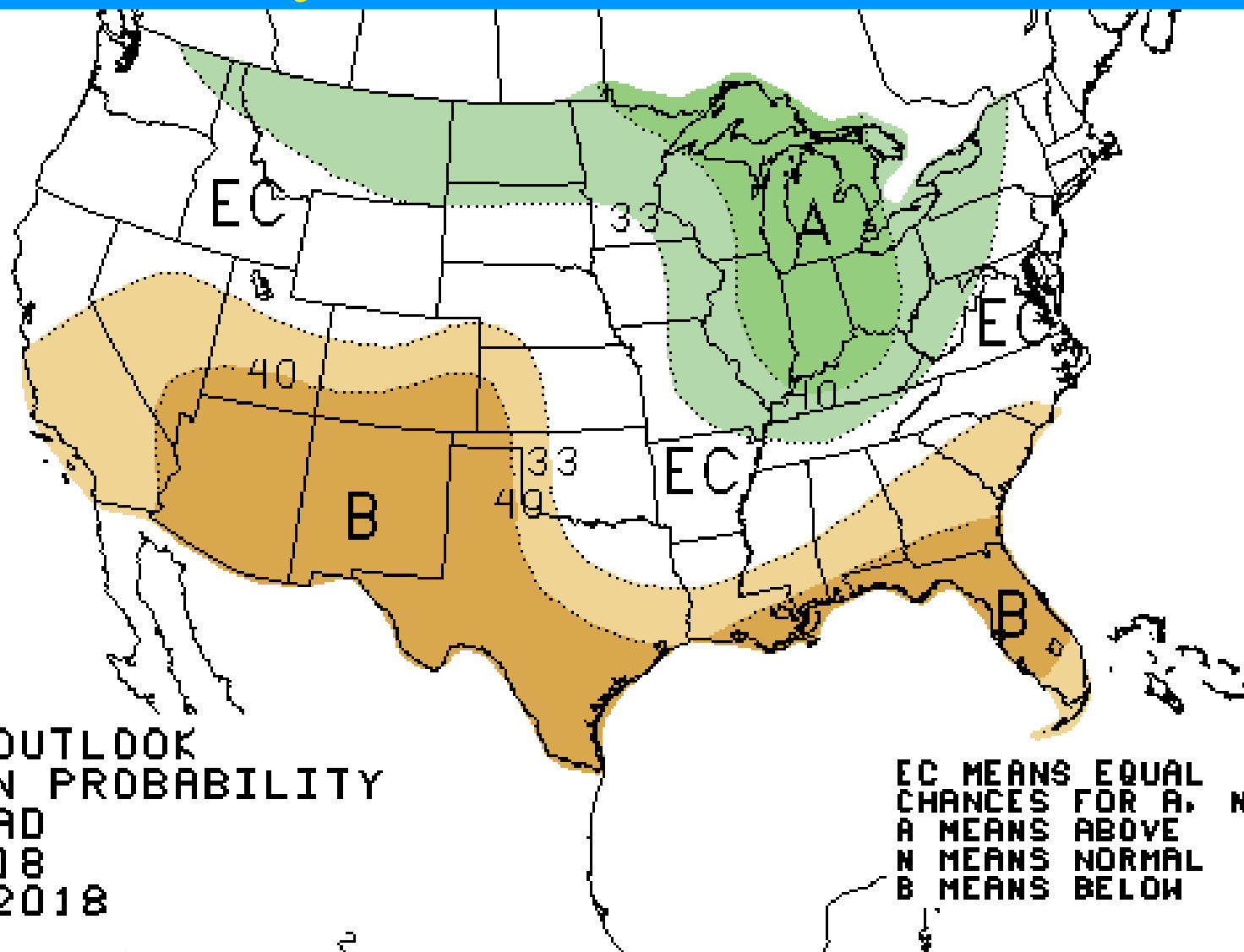


Managing Pesticide, Fertilizer, and Cultural Inputs to Increase Bottom Dollar

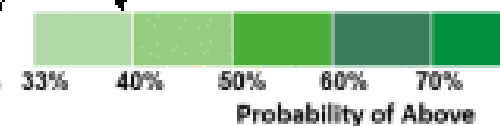
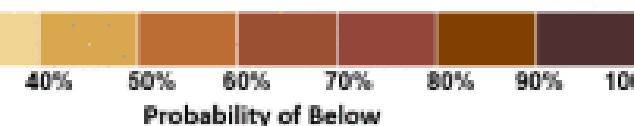
David Wright
Presented by Ethan Carter

