 5755  | 100.4            | 56.7                    | .                                 | 50                    | 3.6                    | 0            | 17                               |
| DEKALB                   | DKS54-07 | 99.0             | 57.6                    | .                                 | 55                    | 4.2                    | 0            | 6                                |
| DEKALB                   | DKS44-07 | 98.3             | 55.6                    | .                                 | 48                    | 3.7                    | 0            | 12                               |
| Dyna-Gro Seed            | GX22936  | 92.8             | 54.0                    | .                                 | 49                    | 3.6                    | 0            | 21                               |
| Dyna-Gro Seed            | GX22934  | 92.7             | 56.0                    | .                                 | 59                    | 5.5                    | 0            | 8                                |
| Dyna-Gro Seed            | GX22937  | 92.2             | 55.3                    | .                                 | 51                    | 5.0                    | 0            | 14                               |
| BH Genetics              | BH 4041  | 87.9             | 47.9                    | .                                 | 48                    | 1.8                    | 0            | 16                               |
| BH Genetics              | BH 4220  | 87.0             | 54.2                    | .                                 | 55                    | 4.5                    | 0            | 13                               |
| DEKALB                   | DKS36-07 | 86.9             | 50.6                    | .                                 | 50                    | 1.8                    | 0            | 30                               |
| Dyna-Gro Seed            | GX22932  | 84.6             | 52.4                    | .                                 | 51                    | 3.5                    | 0            | 18                               |
| Dyna-Gro Seed            | M72GB71  | 84.0             | 53.2                    | .                                 | 49                    | 4.7                    | 0            | 17                               |
| DEKALB                   | DKS50-07 | 83.6             | 52.4                    | .                                 | 52                    | 3.4                    | 0            | 14                               |
| Dyna-Gro Seed            | M63GB78  | 79.8             | 47.2                    | .                                 | 49                    | 4.3                    | 0            | 16                               |
| Dyna-Gro Seed            | M67GB87  | 77.7             | 52.3                    | .                                 | 48                    | 4.0                    | 0            | 17                               |
| Dyna-Gro Seed            | M60GB31  | 75.6             | 53.4                    | .                                 | 53                    | 5.3                    | 0            | 11                               |
| Dyna-Gro Seed            | M71GR91  | 75.0             | 51.7                    | .                                 | 52                    | 3.3                    | 0            | 7                                |
| Sorghum Partners         | SP67B17  | 71.2             | 52.8                    | .                                 | 53                    | 4.5                    | 0            | 19                               |
| Dyna-Gro Seed            | M59GB94  | 68.2             | 44.2                    | .                                 | 43                    | 2.7                    | 0            | 24                               |
| Sorghum Partners         | SWGS4902 | 66.9             | 43.3                    | .                                 | 38                    | 1.2                    | 0            | 27                               |
| Sorghum Partners         | SP7715   | 66.8             | 49.3                    | .                                 | 46                    | 4.3                    | 0            | 16                               |
| Average                  |          | 83.5             | 52.0                    | -                                 | 50                    | 3.8                    | 0            | 16                               |
| LSD at 10% Level         |          | NS               | 4.6                     | -                                 | 5                     | NS                     | -            | NS                               |
| Model R-squared          |          | 0.66             | 0.45                    | -                                 | 0.65                  | 0.58                   | -            | 0.54                             |
| C.V.                     |          | 20.5             | 9.7                     | -                                 | 11.7                  | 50.7                   | -            | 70.6                             |

1. Days from planting to 50% bloom.

2. Percent of grain head damaged.

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

"NS" indicates differences are statistically non-significant ( $p = 0.10$  probability level).

Planted: June 1, 2023.

Harvested: October 18, 2023.

Seeding Rate: 80,000 seeds per acre in 30-inch rows.

Soil Type: Wax loam.

Previous Crop: Soybeans.

Soil Test:  $P_2O_5 = 69$  lbs,  $K_2O = 392$  lbs, and  $pH = 5.8$ .

Fertilization: Preplant: 210 lb N, 0 lb  $P_2O_5$ , and 0 lb  $K_2O$ /acre. Sidedress: 0 lb N/acre.

Tillage: Conventional.

Herbicides: Dual Magnum and Atrazine.

Test conducted by J. Arrington, G. Ware, M. Tucker, and T. Turnquist.

## Tifton, Georgia: Late-Planted Sorghum Grain Performance, 2023, Dryland

| Company or<br>Brand Name | Hybrid  | Yield<br>bu/acre | Test<br>Weight<br>lb/bu | 50%<br>Bloom <sup>1</sup><br>days | Plant<br>Height<br>in | Head<br>Height<br>in | Lodging<br>% | Bird<br>Damage <sup>2</sup><br>% |
|--------------------------|---------|------------------|-------------------------|-----------------------------------|-----------------------|----------------------|--------------|----------------------------------|
| BH Genetics              | BH 4041 | <b>97.8</b>      | 48.3                    | 50                                | 59                    | 10.0                 | 0            | 20                               |
| BH Genetics              | BH 4220 | 89.2             | 47.9                    | 48                                | 56                    | 10.0                 | 1            | 20                               |
| Dyna-Gro Seed            | M60GB31 | 86.2             | 44.5                    | 49                                | 57                    | 12.0                 | 0            | 17                               |
| BH Genetics              | BH 5755 | 84.6             | 48.3                    | 51                                | 59                    | 10.0                 | 2            | 20                               |
| Dyna-Gro Seed            | M63GB78 | 79.3             | 45.5                    | 48                                | 54                    | 11.0                 | 0            | 19                               |
| Dyna-Gro Seed            | M59GB94 | 58.2             | 40.3                    | 43                                | 55                    | 11.0                 | 1            | 19                               |
| Average                  |         | 82.6             | 45.8                    | 48                                | 56                    | 10.7                 | 1            | 19                               |
| LSD at 10% Level         |         | 5.9              | 1.5                     | 1                                 | 2                     | 0.6                  | NS           | 1                                |
| Model R-squared          |         | 0.88             | 0.98                    | 0.96                              | 0.65                  | 0.75                 | 0.58         | 0.75                             |
| C.V.                     |         | 7.5              | 3.3                     | 1.4                               | 3.5                   | 5.6                  | 193.3        | 4.7                              |

1. Days from planting to 50% bloom.

2. Percent of grain missing from head. Yield adjusted to include missing grain.

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: June 27, 2023.

Harvested: October 3, 2023.

Seeding Rate: 80,000 seeds per acre in 36-inch rows.

Soil Type: Tifton loamy sand.

Previous Crop: Fallow.

Soil Test: 59 lb P<sub>2</sub>O<sub>5</sub>, and 52 lb K<sub>2</sub>O/acre, and pH = 6.3.

Fertilization: Preplant: 40 lb N, 10lb S, 100 lb P<sub>2</sub>O<sub>5</sub>, and 60 lb K<sub>2</sub>O/acre. Sidedress: 100 lb N and 23 lb S/acre.

Tillage: Conventional.

Herbicides: Dual Magnum and Atrazine.

Test conducted by M. Cofield, D. Dunn, and W. Mosteller.

