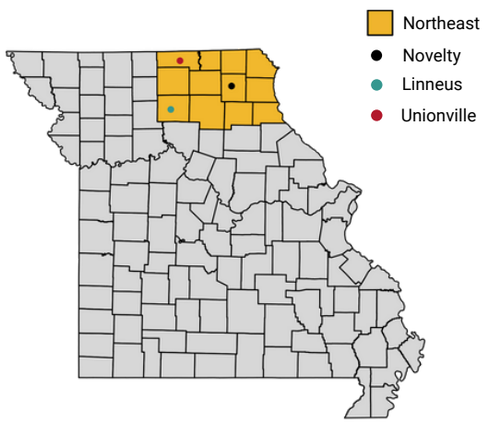
SOYBEAN GROWTH MONITORING

SOYBEAN FARMING SYSTEMS RESEARCH AND EXTENSION

WEEK: 10-01-NORTHEAST-MO



- April-planted soybeans have reached physiological maturity and are ready, or close, to being harvested. Yield predictions are high for the earliest maturity groups planted in early April, while late-maturity groups are expected to show lower test weights.

- Early-maturity group varieties planted in late April and May are also nearing the end of their cycle. Yields for these early-maturity groups are expected to be higher than those of late-maturity groups planted during the same period.

- June-planted fields experienced similar drought stress to April-planted fields, so a yield reduction is expected. However, for June-planted fields, late-maturity groups are expected to experience a smaller yield reduction compared to early-maturity groups, due to recent rainfall. Low test weights are also anticipated.

2024 Relative Yield Prediction

Planting date:

04-05-2024			04-26-2024			05-17-2024			06-07-2024		
MG 3	MG 4	MG 5	MG 3	MG 4	MG 5	MG 3	MG 4	MG 5	MG 3	MG 4	MG 5
+15%	-4%	-13%	+14%	+2%	+2%	+9%	+9%	+5%	-16%	-7%	-7%
End of cycle	End of cycle		End of cycle	End of cycle		End of cycle			End of cycle		

- **Obs:** The 2024 yield prediction is relative to the normal yield of the same maturity group planted on the same date.

Growth Cycle

Planting date: 04-05-2024

	Stage	Nodes	Harvest
MG 3	R7	20	End of cycle
MG 4	R7	23	End of cycle
MG 5	R7	20	10/07 ± 3 days

04-26-2024

Stage	Nodes	Harvest
R7	19	End of cycle
R7	23	End of cycle
R7	20	10/13 ± 3 days

05-17-2024

Stage	Nodes	Harvest
R7	18	End of cycle
R7	22	10/07 ± 3 days
R6	19	10/19 ± 4 days

06-07-2024

Stage	Nodes	Harvest
R7	17	End of cycle
R7	19	10/14 ± 3 days
R6	16	10/26 ± 4 days

The stage and nodes indicate the current crop development as of the date of this report.

