

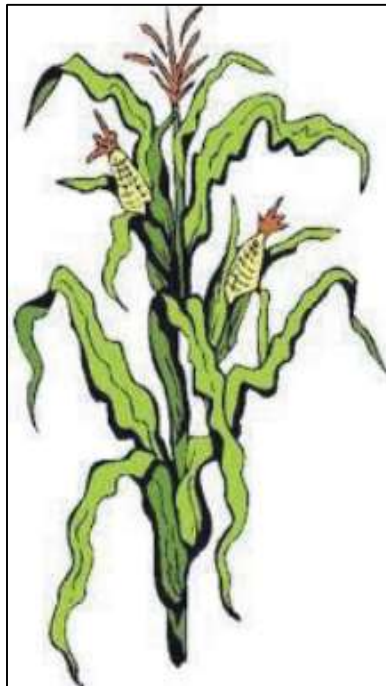
Georgia

2022 Corn, Sorghum,

and Summer Annual Forages

Performance Tests

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Georgia

2022 Corn, Sorghum, and Summer Annual Forages Performance Tests

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Statewide Yield Summary: Corn Grain Performance, Georgia, 2022

Company or Brand Name	Hybrid Name	RM	Bt-trait	Tifton	Midville	Plains	Griffin	Blairsville	Statewide Average
				Irrigated				Dryland	
----- bu/acre -----									
DEKALB	DKC68-35 VT2P	118	Yes	243	264	219	304	356	278
INTEGRA	CX001117	117	Yes	243	270	215	287	324	269
BH Genetics	BH 8721VT2P	117	Yes	230	278	198	275	355	267
MorCorn	MC 4725	117	Yes	249	264	194	267	340	264
Revere Seed	Revere 1898 TC	118	Yes	226	244	212	257	378	263
DEKALB	DKC68-69 VT2P	118	Yes	247	260	197	255	346	262
Dyna-Gro	D58VC65	118	Yes	245	245	195	280	339	261
DEKALB	DKC68-48 SS	118	Yes	245	272	199	260	310	257
MorCorn	MC 4527	115	Yes	227	254	191	252	357	257
Progeny	PGY 9117 VT2P	117	Yes	245	262	191	250	338	256
INTEGRA	6410	114	Yes	216	268	195	249	343	254
INTEGRA	6641	116	Yes	228	263	201	272	309	254
AgraTech	888VT2P	119	Yes	234	241	183	239	365	254
Progeny	PGY 2216 VT2P	116	Yes	248	272	172	231	341	253
Augusta	A1367-3220GT		Yes	240	255	180	256	339	253
MorCorn	MC 4161	111	Yes	256	241	193	241	325	252
Gateway Seed	2716	116	Yes	232	244	172	253	361	252
Revere Seed	Revere 1627 TC	116	Yes	240	234	207	246	324	252
Revere Seed	Revere 1577 VT2P	115	Yes	246	246	192	268	310	252
Gateway Seed	1719	119	Yes	241	254	188	235	333	251
AgraTech	808VT2P	115	Yes	228	232	215	268	319	251
Revere Seed	Revere 1919 VT2P	118	Yes	243	253	193	243	317	251
BH Genetics	BH 8412VT2P	114	Yes	231	246	172	265	340	250
DEKALB	DKC68-95 SS	118	Yes	232	248	178	259	343	250
Innvictis	MEX1791VT2P		Yes	220	246	185	262	328	249
INTEGRA	6493	114	Yes	237	239	205	266	294	249
Stine	9814-20	118	Yes	230	250	192	234	334	249
Pioneer	P1289YHR	112	Yes	241	251	187	190	370	248
BH Genetics	BH 8412RR	114	No	232	251	198	269	285	248
BH Genetics	BH 8820VT2P	118	Yes	233	225	187	264	323	247
AgriGold	A643-52 VT2Pro	113	Yes	246	250	216	219	304	247
Augusta	A9967-3000GT		Yes	228	256	189	262	300	247
Gateway Seed	9714	114	Yes	226	232	185	261	326	246
MorCorn	MC 4311	113	Yes	216	241	192	262	320	246
Innvictis	A1548DGV2P		Yes	221	231	214	247	316	246
Stine	9816-20		No	229	253	149	253	346	246
Revere Seed	Revere 1307 TC	113	Yes	221	237	181	251	347	245
BH Genetics	BH 8660RR	116	No	212	230	186	224	358	243
AgraTech	1777GT	114	No	251	261	194	221	296	243
INTEGRA	6342	113	Yes	225	232	207	238	299	243
Progeny	PGY 2118 VT2P	118	Yes	218	233	181	262	334	243
Progeny	PGY 2215 TRE	115	Yes	215	243	215	221	312	240
INTEGRA	6811	118	Yes	210	229	185	218	356	240
Revere Seed	Revere 1525 V	115	Yes	211	222	204	252	311	239
Revere Seed	Revere 1707 VT2P	117	Yes	218	232	177	260	307	239
Progeny	PGY 9114 VT2P	114	Yes	228	223	194	252	295	238
AgriGold	A647-79 VT2Pro	117	Yes	239	228	200	234	291	238
INTEGRA	6720	117	Yes	214	233	179	243	321	238
AgriGold	A6659 RR	116	No	238	254	171	220	308	238
AgraTech	69RR	114	No	212	232	206	262	280	238

Statewide Yield Summary: Corn Grain Performance, Georgia, 2022 (Continued)

Company or Brand Name	Hybrid Name	RM	Bt-trait	Tifton	Midville	Plains	Griffin	Blairsville	Statewide Average
				Irrigated				Dryland	
INTEGRA	6533	115	No	210	245	170	216	348	237
Pioneer	P2042VYHR	120	Yes	239	220	166	228	331	237
Innqvictis	A1257VT2P RIB		Yes	213	226	169	225	349	236
Progeny	PGY 8116 SS	116	Yes	218	234	192	226	302	236
Dyna-Gro	D57VC53	117	Yes	224	228	177	243	299	234
Stine	9817-30		Yes	195	227	189	237	315	233
Stine	9752-32	112	Yes	207	210	184	237	293	225
INTEGRA	6588	115	Yes	219	228	173	175	323	222
Stine	9808E-20	115	No	192	198	175	223	283	213
Average				229	243	190	247	326	247
LSD				16	14	15	22	33	10
Model R-squared				0.75	0.79	0.77	0.75	0.62	0.89

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, 2022, Irrigated

Company or Brand Name	Hybrid Name	Relative Maturity days	Yield bu/acre	Grain Moisture %	Ears/100 plants no.	Actual Population plants/acre	Lodging %
MorCorn	MC 4161	111	256	15.7	.	.	.
AgraTech	1777GT	114	251	17.1	.	.	.
MorCorn	MC 4725	117	249	17.1	.	.	.
Progeny	PGY 2216 VT2P	116	248	17.8	.	.	.
DEKALB	DKC68-69 VT2P	118	247	17.5	.	.	.
AgriGold	A643-52 VT2Pro	113	246	17.7	.	.	.
Revere Seed	Revere 1577 VT2P	115	246	16.3	.	.	.
DEKALB	DKC68-48 SS	118	245	17.0	.	.	.
Dyna-Gro	D58VC65	118	245	16.5	.	.	.
Progeny	PGY 9117 VT2P	117	245	17.4	.	.	.
INTEGRA	CX001117	117	243	16.9	.	.	.
Revere Seed	Revere 1919 VT2P	118	243	17.6	.	.	.
DEKALB	DKC68-35 VT2P	118	243	16.7	.	.	.
Gateway Seed	1719	119	241	17.7	.	.	.
Pioneer	P1289YHR	112	241	16.4	.	.	.
Revere Seed	Revere 1627 TC	116	240	17.0	.	.	.
Augusta	A1367-3220GT		240	17.4	.	.	.
AgriGold	A647-79 VT2Pro	117	239	16.9	.	.	.
Pioneer	P2042VYHR	120	239	17.9	.	.	.
AgriGold	A6659 RR	116	238	16.8	.	.	.
INTEGRA	6493	114	237	16.4	.	.	.
AgraTech	888VT2P	119	234	17.7	.	.	.
BH Genetics	BH 8820VT2P	118	233	17.1	.	.	.
Gateway Seed	2716	116	232	16.4	.	.	.
BH Genetics	BH 8412RR	114	232	16.3	.	.	.
DEKALB	DKC68-95 SS	118	232	17.5	.	.	.
BH Genetics	BH 8412VT2P	114	231	16.3	.	.	.
Stine	9814-20	118	230	17.2	.	.	.
BH Genetics	BH 8721VT2P	117	230	17.2	.	.	.
Stine	9816-20		229	17.5	.	.	.
INTEGRA	6641	116	228	16.9	.	.	.
Progeny	PGY 9114 VT2P	114	228	16.1	.	.	.
AgraTech	808VT2P	115	228	16.6	.	.	.
Augusta	A9967-3000GT		228	16.8	.	.	.
MorCorn	MC 4527	115	227	15.9	.	.	.
Gateway Seed	9714	114	226	15.8	.	.	.
Revere Seed	Revere 1898 TC	118	226	16.5	.	.	.
INTEGRA	6342	113	225	15.7	.	.	.
Dyna-Gro	D57VC53	117	224	18.4	.	.	.
Revere Seed	Revere 1307 TC	113	221	15.7	.	.	.
Innictis	A1548DGV2P		221	16.4	.	.	.
Innictis	MEX1791VT2P		220	18.2	.	.	.
INTEGRA	6588	115	219	17.0	.	.	.
Progeny	PGY 8116 SS	116	218	15.8	.	.	.
Progeny	PGY 2118 VT2P	118	218	17.9	.	.	.
Revere Seed	Revere 1707 VT2P	117	218	17.6	.	.	.
MorCorn	MC 4311	113	216	15.6	.	.	.
INTEGRA	6410	114	216	16.4	.	.	.
Progeny	PGY 2215 TRE	115	215	16.5	.	.	.
INTEGRA	6720	117	214	16.5	.	.	.

Tifton, Georgia:
Corn Grain Performance, 2022, Irrigated (Continued)

Company or Brand Name	Hybrid Name	Relative Maturity days	Yield bu/acre	Grain Moisture %	Ears/ 100 plants no.	Actual Population plants/acre	Lodging %
Innvictis	A125VT2P RIB		213	16.1	.	.	.
AgraTech	69RR	114	212	16.6	.	.	.
BH Genetics	BH 8660RR	116	212	17.4	.	.	.
Revere Seed	Revere 1525 V	115	211	16.4	.	.	.
INTEGRA	6533	115	210	16.7	.	.	.
INTEGRA	6811	118	210	17.4	.	.	.
Stine	9752-32	112	207	15.8	.	.	.
Stine	9817-30		195	16.3	.	.	.
Stine	9808E-20	115	192	17.2	.	.	.
Average			229	16.8	-	-	-
LSD at 10% Level			16	0.5	-	-	-
Model R-squared			0.75	0.84	-	-	-

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

Planted: April 11, 2022.

Harvested: September 1, 2022.

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

Soil Type: Tifton loamy sand.

Soil Test: P₂O₅ = 100 lbs, K₂O = 171 lbs, and pH = 7.1.

Fertilization: Preplant: 130 lb N, 10 lb S, 180 lb P₂O₅, and 300 lb K₂O/acre. Sidedress: 260 lb N and 46 lb S/acre.

Previous Crop: Soybeans.

Management: Conventional tillage. Warrant, Zidua and atrazine used for weed control.

Test conducted by R. Brooke, K. Cawley, M. Cofield and D. Dunn.

Midville, Georgia: Corn Grain Performance, 2022, Irrigated

Company or Brand Name	Hybrid Name	Relative Maturity days	Yield bu/acre	Grain Moisture %	Ears/100 plants no.	Actual Population plants/acre	Lodging %
BH Genetics	BH 8721VT2P	117	278	20.2	.	.	.
DEKALB	DKC68-48 SS	118	272	19.6	.	.	.
Progeny	PGY 2216 VT2P	116	272	20.5	.	.	.
INTEGRA	CX001117	117	270	19.3	.	.	.
INTEGRA	6410	114	268	20.1	.	.	.
MorCorn	MC 4725	117	264	20.0	.	.	.
DEKALB	DKC68-35 VT2P	118	264	20.4	.	.	.
INTEGRA	6641	116	263	18.6	.	.	.
Progeny	PGY 9117 VT2P	117	262	20.3	.	.	.
AgraTech	1777GT	114	261	18.8	.	.	.
DEKALB	DKC68-69 VT2P	118	260	21.1	.	.	.
Augusta	A9967-3000GT		256	19.4	.	.	.
Augusta	A1367-3220GT		255	21.0	.	.	.
Gateway Seed	1719	119	254	20.8	.	.	.
AgriGold	A6659 RR	116	254	19.1	.	.	.
MorCorn	MC 4527	115	254	19.3	.	.	.
Stine	9816-20		253	20.2	.	.	.
Revere Seed	Revere 1919 VT2P	118	253	19.8	.	.	.
BH Genetics	BH 8412RR	114	251	20.0	.	.	.
Pioneer	P1289YHR	112	251	18.8	.	.	.
AgriGold	A643-52 VT2Pro	113	250	20.1	.	.	.
Stine	9814-20	118	250	19.4	.	.	.
DEKALB	DKC68-95 SS	118	248	19.3	.	.	.
Innvictis	MEX1791VT2P		246	20.3	.	.	.
Revere Seed	Revere 1577 VT2P	115	246	18.1	.	.	.
BH Genetics	BH 8412VT2P	114	246	18.1	.	.	.
Dyna-Gro	D58VC65	118	245	19.6	.	.	.
INTEGRA	6533	115	245	19.3	.	.	.
Gateway Seed	2716	116	244	19.5	.	.	.
Revere Seed	Revere 1898 TC	118	244	18.7	.	.	.
Progeny	PGY 2215 TRE	115	243	18.6	.	.	.
MorCorn	MC 4161	111	241	17.7	.	.	.
AgraTech	888VT2P	119	241	19.6	.	.	.
MorCorn	MC 4311	113	241	18.1	.	.	.
INTEGRA	6493	114	239	18.4	.	.	.
Revere Seed	Revere 1307 TC	113	237	17.5	.	.	.
Revere Seed	Revere 1627 TC	116	234	19.6	.	.	.
Progeny	PGY 8116 SS	116	234	19.9	.	.	.
INTEGRA	6720	117	233	19.1	.	.	.
Progeny	PGY 2118 VT2P	118	233	19.3	.	.	.
Revere Seed	Revere 1707 VT2P	117	232	20.9	.	.	.
INTEGRA	6342	113	232	18.1	.	.	.
Gateway Seed	9714	114	232	18.0	.	.	.
AgraTech	69RR	114	232	19.6	.	.	.
AgraTech	808VT2P	115	232	19.5	.	.	.
Innvictis	A1548DGV2P		231	19.8	.	.	.
BH Genetics	BH 8660RR	116	230	18.5	.	.	.
INTEGRA	6811	118	229	21.7	.	.	.
Dyna-Gro	D57VC53	117	228	20.3	.	.	.
INTEGRA	6588	115	228	19.0	.	.	.

**Midville, Georgia:
Corn Grain Performance, 2022, Irrigated (Continued)**

Company or Brand Name	Hybrid Name	Relative Maturity days	Yield bu/acre	Grain Moisture %	Ears/ 100 plants no.	Actual Population plants/acre	Lodging %
AgriGold	A647-79 VT2Pro	117	228	19.8	.	.	.
Stine	9817-30		227	18.9	.	.	.
Innvictis	A1257VT2P RIB		226	18.5	.	.	.
BH Genetics	BH 8820VT2P	118	225	20.3	.	.	.
Progeny	PGY 9114 VT2P	114	223	18.7	.	.	.
Revere Seed	Revere 1525 V	115	222	19.0	.	.	.
Pioneer	P2042VYHR	120	220	19.6	.	.	.
Stine	9752-32	112	210	18.3	.	.	.
Stine	9808E-20	115	198	23.2	.	.	.
Average			243	19.5	-	-	-
LSD at 10% Level			14	0.9	-	-	-
Model R-squared			0.79	0.79	-	-	-

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

Planted: April 26, 2022.