## Statewide Yield Summary: Sorghum Silage Performance, Georgia, 2021-2023

| Company or<br>Brand Name | Hybrid or<br>Variety Name | Days to<br>Soft Dough | Griffin Milk production |                 |                 | Griffin Yield |             |              | Tifton Yield |             |              |
|--------------------------|---------------------------|-----------------------|-------------------------|-----------------|-----------------|---------------|-------------|--------------|--------------|-------------|--------------|
|                          |                           |                       | 2023<br>lb/ton          | 2023<br>lb/acre | 2022<br>lb/acre | 2023          | 2022        | 2021         | 2023         | 2022        | 2021         |
| ALTA SEEDS               | ADV F7232                 | 128                   | <b>3,319</b>            | 18,105          | .               | 5.46          | .           | .            | 5.67         | .           | .            |
| ALTA SEEDS               | ADV F7424                 | 128                   | <b>3,347</b>            | 19,073          | .               | 5.70          | .           | 6.27         | 6.94         | .           | 6.23         |
| ALTA SEEDS               | ADV F8484IG               | 121                   | 3,034                   | 18,586          | .               | 6.13          | .           | .            | 6.48         | .           | .            |
| ALTA SEEDS               | ADV S6520                 | 128+                  | 3,101                   | <b>23,014</b>   | .               | 7.42          | .           | <b>10.07</b> | 8.37         | .           | 7.67         |
| ALTA SEEDS               | ADV XS005                 | 97                    | <b>3,502</b>            | 13,510          | .               | 3.86          | .           | 8.74         | 6.12         | .           | 7.35         |
| ALTA SEEDS               | ADV XS22008IG             | 128                   | 3,012                   | <b>24,562</b>   | .               | <b>8.15</b>   | .           | .            | 8.02         | .           | .            |
| ALTA SEEDS               | ADV XS22060               | 128+                  | 2,637                   | <b>22,262</b>   | .               | <b>8.44</b>   | .           | .            | 8.73         | .           | .            |
| ALTA SEEDS               | AF7401                    | 128                   | 3,263                   | 20,433          | .               | 6.26          | .           | 6.44         | 5.89         | .           | 5.44         |
| Dyna-Gro Seed            | Danny Boy II BMR          | 128+                  | 2,814                   | 20,330          | .               | 7.22          | .           | .            | <b>9.66</b>  | .           | .            |
| Dyna-Gro Seed            | Dynagraze II              | 97                    | 3,160                   | 10,016          | .               | 3.17          | .           | .            | 8.01         | .           | .            |
| Dyna-Gro Seed            | Dynagraze II BMR          | 105                   | 2,817                   | 10,719          | .               | 3.81          | .           | .            | 6.96         | .           | .            |
| Dyna-Gro Seed            | F74FS23 BMR               | 121                   | 3,258                   | 16,592          | 16,424          | 5.09          | 5.60        | 5.44         | 6.01         | 4.72        | 6.19         |
| Dyna-Gro Seed            | F74FS72 BMR               | 128                   | 3,313                   | 19,631          | 10,521          | 5.93          | 3.28        | .            | 5.24         | 5.62        | .            |
| Dyna-Gro Seed            | Fullgraze II BMR          | 128+                  | 2,866                   | 21,723          | .               | 7.58          | .           | .            | 7.96         | .           | .            |
| Dyna-Gro Seed            | Super Sile 20             | 112                   | 2,973                   | 19,346          | <b>22,565</b>   | 6.51          | <b>8.71</b> | 7.95         | 8.22         | <b>6.02</b> | 8.75         |
| Dyna-Gro Seed            | Super Sile 30             | 105                   | 3,013                   | 18,381          | 13,177          | 6.10          | 5.63        | 6.63         | 8.47         | <b>6.23</b> | 7.50         |
| Sorghum Partners         | NK300                     | 112                   | 3,191                   | 19,259          | 17,408          | 6.04          | 6.28        | 6.40         | 7.27         | <b>5.95</b> | 5.78         |
| Sorghum Partners         | SP1727 MS BMR             | 112                   | 3,182                   | 14,903          | 12,245          | 4.68          | 4.65        | .            | 6.37         | 4.63        | .            |
| Sorghum Partners         | SP2606 BMR                | 112                   | 3,407                   | 16,445          | .               | 4.83          | .           | .            | 6.63         | .           | .            |
| Sorghum Partners         | SS304                     | 121                   | 3,073                   | 19,617          | 18,943          | 6.38          | 6.86        | <b>9.25</b>  | 8.25         | <b>6.49</b> | <b>10.48</b> |
| Sorghum Partners         | SWFS9001                  | 121                   | 3,094                   | 17,249          | .               | 5.57          | .           | .            | 5.66         | .           | .            |
| Grand Mean               |                           |                       | 3,113                   | 18,274          | 16,001          | 5.92          | 5.62        | 6.94         | 7.3          | 5.44        | 6.45         |
| LSD                      |                           |                       | 188                     | 2,376           | 1,842           | 0.77          | 0.87        | 1.01         | 0.6          | 0.69        | 0.78         |
| R-Square                 |                           |                       | 0.83                    | 0.82            | 0.86            | 0.86          | 0.80        | 0.96         | 0.98         | 0.60        | 0.98         |
| C.V.                     |                           |                       | 5                       | 12              | 11              | 12.2          | 14.4        | 13.32        | 7.58         | 11.7        | 11.03        |

Note: Days to soft dough will fluctuate depending on temperatures.

## Tifton, Georgia: Sorghum Silage Performance, 2023, Dryland

| Company or<br>Brand Name | Hybrid or<br>Variety Name | Harvested Yield       |                    |          | Growth<br>Stage | Plant  |         |
|--------------------------|---------------------------|-----------------------|--------------------|----------|-----------------|--------|---------|
|                          |                           | Dry                   | Green <sup>1</sup> | Moisture |                 | Height | Lodging |
|                          |                           | ----- tons/acre ----- |                    | %        |                 | in     | %       |
| Dyna-Gro Seed            | Danny Boy II BMR          | <b>9.65</b>           | <b>27.57</b>       | 78.6     | -               | 115    | 0       |
| ALTA SEEDS               | ADV XS22060               | 8.73                  | 24.94              | 76.7     | -               | 123    | 0       |
| INTEGRA                  | 6709 VT2P                 | 8.53                  | 24.38              | 64.9     | (corn)          | 87     | 1       |
| Dyna-Gro Seed            | Super Sile 30             | 8.46                  | 24.17              | 71.0     | Milk            | 100    | 2       |
| ALTA SEEDS               | ADV S6520                 | 8.41                  | 24.03              | 77.5     | Flowering       | 113    | 0       |
| Sorghum Partners         | SS304                     | 8.26                  | 23.61              | 73.6     | Milk            | 115    | 0       |
| Dyna-Gro Seed            | Super Sile 20             | 8.24                  | 23.54              | 74.0     | Milk            | 113    | 1       |
| NK Brand                 | NK1838-3110               | 8.10                  | 23.13              | 68.9     | (corn)          | 94     | 0       |
| ALTA SEEDS               | ADV XS22008IG             | 8.03                  | 22.95              | 74.5     | Milk            | 119    | 0       |
| Dyna-Gro Seed            | Dynagraze II              | 8.01                  | 22.89              | 69.8     | Hard dough      | 103    | 21      |
| Dyna-Gro Seed            | Fullgraze II BMR          | 7.97                  | 22.76              | 72.3     | Flowering       | 127    | 6       |
| NK Brand                 | NK1188-AA-EZ1             | 7.64                  | 21.83              | 67.0     | (corn)          | 85     | 0       |
| Sorghum Partners         | NK300                     | 7.28                  | 20.79              | 68.7     | Soft dough      | 77     | 1       |
| Dyna-Gro Seed            | Dynagraze II BMR          | 6.96                  | 19.88              | 70.8     | Milk            | 105    | 33      |
| ALTA SEEDS               | ADV F7424                 | 6.93                  | 19.79              | 71.6     | Soft dough      | 75     | 0       |
| Sorghum Partners         | SP2606 BMR                | 6.61                  | 18.89              | 72.7     | Soft dough      | 83     | 1       |
| ALTA SEEDS               | ADV F8484IG               | 6.46                  | 18.47              | 72.6     | Soft dough      | 66     | 1       |
| Sorghum Partners         | SP1727 MS BMR             | 6.38                  | 18.24              | 71.2     | Soft dough      | 96     | 15      |
| ALTA SEEDS               | ADV XS005                 | 6.10                  | 17.42              | 69.6     | Soft dough      | 57     | 0       |
| Dyna-Gro Seed            | F74FS23 BMR               | 5.99                  | 17.13              | 74.5     | Soft dough      | 82     | 22      |
| ALTA SEEDS               | AF7401                    | 5.87                  | 16.78              | 72.7     | Soft dough      | 69     | 0       |
| ALTA SEEDS               | ADV F7232                 | 5.65                  | 16.15              | 73.7     | Soft dough      | 64     | 0       |
| Sorghum Partners         | SWFS9001                  | 5.63                  | 16.10              | 69.5     | Soft dough      | 53     | 1       |
| Dyna-Gro Seed            | F74FS72 BMR               | 5.29                  | 15.10              | 74.6     | Soft dough      | 64     | 0       |
| Average                  |                           | 7.30                  | 20.85              | 72.1     | -               | 91     | 4       |
| LSD at 10% Level         |                           | 0.60                  | 1.70               | 0.7      | -               | 3      | 9       |
| Model R-squared          |                           | 0.98                  | 0.97               | 0.98     | -               | 0.99   | 0.81    |
| C.V.                     |                           | 7.6                   | 7.6                | 0.9      | -               | 3.6    | 206.5   |

1. Green yields are standardized to 65% moisture.

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: April 21, 2023.

