

# Root-knot Nematode Variety Trial Results, 2017



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Variety trials were conducted at Seminole, Locketville, and Brownfield. Not all the same entries were tested at all three locations. The root-knot nematode susceptible varieties tested at all three sites included DP 1646B2XF, NG 3406B2XF, NG 3500XF, and PHY 499WRF. Two varieties that are not advertised as root-knot nematode resistant are FM 1911GLT and FM 2011GT, but are considered somewhat tolerant to root-knot nematode. The varieties or breeding lines that are considered tolerant or resistant included ST 4946GLB2 (1 gene), DP 1558NRB2RF (2 genes), DP 1747NRB2XF (2 genes?), and PHY 417WRF (2 genes). There were Deltapine and Phytogen experimental lines with possible nematode resistant genes included in these three locations. The Seminole location had excellent root-knot nematode pressure. The Locketville location had low to moderate root-knot nematode pressure. The Brownfield site had some plots with very high nematode pressure, but it was sporadic in the field, and so it is difficult to evaluate performance when the nematode pressure was uneven across different varieties.

Cultivars that consistently performed well in (Lint Yield x Loan Value) included FM 2498GLT (ranked 7<sup>th</sup> (of 28) in Seminole (Table 1), 1<sup>st</sup> (of 27) in Locketville (Table 3), and 5<sup>th</sup> (of 35) in Brownfield (Table 5); DP 16R246NRB2XF (ranked 3<sup>rd</sup>, 10<sup>th</sup>, and 7<sup>th</sup> in Seminole, Locketville, and Brownfield); FM 2011GT ranked 1<sup>st</sup>, 9<sup>th</sup>, and 17<sup>th</sup> (Seminole, Locketville, Brownfield); PX3A82W3FE (ranked 4<sup>th</sup>, 2<sup>nd</sup>, and 23<sup>rd</sup> (Seminole, Locketville, Brownfield); and PX3A99W3FE (ranked 6<sup>th</sup> (Seminole), and 6<sup>th</sup> (Brownfield). PHY 308WRF was only tested at Locketville, where it ranked 6<sup>th</sup>. ST 4946GLB2, which is the standard which I would rate all varieties against, performed best in Seminole (ranked 2<sup>nd</sup>), but did not yield well at Locketville (ranked 16<sup>th</sup>) or Brownfield (ranked 13<sup>th</sup>). The variety FM 1911GLT performed adequate at Seminole (ranked 9<sup>th</sup>) and Locketville (ranked 4<sup>th</sup>), but yielded poorly at Brownfield (ranked 33<sup>rd</sup>). The susceptible check NG 3500XF performed well at Locketville (ranked 3<sup>rd</sup>), but not at the other two sites. NG 3406B2XF and PHY 499WRF ranked in the middle of all the cultivars tested.