Harvested: September 7, 2022.

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

Soil Type: Dothan sandy loam.

Soil Test: P₂O₅ = 60 lbs, K₂O = 142 lbs, and pH = 6.3.

Fertilization: Preplant: 56 lb N, 10 lb S, 85 lb P₂O₅, and 180 lb K₂O/acre. Sidedress: 266 lb N and 47 lb S/acre.

Previous Crop: Soybeans.

Management: Conventional tillage. Warrant and atrazine used for weed control.

Test conducted by R. Brooke, K. Cawley, M. Cofield, D. Dunn, J. Lanier, R. Milton and T. Woodward.

Plains, Georgia: Corn Grain Performance, 2022, Irrigated

Company or Brand Name	Hybrid Name	Relative Maturity days	Yield bu/acre	Grain Moisture %	Ears/100 plants no.	Actual Population plants/acre	Lodging %
DEKALB	DKC68-35 VT2P	118	219	17.8	89.3	31,607	4.2
AgriGold	A643-52 VT2Pro	113	216	16.6	98.3	33,200	0.1
Progeny	PGY 2215 TRE	115	215	16.6	97.8	33,014	0.4
INTEGRA	CX001117	117	215	17.3	98.7	30,695	0.8
AgraTech	808VT2P	115	215	17.5	96.9	32,092	0.2
Innvictis	A1548DGV2P		214	16.5	97.9	33,696	0.0
Revere Seed	Revere 1898 TC	118	212	16.5	96.7	30,856	2.9
INTEGRA	6342	113	207	16.6	91.5	33,035	0.2
Revere Seed	Revere 1627 TC	116	207	17.1	93.4	33,674	0.8
AgraTech	69RR	114	206	16.7	97.2	34,302	0.3
INTEGRA	6493	114	205	16.3	97.4	33,132	2.6
Revere Seed	Revere 1525 V	115	204	16.7	96.8	35,076	0.4
INTEGRA	6641	116	201	16.8	95.3	31,993	0.2
AgriGold	A647-79 VT2Pro	117	200	17.0	94.8	33,807	1.9
DEKALB	DKC68-48 SS	118	199	17.0	93.0	33,716	0.0
BH Genetics	BH 8412RR	114	198	16.5	102.4	31,008	0.4
BH Genetics	BH 8721VT2P	117	198	17.2	96.3	34,645	1.0
DEKALB	DKC68-69 VT2P	118	197	17.5	96.7	32,984	1.8
INTEGRA	6410	114	195	16.6	94.7	33,682	3.4
Dyna-Gro	D58VC65	118	195	16.6	88.1	34,303	3.3
MorCorn	MC 4725	117	194	17.1	95.1	31,866	2.8
Progeny	PGY 9114 VT2P	114	194	16.0	95.7	33,092	0.8
AgraTech	1777GT	114	194	16.2	92.6	34,025	1.9
MorCorn	MC 4161	111	193	15.8	96.6	33,815	3.4
Revere Seed	Revere 1919 VT2P	118	193	17.3	95.3	33,057	1.9
Revere Seed	Revere 1577 VT2P	115	192	16.5	97.1	34,511	0.1
MorCorn	MC 4311	113	192	16.1	99.1	31,277	0.3
Progeny	PGY 8116 SS	116	192	16.7	96.8	32,739	1.0
Stine	9814-20	118	192	17.8	93.7	32,049	0.3
Progeny	PGY 9117 VT2P	117	191	17.0	97.8	33,049	1.3
MorCorn	MC 4527	115	191	16.6	96.6	33,995	0.0
Stine	9817-30		189	16.9	97.0	33,826	0.4
Augusta	A9967-3000GT		189	17.3	94.9	32,191	0.4
Gateway Seed	1719	119	188	17.5	91.0	33,269	0.0
Pioneer	P1289YHR	112	187	16.6	97.3	32,681	0.6
BH Genetics	BH 8820VT2P	118	187	17.5	95.9	34,883	0.2
BH Genetics	BH 8660RR	116	186	16.8	91.0	31,734	0.0
Innvictis	MEX1791VT2P		185	17.6	101.3	33,242	1.6
Gateway Seed	9714	114	185	16.6	95.6	32,189	2.4
INTEGRA	6811	118	185	17.4	96.5	31,840	2.3
Stine	9752-32	112	184	16.6	91.2	30,148	0.4
AgraTech	888VT2P	119	183	17.5	96.7	33,160	2.0
Revere Seed	Revere 1307 TC	113	181	16.0	90.8	34,382	1.6
Progeny	PGY 2118 VT2P	118	181	17.6	95.2	32,762	1.2
Augusta	A1367-3220GT		180	17.3	99.2	32,007	0.0
INTEGRA	6720	117	179	15.9	97.4	33,530	3.7
DEKALB	DKC68-95 SS	118	178	17.6	99.1	32,422	2.2
Dyna-Gro	D57VC53	117	177	17.6	94.2	29,046	9.7
Revere Seed	Revere 1707 VT2P	117	177	17.9	94.5	32,526	2.1
Stine	9808E-20	115	175	16.8	95.7	33,391	0.6

**Plains, Georgia:
Corn Grain Performance, 2022, Irrigated (Continued)**

Company or Brand Name	Hybrid Name	Relative Maturity days	Yield bu/acre	Grain Moisture %	Ears/ 100 plants no.	Actual Population plants/acre	Lodging %
INTEGRA	6588	115	173	17.3	96.1	32,620	3.4
Gateway Seed	2716	116	172	17.6	90.8	32,834	0.0
Progeny	PGY 2216 VT2P	116	172	17.6	94.3	31,606	1.0
BH Genetics	BH 8412VT2P	114	172	16.6	96.2	32,089	0.2
AgriGold	A6659 RR	116	171	17.3	92.2	30,427	4.9
INTEGRA	6533	115	170	16.8	100.4	31,343	0.0
Innvictis	A1257VT2P RIB		169	16.0	93.2	31,968	3.8
Pioneer	P2042VYHR	120	166	17.1	91.7	31,672	0.2
Stine	9816-20		149	17.2	93.2	33,992	2.9
Average			190	16.9	95.5	32,746	1.5
LSD at 10% Level			15	0.5	6.1	2,504	2.8
Model R-squared			0.77	0.82	0.27	0.49	0.58

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

Planted: April 13, 2022.

Harvested: September 14, 2022.

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

Soil Type: Greenville sandy clay loam.

Soil Test: $P_2O_5 = 60$ lbs, $K_2O = 154$ lbs, and $pH = 6.3$.

Fertilization: Preplant: 100 lb N, 10 lb S, 100 lb P_2O_5 , and 180 lb K_2O /acre. Sidedress: 200 lb N and 36 lb S/acre.

Previous Crop: Peanuts.

Management: Conventional tillage. Warrant and atrazine used for weed control.

Note: Plant populations above 34,000 per acre in this test result from smaller-seeded varieties causing "doubles" on the planter plate. Populations below 34,000 are due to germination rates of less than 100%. Germination rates are primarily determined by the quality of seed lot obtained, and not the specific hybrid. So a low population number for a hybrid indicates it might not have reached its full yield potential in this test.

Test conducted by R. Brooke, K. Cawley, M. Cofield, D. Dunn, W. Jones and D. Pearce.

Griffin, Georgia: Corn Grain Performance, 2022, Irrigated

Company or Brand Name	Hybrid Name	Relative Maturity days	Yield bu/acre	Grain Moisture %	Ears/ 100 plants no.	Actual Population plants/acre	Lodging %
DEKALB	DKC68-35 VT2P	118	304	12.8	.	.	0.0
INTEGRA	CX001117	117	287	12.7	.	.	0.0
Dyna-Gro	D58VC65	118	280	12.8	.	.	0.0
BH Genetics	BH 8721VT2P	117	275	12.6	.	.	0.0
INTEGRA	6641	116	272	12.9	.	.	0.0
BH Genetics	BH 8412RR	114	269	12.5	.	.	0.0
Revere Seed	Revere 1577 VT2P	115	268	12.5	.	.	0.0
AgraTech	808VT2P	115	268	12.8	.	.	0.0
MorCorn	MC 4725	117	267	12.6	.	.	0.0
INTEGRA	6493	114	266	12.8	.	.	0.0
BH Genetics	BH 8412VT2P	114	265	12.7	.	.	0.0
BH Genetics	BH 8820VT2P	118	264	13.1	.	.	0.0
Innvictis	MEX1791VT2P		262	13.1	.	.	0.0
MorCorn	MC 4311	113	262	12.4	.	.	0.0
AgraTech	69RR	114	262	12.7	.	.	0.0
Augusta	A9967-3000GT		262	13.4	.	.	0.0
Progeny	PGY 2118 VT2P	118	262	12.8	.	.	0.0
Gateway Seed	9714	114	261	12.7	.	.	0.0
DEKALB	DKC68-48 SS	118	260	12.4	.	.	0.0
Revere Seed	Revere 1707 VT2P	117	260	13.1	.	.	0.0
DEKALB	DKC68-95 SS	118	259	12.4	.	.	0.0
Revere Seed	Revere 1898 TC	118	257	12.6	.	.	0.0
Augusta	A1367-3220GT		256	12.9	.	.	0.0
DEKALB	DKC68-69 VT2P	118	255	13.1	.	.	0.0
Stine	9816-20		253	12.7	.	.	0.0
Gateway Seed	2716	116	253	12.9	.	.	0.0
Progeny	PGY 9114 VT2P	114	252	12.5	.	.	0.0
Revere Seed	Revere 1525 V	115	252	14.9	.	.	0.0
MorCorn	MC 4527	115	252	12.4	.	.	0.0
Revere Seed	Revere 1307 TC	113	251	12.5	.	.	0.0
Progeny	PGY 9117 VT2P	117	250	12.6	.	.	0.0
INTEGRA	6410	114	249	12.7	.	.	0.0
Innvictis	A1548DGVT2P		247	12.7	.	.	0.0
Revere Seed	Revere 1627 TC	116	246	12.7	.	.	0.0
Dyna-Gro	D57VC53	117	243	13.3	.	.	0.0
INTEGRA	6720	117	243	15.6	.	.	0.0
Revere Seed	Revere 1919 VT2P	118	243	12.6	.	.	0.0
MorCorn	MC 4161	111	241	12.8	.	.	0.0
AgraTech	888VT2P	119	239	12.7	.	.	0.0
INTEGRA	6342	113	238	12.6	.	.	0.0
Stine	9752-32	112	237	13.0	.	.	0.0
Stine	9817-30		237	12.9	.	.	0.0
Gateway Seed	1719	119	235	12.9	.	.	0.0
AgriGold	A647-79 VT2Pro	117	234	12.7	.	.	0.0
Stine	9814-20	118	234	13.0	.	.	0.0
Progeny	PGY 2216 VT2P	116	231	12.6	.	.	0.0
Pioneer	P2042VYHR	120	228	12.8	.	.	0.0
Progeny	PGY 8116 SS	116	226	12.5	.	.	0.0
Innvictis	A1257VT2P RIB		225	12.6	.	.	0.0
BH Genetics	BH 8660RR	116	224	12.4	.	.	0.0

Griffin, Georgia:
Corn Grain Performance, 2022, Irrigated (Continued)

Company or Brand Name	Hybrid Name	Relative Maturity days	Yield bu/acre	Grain Moisture %	Ears/ 100 plants no.	Actual Population plants/acre	Lodging %
Stine	9808E-20	115	223	12.6	.	.	0.0
Progeny	PGY 2215 TRE	115	221	12.5	.	.	0.0
AgraTech	1777GT	114	221	12.4	.	.	0.0
AgriGold	A6659 RR	116	220	12.6	.	.	0.0
AgriGold	A643-52 VT2Pro	113	219	12.8	.	.	0.0
INTEGRA	6811	118	218	14.1	.	.	0.0
INTEGRA	6533	115	216	12.7	.	.	0.0
Pioneer	P1289YHR	112	190	12.5	.	.	0.0
INTEGRA	6588	115	175	12.4	.	.	0.0
Average			247	12.8	-	-	0
LSD at 10% Level			22	0.9	-	-	-
Model R-squared			0.75	0.53	-	-	-

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

Planted: April 29, 2022.

Harvested: October 10, 2022.

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

Soil Type: Cecil sandy clay loam.

Soil Test: P₂O₅ = 23 lbs, K₂O = 356 lbs, and pH = 6.3.

Fertilization: Preplant: 41 lb N, 104 lb P₂O₅, and 135 lb K₂O/acre. Sidedress: 280 lb N/acre.

Previous Crop: Peanuts.

Management: Conventional tillage. Warrant, glyphosate, and atrazine used for weed control.

Test conducted by G. Ware, S. Brannon, and H. Jackson.

Blairsville, Georgia: Corn Grain Performance, 2022, Dryland

Company or Brand Name	Hybrid Name	Relative Maturity days	Yield bu/acre	Grain Moisture %	Ears/100 plants no.	Actual Population plants/acre	Lodging %
Revere Seed	Revere 1898 TC	118	378	17.0	.	.	.
Pioneer	P1289YHR	112	370	15.8	.	.	.
AgraTech	888VT2P	119	365	16.4	.	.	.
Gateway Seed	2716	116	361	16.1	.	.	.
BH Genetics	BH 8660RR	116	358	16.1	.	.	.
MorCorn	MC 4527	115	357	16.1	.	.	.
INTEGRA	6811	118	356	16.1	.	.	.
DEKALB	DKC68-35 VT2P	118	356	16.1	.	.	.
BH Genetics	BH 8721VT2P	117	355	15.9	.	.	.
Innvictis	A1257VT2P RIB		349	15.8	.	.	.
INTEGRA	6533	115	348	16.2	.	.	.
Revere Seed	Revere 1307 TC	113	347	16.4	.	.	.
DEKALB	DKC68-69 VT2P	118	346	16.3	.	.	.
Stine	9816-20		346	15.9	.	.	.
INTEGRA	6410	114	343	16.2	.	.	.
DEKALB	DKC68-95 SS	118	343	16.3	.	.	.
Progeny	PGY 2216 VT2P	116	341	16.1	.	.	.
BH Genetics	BH 8412VT2P	114	340	16.0	.	.	.
MorCorn	MC 4725	117	340	15.8	.	.	.
Augusta	A1367-3220GT		339	16.4	.	.	.
Dyna-Gro	D58VC65	118	339	16.0	.	.	.
Progeny	PGY 9117 VT2P	117	338	15.7	.	.	.
Stine	9814-20	118	334	16.3	.	.	.
Progeny	PGY 2118 VT2P	118	334	16.5	.	.	.
Gateway Seed	1719	119	333	16.8	.	.	.
Pioneer	P2042VYHR	120	331	16.3	.	.	.
Innvictis	MEX1791VT2P		328	16.9	.	.	.
Gateway Seed	9714	114	326	16.2	.	.	.
MorCorn	MC 4161	111	325	16.2	.	.	.
INTEGRA	CX001117	117	324	16.3	.	.	.
Revere Seed	Revere 1627 TC	116	324	16.2	.	.	.
BH Genetics	BH 8820VT2P	118	323	17.3	.	.	.
INTEGRA	6588	115	323	15.9	.	.	.
INTEGRA	6720	117	321	16.5	.	.	.
MorCorn	MC 4311	113	320	15.8	.	.	.
AgraTech	808VT2P	115	319	16.6	.	.	.
Revere Seed	Revere 1919 VT2P	118	317	16.2	.	.	.
Innvictis	A1548DGVT2P		316	16.1	.	.	.
Stine	9817-30		315	15.9	.	.	.
Progeny	PGY 2215 TRE	115	312	16.3	.	.	.
Revere Seed	Revere 1525 V	115	311	16.1	.	.	.
DEKALB	DKC68-48 SS	118	310	16.6	.	.	.
Revere Seed	Revere 1577 VT2P	115	310	16.1	.	.	.
INTEGRA	6641	116	309	17.0	.	.	.
AgriGold	A6659 RR	116	308	16.4	.	.	.
Revere Seed	Revere 1707 VT2P	117	307	17.0	.	.	.
AgriGold	A643-52 VT2Pro	113	304	16.2	.	.	.
Progeny	PGY 8116 SS	116	302	15.9	.	.	.
Augusta	A9967-3000GT		300	17.6	.	.	.
Dyna-Gro	D57VC53	117	299	17.3	.	.	.