Mar.-May, 2018 Outlook

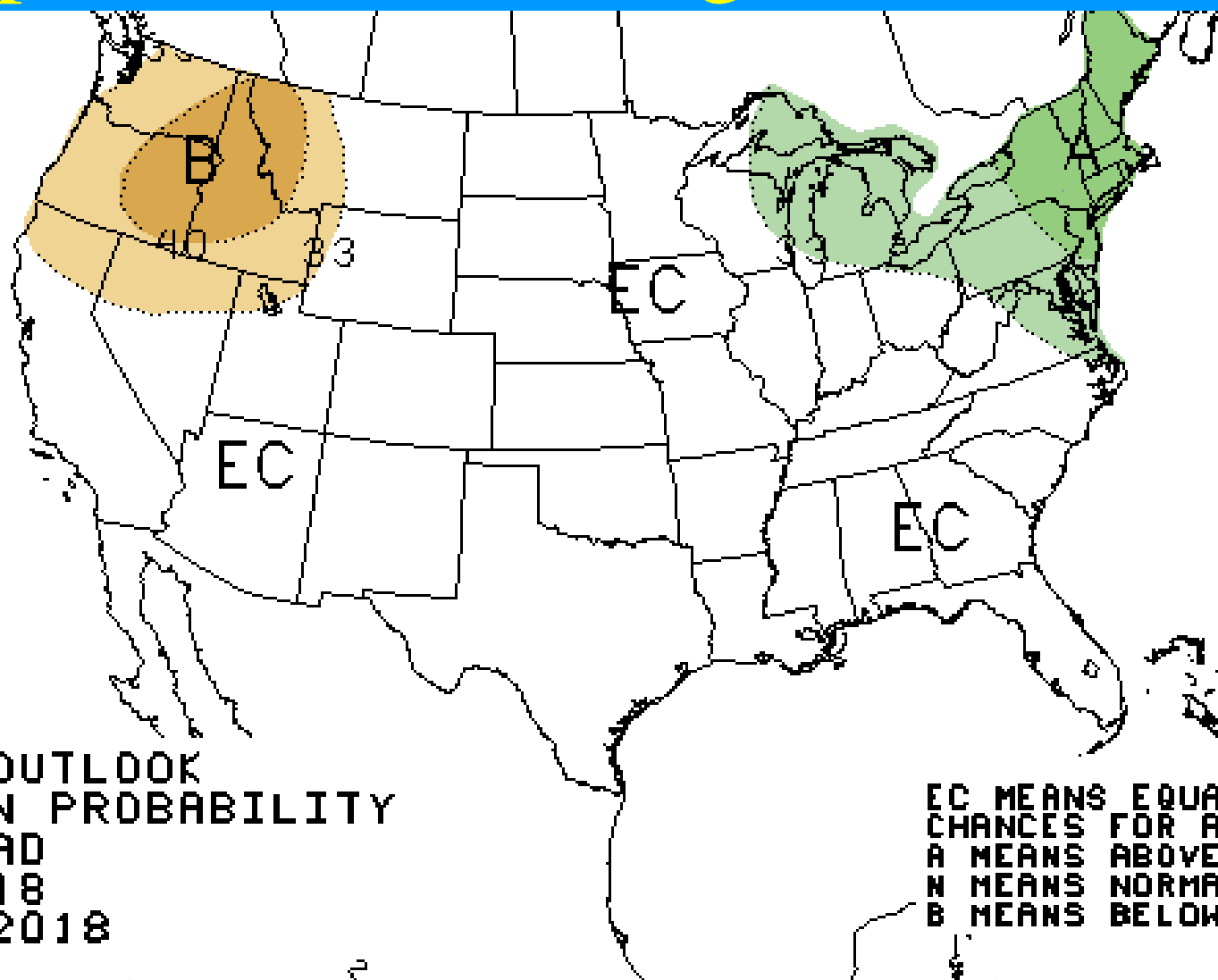


THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
1.5 MONTH LEAD
VALID MAM 2018
MADE 18 JAN 2018

EC MEANS EQUAL
CHANCES FOR A, N
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