**Table 1.** Root-knot Nematode Variety Trial Results – Seminole (moderate to high pressure)

Variety <sup>1</sup>	Lint yield x loan value	Lint Yield (lbs/a)	Loan (¢/lb)	Plants /ft row	Root-knot /500 cm <sup>3</sup> soil	LRK <sup>3</sup>	Turn out (%)
FM 2011GT	863	1,601	53.94	2.13	7,950	3.82	30.3
ST 4946GLB2	844	1,664	50.69	2.00	8,910	3.73	29.7
DP 16R246NRB2XF	839	1,524	55.09	0.92	1,560	2.98	33.8
PX 3A82W3FE	836	1,624	51.52	1.90	4,530	3.42	28.7
DP 1747NRB2XF	803	1,514	53.07	1.20	2,820	3.39	32.3
PX 3A99W3FE	798	1,694	47.12	1.99	960	2.90	31.5
FM 2498GLT	783	1,467	53.39	2.06	13,590	3.91	30.6
DP 17R945NRB3XF	779	1,416	54.99	0.84	4,470	3.42	31.4
FM 1911GLT	765	1,474	51.94	1.57	5,670	3.51	30.2
DP 17R942NRB3XF	764	1,407	54.34	0.78	1,620	2.94	31.1
DP 16R245NRB2XF	752	1,376	54.62	1.28	3,600	3.30	31.3
FM 1888GLT	739	1,408	52.47	1.37	12,600	4.09	28.7
PHY 417WRF	738	1,474	50.09	1.58	840	2.29	31.0
PHY 480W3FE	729	1,511	48.34	1.67	1,200	2.78	28.0
NG 3500XF	718	1,400	51.32	1.47	8,130	3.76	30.9
NG 4689B2XF	716	1,353	52.89	1.34	10,800	4.00	30.0
PX 2AX3W3FE	701	1,397	50.19	2.11	6,690	3.82	27.9
DP 1558NRB2RF	699	1,298	53.89	1.12	2,880	3.43	30.8
NG 3406B2XF	695	1,348	51.59	1.72	7,620	3.82	30.1
PHY 440W3FE	690	1,413	48.87	1.82	7,230	3.79	27.7
PX 2A28W3FE	664	1,334	49.82	1.83	5,280	3.54	28.5
PHY 250W3FE	661	1,328	49.79	1.83	3,630	3.42	29.6
DP 17R933NRB3XF	657	1,195	55.04	0.75	2,550	3.38	32.1
DP 17R946NRB3XF	633	1,158	54.69	0.88	1,350	2.99	30.7
DP 1646B2XF	626	1,138	55.07	0.95	10,740	3.97	31.8
DP 1522B2XF	625	1,174	53.24	1.35	13,230	4.06	29.3
PHY 499WRF	615	1,275	48.22	1.28	6,960	3.76	27.3
DP 17R931NRB3XF			54.94	0.63	3,780	3.43	31.3
MSD (0.05) <sup>2</sup>	135	240	3.57	0.45	8,547	0.79	1.5

<sup>1</sup>DP=Deltapine; FM=Fibermax; NG=NexGen; PHY=Phytogen; PX= experimental from Phytogen; ST=Stoneville.

<sup>2</sup>MSD = minimum significant different ( $P=0.05$ ) between cultivars.

<sup>3</sup>Log<sub>10</sub> transformed root-knot nematode density.

**Table 2.** Fiber quality for Root-knot nematode trial conducted in Seminole

Variety <sup>1</sup>	Mic <sup>2</sup>	Length	Unif	Strength	Elon	Rd	+b	Leaf
DP 1522B2XF	3.40	1.120	81.30	30.30	10.1	78.6	8.6	3.0
DP 1558NRB2RF	4.20	1.115	82.65	31.60	9.5	78.8	9.0	1.0
DP 1646B2XF	3.55	1.190	81.25	30.70	9.4	81.9	8.1	1.0
DP 16R245NRB2XF	3.85	1.145	81.90	29.65	9.2	78.1	9.0	1.5
DP 16R246NRB2XF	4.25	1.165	83.35	32.75	9.4	77.9	8.8	1.0
DP 1747NRB2XF	4.20	1.085	81.20	30.25	9.1	78.6	8.8	2.0
DP 17R931NRB3XF	3.60	1.155	82.35	32.65	9.0	78.1	8.6	2.5
DP 17R933NRB3XF	3.70	1.155	82.25	30.35	9.6	79.2	8.7	1.5
DP 17R942NRB3XF	4.00	1.140	81.40	30.80	8.6	77.6	8.8	2.5
DP 17R945NRB3XF	4.15	1.160	83.15	32.05	8.6	78.2	8.6	2.0
DP 17R946NRB3XF	4.10	1.150	82.10	31.55	8.5	77.4	8.9	1.5
FM 1888GLT	3.50	1.120	80.85	29.50	6.8	78.1	8.3	3.0
FM 1911GLT	3.40	1.150	81.25	30.65	8.2	79.4	8.0	2.0
FM 2011GT	3.60	1.125	81.35	30.05	7.8	78.4	8.2	2.0
FM 2498GLT	3.60	1.155	82.15	30.25	8.2	80.4	7.6	1.0
NG 3406B2XF	3.25	1.115	82.00	30.00	9.7	78.8	8.8	2.5
NG 3500XF	4.00	1.065	82.15	30.60	10.1	76.9	9.2	2.0
NG 4689B2XF	3.85	1.095	80.65	29.10	6.5	77.7	9.1	2.5
PHY 250W3FE	3.40	1.100	80.20	28.50	7.8	78.1	8.3	3.0
PHY 417WRF	3.25	1.105	80.85	29.35	10.0	77.2	8.9	3.0
PHY 440W3FE	3.00	1.150	80.35	30.45	7.6	77.6	9.2	2.5
PHY 480W3FE	2.95	1.110	80.80	28.45	9.8	77.7	8.8	3.0
PHY 499WRF	2.95	1.115	80.65	29.75	9.5	77.5	8.6	2.5
PX 2A28W3FE	3.10	1.125	79.95	28.00	7.0	77.9	8.5	2.0
PX 2AX3W3FE	3.20	1.130	80.25	29.85	7.1	79.2	7.8	3.0
PX 3A82W3FE	3.35	1.100	82.35	30.35	9.2	78.1	8.5	1.5
PX 3A99W3FE	3.10	1.090	79.75	29.40	9.2	76.7	9.3	1.5
ST 4946GLB2	3.40	1.100	81.50	31.35	9.2	75.4	8.8	3.5
MSD (0.05)	0.30	0.038	1.91	2.39	1.2	2.1	0.6	ns