Blairsville, Georgia:
Corn Grain Performance, 2022, Dryland (Continued)

Company or Brand Name	Hybrid Name	Relative Maturity days	Yield bu/acre	Grain Moisture %	Ears/ 100 plants no.	Actual Population plants/acre	Lodging %
INTEGRA	6342	113	299	16.7	.	.	.
AgraTech	1777GT	114	296	16.2	.	.	.
Progeny	PGY 9114 VT2P	114	295	15.6	.	.	.
INTEGRA	6493	114	294	16.0	.	.	.
Stine	9752-32	112	293	16.1	.	.	.
AgriGold	A647-79 VT2Pro	117	291	16.3	.	.	.
BH Genetics	BH 8412RR	114	285	16.2	.	.	.
Stine	9808E-20	115	283	16.7	.	.	.
AgraTech	69RR	114	280	16.6	.	.	.
Average			326	16.3	-	-	-
LSD at 10% Level			33	0.6	-	-	-
Model R-squared			0.62	0.70	-	-	-

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

Planted: May 3, 2022.

Harvested: November 2, 2022.

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

Soil Type: Suches loam.

Soil Test: P₂O₅ = 37 lbs, K₂O = 336 lbs, and pH = 6.1.

Fertilization: Preplant: 130 lb N, 140 lb P₂O₅, and 140 lb K₂O/acre. Sidedress: 265 lb N/acre.

Previous Crop: Soybean.

Management: Conventional tillage. Warrant and atrazine used for weed control.

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

Statewide Harvest Moisture Summary: Corn Grain Performance, Georgia, 2022

Company or Brand Name	Hybrid Name	RM	Sites arranged from highest to lowest moisture at harvest					
			Midville	Plains	Tifton	Griffin	Blairsville	Statewide
----- % Moisture at harvest -----								
Dyna-Gro	D57VC53	117	20.30	17.55	18.40	17.34	13.32	17.38
INTEGRA	6811	118	21.67	17.41	17.44	16.05	14.14	17.36
Stine	9808E-20	115	23.23	16.84	17.16	16.69	12.62	17.33
Revere Seed	Revere 1707 VT2P	117	20.91	17.87	17.60	17.00	13.12	17.32
Inn victis	MEX1791VT2P		20.32	17.57	18.20	16.88	13.14	17.23
Gateway Seed	1719	119	20.75	17.48	17.71	16.78	12.93	17.14
<u>DEKALB</u>	<u>DKC68-69 VT2P</u>	118	21.14	17.49	17.48	16.29	13.06	17.10
BH Genetics	BH 8820VT2P	118	20.28	17.51	17.05	17.31	13.14	17.04
Augusta	A1367-3220GT		21.00	17.26	17.39	16.37	12.85	16.97
Progeny	PGY 2216 VT2P	116	20.52	17.60	17.79	16.05	12.62	16.96
Progeny	PGY 2118 VT2P	118	19.27	17.64	17.85	16.46	12.82	16.87
Augusta	A9967-3000GT		19.38	17.28	16.76	17.55	13.38	16.84
AgraTech	888VT2P	119	19.61	17.47	17.72	16.37	12.68	16.79
INTEGRA	6720	117	19.10	15.93	16.47	16.49	15.59	16.74
<u>DEKALB</u>	<u>DKC68-35 VT2P</u>	118	20.42	17.76	16.69	16.08	12.83	16.72
Pioneer	P2042VYHR	120	19.59	17.06	17.91	16.28	12.84	16.72
Stine	9814-20	118	19.43	17.79	17.20	16.31	12.95	16.71
DEKALB	DKC68-95 SS	118	19.34	17.58	17.47	16.29	12.44	16.69
Revere Seed	Revere 1919 VT2P	118	19.79	17.28	17.58	16.18	12.57	16.67
Progeny	PGY 9117 VT2P	117	20.32	17.03	17.42	15.69	12.60	16.67
AgriGold	A643-52 VT2Pro	113	20.12	16.62	17.73	16.20	12.84	16.66
Revere Seed	Revere 1525 V	115	19.04	16.66	16.38	16.12	14.91	16.66
Stine	9816-20		20.15	17.15	17.46	15.90	12.73	16.64
AgraTech	808VT2P	115	19.50	17.49	16.61	16.63	12.77	16.61
BH Genetics	BH 8721VT2P	117	20.19	17.22	17.16	15.91	12.60	16.59
<u>DEKALB</u>	<u>DKC68-48 SS</u>	118	19.60	16.99	17.02	16.59	12.36	16.55
Gateway Seed	2716	116	19.48	17.59	16.42	16.09	12.88	16.55
AgriGold	A647-79 VT2Pro	117	19.82	16.95	16.94	16.26	12.71	16.53
<u>INTEGRA</u>	<u>CX001117</u>	117	19.28	17.26	16.91	16.28	12.69	16.51
Revere Seed	Revere 1627 TC	116	19.58	17.08	16.99	16.17	12.67	16.49
<u>MorCorn</u>	<u>MC 4725</u>	117	20.04	17.08	17.06	15.76	12.57	16.49
AgriGold	A6659 RR	116	19.12	17.32	16.83	16.40	12.63	16.44
INTEGRA	6641	116	18.55	16.79	16.94	17.01	12.92	16.42
AgraTech	69RR	114	19.58	16.73	16.60	16.57	12.71	16.38
INTEGRA	6410	114	20.05	16.63	16.36	16.16	12.66	16.37
<u>Revere Seed</u>	<u>Revere 1898 TC</u>	118	18.71	16.47	16.48	17.00	12.60	16.31
BH Genetics	BH 8412RR	114	19.99	16.52	16.28	16.20	12.48	16.30
INTEGRA	6533	115	19.30	16.76	16.71	16.15	12.74	16.29
Inn victis	A1548DGVT2P		19.77	16.50	16.42	16.06	12.68	16.29
BH Genetics	BH 8660RR	116	18.50	16.75	17.43	16.14	12.40	16.28
<u>Dyna-Gro</u>	<u>D58VC65</u>	118	19.60	16.64	16.54	15.98	12.82	16.28
INTEGRA	6588	115	18.98	17.34	16.97	15.93	12.39	16.28
Progeny	PGY 8116 SS	116	19.89	16.70	15.78	15.94	12.49	16.18
Stine	9817-30		18.93	16.86	16.31	15.86	12.85	16.13
AgraTech	1777GT	114	18.84	16.16	17.14	16.19	12.43	16.12
INTEGRA	6493	114	18.39	16.30	16.44	16.00	12.83	16.06
Progeny	PGY 2215 TRE	115	18.63	16.64	16.47	16.31	12.48	16.04
Pioneer	P1289YHR	112	18.79	16.64	16.37	15.79	12.50	16.02
<u>MorCorn</u>	<u>MC 4527</u>	115	19.33	16.56	15.87	16.11	12.40	16.01
Stine	9752-32	112	18.31	16.60	15.77	16.06	13.01	15.99

**Statewide Harvest Moisture Summary:
Corn Grain Performance, Georgia, 2022 (Continued)**

Company or Brand Name	Hybrid Name	RM	Sites arranged from highest to lowest moisture at harvest					Statewide
			Midville	Plains	Tifton	Griffin	Blairsville	
----- % Moisture at harvest -----								
BH Genetics	BH 8412VT2P	114	18.11	16.61	16.27	15.96	12.68	15.97
Revere Seed	Revere 1577 VT2P	115	18.06	16.46	16.34	16.11	12.49	15.91
INTEGRA	6342	113	18.10	16.55	15.68	16.73	12.55	15.86
Innictis	A1257VT2P RIB		18.47	16.04	16.08	15.77	12.58	15.79
Gateway Seed	9714	114	17.97	16.55	15.82	16.18	12.66	15.79
Progeny	PGY 9114 VT2P	114	18.68	16.00	16.07	15.61	12.50	15.74
MorCorn	MC 4161	111	17.69	15.75	15.70	16.20	12.82	15.63
Revere Seed	Revere 1307 TC	113	17.46	15.95	15.68	16.37	12.54	15.61
MorCorn	MC 4311	113	18.09	16.05	15.59	15.81	12.43	15.54
Average			19.50	16.93	16.84	16.29	12.83	16.48
LSD at 10% Leve			0.90	0.46	0.46	0.59	0.94	0.37
Model R-squared			0.79	0.82	0.84	0.70	0.53	0.89
Planting date			4/26	4/13	4/11	4/29	5/3	
Estimated physiological maturity (black layer) for RM 115 hybrid (2,650 GDUs)			8/1	7/28	7/20	8/10	9/1	
Harvest date			9/7	9/13	9/1	10/5	11/2	
Days from estimated black layer to harvest			37	47	43	56	62	

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

Statewide Yield Summary: Corn Silage Performance, Georgia, 2020-2022

Company or Brand Name	Hybrid Name	2022				2021		2020		
		Griffin	Tifton	Tifton		Athens	Tifton	Athens	Tifton	Rome
		Forage Yield --- dry tons/acre ---	Milk/Ac	Milk/To	lb/ton	lb/acre	Forage Yield ----- dry tons/acre -----			
AgraTech	1778VIP	. 12.42	3,300	40,329				14.02		
AgraTech	79VIP	. 9.95	3,537	34,981						
AgraTech	808VT2P	. 10.56	3,142	33,210						
AgraTech	888VT2P	. 8.14	3,518	29,000						
AgriGold	A645-80 3110	10.93	11.15	3,496	38,139		10.90			
AgriGold	A647-35 5222	10.50	9.42	3,565	33,575		12.45			
AgriGold	A650-21 VT2Pro	10.02	9.65	3,531	34,110					
Augusta	A9967-3000GT	. 10.10	3,571	35,789				12.12		
BH Genetics	BH 8420VIP3110	10.39	11.79	3,484	40,369					
BH Genetics	BH 8644TRE	8.85	9.76	3,502	34,398					
BH Genetics	BH 8690VIP3111	10.41	12.91	3,285	43,452					
BH Genetics	BH 8705VIP3111	11.52	11.05	3,254	36,269					
BH Genetics	BH 8721VT2P	12.11	9.65	3,550	34,957					
BH Genetics	BH 8780VT2P	8.55	10.11	3,541	35,453					
BH Genetics	BH 8966VT2P	10.40	9.88	3,570	35,327					
DEKALB	DKC67-66 SS	10.26	9.45	3,323	31,505	14.09	10.60			
DEKALB	DKC68-48 SS	10.22	10.64	3,542	36,696					
DEKALB	DKC68-95 SS	9.98	10.34	3,556	36,728					
DEKALB	DKC70-64 SS	10.75	11.13	3,170	35,767	10.27	11.75	8.83	12.24	
DEKALB	DKC70-94 SS	11.69	10.91	3,343	36,671					
Dyna-Gro	D57VC53	10.08	10.32	3,405	35,495					
Dyna-Gro	D58VC65	10.18	10.64	3,507	37,320	10.55	11.80	8.52	12.83	
Gateway Seed	1717	10.84	11.23	3,578	40,048					
Innvictis	A1257VT2P RIB	8.77	.	.	.					
Innvictis	A1548DGV2P	10.48	.	.	.					
Innvictis	MEX1791VT2P	11.17	.	.	.					
INTEGRA	6588	9.63	8.67	3,470	30,375					
INTEGRA	6588	9.63	8.67	3,470	30,375					
INTEGRA	6641	10.22	10.17	3,441	34,427					
INTEGRA	6709	11.52	10.84	3,424	37,550					
INTEGRA	6720	9.55	10.23	3,366	34,447					
INTEGRA	6811	9.61	10.02	3,497	35,359					
INTEGRA	6880	9.82	10.97	3,378	37,470					
MorCorn	MC 4161	. 10.06	3,480	34,721		11.03				
MorCorn	MC 4311	. 10.15	3,655	36,836		10.10				
MorCorn	MC 4527	. 11.03	3,633	40,557						
NK Brand	NK1667-3110	11.40	11.25	3,468	39,859	9.45	11.89	10.64	13.21	
NK Brand	NK1748-3110	11.43	10.11	3,377	34,510			11.28	12.85	
NK Brand	NK1838-3110	10.98	12.06	3,523	42,014					
Pioneer	P2042VYHR	10.59	8.03	3,362	27,272					
Stine	9808E-20	9.01	9.52	3,328	32,281					
Stine	9752-32	10.93	10.39	3,518	36,135					
Stine	9814-20	8.46	10.34	3,234	33,326					
Stine	9816-20	10.37	10.92	3,298	35,955					
Stine	9817-30	9.44	9.21	3,481	32,165					
Average		10.31	10.39	3,443	35,743	11.32	11.04	10.69	12.27	
LSD at 10% Leve		1.29	1.67	161	5,765	2.85	0.76	1.50	1.10	
Model R-squared		0.84	0.77	0.92	0.76	0.50	0.56	0.66	0.51	

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

Mean and LSD from 2020 and 2021 reflect whole tests, and are not restricted to hybrids that returned for 2022.

Tifton, Georgia: Evaluation of Corn Hybrids for Silage, 2022, Irrigated

Company or Brand Name	Hybrid Name	Relative Maturity days	Forage Yield		Percent Moisture %	Grain Portion %
			Dry	Green ¹		
			tons/acre			
BH Genetics	BH 8690VIP3111	116	12.91	36.88	52.2	55.7
AgraTech	1778VIP	116	12.42	35.48	61.0	51.3
NK Brand	NK1838-3110	118	12.06	34.47	60.9	52.3
BH Genetics	BH 8420VIP3110	114	11.79	33.69	57.0	55.0
NK Brand	NK1677-3110	116	11.25	32.13	60.1	52.5
Gateway Seed	1717	117	11.23	32.07	50.0	54.4
AgriGold	A645-80 3110	115	11.15	31.87	57.3	57.2
Dekalb	DKC70-64 SS	120	11.13	31.80	58.6	49.9
BH Genetics	BH 8705VIP3111	117	11.05	31.57	54.2	53.5
MorCorn	MC 4527	115	11.03	31.51	54.1	62.6
INTEGRA	6880	118	10.97	31.33	54.6	56.3
Stine	9816-20	.	10.92	31.19	62.7	52.9
Dekalb	DKC70-94 SS	120	10.91	31.17	61.6	52.5
INTEGRA	6709	117	10.84	30.98	59.4	53.4
Dyna-Gro	D58VC65	118	10.64	30.39	54.3	58.6
Dekalb	DKC68-48 SS	118	10.64	30.41	56.5	56.9
AgraTech	808VT2P	115	10.56	30.18	56.4	57.9
Stine	9752-32	112	10.39	29.69	49.9	57.5
Stine	9814-20	118	10.34	29.53	60.8	59.1
Dekalb	DKC68-95 SS	118	10.34	29.55	57.8	52.3
Dyna-Gro	D57VC53	117	10.32	29.47	53.3	56.4
INTEGRA	6720	117	10.23	29.23	47.6	60.3
INTEGRA	6641	116	10.17	29.05	58.8	53.7
MorCorn	MC 4311	113	10.15	29.01	46.6	58.9
BH Genetics	BH 8780VT2P	117	10.11	28.89	58.6	54.1
NK Brand	NK1748-3110	117	10.11	28.89	60.1	54.9
Augusta	A9967-3000GT	.	10.10	28.86	55.5	57.7
MorCorn	MC 4161	111	10.06	28.73	53.7	54.4
INTEGRA	6811	118	10.02	28.64	49.5	54.6
AgraTech	79VIP	115	9.95	28.44	50.9	60.6
BH Genetics	BH 8966VT2P	119	9.88	28.23	52.8	53.3
BH Genetics	BH 8644TRE	116	9.76	27.88	52.8	54.2
AgriGold	A650-21 VT2Pro	120	9.65	27.56	55.5	59.6
BH Genetics	BH 8721VT2P	117	9.65	27.57	55.5	56.0
Stine	9808E-20	115	9.52	27.20	58.9	55.3
Dekalb	DKC67-66 SS	117	9.45	27.01	57.8	54.4
AgriGold	A647-35 5222	117	9.42	26.90	62.1	56.2
Stine	9817-30	.	9.21	26.32	52.2	58.1
INTEGRA	6588	115	8.67	24.77	59.1	55.1
AgraTech	888VT2P	119	8.14	23.27	59.8	53.2
Pioneer	P2042VYHR	120	8.03	22.96	60.4	53.8
Average			10.39	29.69	56.2	55.5
LSD at 10% Level			1.67	4.77	0.7	4.2
Model R-squared			0.77	0.77	0.99	0.87

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 12, 2022.