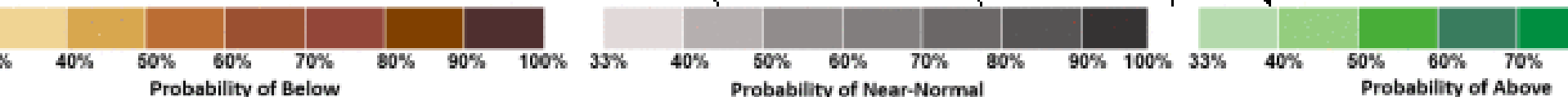


Precipitation June-Aug. , 2018

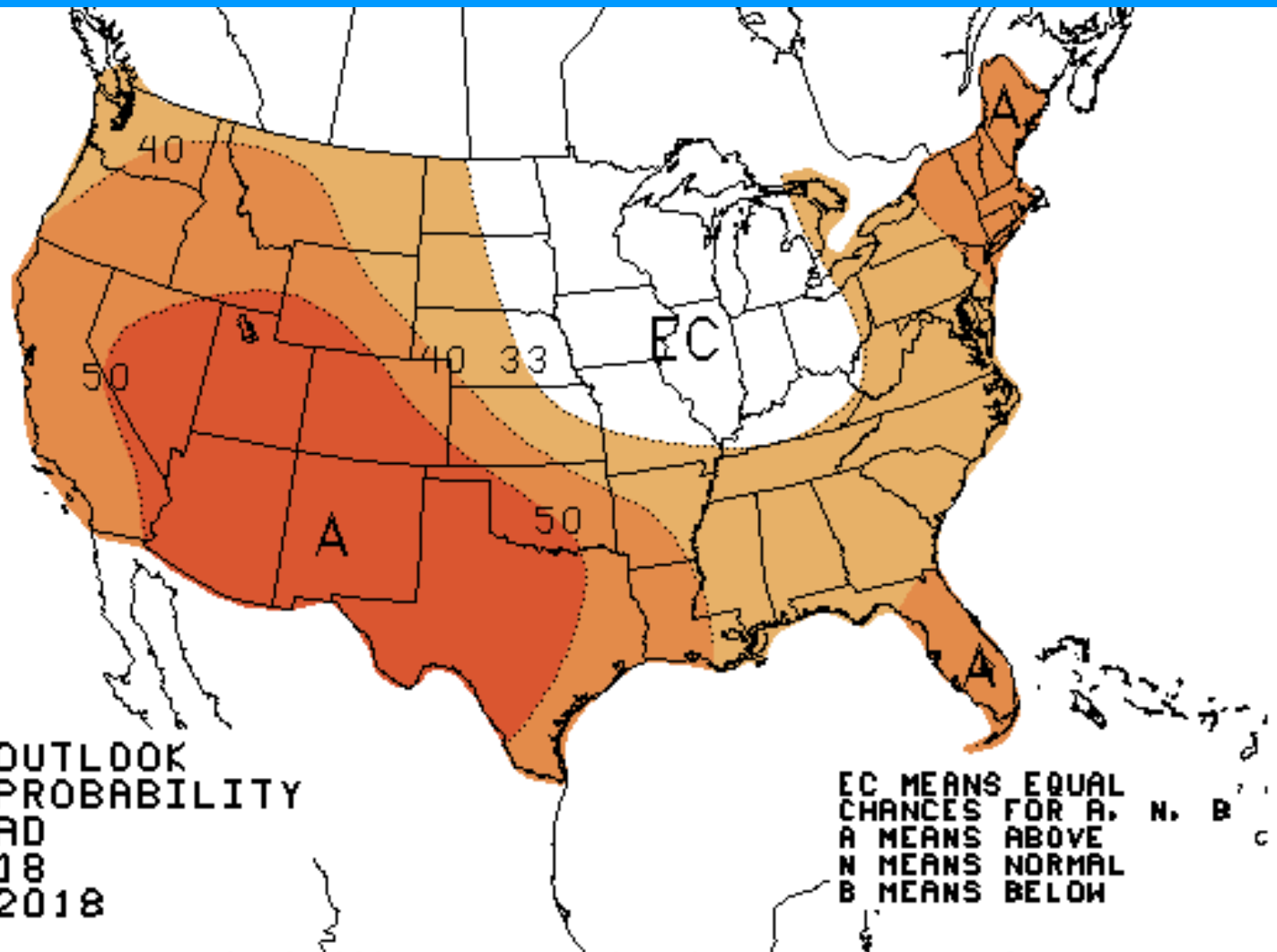


THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
4.5 MONTH LEAD
VALID JJA 2018
MADE 18 JAN 2018

EC MEANS EQUAL
CHANCES FOR A. N
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