<sup>1</sup>DP = Deltapine; FM = Fibermax; NG = NexGen; PHY = Phytogen; PX=experimental line for Phytogen; ST = Stoneville.

<sup>2</sup>Mic=micronaire; unif=uniformity; elon=elongation.

**Table 3.** Root-knot nematode variety trial results from Locketville (low to moderate pressure)

Variety <sup>1</sup>	Lint yield X Loan value	Lint Yield (lbs/a)	Loan Value (¢/lb)	Plants /ft row	Root-knot /500 cm <sup>3</sup> soil	LRK <sup>3</sup>	Turnout (%)
FM 2498GLT	935.04	1,722	54.32	2.69	3,240	3.04	26.3
PX3A82W3FE	918.19	1,730	53.09	2.60	85	1.10	28.6
NG 3500XF	866.91	1,679	51.64	2.28	2,545	3.22	28.0
FM 1911GLT	861.34	1,687	51.07	2.56	2,790	2.37	27.0
PX2A28W3FE	834.86	1,604	52.07	2.56	25	0.50	25.6
PHY 308WRF	828.15	1,719	48.19	2.60	680	2.71	24.4
PX2A36W3FE	826.98	1,575	52.52	2.25	2,010	3.23	25.1
PX2AX4W3FE	823.55	1,580	52.14	2.56	630	2.52	25.6
FM 2011GT	814.86	1,633	49.92	2.47	825	2.80	25.2
DP16R246NRB2XF	814.70	1,520	53.59	1.58	425	1.41	27.9
NG 3406B2XF	791.27	1,607	49.27	1.81	1,300	3.09	26.3
PX2A23W3FE	790.21	1,470	53.77	2.30	530	2.01	24.6
PHY 499WRF	781.47	1,516	51.57	2.35	1,735	3.23	26.5
PHY 250W3FE	773.61	1,535	50.39	2.51	630	2.00	25.0
PX2A27W3FE	758.23	1,500	50.54	2.31	135	1.22	23.3
ST 4946GLB2	745.16	1,510	49.34	2.53	450	2.05	25.6
DP17R945NRB3XF	743.12	1,427	52.07	1.56	200	1.80	28.0
DP16R245NRB2XF	701.89	1,409	49.82	1.42	700	2.79	25.5
DP17R946NRB3XF	700.50	1,332	52.59	1.35	925	2.91	28.7
FM 1888GL	683.39	1,405	48.64	1.69	1,400	2.24	25.1
DP 1646B2XF	675.75	1,376	49.12	1.21	1,270	2.93	29.1
DP17R933NRB3XF	620.14	1,245	49.82	1.31	875	2.78	28.2
DP17R942NRB3XF	599.42	1,241	48.37	0.99	185	2.24	27.5
DP17R931NRB3XF	590.37	1,216	48.54	1.30	850	2.24	27.2
DP 1558NRB2RF	558.32	1,146	48.74	1.17	605	2.18	24.8
PHY 417WRF	548.27	1,205	45.49	2.06	150	1.68	26.0
DP 1747NRB2XF	428.37	966	44.64	0.68	520	2.11	26.5
MSD (0.05)	116.18	246	8.22	0.52	2,150	1.93	4.7