Harvested: July 26, 2022. Accumulated 2,818 GDD units. $50 \leq \text{Temp} \leq 86$ °F

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

Soil Type: Tifton loamy sand.

Soil Test:

Fertilization:

Previous Crop: Soybeans.

Management: Test conducted by K. Cawley, M. Cofield, D. Dunn and W. Mosteller.

Quality Factors of Corn Hybrids for Silage Tifton, Georgia, 2022

Company or Brand Name	Hybrid Name	Dry Yield	UW Milk 2006 Model Calculated Values						Quality Components					
			Milk production	TDN	NE _L	NE _G	NE _M	ADF	aND	aNDFom	Ligni	NDFD3	NDFD24	
		tons/ac	lb/ton	lb/acre	% DM	Mcal/cwt		% DM		% NDFom				
BH Genetics	BH 8690VIP3111	12.91	3,285	43,452	70.9	65.4	54.0	82.6	19.0	33.4	32.0	2.3	53.0	65.6
NK Brand	NK1838-3110	12.06	3,523	42,014	74.0	68.1	58.1	87.2	15.8	29.1	27.8	2.2	52.1	65.3
MorCorn	MC 4527	11.03	3,633	40,557	75.5	69.6	59.7	89.1	15.3	28.8	27.8	2.0	58.2	67.8
BH Genetics	BH 8420VIP3110	11.79	3,484	40,369	73.5	68.1	56.8	85.7	17.3	31.4	30.3	2.3	52.8	68.4
AgraTech	1778VIP	12.42	3,300	40,329	71.2	65.9	53.0	81.4	21.3	37.3	36.2	2.6	53.6	67.8
Gateway Seed	1717	11.23	3,578	40,048	74.8	68.9	58.4	87.6	16.3	30.9	29.9	2.4	55.8	67.6
NK Brand	NK1667-3110	11.76	3,468	39,859	73.5	67.7	56.8	85.7	18.1	33.2	32.1	2.4	55.7	67.4
AgriGold	A645-80 3110	11.15	3,496	38,139	73.7	67.9	57.4	86.4	16.8	30.2	29.0	2.2	52.1	67.0
INTEGRA	6709	10.84	3,424	37,550	72.9	67.4	55.6	84.4	18.4	33.6	32.4	2.5	55.9	66.8
INTEGRA	6880	10.97	3,378	37,470	72.0	66.8	55.3	84.0	18.3	32.6	31.4	2.6	52.5	63.8
Dyna-Gro	D58VC65	10.64	3,507	37,320	73.7	67.9	57.7	86.8	16.2	29.9	28.8	2.3	52.2	67.2
MorCorn	MC 4311	10.15	3,655	36,836	75.6	69.3	60.6	90.2	13.5	25.6	24.3	2.1	52.1	65.1
DEKALB	DKC68-95 SS	10.34	3,556	36,728	74.5	68.5	58.5	87.8	16.0	30.0	28.9	2.0	55.1	66.5
DEKALB	DKC68-48 SS	10.64	3,542	36,696	74.3	68.6	58.4	87.5	16.0	29.6	28.4	2.3	51.4	63.4
DEKALB	DKC70-94 SS	10.91	3,343	36,671	71.5	66.3	54.6	83.3	18.0	32.1	31.0	2.5	49.4	64.7
NK Brand	NK1667-3110	10.73	3,415	36,369	72.9	67.1	55.8	84.6	19.3	34.9	33.7	2.4	56.1	69.7
BH Genetics	BH 8705VIP3111	11.05	3,254	36,269	70.7	65.1	52.4	80.8	21.4	37.9	36.8	2.4	54.6	69.2
Stine	9752-32	10.39	3,518	36,135	74.0	68.1	57.7	86.8	16.5	30.4	29.3	2.0	53.5	67.7
Stine	9816-20	10.92	3,298	35,955	71.1	65.6	53.8	82.3	19.5	34.0	32.8	2.6	52.0	66.7
Augusta	A9967-3000GT	10.1	3,571	35,789	74.8	68.6	58.8	88.0	16.1	29.7	28.5	2.0	56.4	69.9
DEKALB	DKC70-64 SS	11.13	3,170	35,767	69.4	64.4	52.3	80.6	19.9	35.9	34.8	2.7	51.6	65.1
Dyna-Gro	D57VC53	10.32	3,405	35,495	73.1	66.8	55.4	84.2	20.7	38.0	36.9	2.3	60.1	71.4
BH Genetics	BH 8780VT2P	10.11	3,541	35,453	74.4	68.7	58.2	87.4	16.2	30.9	29.8	2.1	55.4	65.8
INTEGRA	6811	10.02	3,497	35,359	73.7	67.8	57.3	86.3	17.4	31.9	30.9	2.1	55.7	67.5
BH Genetics	BH 8966VT2P	9.88	3,570	35,327	74.6	68.5	59.0	88.3	15.7	28.8	27.7	2.3	54.0	66.8
AgraTech	79VIP	9.95	3,537	34,981	74.4	68.0	57.8	86.9	17.2	32.6	31.5	2.1	56.8	71.1
BH Genetics	BH 8721VT2P	9.65	3,550	34,957	74.3	68.6	58.5	87.8	15.8	29.5	28.4	2.2	55.0	64.9
MorCorn	MC 4161	10.06	3,480	34,721	73.4	67.7	56.8	85.8	17.2	31.0	29.9	2.2	53.2	66.2
NK Brand	NK1748-3110	10.11	3,377	34,510	72.2	66.9	54.7	83.3	18.8	34.3	33.2	2.4	54.7	68.3
INTEGRA	6720	10.23	3,366	34,447	72.1	66.4	54.9	83.5	19.3	34.3	33.2	2.4	54.2	67.2
INTEGRA	6641	10.17	3,441	34,427	72.9	67.4	56.3	85.2	16.9	30.8	29.6	2.3	51.0	65.9
BH Genetics	BH 8644TRE	9.76	3,502	34,398	73.8	67.9	57.5	86.6	16.4	30.7	29.6	2.4	55.8	67.9
AgriGold	A650-21 VT2Pro	9.65	3,531	34,110	74.3	68.3	57.8	86.9	16.6	30.9	29.8	2.1	57.0	69.6
AgriGold	A647-35 5222	9.42	3,565	33,575	74.6	68.7	58.6	87.9	15.0	27.7	26.5	2.0	54.9	68.6
Stine	9814-20	10.34	3,234	33,326	70.4	65.1	53.5	81.9	19.5	35.0	34.0	2.6	53.4	66.7
AgraTech	808VT2P	10.56	3,142	33,210	68.8	63.9	50.3	78.4	21.9	37.1	35.9	2.9	48.5	63.9
Stine	9808E-17	9.52	3,328	32,281	71.6	65.8	54.1	82.7	19.4	34.4	33.3	1.9	55.9	68.9
Stine	9817-30	9.21	3,481	32,165	73.4	67.3	57.7	86.8	15.9	29.2	27.9	2.1	52.6	68.3
DEKALB	DKC67-66	9.45	3,323	31,505	71.3	65.8	54.4	83.0	18.8	32.8	31.6	2.3	50.2	63.8
INTEGRA	6588	8.67	3,470	30,375	73.5	67.8	56.6	85.6	17.4	32.3	31.2	2.4	57.0	70.6
AgraTech	888VT2P	8.14	3,518	29,000	74.1	68.4	57.7	86.8	16.8	31.4	30.2	2.3	55.4	65.5
Pioneer	P2042VYHR	8.03	3,362	27,272	72.0	66.6	54.5	83.2	19.1	34.7	33.7	2.4	54.7	68.5
Average		10.39	3,443	35,743	73.0	67.3	56.4	85.3	17.6	32.1	31.0	2.3	54.1	67.1
LSD at 10% Level		1.67	161	5,765	2.1	1.9	2.9	3.4	2.8	4.2	4.2	0.3	4.0	3.1
Model R-squared		0.77	0.92	0.76	###	###	###	###	0.89	###	0.88	0.69	0.88	0.91

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 Corn Hybrids for Silage Tifton, Georgia, 2022

Company or Brand Name	Hybrid Name	Dry Yield	Milk Production	Crude Starch Protein	Sugar (WSC)	Fat (EE)	Fat (TFA)	Ash	P	K	Ca	Mg	S		
		tons/ac	lb/ton	lb/acre	----- % DM -----										
BH Genetics	BH 8690VIP3111	12.91	3,285	43,452	9.3	39.4	8.9	2.8	2.3	3.9	0.25	1.22	0.24	0.15	0.11
NK Brand	NK1838-3110	12.06	3,523	42,014	8.6	45.4	8.9	3.1	2.6	3.2	0.24	1.06	0.21	0.13	0.10
MorCorn	MC 4527	11.03	3,633	40,557	8.9	44.4	6.9	3.7	3.1	3.3	0.26	1.07	0.20	0.13	0.11
BH Genetics	BH 8420VIP3110	11.79	3,484	40,369	9.0	40.6	8.6	3.3	2.7	3.4	0.25	0.93	0.21	0.12	0.11
AgraTech	1778VIP	12.42	3,300	40,329	8.1	34.8	9.7	2.8	2.2	3.6	0.22	1.10	0.22	0.13	0.09
Gateway Seed	1717	11.23	3,578	40,048	8.3	43.6	7.2	3.3	2.9	3.0	0.24	0.99	0.18	0.12	0.10
NK Brand	NK1667-3110	11.76	3,468	39,859	9.3	38.8	8.7	3.4	2.7	3.8	0.25	1.12	0.21	0.13	0.11
AgriGold	A645-80 3110	11.15	3,496	38,139	8.9	44.2	8.1	3.0	2.6	3.4	0.25	0.99	0.21	0.11	0.10
INTEGRA	6709	10.84	3,424	37,550	8.6	38.5	8.5	3.0	2.5	3.5	0.24	1.23	0.21	0.13	0.10
INTEGRA	6880	10.97	3,378	37,470	9.0	40.4	7.9	3.3	2.7	3.5	0.24	1.23	0.23	0.14	0.11
Dyna-Gro	D58VC65	10.64	3,507	37,320	8.5	45.5	7.6	3.2	2.8	3.0	0.24	0.94	0.18	0.12	0.10
MorCorn	MC 4311	10.15	3,655	36,836	8.4	52.0	6.6	3.3	3.0	2.9	0.25	0.96	0.15	0.09	0.10
DEKALB	DKC68-95 SS	10.34	3,556	36,728	8.8	44.9	7.6	3.3	2.8	3.1	0.25	1.08	0.18	0.12	0.11
DEKALB	DKC68-48 SS	10.64	3,542	36,696	9.1	44.7	8.1	3.2	2.8	3.3	0.25	1.25	0.22	0.13	0.11
DEKALB	DKC70-94 SS	10.91	3,343	36,671	8.7	42.2	7.5	3.4	2.8	3.3	0.24	1.01	0.21	0.12	0.11
NK Brand	NK1667-3110	10.73	3,415	36,369	9.2	36.6	8.4	2.9	2.5	4.0	0.24	1.09	0.23	0.15	0.11
BH Genetics	BH 8705VIP3111	11.05	3,254	36,269	7.9	35.1	8.3	2.9	2.3	3.7	0.22	1.03	0.21	0.15	0.10
Stine	9752-32	10.39	3,518	36,135	8.3	44.7	8.0	2.6	2.5	3.2	0.23	1.15	0.19	0.12	0.10
Stine	9816-20	10.92	3,298	35,955	8.9	37.8	8.0	2.8	2.3	4.0	0.24	1.07	0.23	0.13	0.11
Augusta	A9967-3000GT	10.1	3,571	35,789	8.5	45.4	7.4	2.9	2.6	3.3	0.25	1.02	0.19	0.12	0.11
DEKALB	DKC70-64 SS	11.13	3,170	35,767	8.7	33.4	9.8	2.8	2.3	3.7	0.23	1.29	0.22	0.14	0.11
Dyna-Gro	D57VC53	10.32	3,405	35,495	8.2	37.6	7.1	3.4	2.7	3.4	0.23	1.04	0.20	0.14	0.11
BH Genetics	BH 8780VT2P	10.11	3,541	35,453	9.3	40.8	8.5	3.5	2.8	3.5	0.26	1.15	0.22	0.14	0.11
INTEGRA	6811	10.02	3,497	35,359	8.5	42.9	7.1	3.4	2.8	3.2	0.25	1.02	0.20	0.13	0.11
BH Genetics	BH 8966VT2P	9.88	3,570	35,327	8.5	47.8	6.7	3.3	2.9	3.0	0.25	0.99	0.18	0.11	0.10
AgraTech	79VIP	9.95	3,537	34,981	7.5	44.1	7.1	2.7	2.5	3.1	0.23	0.97	0.17	0.12	0.10
BH Genetics	BH 8721VT2P	9.65	3,550	34,957	9.0	45.9	6.9	3.8	3.1	2.9	0.25	1.03	0.19	0.11	0.11
MorCorn	MC 4161	10.06	3,480	34,721	8.8	42.6	7.7	3.2	2.7	3.5	0.25	1.05	0.22	0.14	0.11
NK Brand	NK1748-3110	10.11	3,377	34,510	8.8	37.2	8.5	3.1	2.5	3.7	0.24	1.15	0.21	0.14	0.11
INTEGRA	6720	10.23	3,366	34,447	8.8	39.8	7.2	3.0	2.6	3.7	0.24	1.21	0.22	0.14	0.11
INTEGRA	6641	10.17	3,441	34,427	8.8	42.2	8.4	3.1	2.6	3.6	0.25	1.04	0.22	0.14	0.10
BH Genetics	BH 8644TRE	9.76	3,502	34,398	8.8	43.1	7.1	3.1	2.7	3.6	0.24	1.04	0.19	0.13	0.11
AgriGold	A650-21 VT2Pro	9.65	3,531	34,110	8.4	43.1	8.0	3.0	2.6	3.3	0.24	1.07	0.21	0.14	0.10
AgriGold	A647-35 5222	9.42	3,565	33,575	8.8	45.0	8.3	3.0	2.6	3.6	0.25	1.07	0.20	0.13	0.10
Stine	9814-20	10.34	3,234	33,326	9.0	33.2	10.2	2.5	2.1	4.1	0.24	1.31	0.25	0.16	0.11
AgraTech	808VT2P	10.56	3,142	33,210	8.2	36.4	8.9	2.7	2.2	3.6	0.22	1.20	0.25	0.15	0.09
Stine	9808E-20	9.52	3,328	32,281	8.1	37.9	9.0	2.6	2.1	3.9	0.23	1.18	0.23	0.16	0.11
Stine	9817-30	9.21	3,481	32,165	8.8	47.8	6.4	2.9	2.6	3.3	0.25	1.02	0.19	0.11	0.11
DEKALB	DKC67-66	9.45	3,323	31,505	8.7	42.2	8.0	2.8	2.4	3.6	0.24	1.19	0.25	0.15	0.10
INTEGRA	6588	8.67	3,470	30,375	9.0	39.5	8.2	3.1	2.6	3.7	0.25	1.01	0.20	0.13	0.11
AgraTech	888VT2P	8.14	3,518	29,000	9.0	41.7	8.5	3.3	2.9	3.4	0.25	1.25	0.21	0.15	0.11
Pioneer	P2042VYHR	8.03	3,362	27,272	8.7	37.1	8.2	2.9	2.4	3.6	0.24	1.01	0.20	0.13	0.10
Average		10.39	3,443	35,743	8.7	41.4	8.0	3.1	2.6	3.5	0.24	1.09	0.21	0.13	0.11
LSD at 10% Level		1.67	161	5,765	0.5	5.4	1.0	0.4	0.3	0.4	0.01	0.14	0.03	0.02	0.01
Model R-squared		0.77	0.92	0.76	0.93	0.9	0.73	0.91	0.91	0.89	0.88	0.93	0.87	0.63	0.89

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.