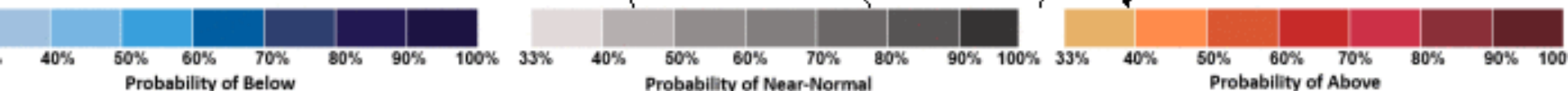


June-Aug. 2018 Temperatures

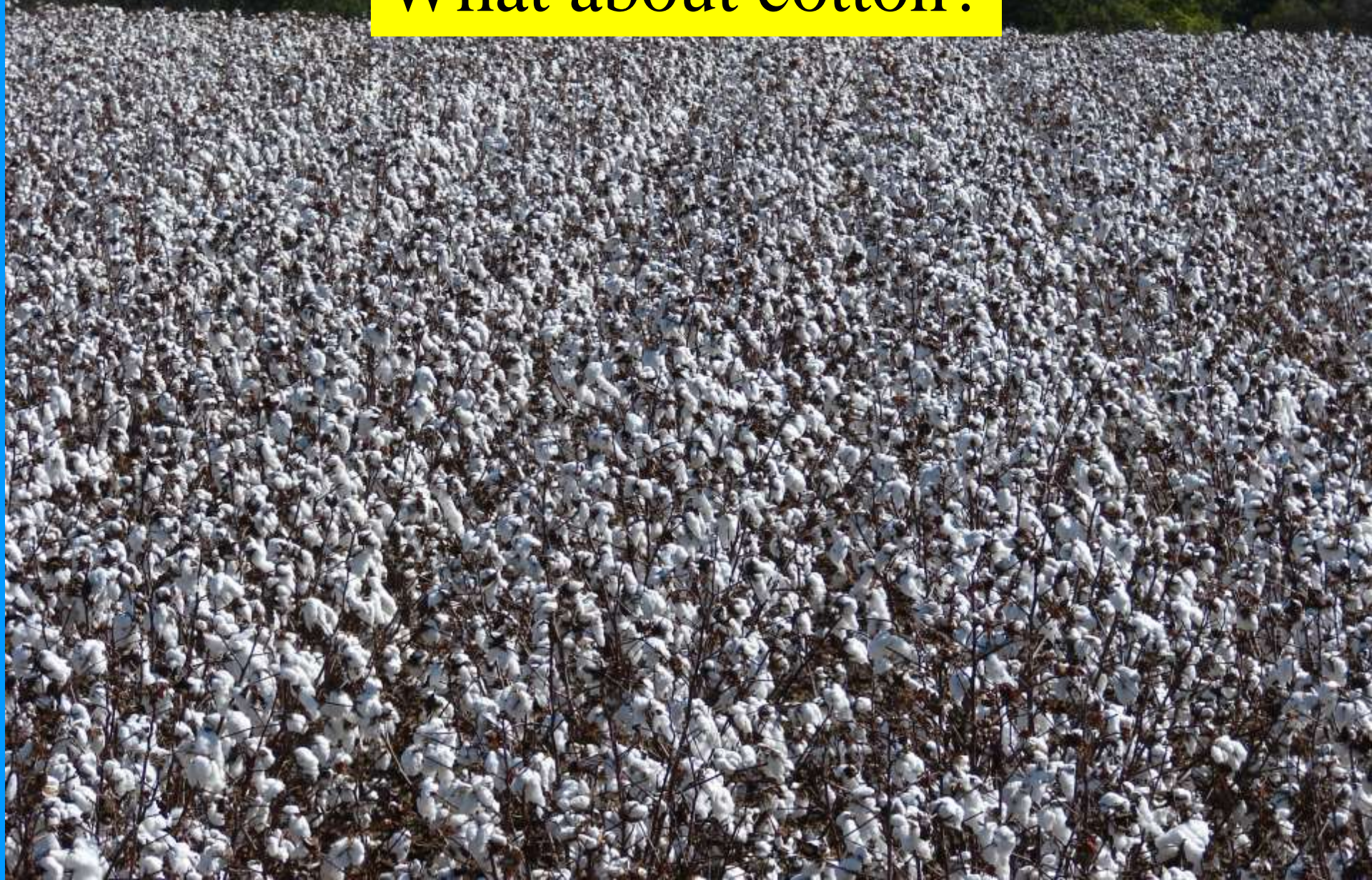


THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
4.5 MONTH LEAD
VALID JJA 2018
MADE 18 JAN 2018

EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW



What about cotton?