Harvested: July 27, 2023. Accumulated 2,418 GDD units.  $50 \leq \text{Temp} \leq 100$  °F

Seeding Rate: 80,000 seeds per acre in 36-inch rows.

Soil Type: Tifton loamy sand.

Previous Crop: Corn.

Soil Test:  $P_2O_5 = 76$  lbs,  $K_2O = 137$  lbs, and  $pH = 6.1$ .

Fertilization: Preplant: 40 lb N, 10 lb S, 110 lb  $P_2O_5$ , and 80 lb  $K_2O$ /acre.

Sidedress: 100 lb N and 23 lb S/acre.

Tillage: Conventional.

Herbicides: Dual Magnum and Atrazine.

Rainfall: 17.1 inches.

Test conducted by M. Cofield, D. Dunn, and W. Mosteller.



## Griffin, Georgia: Sorghum Silage Performance, 2023, Dryland

| Company or<br>Brand Name | Hybrid or<br>Variety Name | Soft-dough Harvest Yield   |                            |               |                |                |               |   |                    |       |
|--------------------------|---------------------------|----------------------------|----------------------------|---------------|----------------|----------------|---------------|---|--------------------|-------|
|                          |                           | Dry<br>---- tons/acre ---- | Green <sup>1</sup><br>---- | Moisture<br>% | Timing<br>days | Height<br>GDUs | Lodging<br>in | % | Boot Stage<br>days | GDUs  |
| ALTA SEEDS               | ADV XS22060               | <b>8.44</b>                | <b>24.12</b>               | 73.7          | 128            | -              | 123           | . | 129                | 3,269 |
| ALTA SEEDS               | ADV XS22008IG             | <b>8.15</b>                | <b>23.30</b>               | 70.4          | 128            | 3,264          | 111           | . | 87                 | 2,372 |
| Dyna-Gro Seed            | Fullgraze II BMR          | 7.58                       | 21.66                      | 72.1          | 128            | -              | 123           | . | 110                | 2,921 |
| ALTA SEEDS               | ADV S6520                 | 7.42                       | 21.20                      | 75.0          | 128            | -              | 113           | . | 127                | 3,244 |
| Dyna-Gro Seed            | Danny Boy II BMR          | 7.22                       | 20.64                      | 76.0          | 128            | -              | 111           | . | 131                | 3,287 |
| Dyna-Gro Seed            | Super Sile 20             | 6.51                       | 18.59                      | 72.7          | 112            | 2,958          | 100           | . | 86                 | 2,317 |
| Sorghum Partners         | SS304                     | 6.38                       | 18.24                      | 73.2          | 121            | 3,129          | 93            | . | 86                 | 2,317 |
| ALTA SEEDS               | AF7401                    | 6.26                       | 17.89                      | 69.9          | 128            | 3,264          | 66            | . | 92                 | 2,504 |
| ALTA SEEDS               | ADV F8484IG               | 6.13                       | 17.51                      | 71.3          | 121            | 3,129          | 73            | . | 88                 | 2,395 |
| Dyna-Gro Seed            | Super Sile 30             | 6.10                       | 17.43                      | 75.2          | 105            | 2,826          | 91            | . | 82                 | 2,197 |
| Sorghum Partners         | NK300                     | 6.04                       | 17.25                      | 72.4          | 112            | 2,958          | 67            | . | 83                 | 2,229 |
| Dyna-Gro Seed            | F74FS72 BMR               | 5.93                       | 16.93                      | 65.4          | 128            | 3,264          | 60            | . | 91                 | 2,462 |
| ALTA SEEDS               | ADV F7424                 | 5.70                       | 16.28                      | 71.3          | 128            | 3,264          | 68            | . | 93                 | 2,531 |
| Sorghum Partners         | SWFS9001                  | 5.57                       | 15.93                      | 68.0          | 121            | 3,129          | 48            | . | 85                 | 2,295 |
| ALTA SEEDS               | ADV F7232                 | 5.46                       | 15.59                      | 68.0          | 128            | 3,264          | 60            | . | 93                 | 2,512 |
| Dyna-Gro Seed            | F74FS23 BMR               | 5.09                       | 14.55                      | 74.7          | 121            | 3,129          | 85            | . | 87                 | 2,345 |
| Sorghum Partners         | SP2606 BMR                | 4.83                       | 13.79                      | 76.6          | 112            | 2,958          | 72            | . | 84                 | 2,262 |
| Sorghum Partners         | SP1727 MS BMR             | 4.68                       | 13.38                      | 74.8          | 112            | 2,958          | 88            | . | 75                 | 2,015 |
| ALTA SEEDS               | ADV XS005                 | 3.86                       | 11.02                      | 71.6          | 97             | 2,621          | 47            | . | 69                 | 1,850 |
| Dyna-Gro Seed            | Dynagraz II BMR           | 3.81                       | 10.87                      | 75.1          | 105            | 2,826          | 93            | . | 73                 | 1,957 |
| Dyna-Gro Seed            | Dynagraz II               | 3.17                       | 9.06                       | 70.8          | 97             | 2,621          | 105           | . | 67                 | 1,778 |
| Average                  |                           | 5.92                       | 16.92                      | 72.3          | 118            | 3,033          | 86            | - | 91                 | 2,431 |
| LSD at 10% Level         |                           | 0.77                       | 2.20                       | 0.9           | -              | -              | 5             | - | 3                  | 72    |
| Model R-squared          |                           | 0.86                       | 0.86                       | 0.95          | -              | -              | 0.98          | - | 0.99               | 0.98  |
| C.V.                     |                           | 12.24                      | 12.24                      | 1.13          | -              | -              | 5.27          | - | 2.75               | 2.77  |

1. Green yields are standardized to 65% moisture.

**Bolded** yields are statistically non-significant (p = 0.10 level) from the highest yielding test entry.

Planted: May 31, 2023.

Harvested: September 5 to October 6, depending on hybrid. GDU model is 50 ≤ Temp ≤ 100 °F.

Seeding Rate: 80,000 seeds per acre in 30-inch rows.

Soil Type: Cecil sandy loam.

Previous Crop: Soybean.

Soil Test: P<sub>2</sub>O<sub>5</sub> = 53 lbs, K<sub>2</sub>O = 230 lbs, and pH = 6.7.

Fertilization: Preplant: 23 lb N, 60 lb P<sub>2</sub>O<sub>5</sub>, and 120 lb K<sub>2</sub>O/acre. Sidedress: 150 lb N/acre.

Tillage: Conventional.

Herbicides: Dual Magnum and Atrazine.

Rainfall: 14.3 inches.

Hybrids lacking a GDUs to harvest number were harvested prior to soft dough stage due to dry-down of leaves. We suspect the soil moisture had been exhausted since no signs of disease were present. Days to boot stage exceeding 128 were recorded from unharvested rows. Harvest prior to soft dough results in lower yields, but higher quality. The extent to which the higher quality from early harvest was offset by plant stress can be observed in the following two tables.

Sugarcane aphids were present early in the test, but declined rapidly, and had no noticeable impact on yields.

No insecticide applications were made.

High winds affected some parts of the test, but not others. Observed lodging could not be explained by hybrids.

Test conducted by J. Arrington, G. Ware, and S. Brannon.