Griffin, Georgia: Evaluation of Corn Hybrids for Silage, 2022, Irrigated

Company or Brand Name	Hybrid Name	Relative Maturity days	Forage Yield		Percent Moisture %
			Dry	Green ¹	
			tons/acre		
BH Genetics	BH 8721VT2P	117	12.11	34.60	65.4
Dekalb	DKC70-94 SS	120	11.69	33.41	68.4
BH Genetics	BH 8705VIP3111	117	11.52	32.93	65.3
INTEGRA	6709	117	11.52	32.90	66.1
NK Brand	NK1748-3110	117	11.43	32.66	68.2
NK Brand	NK1677-3110	116	11.40	32.56	67.6
Innvictis	MEX1791VT2P	.	11.17	31.92	63.7
NK Brand	NK1838-3110	118	10.98	31.38	67.4
AgriGold	A645-80 3110	115	10.93	31.23	66.6
Stine	9752-32	112	10.93	31.24	64.7
Gateway Seed	1717	117	10.84	30.96	63.8
Dekalb	DKC70-64 SS	120	10.75	30.71	69.1
Pioneer	P2042VYHR	120	10.59	30.26	67.9
AgriGold	A647-35 5222	117	10.50	29.99	71.0
Innvictis	A1548DGVT2P	.	10.48	29.95	67.1
BH Genetics	BH 8690VIP3111	116	10.41	29.74	66.8
BH Genetics	BH 8966VT2P	119	10.40	29.71	64.5
BH Genetics	BH 8420VIP3110	114	10.39	29.70	68.7
Stine	9816-20	.	10.37	29.63	71.3
Dekalb	DKC67-66 SS	117	10.26	29.33	67.9
Dekalb	DKC68-48 SS	118	10.22	29.19	66.1
INTEGRA	6641	116	10.22	29.19	69.2
Dyna-Gro	D58VC65	118	10.18	29.08	65.3
Dyna-Gro	D57VC53	117	10.08	28.79	66.9
AgriGold	A650-21 VT2Pro	120	10.02	28.63	66.1
Dekalb	DKC68-95 SS	118	9.98	28.51	66.9
INTEGRA	6880	118	9.82	28.05	69.7
INTEGRA	6588	115	9.63	27.52	68.0
INTEGRA	6811	118	9.61	27.45	66.3
INTEGRA	6720	117	9.55	27.28	66.2
Stine	9817-30	.	9.44	26.97	68.0
Stine	9808E-20	115	9.01	25.73	66.0
BH Genetics	BH 8644TRE	116	8.85	25.27	68.4
Innvictis	A1257VT2P RIB	.	8.77	25.05	64.7
BH Genetics	BH 8780VT2P	117	8.55	24.44	68.2
Stine	9814-20	118	8.46	24.17	69.2
Average			10.31	29.45	67.1
LSD at 10% Level			1.29	3.70	1.4
Model R-squared			0.84	0.84	0.92

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 29, 2022.

Harvested: August 9, 2022. Accumulated 2,602 GDD units. $50 \leq \text{Temp} \leq 86$ °F

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

Test conducted by G. Ware, S. Brannon, and H. Jackson.

Insect Screening Results

Multiple Insect Resistance in 59 Commercial Corn Hybrids, 2022

Xinzhi Ni, 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 59 transgenic Bt hybrids were included in this year's trial; 12 hybrids were rated Very Good (VG), the highest rating for multiple insect resistance in 2021; 16 were Good (G); 14 were Fair (F), and 17 were Poor (P) as shown in **Table 1**.

Of all 59 hybrids in this trial, seven have Roundup Ready trait (denoted by RR or GT in seed names), three have SmartStax™ (SS), two have YHR (also known as Optimum® Intrasect™), 26 have VT2P or VC trait (Genuity Viptera Double PRO®), four have TC or TRE (Trecepta Technology), and one has the VT2P trait with refuge in bag (RIB). RIB hybrids are a blend of 95% transgenic seeds with 5% non-transgenic seeds as a strategy for management of insect resistance to Bt genes. But regulations require that in cotton-growing areas, which includes Georgia, all Bt corn hybrids both pure Bt transgenic corn seed and the RIB products have a 20% non-Bt seed planting as a refuge. Please see the bag tag and seed dealers for details about the Bt corn refuge requirements. For all value-added traits in this report, RR or GT denotes for herbicide Roundup tolerant technology, and the SS traits combined multiple transgenic technologies to control both above- and below-ground insect pests, as well as for herbicide tolerance. The YHR traits include a combination of two insect protection traits – Herculex® I and YieldGard® Corn Borer. The VT2P or VC traits contain a stack of two Bt genes that target foliar- and ear-feeding lepidopteran pests. TC or TRE was built on the proven VT2P Technology, which gives extra control against corn borers and other above ground pests.

Flowering time of all entries was between 53 and 60 days after a relatively late planting (April 23, 2022) due to frequent rain falls in April. In comparison to 2021 (61-65 days after planting), the earlier flowering in 2022 reflected the relatively warmer weather conditions before pollination at the Tifton location. Because no trial was performed in 2020 due to the pandemic of COVID-19, the data from 2019 and 2021 were used for multiple year performance assessment in **Table 1**. Overall insect damage on corn ears in 2022 was relatively low when compared to the observed damage in 2019 and 2021. 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 and 2.03 cm per ear, which was less than the damage observed in 2021 (0-2.2 cm). Kernel-feeding insect damage was assessed by percentage (%) of the 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 kernel feeding insect damage was low, maize weevil, stink bug, sap beetle, and pink scavenger caterpillar damage was combined, which was ranged between 0.18-1.47% of the damaged kernels in 2022. The data related to insect damage were subjected to the principal component analysis using ear and kernel damage. In addition, corn rootworm and corn borer damage were not detected at the Tifton trial in 2022.

Corn husk tightness and extension are considered important traits for ear- and kernel-feeding insect resistance, thus, 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 (< 4.5) to tight (between 4.6 and 5) for husk tightness rating. Husk extension ranged from 1 to 7.2 cm. Also, in the 2022 data, husk extension and tightness data were not correlated to either ear- or kernel-feeding insect damage. This finding demonstrated that husk features are varied among years, which might be influenced by environment 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.

Hybrids resistant to multiple insects are highly recommended for planting, because they 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 25 and harvested during the week of August 19, 2022 when kernel moisture was 19.6%. Experimental plots were thinned to 20,000 plants per acre and maintained following local extension publication-recommended agronomic practices. This trial was maintained and data collection was conducted by Penny Tapp (USDA-ARS, Tifton), Maegan Boucher, Jacob Odom, and Dawson Schwartz (UGA, Tifton).

Ear-Feeding Insect Resistance in 59 Commercial Corn Hybrids, Tifton, Georgia, 2022

Company or Brand Name	Hybrid Name	Days to Anthesis ^a	Husk Extensio n (cm)	Husk Tightness Rating ^b	2022 FAW+CEW Damage (cm) ^c	2022 kernel damage (%) ^d	Overall Resistance to Insect Damage ^e	
							2022	2 or more years
AgraTech	69RR	59	1.1	3.9	0	0.45	VG	
AgriGold	A647-79 VT2Pro	55	1	3.8	0.23	0.98	VG	
INTEGRA	6342	56	1.1	3.85	0	0.48	VG	
INTEGRA	CX001117	57	1.15	3.6	0	0.6	VG	
Local Seed	LC1307 TC	57	1.05	2.75	0	0.57	VG	G
Local Seed	LC1898 TC	57	1	4.6	0	1.1	VG	G
Local Seed	ZS1525 3220A	58	1.05	3.9	0	0.54	VG	
Pioneer	P2042VYHR	57	1.1	3.85	0	0.79	VG	
Progeny	PGY 2215 TRE	57	1	4.2	0.13	0.67	VG	
Stine	9752-32	57	1.1	3.3	0.1	0.92	VG	
Stine	9808E-20	55	0.95	3.95	0.2	0.6	VG	
Innvictis	A1257VT2P RIB	56	1.05	3.75	0.53	0.8	VG	
Augusta	A1367-3220GT	57	1.95	3.55	0.35	0.43	G	
BH Genetics	BH 8412VT2P	56	0.8	4.1	0.38	0.47	G	VG-
DEKALB	DKC68-95	55	1.25	3.95	0.35	0.32	G	G-
INTEGRA	6588	57	1.75	3.6	0.68	0.72	G	
INTEGRA	6641	55	1.4	3.93	0.57	0.72	G	
INTEGRA	6720	56	1.35	3.5	0.88	0.61	G	
INTEGRA	6811	57	0.7	3.55	0.58	0.36	G	
Local Seed	LC1577 VT2P	54	1.1	3.7	0.88	0.54	G	F
Local Seed	LC1919 VT2P	56	0.75	4.05	0.73	0.3	G	G
Gateway Seed	2716	57	1.6	3.27	0.83	0.33	G	
Progeny	PGY 8116 SS	57	1.47	3.07	0.63	0.3	G	VG-
Stine	9816-20	58	0.55	3.9	0	0.27	G	
Stine	9814-20	58	1.15	3.8	0.15	0.18	G	
Stine	9817-30	57	1.25	3.45	0	0.18	G	
Innvictis	MEX1791VT2P	57	0.85	4.15	0.78	0.55	G	
Innvictis	A1548DGV2P	55	0.65	4.1	0.58	0.3	G	
AgraTech	808VT2P	57	1.6	3.05	0.38	1.34	F	
AgriGold	A643-52 VT2Pro	56	1.2	3.8	0.8	1.14	F	
BH Genetics	BH 8412RR	56	1	3.8	0.48	1.02	F	
DEKALB	DKC68-35 VT2P	56	1.65	3.7	0.6	0.86	F	
INTEGRA	6410	55	1.05	3.65	0.78	1.09	F	
INTEGRA	6493	56	0.9	4	0.83	1.31	F	
INTEGRA	6533	55	1.15	3.2	0.45	1.19	F	

Local Seed	LC1627 TC	58	1.15	3.35	0.53	1.2	F	
MorCorn	MC 4161	56	1.15	3.7	1.18	1.47	F	
MorCorn	MC 4311	55	1.25	3.8	0	1.23	F	
MorCorn	MC 4527	58	0.55	4.2	0.53	1.26	F	
Progeny	PGY 2118 VT2P	56	0.69	4.31	0.81	0.96	F	G
Progeny	PGY 9114 VT2P	54	1.35	3.45	0.98	1.1	F	F-
Gateway Seed	9714	54	0.65	3.95	0.68	0.82	F	
AgraTech	1777GT	58	0.8	3.6	1.4	0.89	P	
AgraTech	888VT2P	56	0.93	4	1.26	0.5	P	
Augusta	A9967-3000GT	56	0.95	3.55	1.6	0.89	P	
AgriGold	A6659 RR	56	0.85	4.1	1.6	0.99	P	
Gateway Seed	1719	56	2.55	3.65	1.17	0.89	P	
BH Genetics	BH 8660RR	56	1.6	3.8	1.33	1.09	P	
BH Genetics	BH 8721VT2P	57	1.05	3.75	1.43	0.88	P	
BH Genetics	BH 8820VT2P	57	1.35	3.65	1.03	1.01	P	
DEKALB	DKC68-48 SS	56	1.2	3.15	0.93	0.86	P	F
DEKALB	DKC68-69 VT2P	57	1.65	3.95	1.4	0.95	P	
Dyna-Gro	D57VC53	57	0.9	3.6	0.8	0.75	P	
Dyna-Gro	D58VC65	55	0.6	4	2.03	1.37	P	P
Local Seed	LC1707 VT2P	56	0.67	4.47	0.97	0.74	P	P
MorCorn	MC 4725	57	1.4	3.65	1.03	0.7	P	F-
Pioneer	P1289YHR	57	2.1	3.45	1.98	0.8	P	
Progeny	PGY 2216 VT2P	56	1.1	3.55	1.03	0.67	P	
Progeny	PGY 9117 VT2P	57	0.9	4.15	1.48	1.16	P	F+

a. Days to anthesis is the number of days to flowering at Tifton, Georgia in 2022 after all hybrids were planted on April 25, 2022 ($n = 4$).

b. Husk Tightness: L = loose husk, M = medium-tight husk, and T = 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 savenger 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, 2022

Company or Brand Name	Hybrid	Early Plantings				Early	Late
		Tifton	Plains	Griffin	Rome	Average	Tifton
----- bu/acre -----							
Dyna-Gro Seed	M67GB87	118.9	116.1	99.2	130.9	116.4	39.0
Dyna-Gro Seed	M71GR91	110.1	114.7	99.5	140.8	116.3	.
Dekalb	DKS 44-07	109.3	115.9	97.4	137.9	115.6	.
Dekalb	DKS 54-07	122.3	116.6	97.1	125.2	114.9	.
Dyna-Gro Seed	GX22934	103.6	99.9	94.2	153.4	111.7	.
Dekalb	DKS 50-07	108.4	108.6	84.0	131.8	111.7	.
Sorghum Partners	SP7715	116.0	117.1	97.4	121.7	111.1	.
Scott Seed	S75A60	115.6	101.9	116.6	110.3	109.4	.
Dyna-Gro Seed	M63GB78	120.2	106.6	84.4	117.6	109.1	24.9
Dyna-Gro Seed	M72GB71	126.2	110.6	83.5	109.9	108.8	.
Dyna-Gro Seed	M60GB31	110.0	95.5	79.4	127.5	106.2	18.6
Dekalb	DKS 36-07	97.9	105.7	98.0	117.6	105.5	.
Carolina Seed Systems	Exp 003	104.8	104.5	82.3	117.3	102.7	50.7
Carolina Seed Systems	Exp 002	103.0	104.6	83.7	111.8	101.8	49.5
Sorghum Partners	SP 67B17	116.5	97.3	82.8	103.7	101.3	.
Scott Seed	S75A90	108.1	90.0	107.0	101.0	99.6	.
Carolina Seed Systems	Launch	98.7	99.6	88.8	104.6	98.1	50.8
Scott Seed	S78N30	102.3	93.8	89.6	106.4	97.3	.
Carolina Seed Systems	Exp 001	110.8	101.4	89.1	93.9	97.1	49.8
Dyna-Gro Seed	M59GB94	84.8	109.2	77.1	98.7	92.8	9.9
Sorghum Partners	SPSC343	82.6	79.8	91.0	107.1	90.7	.
Dyna-Gro Seed	GX22932	61.3	87.7	84.7	101.8	84.1	.
Average		106.2	104.2	91.2	118.4	103.0	36.7
LSD at 10% Level		9.4	7.9	11.8	13.6	9.3	4.3
Model R-squared		0.74	0.86	0.89	0.79	0.40	0.95

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.