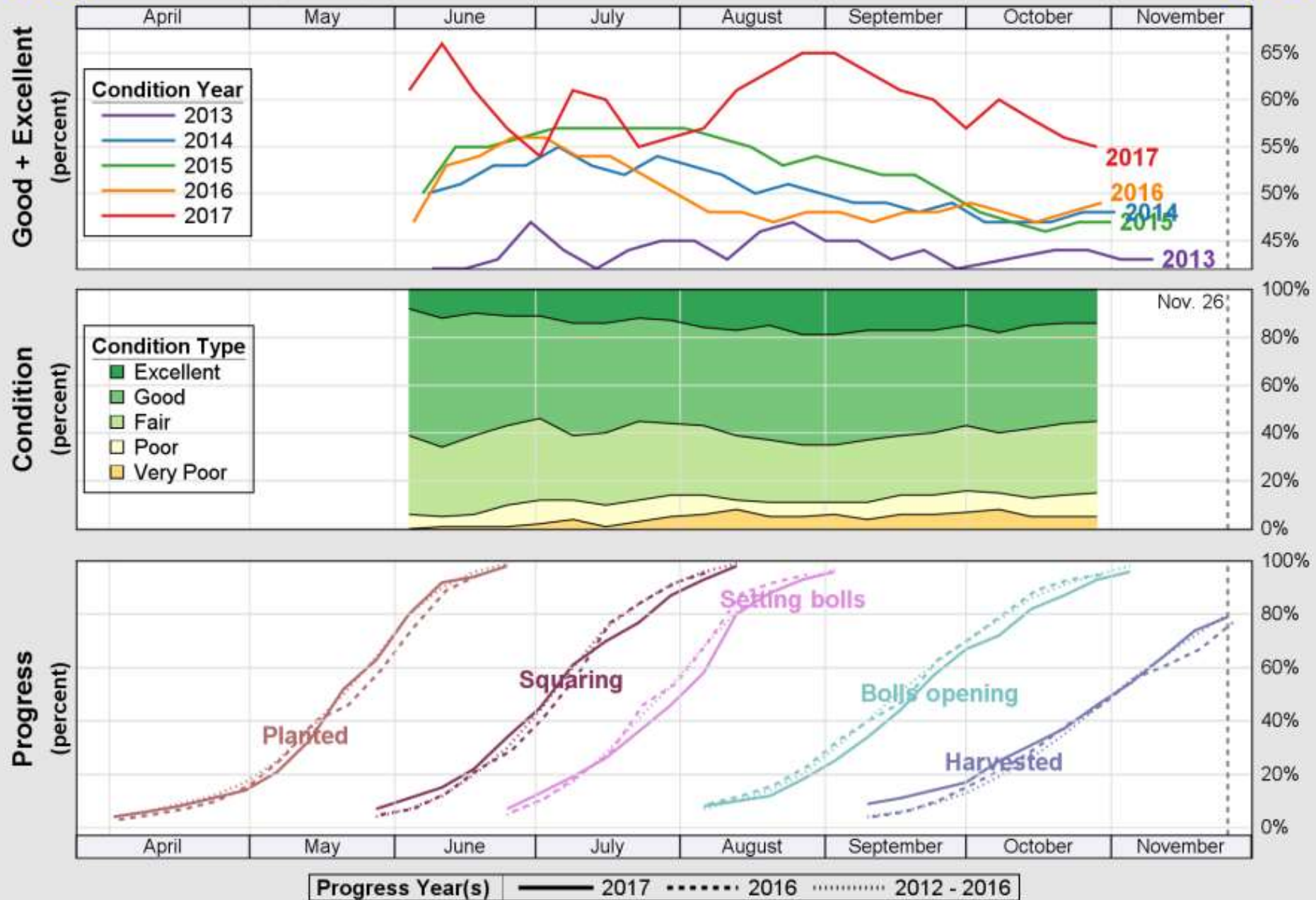


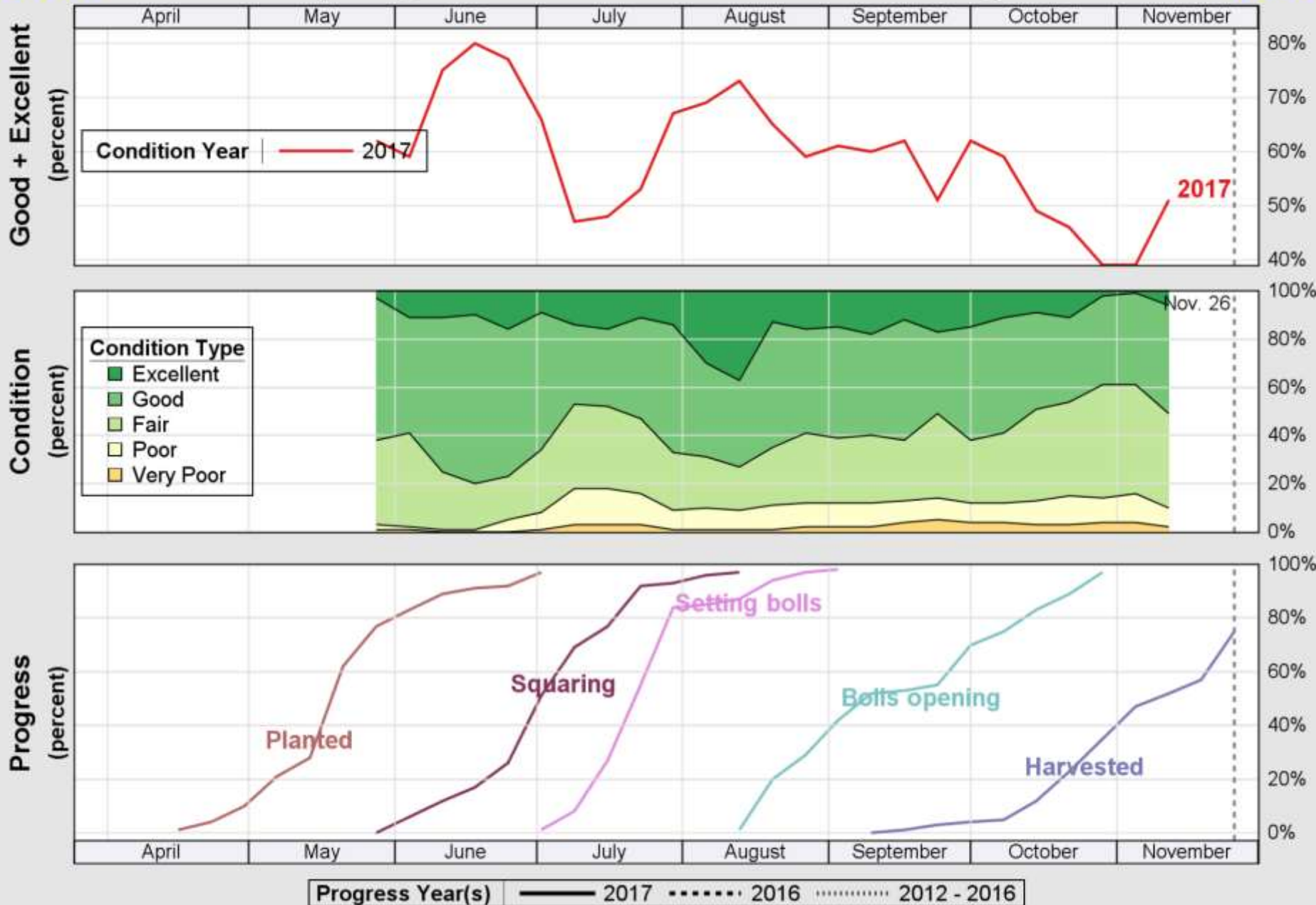
2017 Cotton Season

- Acreage was up and similar to 2012
- Record national yield, except for Florida/SE where yields were off by 150-200 lbs/A
- Excellent quality
- Strong exports
- Better prices than recent years