## Quality Factors of Sorghum Hybrids for Silage Griffin, Georgia, 2023

| Company or<br>Brand Name | Hybrid<br>Name   | Dry<br>Yield | UW Milk 2013 Model Calculated Values |               |                 |                      |                 |                  | Quality Components |                     |       |       |        |      |
|--------------------------|------------------|--------------|--------------------------------------|---------------|-----------------|----------------------|-----------------|------------------|--------------------|---------------------|-------|-------|--------|------|
|                          |                  |              | Milk production                      | TDN           | NE <sub>L</sub> | NE <sub>G</sub>      | NE <sub>M</sub> | ADF              | aND                | aNDFom              | Ligni | NDFD3 | NDFD24 |      |
|                          |                  | tons/ac      | lb/ton                               | lb/acre       | % DM            | ----- Mcal/cwt ----- |                 | ----- % DM ----- |                    | ----- % NDFom ----- |       |       |        |      |
| ALTA SEEDS               | ADV XS22008IG    | <b>8.15</b>  | 3,012                                | <b>24,562</b> | 60.2            | 66.4                 | 33.2            | 59.1             | 36.3               | 60.0                | 58.3  | 4.2   | 52.6   | 69.4 |
| ALTA SEEDS               | ADV S6520        | 7.42         | 3,101                                | <b>23,014</b> | 62.1            | 67.4                 | 35.7            | 61.9             | 35.2               | 57.4                | 54.3  | 3.0   | 55.0   | 69.2 |
| ALTA SEEDS               | ADV XS22060      | <b>8.44</b>  | 2,637                                | <b>22,262</b> | 56.2            | 60.2                 | 28.2            | 53.7             | 43.4               | 70.3                | 68.2  | 5.3   | 55.4   | 70.1 |
| Dyna-Gro Seed            | Fullgraze II BMR | 7.58         | 2,866                                | 21,723        | 60.8            | 62.9                 | 34.5            | 60.6             | 38.8               | 63.7                | 62.2  | 3.5   | 61.1   | 73.4 |
| ALTA SEEDS               | AF7401           | 6.26         | 3,263                                | 20,433        | 64.7            | 69.5                 | 39.5            | 66.2             | 33.8               | 54.7                | 53.2  | 3.2   | 58.3   | 70.7 |
| Dyna-Gro Seed            | Danny Boy II BMR | 7.22         | 2,814                                | 20,330        | 60.0            | 62.2                 | 33.8            | 59.8             | 40.0               | 62.5                | 60.7  | 3.7   | 60.5   | 72.6 |
| Dyna-Gro Seed            | F74FS72 BMR      | 5.93         | <b>3,313</b>                         | 19,631        | 65.2            | 70.3                 | 40.5            | 67.3             | 34.3               | 55.0                | 53.4  | 3.8   | 57.7   | 70.5 |
| Sorghum Partners         | SS304            | 6.38         | 3,073                                | 19,617        | 62.3            | 66.6                 | 36.2            | 62.5             | 35.6               | 58.8                | 57.1  | 3.3   | 57.5   | 72.0 |
| Dyna-Gro Seed            | Super Sile 20    | 6.51         | 2,973                                | 19,346        | 59.8            | 65.8                 | 32.5            | 58.4             | 35.4               | 58.6                | 57.2  | 3.5   | 52.5   | 66.6 |
| Sorghum Partners         | NK300            | 6.04         | 3,191                                | 19,259        | 63.1            | 68.8                 | 37.4            | 63.9             | 35.2               | 57.0                | 55.3  | 4.7   | 55.1   | 69.2 |
| ALTA SEEDS               | ADV F7424        | 5.70         | 3,347                                | 19,073        | 66.6            | 70.3                 | 41.7            | 68.6             | 31.9               | 53.3                | 51.8  | 2.3   | 62.1   | 72.7 |
| ALTA SEEDS               | ADV F8484IG      | 6.13         | 3,034                                | 18,586        | 60.6            | 66.7                 | 33.8            | 59.8             | 34.8               | 57.2                | 56.2  | 3.5   | 52.6   | 67.3 |
| Dyna-Gro Seed            | Super Sile 30    | 6.10         | 3,013                                | 18,381        | 59.7            | 66.9                 | 32.3            | 58.2             | 38.7               | 63.3                | 54.2  | 4.3   | 49.5   | 64.5 |
| ALTA SEEDS               | ADV F7232        | 5.46         | <b>3,319</b>                         | 18,105        | 65.7            | 70.2                 | 40.9            | 67.7             | 31.7               | 52.3                | 49.8  | 2.9   | 59.4   | 70.3 |
| Sorghum Partners         | SWFS9001         | 5.57         | 3,094                                | 17,249        | 62.1            | 67.2                 | 36.5            | 62.8             | 34.7               | 56.9                | 55.4  | 4.1   | 55.8   | 69.9 |
| Dyna-Gro Seed            | F74FS23 BMR      | 5.09         | 3,258                                | 16,592        | 64.1            | 69.9                 | 38.9            | 65.5             | 31.2               | 50.7                | 49.2  | 2.8   | 54.9   | 68.7 |
| Sorghum Partners         | SP2606 BMR       | 4.83         | 3,407                                | 16,445        | 66.7            | 71.6                 | 42.1            | 69.0             | 30.8               | 50.5                | 49.1  | 2.8   | 59.1   | 71.6 |
| Sorghum Partners         | SP1727 MS BMR    | 4.68         | 3,182                                | 14,903        | 63.2            | 68.6                 | 37.4            | 63.8             | 32.7               | 52.7                | 51.2  | 2.5   | 55.4   | 68.6 |
| ALTA SEEDS               | ADV XS005        | 3.86         | <b>3,502</b>                         | 13,510        | 67.3            | 73.4                 | 43.2            | 70.3             | 30.7               | 49.9                | 48.4  | 4.3   | 57.0   | 70.2 |
| Dyna-Gro Seed            | Dynagraze II BMR | 3.81         | 2,817                                | 10,719        | 59.0            | 62.7                 | 31.9            | 57.8             | 39.7               | 62.4                | 60.6  | 4.2   | 56.9   | 69.4 |
| Dyna-Gro Seed            | Dynagraze II     | 3.17         | 3,160                                | 10,016        | 62.1            | 68.7                 | 36.0            | 62.2             | 34.9               | 56.4                | 54.8  | 4.4   | 52.3   | 66.9 |
| Average                  |                  | 5.92         | 3,113                                | 18,274        | 62.5            | 67.4                 | 36.5            | 62.8             | 35.2               | 57.3                | 55.3  | 3.6   | 56.2   | 69.7 |
| LSD at 10% Level         |                  | 0.77         | 188                                  | 2,376         | 2.0             | 3.2                  | 2.6             | 2.9              | 3.9                | 4.8                 | 4.3   | 0.7   | 3.0    | 2.2  |
| Model R-squared          |                  | 0.86         | 0.83                                 | 0.82          | 0.88            | 0.80                 | 0.89            | 0.89             | 0.73               | 0.81                | 0.82  | 0.81  | 0.80   | 0.78 |
| C.V.                     |                  | 12.2         | 4.6                                  | 12.2          | 2.4             | 3.5                  | 5.5             | 3.5              | 8.4                | 6.3                 | 5.8   | 14.9  | 4.1    | 2.4  |

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Sample analysis conducted by Dairyland Laboratories, Arcadia, WI.