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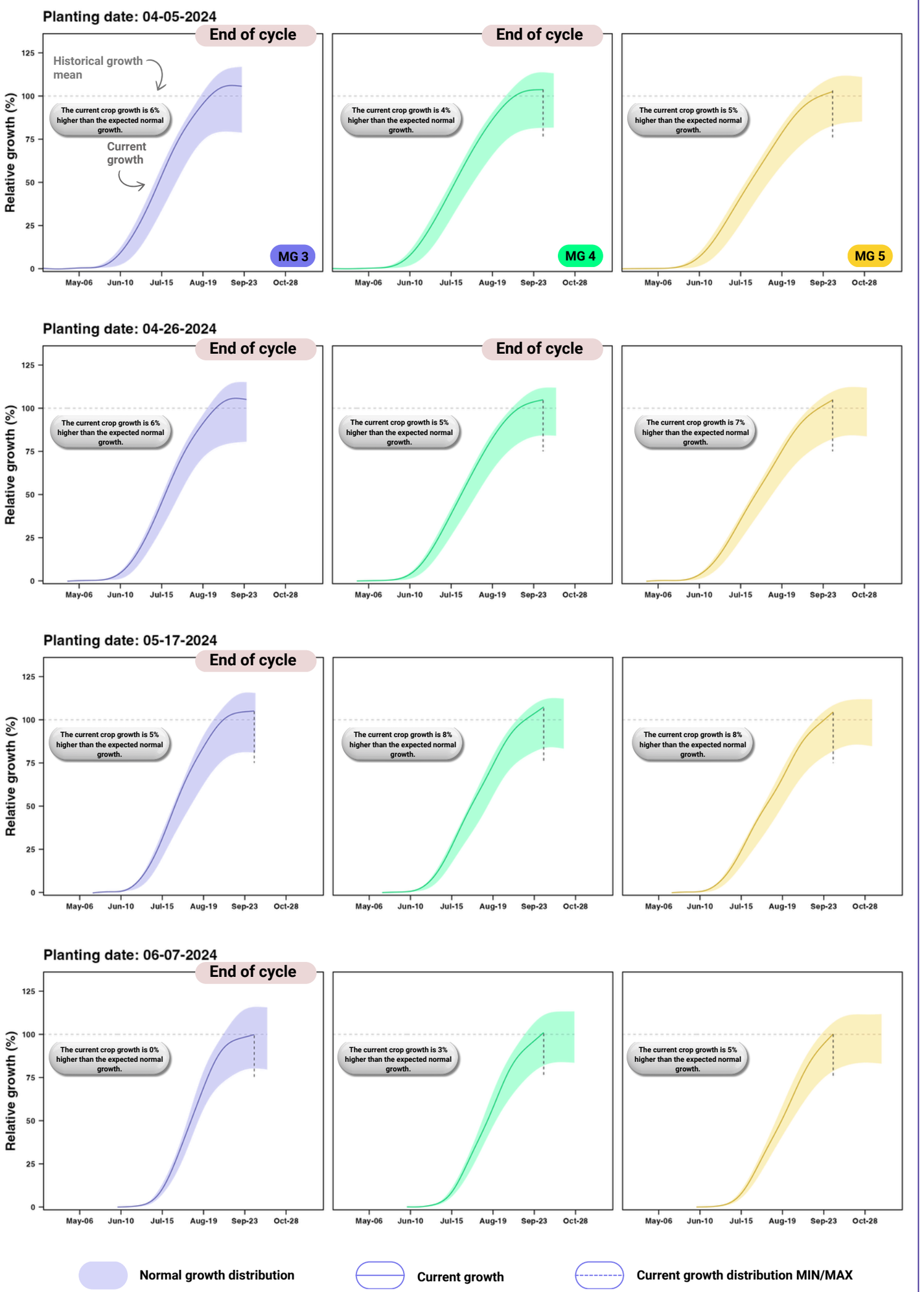
End-of-season growth prediction



The normal growth represents the average growth expected at the reporting date, derived from simulating a current crop variety using 40 years of historical weather data specific to a particular location and planting date.

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Missouri Soybean Center University of Missouri
MISSOURI SOYBEANS

Soil water content

Planting date: 04-05-2024

Soil layer

	0-9in	9-23in	23-54in
Novelty (Chariton silt loam)	62%	65%	62%
Linneus (Armstrong clay loam)	45%	53%	47%
Unionville (Gara loam)	38%	51%	50%

04-26-2024

	0-9in	9-23in	23-54in
Novelty (Chariton silt loam)	63%	68%	67%
Linneus (Armstrong clay loam)	43%	47%	44%
Unionville (Gara loam)	42%	51%	50%

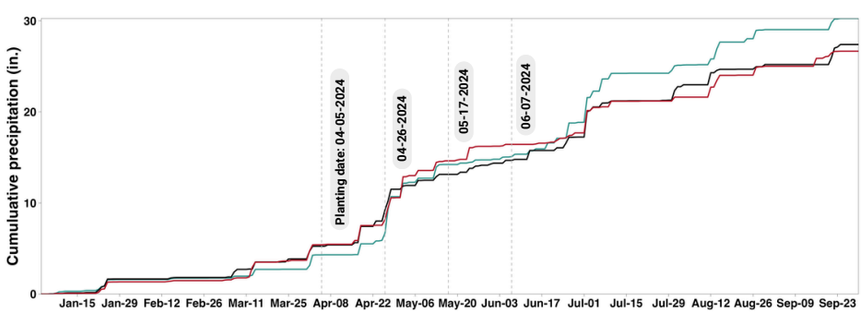
05-17-2024

	0-9in	9-23in	23-54in
Novelty (Chariton silt loam)	65%	68%	66%
Linneus (Armstrong clay loam)	41%	52%	48%
Unionville (Gara loam)	38%	51%	51%

06-07-2024

	0-8in	8-30in	30-60in
Novelty (Chariton silt loam)	62%	68%	67%
Linneus (Armstrong clay loam)	43%	48%	46%
Unionville (Gara loam)	42%	51%	50%

Rainfall



Drought Stress

Planting date:	MG 3	MG 4	MG 5
04-05-2024	-	-	46%
04-26-2024	-	-	33%
05-17-2024	-	19%	19%
06-07-2024	-	25%	13%

Drought stress is estimated by the cumulative crop transpiration reduction.

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