Florida Cotton Production

	2015	2016	2017
Acres planted	85,000	103,000	99,000
Yield per acre (lbs)	885	922	784
Production (bales)	153,000	196,000	160,000





Cotton Issues, 2017

Nematodes, whiteflies, hurricane,
record warm winters previous 2 years



Nematode damage on all but NR
variety, impacts on sandy soils



Rotation, irrigation and nematicide impacts on cotton

Years in cotton	IR Velum	IR no Velum	NI Velum	NI no Velum	AVG
		Lbs/A			
1 in 4	1705	1584	1662	1622	1643
1 in 2	1441	1415	1445	1396	1424
1 in 1	1445	1261	1344	1103	1288
AVG	1530	1420	1483	1374	

What made the greatest impact? Rotation followed by nematicide followed by irrigation.

Nematicide Trial

Nematode resistant variety in center



Table 1. Nematicide application economics based on 2017 on-farm nematicide trial. All values are on a per-acre basis

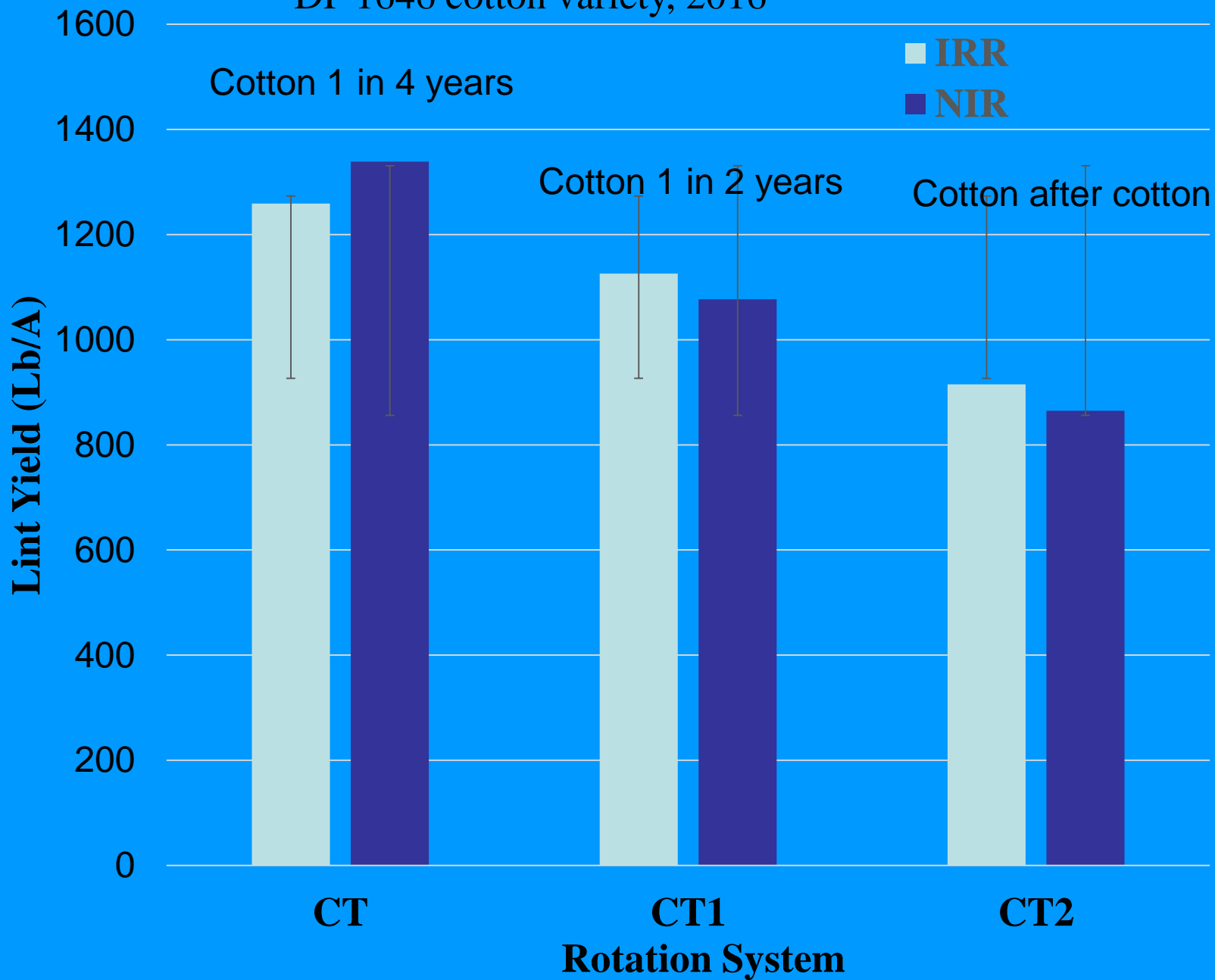
Treatment (rate)	Seed cotton yield (lb/a)	Yield increase vs untreated	Total Revenue increase	Product cost	Income increase
Velum Total (18 oz/a)	2706	272	\$90	\$34	\$56
Telone (3.5 gal/a)	2611	177	\$59	\$70	-\$11
AgLogic 15GG (7 lb/a)	2686	252	\$83	\$42	\$41
Untreated	2434	-	-	-	-

†Revenue increase is based on \$0.70/lb for lint and \$0.10/lb for seed.