## Nutrient and Elemental Analysis of Sorghum Hybrids for Silage Griffin, Georgia, 2023

| Company or<br>Brand Name | Hybrid<br>Name   | Dry<br>Yield | Milk<br>Production | Crude Protein | Starch | Sugar<br>(WSC) | Fat<br>(EE) | Fat<br>(TFA) | Ash  | P    | K    | Ca   | Mg   | S    |      |
|--------------------------|------------------|--------------|--------------------|---------------|--------|----------------|-------------|--------------|------|------|------|------|------|------|------|
|                          |                  | tons/ac      | lb/ton             | lb/acre       | % DM   |                |             |              |      |      |      |      |      |      |      |
| ALTA SEEDS               | ADV XS22008IG    | <b>8.15</b>  | 3,012              | <b>24,562</b> | 8.7    | 5.1            | 10.7        | 2.3          | 0.7  | 3.4  | 0.13 | 1.02 | 0.29 | 0.23 | 0.10 |
| ALTA SEEDS               | ADV S6520        | 7.42         | 3,101              | <b>23,014</b> | 9.0    | 5.8            | 11.0        | 2.5          | 0.9  | 5.1  | 0.19 | 1.49 | 0.26 | 0.19 | 0.12 |
| ALTA SEEDS               | ADV XS22060      | <b>8.44</b>  | 2,637              | <b>22,262</b> | 9.5    | 1.4            | 5.0         | 1.8          | 0.5  | 4.4  | 0.18 | 1.78 | 0.25 | 0.24 | 0.11 |
| Dyna-Gro Seed            | Fullgraze II BMR | 7.58         | 2,866              | 21,723        | 10.2   | 2.7            | 5.7         | 2.6          | 0.8  | 6.3  | 0.21 | 1.95 | 0.32 | 0.20 | 0.15 |
| ALTA SEEDS               | AF7401           | 6.26         | 3,263              | 20,433        | 10.2   | 8.1            | 9.7         | 2.9          | 0.9  | 4.6  | 0.21 | 1.40 | 0.29 | 0.21 | 0.13 |
| Dyna-Gro Seed            | BMR              | 7.22         | 2,814              | 20,330        | 11.0   | 1.2            | 6.7         | 2.5          | 0.5  | 7.0  | 0.25 | 2.24 | 0.32 | 0.21 | 0.14 |
| Dyna-Gro Seed            | F74FS72 BMR      | 5.93         | <b>3,313</b>       | 19,631        | 11.2   | 11.4           | 7.5         | 2.7          | 0.9  | 3.8  | 0.22 | 1.13 | 0.33 | 0.23 | 0.13 |
| Sorghum Partners         | SS304            | 6.38         | 3,073              | 19,617        | 9.4    | 5.4            | 9.8         | 2.6          | 0.8  | 4.9  | 0.18 | 1.57 | 0.31 | 0.23 | 0.12 |
| Dyna-Gro Seed            | Super Sile 20    | 6.51         | 2,973              | 19,346        | 8.3    | 7.0            | 10.1        | 2.3          | 0.8  | 4.7  | 0.18 | 1.62 | 0.24 | 0.20 | 0.11 |
| Sorghum Partners         | NK300            | 6.04         | 3,191              | 19,259        | 10.2   | 13.5           | 7.6         | 2.6          | 1.0  | 3.7  | 0.20 | 1.28 | 0.25 | 0.24 | 0.12 |
| ALTA SEEDS               | ADV F7424        | 5.70         | 3,347              | 19,073        | 9.7    | 9.3            | 10.6        | 2.8          | 1.0  | 5.2  | 0.22 | 1.46 | 0.29 | 0.20 | 0.14 |
| ALTA SEEDS               | ADV F8484IG      | 6.13         | 3,034              | 18,586        | 9.0    | 7.2            | 10.9        | 2.5          | 0.8  | 4.3  | 0.16 | 1.13 | 0.24 | 0.20 | 0.10 |
| Dyna-Gro Seed            | Super Sile 30    | 6.10         | 3,013              | 18,381        | 8.2    | 7.2            | 7.7         | 2.3          | 0.7  | 4.5  | 0.17 | 1.59 | 0.24 | 0.20 | 0.10 |
| ALTA SEEDS               | ADV F7232        | 5.46         | 3,319              | 18,105        | 10.7   | 12.7           | 9.0         | 2.9          | 1.0  | 5.7  | 0.24 | 1.54 | 0.32 | 0.23 | 0.14 |
| Sorghum Partners         | SWFS9001         | 5.57         | 3,094              | 17,249        | 10.8   | 9.7            | 7.7         | 2.4          | 1.0  | 5.1  | 0.20 | 1.54 | 0.34 | 0.28 | 0.14 |
| Dyna-Gro Seed            | F74FS23 BMR      | 5.09         | 3,258              | 16,592        | 10.6   | 9.5            | 10.6        | 3.2          | 1.0  | 5.5  | 0.21 | 1.41 | 0.25 | 0.19 | 0.14 |
| Sorghum Partners         | SP2606 BMR       | 4.83         | 3,407              | 16,445        | 10.4   | 12.3           | 10.9        | 2.9          | 1.1  | 4.9  | 0.22 | 1.47 | 0.30 | 0.21 | 0.13 |
| Sorghum Partners         | SP1727 MS BMR    | 4.68         | 3,182              | 14,903        | 9.6    | 4.4            | 12.1        | 3.1          | 0.9  | 5.5  | 0.20 | 1.48 | 0.26 | 0.17 | 0.13 |
| ALTA SEEDS               | ADV XS005        | 3.86         | 3,502              | 13,510        | 11.3   | 21.1           | 8.2         | 3.0          | 1.3  | 3.6  | 0.25 | 1.30 | 0.24 | 0.24 | 0.13 |
| Dyna-Gro Seed            | BMR              | 3.81         | 2,817              | 10,719        | 9.5    | 3.8            | 7.6         | 2.2          | 0.6  | 6.1  | 0.19 | 1.70 | 0.30 | 0.22 | 0.12 |
| Dyna-Gro Seed            | Dynagraze II     | 3            | 3,160              | 10,016        | 9.7    | 12.5           | 8.9         | 2.6          | 1.0  | 3.5  | 0.18 | 1.26 | 0.25 | 0.22 | 0.10 |
| Average                  |                  | 5.92         | 3,113              | 18,274        | 9.9    | 8.1            | 8.9         | 2.6          | 0.9  | 4.8  | 0.20 | 1.49 | 0.28 | 0.21 | 0.12 |
| LSD at 10% Level         |                  | 0.77         | 188                | 2,376         | 1.0    | 3.8            | 2.8         | 0.3          | 0.2  | 1.3  | 0.03 | 0.36 | 0.04 | 0.03 | 0.02 |
| Model R-squared          |                  | 0.86         | 0.83               | 0.82          | 0.76   | 0.85           | 0.64        | 0.82         | 0.74 | 0.67 | 0.75 | 0.69 | 0.67 | 0.68 | 0.76 |
| C.V.                     |                  | 12.2         | 4.6                | 12.2          | 7.4    | 34.8           | 23.7        | 8.4          | 18.5 | 20.4 | 11.9 | 18.4 | 12.2 | 11.2 | 10.2 |

**Bolded** yields are statistically non-significant (p = 0.10 level) from the highest yielding test entry.

Silage analysis conducted by Dairyland Laboratories, Arcadia, WI.

"Milk Production" reprinted from Quality Factors table, based on UW Milk 2013 predicted milk model.

**Tifton, Georgia:**  
**Summer Annual Forage Performance, 2023, Dryland**

| Company or<br>Brand Name  | Hybrid or<br>Variety Name | Harvest Date |             | Season<br>Total |
|---------------------------|---------------------------|--------------|-------------|-----------------|
|                           |                           | 7-7-2023     | 8-29-2023   |                 |
| ----- dry tons/acre ----- |                           |              |             |                 |
| ALTA SEEDS                | ADV XS22060               | <b>5.62</b>  | <b>5.05</b> | <b>10.67</b>    |
| ALTA SEEDS                | ADV XS22008IG             | 4.70         | <b>4.46</b> | 9.17            |
| Dyna-Gro Seed             | Dynagraze II              | 4.62         | 3.85        | 8.46            |
| Dyna-Gro Seed             | Dynagraze II BMR          | 4.46         | 3.29        | 7.75            |
| Dyna-Gro Seed             | Fullgraze II BMR          | 4.52         | 2.87        | 7.39            |
| ALTA SEEDS                | ADV S6520                 | 4.05         | 2.88        | 6.93            |
| Dyna-Gro Seed             | Danny Boy II BMR          | 3.87         | 2.97        | 6.84            |
| ALTA SEEDS                | ADV XS005                 | 3.18         | 2.38        | 5.55            |
| Average                   |                           | 4.38         | 3.47        | 7.85            |
| LSD at 10% Level          |                           | 0.47         | 0.73        | 1.09            |
| Model R-squared           |                           | 0.98         | 0.96        | 0.97            |
| C.V.                      |                           | 9.0          | 17.4        | 11.6            |

**Bolded** yields are statistically non-significant ( $p = 0.10$  level) from the highest yielding test entry.

Planted: April 21, 2023.

Harvested: 1,815 (July 7) and 3,454 (Aug 29) GDD units after planting.  $50 \leq \text{Temp} \leq 100$  °F

Seeding Rate: 100,000 seeds per acre in 36-inch rows.

Soil Type: Tifton loamy sand.

Previous Crop: Corn.

Soil Test:  $P_2O_5 = 76$  lbs,  $K_2O = 137$  lbs, and  $pH = 6.1$ .

Fertilization: Preplant: 40 lb N, 10 lb S, 110 lb  $P_2O_5$ , and 80 lb  $K_2O$ /acre. Sidedress: 100 lb N and 23 lb S/acre.

Tillage: Conventional.

Herbicides: Dual Magnum and Atrazine.

Test conducted by M. Cofield, D. Dunn, and W. Mosteller.