<sup>1</sup>DP=Deltapine; FM=Fibermax; NG=NexGen; PHY=Phytogen; PX= experimental from Phytogen; ST=Stoneville.

<sup>2</sup>MSD = minimum significant different ( $P=0.05$ ) between cultivars.

<sup>3</sup>Log<sub>10</sub> transformed root-knot nematode density.

**Table 4.** Fiber quality for Root-knot nematode trial conducted in Locketville

Variety <sup>1</sup>	Mic <sup>3</sup>	length	strength	unif	elon	Rd	+b	leaf
DP 1558NRB2RF	3.10	1.130	31.00	81.5	9.4	76.7	10.2	2.5
DP 1646B2XF	2.95	1.190	30.50	80.6	10.8	81.9	8.9	1.5
DP16R245NRB2XF	3.10	1.225	31.95	82.5	10.1	77.8	10.0	2.0
DP16R246NRB2XF	3.60	1.195	32.90	83.8	10.1	76.8	10.9	2.5
DP 1747NRB2XF	2.65	1.110	30.65	80.2	10.1	78.0	10.9	1.0
DP17R931NRB3XF	2.90	1.155	32.15	82.8	11.2	78.1	10.4	2.0
DP17R933NRB3XF	3.05	1.195	31.60	82.5	10.7	78.8	10.1	1.0
DP17R942NRB3XF	3.25	1.155	32.50	82.0	9.4	77.2	11.0	2.0
DP17R945NRB3XF	3.35	1.190	32.30	82.8	8.8	77.7	10.2	3.0
DP17R946NRB3XF	3.45	1.195	33.35	83.3	9.7	77.1	10.4	2.0
FM 1888GL	2.80	1.180	32.35	82.2	8.1	80.2	8.4	2.5
FM 1911GLT	3.05	1.170	30.45	82.0	9.1	80.4	8.5	2.5
FM 2011GT	2.95	1.145	30.75	82.3	9.3	80.0	8.6	3.0
FM 2498GLT	3.75	1.165	32.05	82.3	8.9	78.6	9.2	1.5
NG 3406B2XF	2.95	1.160	30.35	82.6	11.6	79.1	9.7	3.5
NG 3500XF	3.30	1.105	32.50	82.8	10.8	79.2	9.8	1.0
PHY 250W3FE	3.00	1.160	32.00	82.2	8.1	80.2	8.8	3.5
PHY 308WRF	3.15	1.145	32.45	81.4	10.3	72.6	9.1	5.5
PHY 417WRF	2.65	1.105	29.75	81.0	10.6	78.1	10.1	2.5
PHY 499WRF	3.35	1.145	31.70	82.4	10.5	76.5	10.3	2.5
PX2A23W3FE	3.45	1.215	33.10	83.3	8.5	80.3	8.3	3.5
PX2A27W3FE	3.00	1.195	32.80	81.6	9.8	79.8	8.7	2.5
PX2A28W3FE	3.25	1.160	30.10	81.1	7.8	80.2	8.8	1.5
PX2A36W3FE	3.25	1.150	34.05	82.4	7.8	81.5	8.5	1.5
PX2AX4W3FE	3.30	1.175	32.25	81.9	7.9	79.8	8.3	2.5
PX3A82W3FE	3.30	1.135	32.65	83.3	11.2	79.5	8.9	2.5
ST 4946GLB2	3.05	1.150	32.40	82.2	10.4	76.6	10.4	3.0
MSD (0.05) <sup>2</sup>	0.78	0.048	2.32	3.3	1.2	2.2	0.8	1.8

<sup>1</sup>DP=Deltapine; FM=Fibermax; NG=NexGen; PHY=Phytogen; PX=experimental from Phytogen; ST=Stoneville.