Tifton, Georgia: Early-Planted Sorghum Grain Performance, 2022, Dryland

Company or Brand Name	Hybrid	Yield bu/acre	Test Weight lb/bu	50% Bloom ¹ days	Plant Height in	Head Height in	Lodging %	Bird Damage ² %
Dyna-Gro Seed	M72GB71	126.2	51.9	.	54	11.0	0	13
Dekalb	DKS 54-07	122.3	50.5	.	52	9.5	1	9
Dyna-Gro Seed	M63GB78	120.2	47.6	.	48	11.0	0	14
Dyna-Gro Seed	M67GB87	118.9	46.7	.	50	10.0	1	9
Sorghum Partners	SP 67B17	116.5	46.1	.	55	12.0	1	10
Sorghum Partners	SP7715	116.0	54.0	.	54	10.5	1	9
Scott Seed	S75A60	115.6	52.1	.	54	9.5	5	11
Carolina Seed Systems	Exp 001	110.8	46.4	.	60	15.0	17	13
Dyna-Gro Seed	M71GR91	110.1	50.0	.	51	11.0	0	10
Dyna-Gro Seed	M60GB31	110.0	47.0	.	48	10.5	7	17
Dekalb	DKS 44-07	109.3	52.2	.	48	9.7	1	10
Dekalb	DKS 50-07	108.4	49.0	.	52	10.5	2	11
Scott Seed	S75A90	108.1	50.6	.	56	10.0	3	14
Carolina Seed Systems	Exp 003	104.8	53.1	.	55	13.0	0	7
Dyna-Gro Seed	GX22934	103.6	44.5	.	53	11.0	6	12
Carolina Seed Systems	Exp 002	103.0	51.4	.	52	11.5	1	9
Scott Seed	S78N30	102.3	51.3	.	51	11.5	1	12
Carolina Seed Systems	Launch	98.7	53.3	.	61	14.1	12	12
Dekalb	DKS 36-07	97.9	45.9	.	51	10.0	2	26
Dyna-Gro Seed	M59GB94	84.8	41.8	.	52	11.0	1	17
Sorghum Partners	SPSC343	82.6	48.8	.	52	11.5	0	18
Dyna-Gro Seed	GX22932	61.3	39.0	.	47	10.0	0	0
Average		106.2	48.9	-	52	11.0	3	12
LSD at 10% Level		12.2	3.2	-	3	1.2	7	5
Model R-squared		0.74	0.81	-	0.84	0.82	0.68	0.82

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, 2022.

Harvested: August 16, 2022.

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

Soil Type: Tifton loamy sand.

Soil Test: 33 lb P₂O₅, and 78 lb K₂O/acre, and pH = 6.7.

Fertilization: Preplant: 50 lb N, 90 lb P₂O₅, and 50 lb K₂O/acre. Sidedress: 100 lb N and 23 lb S/acre.

Previous Crop: Peanuts.

Management: Conventional tillage. Dual Magnum and Atrazine used for weed control.

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

Plains, Georgia: Early-Planted Sorghum Grain Performance, 2022, Dryland

Company or Brand Name	Hybrid	Yield bu/acre	Test Weight lb/bu	50% Bloom ¹ days	Plant Height in	Head Height in	Lodging %	Bird Damage ² %
Sorghum Partners	SP7715	117.1	52.5	.	50	11.0	1	0
Dekalb	DKS 54-07	116.6	50.8	.	57	12.0	0	0
Dyna-Gro Seed	M67GB87	116.1	47.5	.	53	11.0	1	4
Dekalb	DKS 44-07	115.9	53.3	.	49	11.0	1	0
Dyna-Gro Seed	M71GR91	114.7	52.8	.	54	11.5	1	0
Dyna-Gro Seed	M72GB71	110.6	50.0	.	51	12.0	1	0
Dyna-Gro Seed	M59GB94	109.2	47.6	.	49	10.0	3	10
Dekalb	DKS 50-07	108.6	53.0	.	55	10.5	1	0
Dyna-Gro Seed	M63GB78	106.6	49.3	.	49	11.0	6	0
Dekalb	DKS 36-07	105.7	48.2	.	49	10.0	1	10
Carolina Seed Systems	Exp 002	104.6	52.2	.	54	13.0	1	0
Carolina Seed Systems	Exp 003	104.5	52.4	.	52	13.5	1	0
Scott Seed	S75A60	101.9	52.5	.	52	9.5	4	0
Carolina Seed Systems	Exp 001	101.4	51.6	.	61	15.0	8	0
Dyna-Gro Seed	GX22934	99.9	48.7	.	54	10.5	2	0
Carolina Seed Systems	Launch	99.6	52.4	.	64	14.5	7	1
Sorghum Partners	SP 67B17	97.3	48.9	.	45	12.5	1	0
Dyna-Gro Seed	M60GB31	95.5	47.8	.	50	9.5	1	0
Scott Seed	S78N30	93.8	52.5	.	54	10.5	1	0
Scott Seed	S75A90	90.0	49.8	.	54	10.0	11	0
Dyna-Gro Seed	GX22932	87.7	43.9	.	45	10.0	0	0
Sorghum Partners	SPSC343	79.8	50.5	.	49	12.0	19	1
Average		104.2	50.6	-	52	11.3	3	1
LSD at 10% Level		10.1	1.8	-	3	1.1	6	4
Model R-squared		0.86	0.86	-	0.90	0.76	0.68	0.69

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 13, 2022.

Harvested: August 23, 2022.

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

Soil Type: Greenville sandy loam.

Soil Test: 71 lb P₂O₅, and 333 lb K₂O/acre, and pH = 6.2.

Fertilization: Preplant: 6 lb N, 35 lb P₂O₅, and 70 lb K₂O/acre. Sidedress: 50 lb N/acre.

Previous Crop: Cotton.

Management: Conventional tillage. Dual Magnum and Atrazine used for weed control. Sivanto used for insect control.

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

Griffin, Georgia: Early-Planted Sorghum Grain Performance, 2022, Dryland

Company or Brand Name	Hybrid	Yield bu/acre	Test Weight lb/bu	50% Bloom ¹ days	Plant Height in	Head Exertion in	Lodging %	Bird Damage ² %
Scott Seed	S75A60	115.0	53.5	72.5	47	4.7	0	0
Scott Seed	S75A90	113.2	51.6	71.0	51	5.5	0	0
Dyna-Gro Seed	M67GB87	102.1	48.4	63.1	48	6.7	0	0
Sorghum Partners	SP7715	99.5	51.2	71.9	48	5.8	0	0
Dekalb	DKS 54-07	97.1	51.0	69.7	44	6.3	0	0
Dekalb	DKS 44-07	96.1	51.6	62.9	36	1.3	0	0
Dyna-Gro Seed	M71GR91	95.4	52.2	66.6	43	7.4	0	0
Dekalb	DKS 36-07	93.4	51.5	59.2	36	1.2	0	0
Dyna-Gro Seed	GX22934	92.7	49.8	66.4	42	4.0	0	0
Sorghum Partners	SPSC343	90.9	49.1	62.0	42	4.9	0	0
Carolina Seed Systems	Exp 002	89.7	48.9	70.5	48	6.8	0	0
Dyna-Gro Seed	M72GB71	88.5	47.9	67.7	46	4.8	0	0
Carolina Seed Systems	Launch	87.6	51.7	70.1	50	5.7	0	0
Dyna-Gro Seed	M63GB78	87.3	42.9	62.3	35	1.2	0	0
Dekalb	DKS 50-07	87.0	48.0	66.8	42	4.5	0	0
Carolina Seed Systems	Exp 001	86.4	51.8	69.1	52	5.8	0	0
Sorghum Partners	SP 67B17	84.4	46.6	62.0	40	2.8	0	0
Scott Seed	S78N30	83.9	50.9	70.5	47	5.5	0	0
Dyna-Gro Seed	M59GB94	81.6	48.0	56.3	37	1.2	0	0
Dyna-Gro Seed	M60GB31	78.3	44.6	61.8	37	3.3	0	0
Carolina Seed Systems	Exp 003	77.8	49.4	70.0	49	6.2	0	0
Dyna-Gro Seed	GX22932	77.3	47.0	56.7	36	0.1	0	0
Average		91.2	49.5	65.8	43	4.2	0	0
LSD at 10% Level		9.6	1.9	2.6	3	2.2	-	-
Model R-squared		0.57	0.67	0.86	0.89	0.74	-	-

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: May 9, 2022.

Harvested: October 5, 2022.

Seeding Rate: 80,000 seeds per acre in 7-inch rows.

Soil Type: Cecil gravelly sandy loam.

Soil Test: $P_2O_5 = 36$ lbs, $K_2O = 272$ lbs, and $pH = 6.7$.

Fertilization: Preplant: 35 lb N, 104 lb P_2O_5 , and 135 lb K_2O /acre. Topdress: 50 lb N/acre.

Previous Crop:

Management: Conventional tillage. Dual Magnum and Atrazine used for weed control.

Test conducted by G. Ware, C. Fox, J. Griffin, and K. Roach.

Rome, Georgia: Early-Planted Sorghum Grain Performance, 2022, Dryland

Company or Brand Name	Hybrid	Yield bu/acre	Test Weight lb/bu	50% Bloom ¹ days	Plant Height in	Head Exertion in	Lodging %	Bird Damage ² %
Dyna-Gro Seed	GX22934	153.4	58.4	74.9	51	.	0	7
Dyna-Gro Seed	M71GR91	140.8	59.9	72.9	48	.	0	13
Dekalb	DKS 44-07	137.9	57.3	72.1	47	.	0	13
Dekalb	DKS 50-07	131.8	59.1	73.1	48	.	0	13
Dyna-Gro Seed	M67GB87	130.9	57.0	74.3	48	.	0	14
Dyna-Gro Seed	M60GB31	127.5	55.2	73.4	46	.	0	20
Dekalb	DKS 54-07	125.2	59.2	74.1	47	.	0	2
Sorghum Partners	SP7715	121.7	55.4	74.5	47	.	0	18
Dyna-Gro Seed	M63GB78	117.6	54.4	70.5	43	.	0	18
Dekalb	DKS 36-07	117.6	53.2	70.6	46	.	0	24
Carolina Seed Systems	Exp 003	117.3	56.0	71.0	49	.	0	14
Carolina Seed Systems	Exp 002	111.8	55.9	71.8	50	.	0	10
Scott Seed	S75A60	110.3	55.2	72.0	50	.	0	13
Dyna-Gro Seed	M72GB71	109.9	56.0	72.4	48	.	0	8
Sorghum Partners	SPSC343	107.1	51.6	70.7	46	.	0	24
Scott Seed	S78N30	106.4	56.2	74.3	48	.	0	3
Carolina Seed Systems	Launch	104.6	56.9	70.9	58	.	0	5
Sorghum Partners	SP 67B17	103.7	52.9	71.2	49	.	0	10
Dyna-Gro Seed	GX22932	101.8	51.0	68.8	44	.	33	20
Scott Seed	S75A90	101.0	56.8	72.2	51	.	0	6
Dyna-Gro Seed	M59GB94	98.7	50.8	70.1	44	.	20	15
Carolina Seed Systems	Exp 001	93.9	58.8	72.1	64	.	0	0
Average		118.4	56.0	72.2	49	-	2	12
LSD at 10% Level		13.6	2.8	2.4	3	-	10	7
Model R-squared		0.79	0.70	0.68	0.78	-	0.38	0.70

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:

Harvested:

Seeding Rate: 80,000 seeds per acre in 7-inch rows.

Soil Type:

Soil Test:

Fertilization:

Previous Crop:

Management: Conventional tillage. Dual Magnum and Atrazine used for weed control.

Tifton, Georgia: Late-Planted Sorghum Grain Performance, 2022, Dryland

Company or Brand Name	Hybrid	Yield bu/acre	Test Weight lb/bu	50% Bloom ¹ days	Plant Height in	Head Height in	Lodging %	Bird Damage ² %
Carolina Seed Systems	Launch	50.8	52.3	.	62	12.0	1	0
Carolina Seed Systems	Exp 003	50.7	53.1	.	56	12.0	0	0
Carolina Seed Systems	Exp 001	49.8	53.0	.	60	11.5	5	0
Carolina Seed Systems	Exp 002	49.5	53.9	.	55	12.0	1	0
Dyna-Gro Seed	M67GB87	39.0	47.4	.	54	8.3	3	0
Dyna-Gro Seed	M63GB78	24.9	41.2	.	49	8.0	3	0
Dyna-Gro Seed	M60GB31	18.6	38.0	.	50	10.0	0	0
Dyna-Gro Seed	M59GB94	9.9	.	.	51	8.0	63	0
Average		36.7	42.4	-	55	10.2	9	0
LSD at 10% Level		4.3	1.6	-	2	0.4	4	-
Model R-squared		0.95	0.99	-	0.96	0.97	0.99	-

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 28, 2022.

Harvested: October 11, 2022.

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

Soil Type: Tifton loamy sand.

Soil Test: 94 lb P₂O₅, and 111 lb K₂O/acre, and pH = 6.0.

Fertilization: Preplant: 35 lb N, 10lb S, 80 lb P₂O₅, and 50 lb K₂O/acre. Sidedress: 100 lb N and 23 lb S/acre.

Previous Crop: Fallow.

Management: Conventional tillage. Dual Magnum and Atrazine used for weed control.

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

Tifton, Georgia:
Sorghum Silage Performance, 2022, Dryland

Company or Brand Name	Hybrid or Variety Name	Harvested Yield			Growth Stage	Plant	
		Dry	Green ¹	Moisture		Height	Lodging
		----- tons/acre -----		%		in	%
Sorghum Partners	SS304	6.49	18.55	80.8	Flowering	118	0
Dyna-Gro Seed	Super Sile 30	6.23	17.81	76.8	Milk	105	2
Dyna-Gro Seed	Super Sile 20	6.02	17.21	80.8	Milk	123	2
Sorghum Partners	NK300	5.95	17.01	78.8	Soft dough	78	0
Scott Seed	S21N924	5.63	16.09	80.0	-	91	0
Dyna-Gro Seed	F74FS72 BMR	5.62	16.07	81.5	Milk	103	8
Sorghum Partners	SPBD703	5.21	14.88	78.5	Soft dough	90	0
Dyna-Gro Seed	5FS Star	5.11	14.59	73.5	Hard dough	85	2
Sorghum Partners	SP1792 BMR	4.94	14.11	73.3	Soft dough	85	2
Sorghum Partners	SPBD702	4.76	13.60	80.1	Milk	74	0
Dyna-Gro Seed	F74FS23 BMR	4.72	13.49	80.7	-	61	0
Sorghum Partners	SP1727 MS BMR	4.63	13.22	78.2	Soft dough	93	2
Average		5.44	15.55	78.6	-	92	1
LSD at 10% Level		0.69	1.97	0.6	-	3	4
Model R-squared		0.60	0.60	0.97	-	0.99	0.38

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 3, 2022.

Harvested: July 28, 2022. Accumulated 2,479 GDD units. 50 <= Temp <= 100 °F

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

Soil Type: Tifton loamy sand.

Soil Test: 33 lb P₂O₅, and 78 lb K₂O/acre, and pH = 6.7.

Fertilization: Preplant: 50 lb N, 90 lb P₂O₅, and 50 lb K₂O/acre. Sidedress: 100 lb N and 23 lb S/acre.

Previous Crop: Peanuts.

Management: Conventional tillage. Dual Magnum (wide-stem only) and Atrazine used for weed control.

