

ThryvOn Cotton: Yield and Performance



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ThryvOn Yield Demonstrations

ThryvOn Incentives:

- Increased insect protection:
 - Thrips
 - Tarnished plant bugs
 - Lepidopteran pests (when stacked with Bollgard 3)

**** At the end of the day variety performance trumps technology****



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ThryvOn Yield Demonstrations

Locations

- Clarksdale, MS
- Brooksville, MS
- Jackson, TN

Both Mississippi locations are dryland

Experimental Design

- Randomized Complete Block
- 24 treatments (varieties)
- 4 replications



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ThryvOn Yield Demonstrations

Variety	Lint Yield†	Lint	Variety	Lint Yield†	Lint
	(lb/acre)	(%)		(lb/acre)	(%)
21R4139B3TXF	1183 *	0.41	21R4135B3TXF	968	0.40
21R4123B3TXF	1140*	0.40	21R4125B3TXF	960	0.41
21R4140B3TXF	1125*	0.41	21R4334B3TXF	938	0.42
DP 1845 B3XF	1073*	0.41	21R4232B3TXF	937	0.41
DP 2020 B3XF	1041	0.40	DP 2115 B3XF	927	0.42
21R4332B3TXF	1040	0.40	DP 1646 B2XF	904	0.41
21R4533B3TXF	1031	0.41	21R4136B3TXF	891	0.41
21R4145B3TXF	1019	0.40	21R4116B3TXF	875	0.41
21R4229B3TXF	1016	0.40	21R4152B3TXF	842	0.40
21R4233B3TXF	991	0.41	21R4130B3TXF	839	0.41
21R4632B3TXF	990	0.41	21R4535B3TXF	802	0.40
21R4117B3TXF	985	0.41	21R4238B3TXF	798	0.41
Overall Mean	971	0.41	Overall Mean	971	0.41
LSD(0.05)	132.7	0.01	LSD(0.05)	132.7	0.01
C.V. (%)	13.1	3.1	C.V. (%)	13.1	3.1

Across MS Locations

- Greatest yield achieved by 4 varieties
- 3 top yielders - ThryvOn varieties
- 24 total varieties – 4 non ThryvOn varieties
 - DP 1845 B3XF
 - DP 2020 B3XF
 - DP 2115 B3XF
 - DP 1646 B2XF
- Greatest yield 1183 lbs lint/ acre
- Mean lint yield 971 lbs lint/ acre



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ThryvOn Yield Demonstrations



Clarksdale, MS

Planted 5/20/2021

Harvested 11/1/2021

Variety	Lint Yield†	Lint	Variety	Lint Yield†	Lint
	(lb/acre)	(%)		(lb/acre)	(%)
21R4140B3TXF	1513*	0.42	21R4229B3TXF	1211	0.40
21R4139B3TXF	1467*	0.42	21R4117B3TXF	1186	0.41
DP 1845 B3XF	1372*	0.42	DP 2115 B3XF	1176	0.40
21R4123B3TXF	1349*	0.40	21R4152B3TXF	1105	0.41
21R4533B3TXF	1341*	0.43	21R4130B3TXF	1092	0.41
DP 2020 B3XF	1328*	0.40	21R4145B3TXF	1083	0.40
21R4334B3TXF	1266*	0.43	21R4116B3TXF	1061	0.42
21R4135B3TXF	1258	0.41	21R4232B3TXF	1043	0.41
21R4233B3TXF	1254	0.43	21R4535B3TXF	1041	0.41
21R4332B3TXF	1253	0.41	21R4632B3TXF	1041	0.41
21R4136B3TXF	1222	0.42	DP 1646 B2XF	1001	0.40
21R4125B3TXF	1218	0.42	21R4238B3TXF	981	0.41
Overall Mean	1206	0.41	Overall Mean	1206	0.41
LSD(0.05)	249	0.01	LSD(0.05)	249	0.01
C.V. (%)	14.2	2.74	C.V. (%)	14.2	2.74

*Yield in bold type are not significantly different from the highest yielding variety.