<sup>2</sup>MSD = minimum significant different ( $P=0.05$ ) between cultivars.

<sup>3</sup>Mic=micronaire; unif=uniformity; elon=elongation.

**Table 5.** Root-knot nematode variety trial results from Brownfield (sporadic pressure)

Variety <sup>1</sup>	Plants /ft row	Root-knot /500 cm <sup>3</sup> soil	LOG10 <sup>3</sup> (RK+1)	Lint Yield (lbs/a)	Turnout (%)	Loan Value (¢/lb)	Yield X Loan (\$/acre)
DP17R942NRB3XF	1.88	870	1.56	1,322	29.1	54.74	746.79
PX4A57W3FE	2.38	0	0.00	1,380	30.4	52.72	745.26
PX2A28W3FE	2.72	600	0.85	1,318	28.1	54.87	737.80
PHY 480W3FE	2.29	0	0.00	1,319	28.9	54.09	727.92
FM 2498GLT	2.49	4,110	1.05	1,285	32.6	54.59	715.81
PX3A99W3FE	2.44	0	0.00	1,259	29.8	54.72	706.78
DP16R246NRB2XF	1.48	540	2.09	1,227	25.7	54.72	703.27
FM 1888GL	1.99	3,420	1.03	1,258	29.6	53.74	697.95
DP17R945NRB3XF	2.06	1,410	1.62	1,220	27.5	54.84	692.63
DP 1646B2XF	1.72	0	0.00	1,193	32.1	55.37	684.59
DP 1612B2XF	2.13	180	0.71	1,194	28.8	53.69	658.78
PX2AX4W3FE	2.67	330	0.78	1,180	28.3	54.49	658.10
ST 4946GLB2	2.49	270	0.76	1,168	28.3	54.77	655.81
PX3A96W3FE	2.55	0	0.00	1,151	27.4	54.54	643.71
DP 1747NRB2XF	1.65	30	0.52	1,126	24.1	55.09	643.61
PHY 499WRF	2.44	5,700	1.09	1,154	28.9	54.54	643.44
FM 2011GT	2.42	325	1.38	1,178	31.4	53.34	643.01
DP17R933NRB3XF	1.83	2,220	2.92	1,153	28.6	54.07	638.64
NG 3406B2XF	2.19	390	0.80	1,162	29.5	53.47	637.97
NG 3500XF	2.44	690	1.54	1,147	28.4	53.57	628.32
PHY 250W3FE	2.40	900	0.89	1,117	26.0	54.72	626.21
PHY 440W3FE	2.31	0	0.00	1,132	27.0	53.67	624.79
PX3A82W3FE	2.44	0	0.00	1,135	27.7	53.67	623.72
PX4A54W3FE	2.60	5,400	1.08	1,098	27.7	54.54	614.39
DP 1558NRB2RF	1.88	60	1.04	1,116	23.8	53.84	597.60
PX2AX2W3FE	2.44	30	0.52	1,053	26.0	54.74	592.01
PX2A36W3FE	2.10	0	0.00	1,054	26.3	54.49	589.40
DP17R946NRB3XF	2.27	30	0.52	1,025	27.2	54.62	574.14
DP 1522B2XF	2.20	1,080	2.28	1,013	29.4	54.94	571.51
DP17R931NRB3XF	2.33	90	0.64	1,017	24.4	53.74	561.31
PX2A31W3FE	2.35	30	0.52	1,016	27.0	53.69	561.06
DP16R245NRB2XF	1.65	0	0.00	983	29.1	55.37	556.16
FM 1911GLT	2.30	2,070	0.98	990	28.5	54.24	549.86
PX2A27W3FE	2.52	0	0.00	936	24.8	55.12	530.21
PHY 417WRF	2.10	0	0.00	907	27.2	51.39	479.34
MSD (0.05)	0.67			205	3.5	2.04	122.32

<sup>1</sup>DP=Deltapine; FM=Fibermax; NG=NexGen; PHY=Phytogen; PX= experimental from Phytogen; ST=Stoneville.