# Insect Screening Results

## Evaluation of Insect, Disease, and Bird Damage in Grain, Silage and Forage Sorghum Hybrids in 2023

Xinzhi Ni, Daniel J. Mailhot, Karen R. Harris-Shultz, Joseph E. Knoll, Osariyekemwen Uyi, Michael D. Toews, Dustin Dunn, and G. David Buntin

### Basic field plot information:

The commercial hybrids of grain, silage and forage sorghum were evaluated at Tifton, GA to identify the best performing hybrids. For the silage and forage trials, the plots were planted as 20-foot, four-row plots in a randomized complete block design with three replications, while the grain sorghum trial was planted with a similar design of two-row plots and four replications. In contrast to previous growing season, the 2023 season had very low sorghum aphid infestations in all trials, possibly due to frequent rainfalls. While silage and forage sorghum trials were planted on April 21, 2023, the grain trial was planted on May 31, 2023. The forage trial was evaluated on July 3, 2023, prior to the harvest. The silage trial was evaluated on July 20, 2023, before the harvest. The grain sorghum trial was evaluated before harvest on September 21, 2023. A total of ten insect pests were observed throughout the 2023 field season foliar-feeding fall armyworm, sorghum aphid (*Melanaphis sorghi*, also known as sugarcane aphid), corn leaf aphid, and chinch bug at the seedling stage, and panicle/kernel-feeding insects included sorghum headworm complex (corn earworm and sorghum webworm), stink bugs (southern green and brown stink bugs), sorghum midge, and leaf-footed bug after flowering. Bird damage on grain sorghum was also evaluated. Although the infestations of some insect pests (such as, foliar-feeding fall armyworm and chinch bug, and kernel-feeding sorghum midge, stink bugs, and leaf-footed bug) occurred in 2023, they were not included in this report because their very low infestations caused minimal damage. For sorghum diseases, only prevalent anthracnose infection was evaluated. Also, bird damage was only evaluated on grain sorghum.

### Rating scales used for hybrid evaluations:

In all trials, sorghum growth stage was assessed using a scale of 0-9 based on the publication S3 by the Kansas-State Research and Extension Service (<https://bookstore.ksre.ksu.edu/pubs/MF3234.pdf>). The number of sorghum aphids was estimated by averaging the number of aphids on 6 mid-canopy leaves (or top and bottom green leaves of three randomly sampled plants) per plot. The number of aphids per leaf was estimated using the following scale: 0=no aphid, and then estimated as 1 =1-25 aphids, 2 =26-50, 3 =51-100, 4 =101-500, 5 =501-1000, and 6 =over 1000 aphids. Aphid damage on plants was rated using a 1-9 scale. The scale of 1-9 is described as follows; 1 = no damage, 2 = 1-20%, 3 = 21-30%, 4 = 31-40%, 5 = 41-50%, 6 = 51-60%, 7 = 61-70%, 8 = 71-80%, and 9 = greater than 81% of the leaves are dying, which also included aphid-killed plants. However, in grain sorghum, sorghum aphid infestation was limited, but corn leaf aphid infestation and damage on whorl tissue was prevalent. Corn leaf aphid damage on sorghum plants was assessed at pre-flowering, using a binary rating scale, 0 = no infestation; and 1 = whorl tissue of sorghum plants was colonized with corn leaf aphids, and purple leaf discoloration was observed. In addition, headworm, and bird damage were assessed by the percentage of damaged kernels per panicle for the grain sorghum trial.

Severity of anthracnose infection was rated using a 1-5 scale, where 1 = no symptoms, 2 = colored spots on leaves but no sporulation, 3 = some sporulation on lower leaves, 4 = moderate sporulation, 5 = heavy sporulation up to the flag leaf.

#### **Hybrid ranking criteria:**

The overall hybrid rankings in 2023 were based on principal component analysis results. Hybrids in a trial were designated as Very Good (VG), Good (G), Fair (F), and Poor (P), respectively.

#### **Results from grain, silage and forage sorghum trials:**

A total of 20 grain sorghum hybrids (**Table 1**) were evaluated. While low sorghum aphid infestation and minimal sorghum aphid damage was observed, corn leaf aphid infestation was prevalent on whorl tissue at pre-flowering stage in 2023 as shown in Table 1. Thus, the parameters used for grain sorghum evaluation included corn leaf aphid, headworm, and bird damage, as well as anthracnose infection severity. Four hybrids were ranked VG in 2023, and the four best hybrids are 'M67GB87', 'BH 5755', 'GX22932', and 'GX22936'.

For the silage trial, a total of 21 hybrids were evaluated (**Table 2**). In general, low sorghum aphid infestation and damage on early planted sorghum plants were observed in 2023. The hybrid ranking was based on the results of the principal component analysis with four parameters as shown in the table. Five of the 21 sorghum hybrid entries were ranked as VG. The five sorghum hybrids are 'ADV F7424', 'ADV XS2208IG', 'AF7401', 'F74FS72 BMR' and 'SWFS9001'.

Eight forage sorghum hybrids were evaluated as shown in **Table 3**. Insect and disease damage ratings were relatively low at the sampling date at pre-harvest as shown in **Table 3**. One hybrid ('ADV XS005') was rated VG.

Growers should select high-yielding insect- and disease-resistant hybrids, the most economical pest management strategy for sorghum production in our region. Producers should be aware that later plantings generally experience increased insect pest and disease pressure. For further integrated insect management information, please consult with your local County Agents and/or Extension Entomologists.

We appreciate our team members' efforts on completing these trials in 2023. The grain sorghum trial was planted on the Gibbs Research Farm and maintained by Penny Tapp (Crop Genetics and Breeding Research Unit, USDA-ARS), and Annalyn Burnham and Emily Purvis (University of Georgia, Tifton), while silage and forage sorghum trials were planted on the Plant Science Farm, and experimental plots were maintained and harvested by Dustin Dunn, Keith Cawley, Marcus Cofield, and Wes Mosteller (University of Georgia, Tifton). All data collections were assisted by Penny Tapp and Michael Purvis (Crop Genetics and Breeding Research Unit, USDA-ARS), and Annalynn Burnham (University of Georgia, Tifton).

**Table 1. Evaluation of 20 Grain Sorghum Hybrids for Resistance to Corn Leaf Aphid, Headworm, Bird and Anthracnose Damage in 2023 at Tifton, Georgia<sup>1</sup>**

| Brand            | Hybrid    | Headworm Damage (%) <sup>2</sup> | Corn Leaf Aphid Damage | Bird Damage (%) <sup>4</sup> | Anthracnose Severity (1-5) <sup>5</sup> | Hybrid Ranking (2023) <sup>6</sup> | Hybrid Ranking with 3-year Data <sup>7</sup> |
|------------------|-----------|----------------------------------|------------------------|------------------------------|---|------------------------------------|--|
| Dyna-Gro Seed    | M67GB87   | 10.4                             | 0.5                    | 12.9                         | 1.9                                     | VG                                 | VG   |
| BH Genetics      | BH 5755   | 9.0                              | 0.5                    | 10.8                         | 2.0                                     | VG                                 | .  |
| Dyna-Gro Seed    | GX22932   | 10.2                             | 0.5                    | 11.8                         | 1.8                                     | VG                                 | G  |
| Dyna-Gro Seed    | GX22936   | 8.8                              | 0.5                    | 5.8                          | 2.0                                     | VG                                 | .  |
| DEKALB           | DKS 50-07 | 10.4                             | 1                      | 12.9                         | 2.1                                     | G                                  | G  |
| Sorghum Partners | SWGS4902  | 15.4                             | 1                      | 7.5                          | 2.0                                     | G                                  | .  |
| Dyna-Gro Seed    | M60GB31   | 11.7                             | 1                      | 14.2                         | 2.0                                     | G                                  | VG-  |
| BH Genetics      | BH 4220   | 10.8                             | 1                      | 12.1                         | 2.1                                     | G                                  | .  |
| Dyna-Gro Seed    | GX22934   | 19.2                             | 1                      | 11.3                         | 2.0                                     | G                                  | G-   |
| BH Genetics      | BH 4041   | 14.2                             | 0.75                   | 12.5                         | 2.0                                     | G                                  | .  |
| Dyna-Gro Seed    | M72GB71   | 15.4                             | 1                      | 13.3                         | 2.0                                     | G                                  | VG-  |
| Dyna-Gro Seed    | M63GB78   | 11.7                             | 1                      | 15.4                         | 1.8                                     | G                                  | F  |
| DEKALB           | DKS 54-07 | 6.3                              | 0.75                   | 22.1                         | 2.4                                     | F                                  | G  |
| Sorghum Partners | SP67B17   | 11.7                             | 1                      | 13.8                         | 2.0                                     | F                                  | F-   |
| DEKALB           | DKS 44-07 | 10.0                             | 1                      | 14.6                         | 2.1                                     | P                                  | P+   |
| Dyna-Gro Seed    | GX22937   | 10.0                             | 1                      | 8.3                          | 2.3                                     | P                                  | .  |
| DEKALB           | DKS 36-07 | 10.0                             | 1                      | 14.6                         | 2.0                                     | P                                  | F  |
| Sorghum Partners | SP7715    | 11.3                             | 1                      | 17.1                         | 2.5                                     | P                                  | .  |
| Dyna-Gro Seed    | M59GB94   | 6.7                              | 1                      | 13.8                         | 2.1                                     | P                                  | F-   |
| Dyna-Gro Seed    | M71GR91   | 3.8                              | 1                      | 15.4                         | 2.4                                     | P                                  | P+   |