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- Greatest yield achieved by 7 varieties
- 5 top yielders -ThryvOn varieties
- 24 total varieties – 4 non ThryvOn varieties
 - DP 1845 B3XF
 - DP 2020 B3XF
 - DP 2115 B3XF
 - DP 1646 B2XF
- Greatest yield 1513 lbs lint/ acre
- Mean lint yield 1206 lbs lint/ acre

ThryvOn Yield Demonstrations

Variety	Lint Yield†	Lint	Variety	Lint Yield†	Lint
	(lb/acre)	(%)		(lb/acre)	(%)
21R4145B3TXF	933*	0.41	21R4233B3TXF	729	0.40
21R4123B3TXF	856*	0.40	21R4533B3TXF	719	0.39
21R4632B3TXF	834*	0.40	21R4238B3TXF	710	0.41
21R4229B3TXF	821*	0.41	21R4152B3TXF	710	0.40
DP 1646 B2XF	806*	0.42	21R4125B3TXF	703	0.40
21R4116B3TXF	804*	0.41	21R4232B3TXF	687	0.41
21R4139B3TXF	783	0.41	DP 2115 B3XF	678	0.44
21R4117B3TXF	783	0.41	21R4135B3TXF	678	0.40
DP 1845 B3XF	774	0.40	21R4535B3TXF	671	0.40
21R4332B3TXF	756	0.39	21R4334B3TXF	655	0.41
DP 2020 B3XF	754	0.40	21R4130B3TXF	649	0.41
21R4140B3TXF	738	0.40	21R4136B3TXF	559	0.40
Overall Mean	737.9	0.4	Overall Mean	738	0.40
LSD(0.05)	186.29	0.01	LSD(0.05)	186.29	0.01
C.V. (%)	17.28	2.2	C.V. (%)	17.28	2.2

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Brooksville, MS

Planted 6/1/2021

Harvested 11/18/2021



- Greatest yield achieved by 6 varieties
- 5 top yielders -ThryvOn varieties
- 24 total varieties – 4 non ThryvOn varieties
 - DP 1845 B3XF
 - DP 2020B3XF
 - DP 2115 B3XF
 - DP 1646 B2XF
- Greatest yield 934 lbs lint/ acre
- Mean lint yield 738 lbs lint/ acre



ThryvOn Yield Demonstrations

Variety	Lint Yield†	Lint	Variety	Lint Yield†	Lint
	(lb/acre)	(%)		(lb/acre)	(%)
21R4338B3TXF	1498*	0.43	DP 1646 B2XF	1287	0.42
21R4135B3TXF	1427*	0.41	21R4110B3TXF	1286	0.40
20R816B3TXF	1413*	0.43	21R4234B3TXF	1267	0.40
DP 2115 B3XF	1410*	0.44	21R4128B3TXF	1267	0.41
DP 2131 B3TXF	1356*	0.44	DP 2020 B3XF	1262	0.40
DP 2038 B3XF	1340	0.45	20R822B3TXF	1258	0.42
21R4127B3TXF	1333	0.40	21R4126B3TXF	1250	0.40
21R4112B3TXF	1326	0.40	21R4117B3TXF	1209	0.40
21R4134B3TXF	1319	0.41	DP 2012 B3XF	1195	0.41
21R4533B3TXF	1317	0.39	21R4221B3TXF	1191	0.40
21R4229B3TXF	1309	0.40	21R4121B3TXF	1178	0.41
21R4432B3TXF	1307	0.40	21R4123B3TXF	1075	0.40
Overall Mean	1294.3	0.41	Overall Mean	1294	0.41
LSD(0.05)	152.6	1.74	LSD(0.05)	152.6	1.74
C.V. (%)	8.18	0.01	C.V. (%)	8.18	0.01

*Yield in bold type are not significantly different from the highest yielding variety.

Jackson, TN

5/14/2021

11/8/2021



- Greatest yield achieved by 5 varieties
- 3 top yielders -ThryvOn varieties
- 24 total varieties – 4 non ThryvOn varieties
- Early maturity set – different varieties
 - DP 2012 B3XF
 - DP 2020 B3XF
 - DP 2038 B3XF
 - DP 2131B3XF
 - DP 2115 B3XF
 - DP 1646 B2XF
- Greatest yield 1499 lbs lint/ acre
- Mean lint yield 1294 lbs lint/ acre

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ThryvOn Yield Demonstrations



Comments:

- Good seedling vigor and emergence
- Excellent Thrips control
- Abundant rainfall – washed a lot of Thrips off young plants
- Necessary TPB applications – especially in high adult TPB migration locations
- Brooksville experienced low TPB pressure – non ThryvOn increased yields
- Good response to PGRs
- On-time maturity and good defoliation

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Yield Demonstrations



Take Aways:

- Possibly eliminate 1 to 2 in season sprays?
- Excellent germplasm
- Competitive yield potential
 - Superior in some cases
- Convenience
- TPB maintenance required
- Application frequency dependent on pressure and TPB growth stage
- Good fit for some growers looking for this type product

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Thank You



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