<sup>2</sup>MSD = minimum significant different ( $P=0.05$ ) between cultivars.

<sup>3</sup>Log10 transformed root-knot nematode density.

**Table 4.** Fiber quality for Root-knot nematode trial conducted in Brownfield

Variety <sup>1</sup>	Micro- naire	Length	Unifor- mity	Strength	Elon- gation	Rd	+b	Leaf
DP 1522B2XF	3.85	1.145	82.85	31.00	8.7	79.3	8.0	2.5
DP 1558NRB2RF	4.10	1.185	83.25	32.25	6.6	75.4	8.7	3.5
DP 1612B2XF	3.75	1.165	82.40	31.75	7.6	76.7	7.7	5.5
DP 1646B2XF	4.00	1.235	82.35	31.00	7.6	80.9	7.7	1.0
DP 1747NRB2XF	4.05	1.160	83.40	32.90	6.3	78.6	8.6	2.0
DP 16R245NRB2XF	4.10	1.230	84.15	32.55	7.0	76.9	8.7	2.0
DP 16R246NRB2XF	4.20	1.165	82.70	32.10	7.5	77.7	8.4	3.0
DP 17R931NRB3XF	3.50	1.180	83.35	33.15	7.8	77.3	8.6	2.5
DP 17R933NRB3XF	3.55	1.175	83.75	31.50	8.0	79.1	8.2	3.0
DP 17R942NRB3XF	4.05	1.170	82.95	32.55	6.6	75.9	8.4	2.0
DP 17R945NRB3XF	4.05	1.195	83.05	32.90	6.8	77.6	8.4	3.0
DP 17R946NRB3XF	4.25	1.170	83.75	33.00	6.4	77.7	8.5	2.0
FM 1888GL	3.95	1.170	82.55	31.30	5.7	77.2	7.5	2.5
FM 1911GLT	3.70	1.160	81.60	30.65	6.1	79.2	7.4	2.0
FM 2011GT	4.10	1.125	82.20	30.20	6.2	78.2	8.0	2.0
FM 2498GLT	4.45	1.155	82.25	30.05	6.1	80.4	7.5	1.5
NG 3406B2XF	3.60	1.125	82.30	30.25	9.1	79.7	8.3	1.5
NG 3500XF	4.30	1.110	83.25	32.10	7.7	76.4	8.8	2.5
PHY 250W3FE	3.85	1.195	82.35	32.05	5.5	79.5	7.6	2.0
PHY 417WRF	3.35	1.115	81.75	30.10	8.2	77.4	8.0	2.5
PHY 440W3FE	3.50	1.185	82.30	33.25	6.3	77.9	8.0	3.0
PHY 480W3FE	3.55	1.160	83.85	32.00	7.9	79.4	7.7	2.5
PHY 499WRF	3.80	1.135	82.75	31.75	8.1	77.1	8.3	2.5
PX 2A27W3FE	4.05	1.195	82.40	32.00	5.4	79.4	7.9	1.0
PX 2A28W3FE	3.90	1.165	82.00	30.55	5.4	79.8	7.8	1.5
PX 2A31W3FE	4.25	1.155	83.35	31.85	5.7	78.7	7.6	1.0
PX 2A36W3FE	4.10	1.145	82.80	31.95	4.9	79.9	7.7	1.0
PX 2AX2W3FE	4.30	1.165	83.55	33.10	5.7	79.2	7.7	2.5
PX 2AX4W3FE	4.10	1.170	82.55	30.45	5.4	79.3	7.6	1.0
PX 3A82W3FE	4.15	1.120	84.15	31.10	8.9	78.3	8.0	2.5
PX 3A96W3FE	3.95	1.160	81.80	29.40	7.0	80.3	7.8	1.0
PX 3A99W3FE	3.95	1.135	81.85	29.50	7.7	80.7	8.3	1.5
PX 4A54W3FE	4.00	1.140	82.85	31.65	7.2	78.4	8.2	1.0
PX 4A57W3FE	3.90	1.085	81.45	30.65	7.7	76.6	8.8	3.0
ST 4946GLB2	3.75	1.135	82.35	31.20	7.9	80.1	8.1	2.0
MSD <sup>2</sup> (0.05)	0.34	0.0321	2.266	1.8541	0.8	3.62	0.57	NS