1. In 2023, the grain sorghum trial with 20 entries and four replications was planted on May 31, 2023. Headworm and bird damage were assessed prior to harvest on September 21, 2023. Headworm and bird damage were assessed by percentage of lost kernels per panicle. Because very few sorghum aphid colonies were observed throughout the crop cycle, sorghum aphid damage was not assessed in 2023.
2. Headworm damage (%) was evaluated as the percentage of grain kernels that were damaged by headworm feeding on the panicles.
3. Corn leaf aphid infestation and damage on whorl tissue was assessed at pre-flowering on July 17, 2023, using a binary rating scale (0 = no infestation, 1 = whorl tissue of sorghum plants was colonized with corn leaf aphids, and purple leaf discoloration was observed).
4. Bird damage was assessed by percentage of lost kernels.
5. Severity of anthracnose infection was rated on August 17, 2023, using a 1-5 scale with 1 = no damage, and 5 = all leaves were discolored.
6. Hybrid rating was based on the results of the principal analysis using four parameters (i.e., headworm, corn leaf aphid and bird damage, and anthracnose infection severity) of all 20 hybrids.
7. Hybrid performance rating with 3-year (2021-2023) data to show consistency of hybrid performance through years. The ranking with a "-" sign means the ranking varied from year to year.

**Table 2. Evaluation of 24 Silage Sorghum Hybrids for Resistance to Sorghum Aphid (SA) and Anthracnose in 2023 at Tifton, Georgia<sup>1</sup>**

| Brand            | Hybrid           | Sorghum                           |                                      |                                 |   | Hybrid Ranking (2023) <sup>6</sup> | Hybrid Ranking with 2-year Data <sup>7</sup> |
|------------------|------------------|-----------------------------------|--------------------------------------|---------------------------------|---|------------------------------------|--|
|                  |                  | Sorghum Growth Stage <sup>2</sup> | Number of Sorghum Aphid <sup>3</sup> | Aphid Damage (1-9) <sup>4</sup> | Anthracnose Severity (1-5) <sup>5</sup> |                                    |  |
| ALTA SEEDS       | ADV F7424        | 7.0                               | 140                                  | 1.0                             | 1.0                                     | VG                                 | .  |
| ALTA SEEDS       | ADV XS22008IG    | 6.0                               | 33                                   | 1.0                             | 1.0                                     | VG                                 | .  |
| ALTA SEEDS       | AF7401           | 7.0                               | 39                                   | 1.0                             | 1.0                                     | VG                                 | .  |
| Dyna-Gro Seed    | F74FS72 BMR      | 6.7                               | 0                                    | 1.0                             | 1.0                                     | VG                                 | G  |
| Sorghum Partners | SWFS9001         | 7.0                               | 3                                    | 1.0                             | 1.3                                     | VG                                 | .  |
| Sorghum Partners | NK300            | 7.0                               | 95                                   | 1.0                             | 1.3                                     | G                                  | VG-  |
| Sorghum Partners | SP1727 MS BMR    | 7.0                               | 156                                  | 1.2                             | 1.3                                     | G                                  | F  |
| Sorghum Partners | SP2606 BMR       | 7.0                               | 85                                   | 1.0                             | 2.0                                     | G                                  | .  |
| Dyna-Gro Seed    | Super Sile 30    | 7.0                               | 144                                  | 1.1                             | 1.3                                     | G                                  | VG-  |
| ALTA SEEDS       | ADV F7232        | 6.7                               | 4                                    | 1.0                             | 1.3                                     | F                                  | .  |
| ALTA SEEDS       | ADV F8484IG      | 6.7                               | 0                                    | 1.0                             | 1.3                                     | F                                  | .  |
| ALTA SEEDS       | ADV S6520        | 4.7                               | 1                                    | 1.0                             | 1.0                                     | F                                  | .  |
| ALTA SEEDS       | ADV XS22060      | 4.3                               | 6                                    | 1.0                             | 1.7                                     | F                                  | .  |
| ALTA SEEDS       | ADV XS005        | 7.3                               | 0                                    | 1.0                             | 1.7                                     | P                                  | .  |
| Dyna-Gro Seed    | Danny Boy II BMR | 4.7                               | 1                                    | 1.0                             | 2.0                                     | P                                  | .  |
| Dyna-Gro Seed    | Dynagraze II     | 7.0                               | 6                                    | 1.0                             | 2.3                                     | P                                  | .  |
| Dyna-Gro Seed    | Dynagraze II BMR | 6.3                               | 4                                    | 1.0                             | 1.7                                     | P                                  | .  |
| Dyna-Gro Seed    | F74FS23 BMR      | 7.0                               | 13                                   | 1.0                             | 1.7                                     | P                                  | F  |
| Dyna-Gro Seed    | Fullgraze II BMR | 6.0                               | 4                                    | 1.0                             | 1.7                                     | P                                  | .  |
| Sorghum Partners | SS304            | 7.0                               | 14                                   | 1.0                             | 1.7                                     | P                                  | G  |
| Dyna-Gro Seed    | Super Sile 20    | 7.0                               | 3                                    | 1.0                             | 1.5                                     | P                                  | F-   |

1. In 2023, the silage sorghum trial consisted of 24 sorghum hybrids with four replications was planted on April 21, 2023. The number of the sorghum aphids (SA) were estimated on the top and bottom green leaves of three randomly sampled plants per plot. In addition, growth stage, lodging, aphid damage, and anthracnose infection were assessed per plot prior to harvest on July 20, 2023. Because only a few sugarcane aphids were recorded in this trial, the number of alates and apterae on top and bottom of the sampled plants were combined for statistical analysis.

2. Growth stage was assessed using a scale of 0-9 based on the publication S3 by the K-State Research and Extension Service.

3. The number of winged and wingless aphids were combined using the data collected on top and bottom green leaves from three randomly sampled plants per plot. The number of the winged sugarcane aphids were counted, while the number of wingless sugarcane aphids was sampled on each sampled leaf. The estimate of the wingless aphids using the scale of 0=no aphid, and then estimated as 1=1-25 aphids, 2=26-50, 3=51-100, 4=101-500, 5=501-1000, and 6=over 1000 aphids. The mean of a scale range was used for calculating the number of aphids presented in the table.

4. The average of sorghum aphid damage rating per plot was evaluated on July 20, 2023 using a scale of 1-9; where 1=no damage, 2=1-20%; 3=21-30%, 4=31-40%, 5=41-50%, 6=51-60%, 7=61-70%, 8=71-80%, and 9=greater than 81% of the leaves are dying, which also included aphid-killed plants.

5. Severity of anthracnose infection was rated using a 1-5 scale with 1= no damage, and 5=all leaves were discolored.

6. The hybrid ranking was based on the results of the principal component analysis using the data of five parameters (i.e., growth stage, or maturity, number of sorghum aphids, sorghum aphid damage, and anthracnose infection) of the 24 silage sorghum hybrids. The rankings are: Very Good (VG), Good (G), Fair (F), and Poor (P).

7. Hybrid performance ranked with over two-year data to show consistency of hybrid performance through years. The ranking with a "+" or "-" sign means the ranking varied from year to year.



**Table 3. Evaluation of 8 Forage Sorghum Hybrids for Resistance to Sorghum Aphid and Anthracnose in 2023 at Tifton, Georgia<sup>1</sup>**

| Brand         | Hybrid           | Growth Stage <sup>2</sup> | Number of Aphids <sup>3</sup> | Aphid Damage (1-9) <sup>4</sup> | Anthracnose Severity (1-5) <sup>5</sup> | Hybrid Ranking (2023) <sup>6</sup> | Hybrid Ranking with 2-year Data <sup>7</sup> |
|---------------|------------------|---------------------------|-------------------------------|---------------------------------|---|------------------------------------|--|
| ALTA SEEDS    | ADV XS005        | 6.0                       | 0                             | 1.0                             | 1.0                                     | VG                                 | .  |
| Dyna-Gro Seed | Danny Boy II BMR | 4.0                       | 5                             | 1.0                             | 1.3                                     | G                                  | G  |
| ALTA SEEDS    | ADV XS22008IG    | 4.7                       | 6                             | 1.0                             | 1.0                                     | G                                  | .  |
| Dyna-Gro Seed | Fullgraze II BMR | 4.0                       | 2                             | 1.0                             | 1.3                                     | G                                  | F+   |
| ALTA SEEDS    | ADV S6520        | 4.0                       | 2                             | 1.0                             | 1.3                                     | G                                  | .  |
| ALTA SEEDS    | ADV XS22060      | 4.0                       | 10                            | 1.0                             | 1.0                                     | G                                  | .  |
| Dyna-Gro Seed | Dynagraze II BMR | 6.0                       | 0                             | 1.0                             | 2.0                                     | F                                  | G-   |
| Dyna-Gro Seed | Dynagraze II     | 6.0                       | 28                            | 1.0                             | 2.0                                     | P                                  | F  |

1. The forage sorghum trial consisted of 8 sorghum hybrids and three replications was planted on April 21, 2023. The number of sorghum aphid [also known as the sugarcane aphid] on the top and bottom leaves and aphid damage was estimated on three randomly selected plants per plot. In addition, growth stage, lodging and anthracnose damage were also assessed per plot prior to harvest on July 3 2023. Sugarcane aphid infestations were relatively low in 2023. The number of winged and wingless aphids on top and bottom leaves of the sampled plants were combined as the number of aphids per leaf for statistical analysis.