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

Quality Factors of Sorghum Hybrids for Silage Tifton, Georgia, 2022

Company or Brand Name	Hybrid Name	Dry Yield	UW Milk 2013 Model Calculated Values						Quality Components					
			Milk production	TDN	NE _L	NE _G	NE _M	ADF	aND	aNDFom	Ligni	NDFD3	NDFD24	
		tons/ac	lb/ton	lb/acre	% DM	-----	Mcal/cwt	-----	-----	% DM	-----	-----	% NDFom	-----
Sorghum Partners	SS304	6.49	2,635	17,112	55.8	60.5	27.2	52.7	37.8	65.0	63.2	4.6	54.0	68.1
Dyna-Gro Seed	Super Sile 30	6.23	2,730	17,021	57.8	61.5	29.8	55.4	37.8	64.7	63.3	4.7	57.0	71.0
Dyna-Gro Seed	5FS Star	5.11	3,308	16,890	64.3	70.9	38.4	64.9	28.4	48.7	47.5	3.5	53.7	68.3
Sorghum Partners	NK300	5.95	2,794	16,630	58.7	62.4	31.3	57.1	35.9	62.0	60.7	4.2	55.5	70.1
Dyna-Gro Seed	Super Sile 20	6.02	2,691	16,207	56.7	61.2	28.1	53.6	38.3	65.1	63.4	5.0	54.6	69.2
Sorghum Partners	SP1792 BMR	4.94	3,273	16,158	63.7	70.7	37.5	63.9	27.8	47.5	46.3	2.9	50.0	67.2
Dyna-Gro Seed	F74FS72 BMR	5.62	2,809	15,798	59.9	62.2	32.8	58.8	35.9	61.3	59.6	3.2	62.1	72.9
Scott Seed	S21N924	5.63	2,700	15,204	58.1	60.7	30.5	56.3	37.0	64.8	63.4	4.6	57.4	71.4
Sorghum Partners	SP1727 MS BMR	4.63	3,184	14,731	63.4	68.6	37.3	63.7	29.7	50.9	49.3	2.6	55.6	69.1
Sorghum Partners	SPBD703	5.21	2,795	14,553	59.3	62.1	32.4	58.3	33.7	59.1	57.4	3.0	56.9	69.6
Dyna-Gro Seed	F74FS23 BMR	4.72	2,836	13,390	61.1	62.1	34.9	61.1	35.2	60.3	59.0	3.4	65.5	75.5
Sorghum Partners	SPBD702	4.76	2,754	13,106	59.3	61.3	32.5	58.4	34.9	61.3	59.7	3.2	60.3	71.1
Average		5.44	2,876	15,567	59.8	63.7	32.7	58.7	34.4	59.2	57.7	3.7	56.9	70.3
LSD at 10% Level		0.69	184	1,905	2.5	2.8	3.1	3.4	2.3	3.1	3.0	0.6	2.4	2.3
Model R-squared		0.60	0.77	0.49	0.72	0.80	0.74	0.75	0.83	0.88	0.89	0.75	0.93	0.87

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 Tifton, Georgia, 2022

Company or Brand Name	Hybrid Name	Dry	Milk	Crude	Starch	Sugar	Fat	Fat	Ash	P	K	Ca	Mg	S	
		Yield	Production	Protein	(WSC)	(EE)	(TFA)	% DM							
		tons/ac	lb/ton	lb/acre											
Sorghum Partners	SS304	6.49	2,635	17,112	8.7	0.5	11.5	2.3	0.6	6.1	0.17	1.85	0.24	0.19	0.13
Dyna-Gro Seed	Super Sile 30	6.23	2,730	17,021	8.4	0.5	12.7	2.2	0.7	5.9	0.16	1.69	0.24	0.20	0.11
Dyna-Gro Seed	5FS Star	5.11	3,308	16,890	8.6	15.1	11.4	3.1	1.3	5.4	0.21	1.21	0.24	0.20	0.11
Sorghum Partners	NK300	5.95	2,794	16,630	9.0	0.9	12.3	2.5	0.8	6.5	0.18	1.85	0.24	0.23	0.12
Dyna-Gro Seed	Super Sile 20	6.02	2,691	16,207	7.8	0.4	13.4	2.3	0.6	5.6	0.14	1.56	0.24	0.19	0.11
Sorghum Partners	SP1792 BMR	4.94	3,273	16,158	8.3	11.9	15.4	2.8	1.1	5.5	0.16	1.29	0.24	0.21	0.10
Dyna-Gro Seed	F74FS72 BMR	5.62	2,809	15,798	8.9	0.4	12.2	2.7	0.8	7.8	0.22	2.02	0.25	0.19	0.15
Scott Seed	S21N924	5.63	2,700	15,204	9.1	0.6	10.6	2.3	0.8	7.1	0.17	2.12	0.24	0.23	0.12
Sorghum Partners	SP1727 MS BMR	4.63	3,184	14,731	8.6	5.4	16.9	3.0	0.9	6.4	0.18	1.40	0.24	0.16	0.11
Sorghum Partners	SPBD703	5.21	2,795	14,553	10.0	2.1	14.2	2.5	0.8	8.3	0.22	2.13	0.26	0.19	0.14
Dyna-Gro Seed	F74FS23 BMR	4.72	2,836	13,390	10.1	0.4	10.8	2.8	0.9	8.6	0.24	2.32	0.31	0.23	0.16
Sorghum Partners	SPBD702	4.76	2,754	13,106	9.9	1.2	11.0	3.1	0.8	8.4	0.23	1.99	0.25	0.18	0.16
Average		5.44	2,876	15,567	8.9	3.3	12.7	2.6	0.9	6.8	0.19	1.79	0.25	0.20	0.13
LSD at 10% Level		0.69	184	1,905	1.0	2.2	3.0	0.3	0.1	1.0	0.03	0.33	0.02	0.02	0.02
Model R-squared		0.6	0.77	0.49	0.5	0.9	0.43	0.64	0.79	0.75	0.69	0.7	0.65	0.76	0.69

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.

Griffin, Georgia: Sorghum Silage Performance, 2022, Dryland

Company or Brand Name	Hybrid or Variety Name	Soft-dough Harvest Yield								
		Dry	Green ¹	Moisture	Timing	Height	Lodging	Boot Stage		
		---- tons/acre ----		%	days	GDU	in	%	days	GDU
Dyna-Gro Seed	Super Sile 20	8.71	24.90	74.6	98	2,580	124	0	77	2,026
Sorghum Partners	SS304	6.86	19.61	74.8	105	2,750	122	0	77	2,026
Sorghum Partners	NK300	6.28	17.95	77.0	98	2,580	83	0	74	1,940
Sorghum Partners	SPBD702	5.69	16.27	77.1	98	2,580	76	0	72	1,873
Sorghum Partners	SPBD703	5.64	16.11	77.2	98	2,580	85	0	72	1,864
Dyna-Gro Seed	Super Sile 30	5.63	16.09	80.4	77	2,016	105	0	75	1,947
Dyna-Gro Seed	F74FS23 BMR	5.60	15.99	77.3	105	2,750	75	0	82	2,161
Sorghum Partners	SP1792 BMR	5.37	15.35	76.3	90	2,380	84	0	59	1,524
Dyna-Gro Seed	5FS Star	4.98	14.23	74.4	77	2,016	87	0	63	1,638
Scott Seed	S21N924	4.76	13.61	75.0	105	2,750	94	0	80	2,115
Sorghum Partners	SP1727 MS BMR	4.65	13.27	78.3	98	2,580	96	0	64	1,654
Dyna-Gro Seed	F74FS72 BMR	3.28	9.38	83.6	77	2,016	87	45	76	1,987
Average		5.62	16.06	77.2	94	2,465	93	4	73	1,896
LSD at 10% Level		0.87	3.23	2.7	0	-	5	16	2	61
Model R-squared		0.80	0.80	0.76	1	-	0.96	0.67	0.97	0.97

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 10, 2022.

Harvested: July 26 to Aug 23, depending on hybrid. GDU model is $50 \leq \text{Temp} \leq 100$ °F.

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

Soil Type: Cecil gravelly sandy loam.

Soil Test: $P_2O_5 = 26$ lbs, $K_2O = 247$ lbs, and $pH = 6.4$.

Fertilization: Preplant: 35 lb N, 104 lb P_2O_5 , and 135 lb K_2O /acre. Topdress: 50 lb N/acre.

Previous Crop:

Management: Conventional tillage. Dual Magnum and atrazine used for weed control.

F74FS72 BMR was harvested prior to soft dough due to lodging.

Sugarcane aphids were nearly absent from the test, and had no noticeable impact on yields.

No insecticide applications were made.

Test conducted by G. Ware, S. Brannon, and H. Jackson.

Quality Factors of Sorghum Hybrids for Silage Griffin, Georgia, 2022

Company or Brand Name	Hybrid Name	Dry Yield	UW Milk 2013 Model Calculated Values						Quality Components					
			Milk production	TDN	NE _L	NE _G	NE _M	ADF	aND	aNDFom	Ligni	NDFD3	NDFD24	
		tons/ac	lb/ton	lb/acre	% DM	-----	Mcal/cwt	-----	-----	% DM	-----	-----	% NDFom	-----
Dyna-Gro Seed	Super Sile 20	8.71	2,608	22,565	53.6	61.7	23.4	48.5	42.2	63.9	62.1	5.5	45.1	61.7
Sorghum Partners	SP1792 BMR	5.37	3,039	18,945	60.8	67.2	34.0	60.1	31.7	54.2	52.7	3.8	51.8	68.0
Sorghum Partners	SS304	6.86	2,885	18,943	58.3	64.6	30.6	56.3	37.8	59.4	57.7	5.2	50.3	68.2
Sorghum Partners	SPBD702	5.69	2,954	17,957	61.4	65.4	35.2	61.4	34.9	55.9	54.3	4.0	60.3	73.2
Sorghum Partners	NK300	6.28	2,812	17,408	57.1	63.2	29.3	54.9	36.3	56.9	55.3	4.5	47.3	63.9
Sorghum Partners	SPBD703	5.64	2,781	17,246	58.3	62.7	31.8	57.7	35.0	54.1	52.8	3.7	54.6	66.6
Dyna-Gro Seed	F74FS23 BMR	5.60	2,739	16,424	59.3	61.7	32.4	58.3	36.9	59.2	57.5	3.9	61.9	75.3
Dyna-Gro Seed	5FS Star	4.98	3,101	13,505	62.3	67.4	36.4	62.7	33.1	53.8	52.2	4.6	56.1	71.8
Dyna-Gro Seed	Super Sile 30	5.63	2,777	13,177	58.6	61.4	30.8	56.5	39.8	65.7	63.8	4.8	57.9	72.7
Scott Seed	S21N924	4.76	2,881	13,076	57.5	65.5	28.9	54.5	33.9	55.0	53.4	3.6	45.0	64.0
Sorghum Partners	SP1727 MS BMR	4.65	2,907	12,245	58.6	64.5	31.7	57.6	37.5	56.6	55.1	4.8	49.5	63.3
Dyna-Gro Seed	F74FS72 BMR	3.28	2,778	10,521	60.6	60.7	34.6	60.7	37.6	62.2	60.5	3.5	63.6	72.6
Average		5.62	2,855	16,001	58.9	63.8	31.6	57.4	36.4	58.1	56.5	4.3	53.6	68.4
LSD at 10% Level		0.87	169	1,842	2.1	2.7	2.9	3.2	3.3	4.4	4.2	0.7	3.6	3.2
Model R-squared		0.80	0.73	0.86	0.82	0.75	0.84	0.83	0.77	0.77	0.77	0.83	0.88	0.82

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, 2022

Company or Brand Name	Hybrid Name	Dry Yield	Milk Production	Crude Protein	Starch	Sugar (WSC)	Fat (EE)	Fat (TFA)	Ash	P	K	Ca	Mg	S	
		tons/ac	lb/ton	lb/acre	% DM										
Dyna-Gro Seed	Super Sile 20	8.71	2,608	22,565	6.7	3.8	9.6	2.2	0.7	5.4	0.12	0.85	0.27	0.22	0.10
Sorghum Partners	SP1792 BMR	5.37	3,039	18,945	9.1	7.1	10.1	3.1	1.0	5.6	0.19	1.55	0.25	0.21	0.12
Sorghum Partners	SS304	6.86	2,885	18,943	8.6	7.8	7.4	2.6	0.8	5.5	0.18	1.12	0.25	0.24	0.10
Sorghum Partners	SPBD702	5.69	2,954	17,957	9.9	10.9	1.9	2.9	1.0	7.4	0.26	1.79	0.25	0.21	0.14
Sorghum Partners	NK300	6.28	2,812	17,408	9.3	8.7	5.0	2.6	0.9	6.8	0.21	1.60	0.27	0.26	0.12
Sorghum Partners	SPBD703	5.64	2,781	17,246	11.6	10.2	2.6	2.7	1.0	9.6	0.31	2.29	0.34	0.26	0.17
Dyna-Gro Seed	F74FS23 BMR	5.60	2,739	16,424	9.8	4.4	4.4	3.0	0.8	9.0	0.24	2.46	0.32	0.25	0.15
Dyna-Gro Seed	5FS Star	4.98	3,101	13,505	10.0	8.7	6.0	3.0	1.1	5.6	0.20	1.50	0.28	0.25	0.12
Dyna-Gro Seed	Super Sile 30	5.63	2,777	13,177	8.1	0.1	9.2	2.4	0.9	5.8	0.17	1.83	0.27	0.24	0.10
Scott Seed	S21N924	4.76	2,881	13,076	7.2	7.0	13.6	2.8	0.9	6.3	0.17	1.56	0.24	0.19	0.11
Sorghum Partners	SP1727 MS BMR	4.65	2,907	12,245	10.6	8.8	3.4	2.3	0.9	5.9	0.20	0.99	0.37	0.28	0.15
Dyna-Gro Seed	F74FS72 BMR	3.28	2,778	10,521	10.8	0.1	6.1	3.3	1.2	9.5	0.29	2.44	0.37	0.25	0.17
Average		5.62	2,855	16,001	9.3	6.5	6.6	2.7	0.9	6.9	0.21	1.67	0.29	0.24	0.13
LSD at 10% Level		0.87	169	1,842	1.0	3.9	3.0	0.4	0.2	1.0	0.03	0.36	0.05	0.03	0.02
Model R-squared		0.80	0.73	0.86	0.91	0.80	0.79	0.72	0.76	0.92	0.92	0.90	0.80	0.73	0.90

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, 2022, Dryland

Company or Brand Name	Hybrid or Variety Name	Harvest Date		Season Total
		7-7-2022	9-2-2022	
----- dry pounds/acre -----				
Wide-stem Forages (Sorghum, Srq x Sudangrass)				
Scott Seed	S23N306	6,773	8,539	15,312
Dyna-Gro Seed	Dynagraze II BMR	6,817	7,984	14,801
Dyna-Gro Seed	Fullgraze II	6,799	7,972	14,770
Dyna-Gro Seed	Dynagraze II	6,514	8,026	14,540
Dyna-Gro Seed	Danny Boy II BMR	6,404	7,795	14,199
Sorghum Partners	Sordan 79	6,250	6,776	13,027
Sorghum Partners	SP4555	5,540	6,643	12,183
Dyna-Gro Seed	Fullgraze II BMR	5,038	7,033	12,071
Sorghum Partners	SP4105 BMR	4,743	6,474	11,216
Sorghum Partners	SP7106 BMR	4,647	5,790	10,437
Sorghum Partners	SWSB8801	4,858	5,578	10,435
Scott Seed	S26N312	3,080	6,761	9,841
Average		5,622	7,114	12,736
LSD at 10% Level		1,135	1,187	2,108
Model R-squared		0.66	0.52	0.61
Narrow-stem (Sudangrass, Pearl Millet)				
Dyna-Gro Seed	Dynagraze II	7,890	8,751	16,641
Dyna-Gro Seed	Dynagraze II BMR	7,228	7,157	14,385
Dyna-Gro Seed	Fullgraze II	6,719	7,388	14,108
Dyna-Gro Seed	Danny Boy II BMR	5,324	8,356	13,680
Dyna-Gro Seed	Fullgraze II BMR	5,638	6,621	12,259
Sorghum Partners	Millex 32	8,105	1,718	9,823
Average		6,817	6,665	13,483
LSD at 10% Level		583	1,266	1,782
Model R-squared		0.93	0.86	0.73

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

Planted: May 3, 2022.
 Seeding Rate: Sorghum, Sudangrass and hybrids: 100,000 seed/acre in 36-inch rows.
 Millet: 500,000 seed/acre in 36" rows.
 Soil Type: Tifton loamy sand.
 Soil Test: 33 lb P₂O₅, and 78 lb K₂O/acre, and pH = 6.7.
 Fertilization: Preplant: 50 lb N, 90 lb P₂O₅, and 50 lb K₂O/acre. Sidedress: 100 lb N and 23 lb S/acre.
 Previous Crop: Peanuts.
 Management: Conventional tillage. Dual Magnum (wide-stem only) and Atrazine used for weed control.