<sup>1</sup>DP=Deltapine; FM=Fibermax; NG=NexGen; PHY=Phytogen; PX= experimental from Phytogen; ST=Stoneville.

<sup>2</sup>MSD = minimum significant different ( $P=0.05$ ) between cultivars.



A combined analysis was done with the transformed root-knot nematode densities from three sites. Entries had to be present in two of the three locations to be included in this analysis.

**Table 5.** Combination analysis of LOG10(Root-knot nematode/500 cm<sup>3</sup> soil) at three locations.

Variety <sup>1</sup>	Mean <sup>2</sup>	Site <sup>3</sup>	Mean <sup>4</sup> Separation	Known Status of Varieties
PHY 480W3FE	0.344	D,G	k	
PX 2A27W3FE	0.377	D,H	jk	
PHY 417WRF	0.381	D,G,H	jk	Resistant 2 genes
PX 3A82W3FE	0.386	D,G,H	ijk	
PX 2A28W3FE	0.430	D,G,H	h-k	
DP 17R946NRB3XF	0.467	G,H	g-k	
PX 3A99W3FE	0.476	D,G	f-k	
PHY 440W3FE	0.490	D,G	f-k	
DP 16R246NRB2XF	0.505	D,G,H	f-j	
DP 1558NRB2RF	0.521	D,G,H	e-i	Resistant 2 genes
PX 2AX4W3FE	0.525	D,H	d-i	
DP 1747NRB2XF	0.532	D,G,H	d-h	
DP 17R931NRB3XF	0.545	G,H	c-h	
DP 16R245NRB2XF	0.549	D,G,H	c-h	
PHY 250W3FE	0.551	D,G,H	c-h	
PX 2A23W3FE	0.562	D,H	c-h	
ST 4946GLB2	0.578	D,G,H	c-g	Resistant 1 gene
FM 1911GLT	0.592	D,G,H	b-g	
DP 1646B2XF	0.595	G,H	b-g	Susceptible
PX 2A36W3FE	0.602	D,H	b-g	
DP 17R945NRB3XF	0.620	G,H	a-g	
DP 17R942NRB3XF	0.626	G,H	a-f	
PX 2AX3W3FE	0.647	D,G	a-f	
FM 1888GL	0.657	D,G,H	a-e	
NG 3406B2XF	0.659	D,G,H	a-d	Susceptible
FM 2011GT	0.665	D,G,H	a-d	
FM 2498GLT	0.681	G,H	a-d	
PHY 499WRF	0.689	G,H	abc	Susceptible
NG 3500XF	0.738	D,G,H	ab	Susceptible
NG 4689B2XF	0.751	D,G	ab	Susceptible
DP 17R933NRB3XF	0.773	G,H	a	

<sup>1</sup>DP=Deltapine; FM=Fibermax; NG=NexGen; PHY=Phytogen; PX= experimental from Phytogen; ST=Stoneville.

<sup>2</sup>LOG10(Root-knot nematode+1) was scaled for each site. Maximum reproduction in a site = 1 and minimum = 0.

<sup>3</sup>Site: D = Dawson county, G = Gaines county, H= Hockley county.

<sup>4</sup>A t-test was used to compare least square means for each cultivar combination. Different letters indicated means were different at  $P=0.10$ .