§ Assumes Telone costs of \$20/gallon, AgLogic at \$6/lb, and Velum at \$1.89/oz

Grabau- Jackson Co.

DP 1646 cotton variety, 2016



Prices for 2018

Comparison of 2018 Estimated Net Returns, Georgia, Irrigated

	Corn	Cotton	Grn Sorgh	Peanuts	Soybeans
Expected Yield	200	1,200	100	4,700	60
Expected Average Price¹	\$4.15	\$0.72	\$3.85	\$400	\$9.50
Crop Income	\$830	\$864	\$385	\$940	\$570
Variable Costs²	\$588	\$573	\$322	\$670	\$274
Net Return Per Acre Above VC	\$242	\$291	\$63	\$270	\$296
Net Return per Acre Above VC with \$200/ac Irr Land Rent	\$42	\$91	(\$137)	\$70	\$96

1/ Expected average price. Cotton includes LDP and quality premium.

2/ Assumes Jan 2018 costs, [Crop Comparison Tool](#), Department of Agricultural and Applied Economics, UGA

Comparison of 2018 Estimated Net Returns, Georgia, Non-Irrigated

	Corn	Cotton	Grn Sorgh	Peanuts	Soybeans
Expected Yield	85	750	65	3,400	30
Expected Average Price¹	\$4.15	\$0.72	\$3.85	\$400	\$9.50
Crop Income	\$353	\$540	\$250	\$680	\$285
Variable Costs²	\$305	\$454	\$215	\$580	\$211
Net Return Per Acre Above VC	\$48	\$86	\$35	\$100	\$74
Net Return Per Acre Above VC + \$65 Land Rent	(\$17)	\$21	(\$30)	\$35	\$9

1/ Expected average price. Cotton includes LDP and quality premium.

2/ Assumes Jan 2018 costs, [Crop Comparison Tool](#), Department of Agricultural and Applied Economics, University of Georgia

2015 GA & FL On-Farm Trials

17 Trials = 607 – 1626 lbs/A

Variety	Combined Average lint	% Top 3
DP 1538 B2XF	1332	65
DP 1558NR B2RF	1305	53
DP 1553 B2XF	1286	59
ST 6182 GLT	1253	35
DP 1252 B2RF	1253	35
PHY 333 WRF	1199	24
PHY 552 WRF	1183	6
PHY 444 WRF	1175	12
ST 4946 GLB2	1158	12

2015 & 2016 UGA On-Farm Cotton Variety Performance Evaluation Program

44 Locations

Variety	All Locations	
	Avg. Lint Yield	44 Locations
CG 3885 B2XF	1076	A
DP 1538 B2XF	1067	AB
PHY 444 WRF	1046	ABC
ST 6182 GLT	1043	BC
NG 5007 B2XF	1019	CD
DP 1553 B2XF	1004	D
PHY 333 WRF	994	D

Variety	< 1000 lbs/A	
	Avg. Lint Yield	14 Locations
CG 3885 B2XF	763	A
DP 1538 B2XF	748	AB
PHY 444 WRF	728	ABC
ST 6182 GLT	717	BCD
DP 1553 B2XF	702	CD
NG 5007 B2XF	689	CD
PHY 333 WRF	683	D

Variety	1000 < 1249 lbs/A	
	Avg. Lint Yield	14 Locations
DP 1538 B2XF	1193	A
CG 3885 B2XF	1172	A
ST 6182 GLT	1168	A
NG 5007 B2XF	1160	A
DP 1553 B2XF	1126	A
PHY 444 WRF	1122	A
PHY 333 WRF	1095	A

Variety	> 1250 lbs/A	
	Avg. Lint Yield	12 Locations
CG 3885 B2XF	1414	A
PHY 444 WRF	1409	A
DP 1538 B2XF	1383	AB
ST 6182 GLT	1370	ABC
NG 5007 B2XF	1333	BCD
PHY 333 WRF	1323	CD
DP 1553 B2XF	1299	D