Test conducted by K. Cawley, 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 2022

Xinzhi Ni, 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 four rows by 20 ft with a randomized complete block design and three replications, while the grain sorghum trial was planted with a similar design with two-row plots and four replications. The field season of 2022 had very low sugarcane aphid infestations in all trials, possibly due to frequent rainfalls. While silage and forage sorghum trials were planted on May 3, 2022, the grain trial was planted on June 8, 2022. The forage trial was evaluated on July 6, and August 31, 2022, respectively, prior to the two harvests. The silage trial was evaluated on July 27, 2022 before the harvest. The grain sorghum trial was evaluated before harvest on September 26, 2022. A total of seven groups of insect pests were observed throughout the field season of 2022: foliar-feeding fall armyworm, sugarcane aphid (*Melanaphis sorghi* also known as sorghum 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. Bird damage on grain sorghum was also evaluated. Although the infestations of some insect pests (such as, foliar-feeding fall armyworm, stink bugs, chinch bug, and leaf-footed bug) occurred, they were not included in this report because the infestations caused minimal damage. It is worth noting that sugarcane aphid infestation and aphid damage were relatively low in all three trials, when compared to the data from the previous years as showing in the three tables.

Rating scales used for hybrid evaluations:

In all trials, growth stage was assessed based on 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>). 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. The number of sugarcane 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. The root and/or stalk lodging was assessed by percentage of plants with root or stalk lodging per plot. In addition, headworm, sorghum midge, and bird damage were assessed by the percentage of damaged kernels per panicle for the grain sorghum trial.

Hybrid ranking criteria:

The overall hybrid rankings in 2022 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 22 grain sorghum hybrids (**Table 1**) were evaluated. Sugarcane aphid, headworm and sorghum midge damage, as well as anthracnose infection severity, were evaluated. Six hybrids ranked VG in 2022, and four hybrids ('DKS 54-07', 'SP7715', 'M72GB71', and 'DKS 36-07') ranked VG or VG- with two-year data (**Table 1**).

For the silage sorghum trial, a total of 12 commercial hybrids were evaluated (**Table 2**). Low sugarcane aphid infestation and damage on plants were observed in 2022. The hybrid ranking was based on the results of the principal component analysis with four parameters. Four hybrids were ranked as VG, and three hybrids ('NK300', 'SS304', and 'F74FS23 BMR') were rated VG or VG- with 2-year data (**Table 2**).

Twelve forage sorghum hybrids were evaluated as shown in **Table 3**. Insect and disease damage ratings were relatively low at both sampling dates at pre-harvest as shown in **Table 3**. Four hybrids were ranked VG for 2022, and three hybrids ('SWSB8801', 'SP7106 BMR', and 'Fullgraze II') were rated VG or VG- with 2-year data (**Table 3**).

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 2022. The grain sorghum trial was planted and maintained by Penny Tapp (Crop Genetics and Breeding Research Unit, USDA-ARS), and Maegan Boucher, Jacob Odom, and Dawson Schwartz (University of Georgia, Tifton), while silage and forage sorghum trials were planted on the Lang/Rigdon 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, Michael Purvis, and Mikayla Barela (Crop Genetics and Breeding Research Unit, USDA-ARS), and Maegan Boucher, Jacob Odom, and Dawson Schwartz (University of Georgia, Tifton).

Table 1. Evaluation of 22 Grain Sorghum Hybrids for Resistance to Headworm, Sugarcane Aphid, Bird and Anthracnose Damage in 2022 at Tifton, Georgia¹

Brand	Hybrid	Headworm damage ² %	Aphid damage ³ 1-9 scale	Bird damage ⁴ %	Anthracnose severity ⁵ 1-5 scale	Hybrid rating ⁶	
						2022	3-yr avg
DEKALB	DKS 54-07	7.5	1.0	11.3	5.0	VG	VG
Dyna-Gro Seed	M60GB31	7.5	1.0	12.5	4.8	VG	F+
Dyna-Gro Seed	M67GB87	7.5	1.0	15.0	4.8	VG	G
Dyna-Gro Seed	M72GB71	8.75	1.0	11.3	5.0	VG	VG-
Scott Seed	S78N30	10	1.0	14.3	4.0	VG	.
Sorghum Partners	SP7715	8.75	1.0	16.3	3.5	VG	VG
DEKALB	DKS 36-07	11.25	1.0	10.0	3.3	G	VG-
DEKALB	DKS 50-07	12.5	1.0	12.5	4.0	G	.
Carolina Seed Systems	Exp 002	8.75	1.0	15.0	3.0	G	.
Carolina Seed Systems	Exp 003	8.75	1.0	9.5	2.3	G	.
Carolina Seed Systems	Launch	9.25	1.0	8.8	2.0	G	.
Sorghum Partners	SPSC343	11.25	1.0	13.8	3.5	G	.
Dyna-Gro Seed	GX22932	7.5	1.0	15.0	5.0	F	.
Dyna-Gro Seed	GX22934	11.25	1.0	18.8	5.0	F	.
Dyna-Gro Seed	M59GB94	12.5	1.0	15.0	5.0	F	.
Dyna-Gro Seed	M63GB78	12.5	1.0	20.0	4.8	F	F-
Dyna-Gro Seed	M71GR91	12.5	1.0	16.3	5.0	F	F-
Scott Seed	S75A90	10	1.0	13.8	5.0	F	.
DEKALB	DKS 44-07	13.75	1.5	16.3	4.6	P	F-
Carolina Seed Systems	Exp 001	11.75	2.4	15.0	3.3	P	.
Scott Seed	S75A60	15	1.0	10.0	4.9	P	.
Sorghum Partners	SP 67B17	13.75	1.0	11.3	4.8	P	.

1. In 2022, the grain sorghum trial with 18 entries and four replications was planted on June 8, 2022. Headworm and bird damage, and anthracnose infection were assessed prior to harvest on September 26, 2022. Because very few sugarcane aphid colonies were observed throughout the plant development in this trial, only aphid damage data were collected on August 23, 2022 for the grain sorghum trial.
2. Headworm damage (%) was evaluated as the percentage of grain kernels that were damaged by headworm feeding on the panicles.
3. The average of SCA damage rating per plot was evaluated on August 23, 2022 by 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.
4. Bird damage to the grain was rated in percentage of damaged grain kernels per panicle.
5. Anthracnose infection severity rated on 1 (no damage) to 5 (all leaves discolored) scale.
6. Hybrid ranking was based on the results of the principal analysis using four parameters (i.e., headworm, sugarcane aphid and bird damage, and anthracnose infection severity) of all 22 hybrids. The rankings are: Very Good (VG), Good (G), Fair (F), and Poor (P). 3-year (2020-2022) data shows consistency of hybrid performance through years. The ranking with a "+" or "-" sign means the ranking varied from year to year.

Table 2. Evaluation of 12 Silage Sorghum Hybrids for Resistance to Sugarcane Aphid (SCA) and Anthracnose in 2022 at Tifton, Georgia¹

Brand	Hybrid	Growth Stage ² 0-9	Lodging ³ %	Aphids		Anthracnose severity ⁶ 1-5	Hybrid rating ⁷	
				Number present ⁴ count	Damage rating ⁵ 1-9		2022	2-yr avg
Dyna-Gro Seed	Super Sile 30	5.7	1.7	2.9	2.2	2.0	VG	G
Sorghum Partners	NK300	6.0	0.0	11.7	2.7	1.7	VG	VG-
Sorghum Partners	SS304	5.3	1.7	5.5	1.7	2.0	VG	VG
Scott Seed	S21N924	5.0	0.0	4.0	2.6	2.0	VG	.
Sorghum Partners	SPBD703	6.7	0.0	6.8	3.1	2.7	G	.
Sorghum Partners	SPBD702	6.7	0.0	18.7	3.3	1.7	G	.
Dyna-Gro Seed	F74FS23 BMR	4.3	0.0	20.5	3.1	2.0	G	VG-
Sorghum Partners	SP1792 BMR	7.0	5.0	3.3	1.8	3.3	F	.
Dyna-Gro Seed	Super Sile 20	5.3	5.0	3.8	1.9	2.0	F	F
Sorghum Partners	SP1727 MS BMF	6.7	12.3	2.9	3.1	3.0	P	.
Dyna-Gro Seed	5FS Star	8.3	3.3	2.6	3.0	3.0	P	.
Dyna-Gro Seed	F74FS72 BMR	6.0	15.0	2.2	3.5	2.7	P	F-

1. In 2022, the silage sorghum trial consisted of 12 sorghum hybrids with four replications was planted on May 3, 2022. The number of the sugarcane aphids (SCA) 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 29, 2022. 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. Lodging rated as the percentage of plants showing either root or stalk lodging prior to harvest.

4. 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.

5. The average of SCA damage rating per plot was evaluated on July 29, 2022 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.

6. Anthracnose infection severity rated on 1 (no damage) to 5 (all leaves discolored) scale.

7. 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, lodging, number of sugarcane aphids, sugarcane aphid damage, and anthracnose infection) of the 12 silage sorghum hybrids. The rankings are: Very Good (VG), Good (G), Fair (F), and Poor (P). The ranking with a "+" or "-" sign means the ranking varied from year to year.

Table 3. Evaluation of 12 Forage Sorghum Hybrids for Resistance to Sugarcane Aphid (SCA) and Anthracnose in 2022 at Tifton, Georgia¹

Brand	Hybrid	Growth Stage ²	Lodging ³	Aphids		Anthracnose severity ⁶	Hybrid rating ⁷	
				Number present ⁴	Damage rating ⁵		2022	2-yr avg
		0-9	%	count	1-9	1-5		
Sorghum Partners	SWSB8801	6.5	2.7	2.9	1.1	2.3	VG	VG
Scott Seed	S23N306	4.0	0.8	3.5	1.0	1.7	VG	.
Sorghum Partners	SP7106 BMR	4.0	0.0	7.9	1.0	1.8	VG	VG-
Dyna-Gro Seed	Fullgraze II	4.0	1.7	5.4	1.1	1.9	VG	VG
Sorghum Partners	Sordan 79	5.7	28.3	15.9	1.3	2.5	G	F
Sorghum Partners	SP4555	5.7	7.5	5.9	1.0	2.7	G	F
Dyna-Gro Seed	Danny Boy II BM	4.0	0.0	14.6	1.2	2.7	G	G-
Dyna-Gro Seed	Dynagraze II	6.0	0.8	32.2	1.1	2.8	G	.
Dyna-Gro Seed	Fullgraze II BMR	4.0	0.0	32.1	1.2	2.2	F	F-
Scott Seed	S26N312	3.5	0.0	24.8	1.3	2.0	F	F-
Sorghum Partners	SP4105 BMR	3.7	0.0	85.5	1.9	2.0	P	F
Dyna-Gro Seed	Dynagraze II BM	5.7	3.3	26.4	1.2	2.8	P	.

1. The forage sorghum trial consisted of 12 sorghum hybrids and three replications was planted on May 3, 2022. The number of the sugarcane aphids (SCA) 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 infection were also assessed per plot prior to harvest on July 5 and August 31, 2022, respectively. Sugarcane aphid infestations at both harvests were relatively low in 2022. 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.

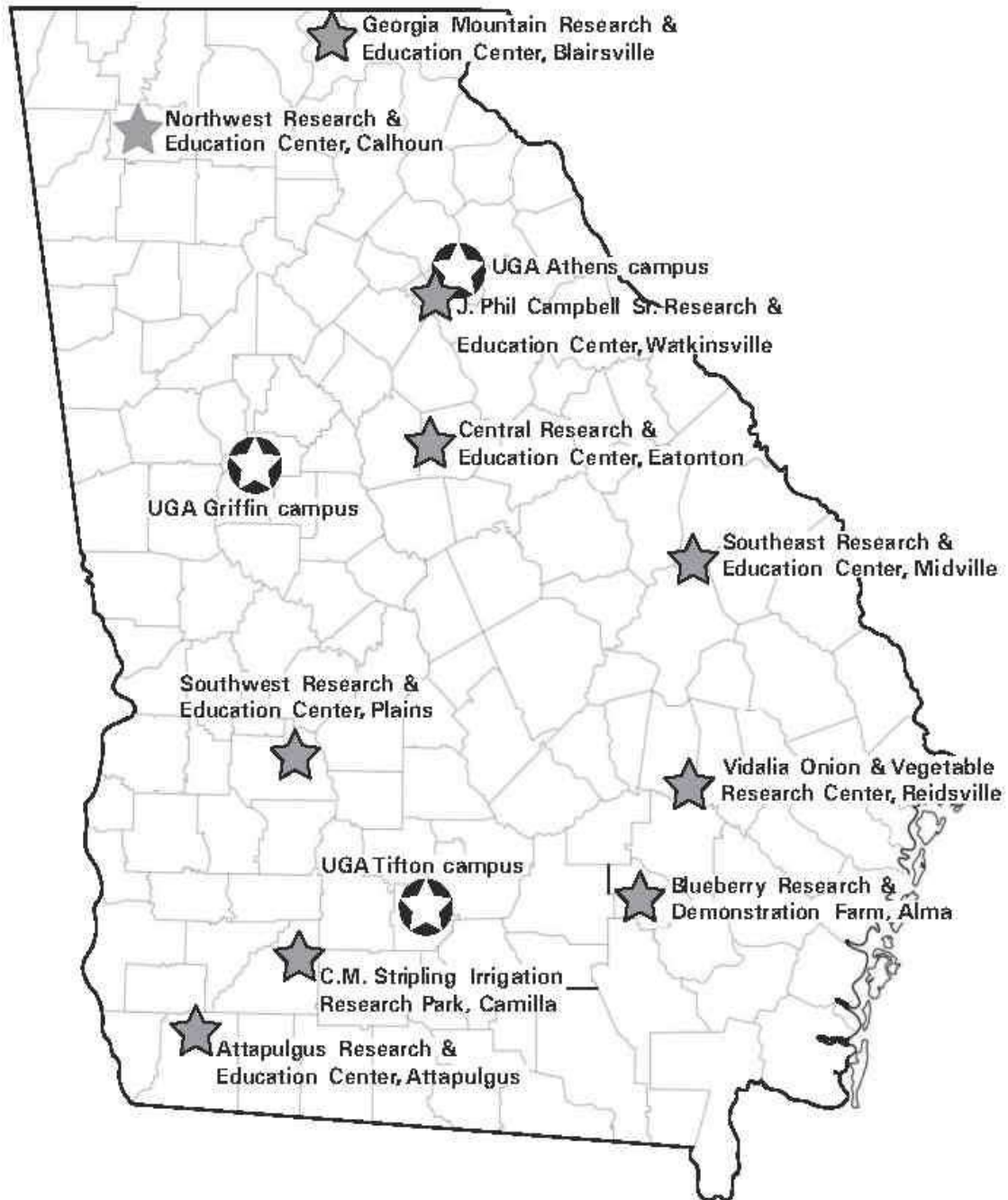
3. Lodging rated as the percentage of plants showing either root or stalk lodging prior to harvest.

4. 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 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

5. The average of SCA 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.

6. Anthracnose infection severity rated on 1 (no damage) to 5 (all leaves discolored) scale.

7. The hybrid ranking was based on the results of analysis of each parameters. Very few sugarcane aphids, low aphid damage, and very limited anthracnose infection was recorded prior to the two harvests as described previously. The rankings are: Very Good (VG), Good (G), Fair (F), and Poor (P). Two-year data shows consistency of hybrid performance through years. The ranking with a "+" or "-" sign means the ranking varied from year to year.



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