2. Growth stage was assessed using a scale of 0-9 based on the publication S3 by the K-State Research and Extension Service.

3. The number of winged and wingless sorghum aphids were combined using the data collected on top and bottom green leaves from three randomly sampled plants per plot. The number of the winged sorghum aphids were counted, while the number of wingless sorghum aphids per sampled leaf was estimated. The estimate of the wingless aphids using the scale of 0=no aphid, and then estimated as 1=1-25 aphids, 2=26-50, 3=51-100, 4=101-500, 5=501-1000, and 6=over 1000 aphids. The median of each estimating range was used for calculating number of aphids used for statistical analysis.

4. The average of sorghum aphid damage rating per plot was evaluated using a scale of 1-9; where 1=no damage, 2=1-20%; 3=21-30%, 4=31-40%, 5=41-50%, 6=51-60%, 7=61-70%, 8=71-80%, and 9=greater than 81% of the leaves are dying, which also included aphid-killed plants.

5. Severity of anthracnose infection was rated using a 1-5 scale with 1=no damage, and 5=all leaves were discolored.

6. The hybrid ranking was based on the results of analysis of each parameters. Very few sorghum aphids, low aphid damage, and very limited anthracnose infection was recorded prior to the July harvest as described previously. The rankings are: Very Good (VG), Good (G), Fair (F), and Poor (P).

7. Hybrid performance ranked with over two-year data to show consistency of hybrid performance through years. The ranking with a "+" or "-" sign means the ranking varied from year to year.

## Cooperators

Mr. A. Black, Southeast Research & Education Center, Midville, Georgia  
Mr. R. Covington, Mountain Research & Education Center, Blairsville, Georgia  
Mr. J. Gassett, Field Research Services, UGA-Griffin, Griffin, Georgia  
Ms. K. Hammond, Northwest Research & Education Center, Calhoun, Georgia  
Dr. P. Knox, Crop and Soil Sciences Department, Athens, Georgia  
Mr. S. Rogers, Southwest Research & Education Center, Plains, Georgia  
Mr. E. T. Ross, Field Research Services, UGA-Tifton, Tifton, Georgia

## Contributors

The following individuals contributed to the gathering of data and preparation of this report:

Griffin - S. Brannon, Y. Barton, B. Byous, K. Cassell, J. Arrington, G. Ware, and B. Wood.

Tifton - T. Bailey, H. Barry, A. Burgess, M. Cofield,  
W. Mosteller, A. Skipper, P. Tapp, and M. Tomberlin

Blairsville - C. Graham, L. Lee, D. Patterson, and D. Rogers

Midville - J. Lanier, R. Milton, and T. Woodward

Calhoun - M. Tucker and T. Turnquist

Plains - W. Jones and D. Pearce

## Authors

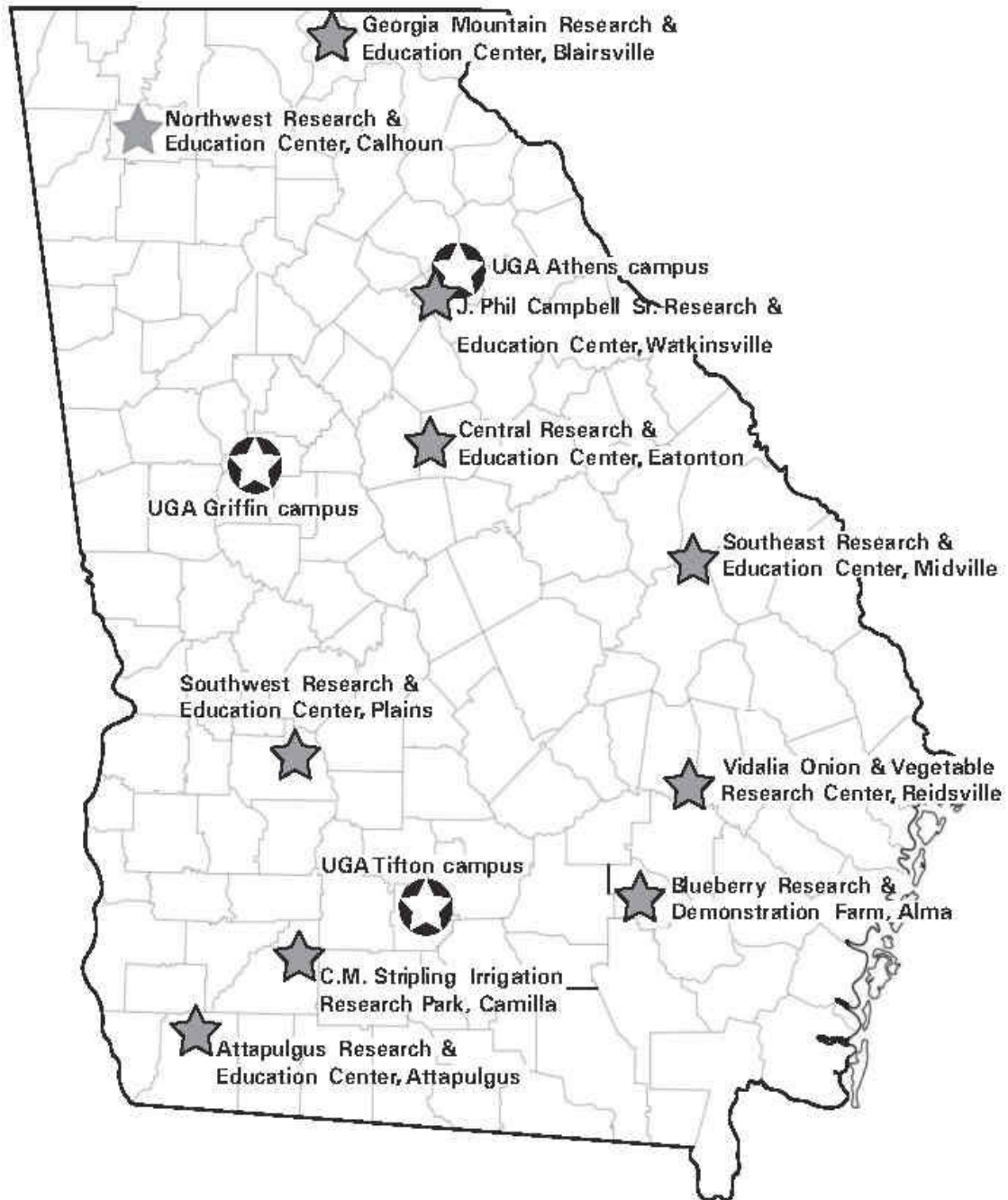
Dr. Daniel J. Mailhot is the director of the Statewide Variety Testing program and based at Griffin Campus.

Dustin Dunn and Gary Ware are Research Professionals managing field trials from Tifton and Griffin campuses, respectively.

Dr. David G. Buntin, Entomology Department, conducts insect tolerance screenings and is based at Griffin Campus.

Dr. Xinzhi Ni, USDA-ARS Crop Genetics & Breeding Research Unit, conducts insect tolerance screenings at Tifton Campus.

Dr. Michael D. Toews, Entomology Department, conducts insect tolerance screenings and is Assistant Dean and Campus Director at Tifton.



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★ Research Center

# University of Georgia

Agricultural Experiment Stations

Athens, Georgia 30602

Harshavardhan Thippareddi, Associate Dean for Research

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