2017 UGA On-Farm Cotton Variety Evaluation Program

19 Locations (10 Irrigated, 9 Dryland)

Variety	Telfair DRY	Grady DRY	Wayne DRY	Early DRY	Oconee DRY	Colony (Exp) IRR	Turner DRY	TR (Exp) IRR	Prosser IRR	Bleckley DRY	Burke DRY	Wash-Ington IRR	Garland IRR	Colony (Phy) IRR	Jeff Davis IRR	Cozz IRR	Colony (Davis) IRR	Bulloch DRY	Burke IRR	Variety Average
ST 6182 GLT	569	897	745	953	1,041	1,097	1,075	1,283	1,247	1,123	1,157	1,157	1,214	1,288	1,231	1,268	1,296	1,374	1,490	1,132
DP 1538 B2XF	500	818	928	953	864	1,123	1,141	1,304	1,203	1,214	1,161	1,195	1,187	1,227	1,210	1,309	1,219	1,397	1,435	1,126
DP 1646 B2XF	528	810	842	982	973	1,081	1,097	1,220	1,138	1,233	1,129	1,125	1,184	1,177	1,196	1,243	1,339	1,340	1,426	1,109
CG 3885 B2XF	558	822	914	939	963	1,030	968	1,163	1,131	1,073	1,050	1,182	1,261	1,172	1,235	1,149	1,271	1,253	1,458	1,084
NG 5007 B2XF	458	558	810	816	891	1,020	901	1,135	1,135	1,095	1,136	1,057	1,153	1,107	1,155	1,109	1,133	1,241	1,375	1,015
ST 5115 GLT	454	808	620	923	1,002	906	1,065	1,082	992	951	1,082	1,106	1,040	1,124	1,153	1,216	1,173	1,111	1,318	1,007
NG 4601 B2XF	537	697	771	907	831	838	1,019	986	986	1,034	1,079	1,143	1,133	1,052	1,083	1,092	1,210	1,215	1,273	994
PHY 340 W3FE	399	711	812	882	970	847	1,014	954	1,020	1,032	1,113	1,079	993	1,132	1,048	1,067	1,201	1,265	1,274	990
ST 5020 GLT	423	724	728	987	914	835	975	945	1,033	972	1,118	1,076	1,047	1,050	992	1,032	1,246	1,262	1,372	986
DP 1747NR B2XF	412	694	1,035	592	863	879	1,054	926	1,018	969	1,113	1,088	1,124	1,057	1,287	1,056	957	1,278	1,306	985
PHY 330 W3FE	362	584	809	889	954	906	946	934	1,048	1,003	1,084	1,102	1,038	1,172	1,045	1,043	1,199	1,162	1,338	980
PHY 450 W3FE	529	704	745	789	966	847	847	916	888	1,039	1,111	1,130	963	1,044	1,104	1,186	1,039	1,141	1,243	960
PHY 490 W3FE	483	735	693	862	893	756	983	910	939	1,045	1,069	1,074	1,108	1,022	990	1,070	1,046	1,194	1,231	953

Trial Average	478	736	804	883	933	936	1,007	1,058	1,060	1,060	1,108	1,116	1,111	1,125	1,133	1,142	1,179	1,249	1,349	1,024
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Bold Italic - Above Trial Average

Red Font - in Top 4 of 13

2017 UGA On-Farm Cotton Variety Evaluation Program (Preliminary Results 12-22-17)

19 Locations (10 Irrigated, 9 Dryland)

Variety	Variety Average	LSD Letters	% Above Average	% Top 4	% Top 3	% Top 2	% Top 1
ST 6182 GLT	1,132	A	95	95	89	68	32
DP 1538 B2XF	1,126	A	95	84	84	58	37
DP 1646 B2XF	1,109	AB	100	84	58	21	11
CG 3885 B2XF	1,084	B	89	58	42	32	5
NG 5007 B2XF	1,015	C	47	16	5	0	0
ST 5115 GLT	1,007	C	37	16	5	5	0
NG 4601 B2XF	994	CD	32	11	5	0	0
PHY 340 W3FE	990	CD	37	5	0	0	0
ST 5020 GLT	986	CDE	26	11	5	5	5
DP 1747NR B2XF	985	CDE	32	16	11	11	11
PHY 330 W3FE	980	CDE	26	0	0	0	0
PHY 450 W3FE	960	DE	26	5	0	0	0
PHY 490 W3FE	953	E	5	0	0	0	0

LSD P=0.1	37
CV	6.74
Grand Mean	1024
VAR. P-value	0.0001

Most Expensive Items in Budgets

- Cash rent
- Seed (corn, cotton, peanut)
- Fertilizer, N (corn, cotton)
- Machinery depreciation
- Pesticides (fungicides peanuts, weed control all crops)

Can you do anything about these? Yes, graze ahead of planting corn, cotton, soybean

How can I ensure a profit for 2018?


- You can't but you can make wise choices
- Rotation
- Plant after winter grazing- lower N, higher yields by 150-200 lbs/A
- Right varieties
- Irrigation
- Nematicide in fields where you know problems exist
- Timely management (planting, N, growth regulators, harvest)

Management impacts on cotton yields

Management/yield response

Cost of practice

- Rotation/grazing- 100-300 lbs/A Low
- Variety selection- 100-300 lbs/A Low
- N rate, placement, timing- 100-300 lbs/A Moderate
- Cover crops and strip tillage- 0-100 \$ moderate
- In-row ripping- 100-150 lbs/A \$15/A
- Insecticides during bloom-100-300 lbs/A \$10-30/A
- Irrigation- 0-500 lbs/A \$12/A inch
- Nematicide- 50-200 lbs/A \$15-25/A
- Starter fertilizer-0-200 lbs/A \$10-30/A
- Micronutrients at plant-0-100 \$5-15/A
- Plant population- 0-100 Low
- Fungicide- 0-100 lbs/A \$15-20/A
- Look at economics to determine prospects for the crop



Thank you, Questions?