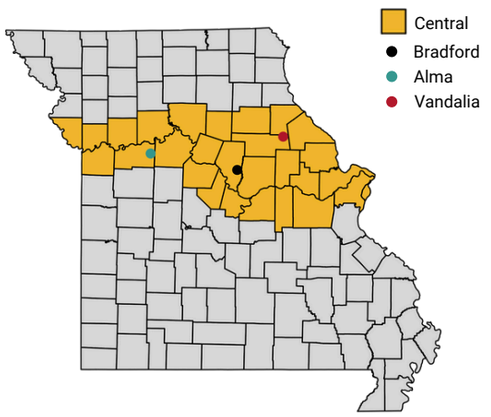
SOYBEAN GROWTH MONITORING

SOYBEAN FARMING SYSTEMS RESEARCH AND EXTENSION

WEEK: 10-01-CENTRAL-MO



- April-planted soybeans have reached physiological maturity and are ready or close to being harvested. Yield predictions remain high despite the low rainfall in September.

- Early-maturity group varieties planted in May are also nearing the end of their cycle. Yields for early-maturity groups are expected to be higher than for late-maturity groups.

- June-planted fields experienced more drought stress in August and September compared to early-planted fields therefore yield drop is expected. However, for June-planted fields, late-maturity groups are expected to have a smaller yield reduction due to the rainfall from last weekend. Low test weight is expected.

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
+29%	+28%	+21%	+25%	+23%	+20%	+22%	+14%	16%	-6%	-6%	0%
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	25	End of cycle
MG 5	R7	20	10/06 ± 1 days

04-26-2024

Stage	Nodes	Harvest
R7	20	End of cycle
R7	24	End of cycle
R7	20	10/10 ± 1 days

05-17-2024

Stage	Nodes	Harvest
R7	19	End of cycle
R7	22	10/03 ± 1 days
R7	19	10/17 ± 2 days

06-07-2024

Stage	Nodes	Harvest
R7	17	End of cycle
R7	20	10/10 ± 2 days
R6	17	10/24 ± 2 days

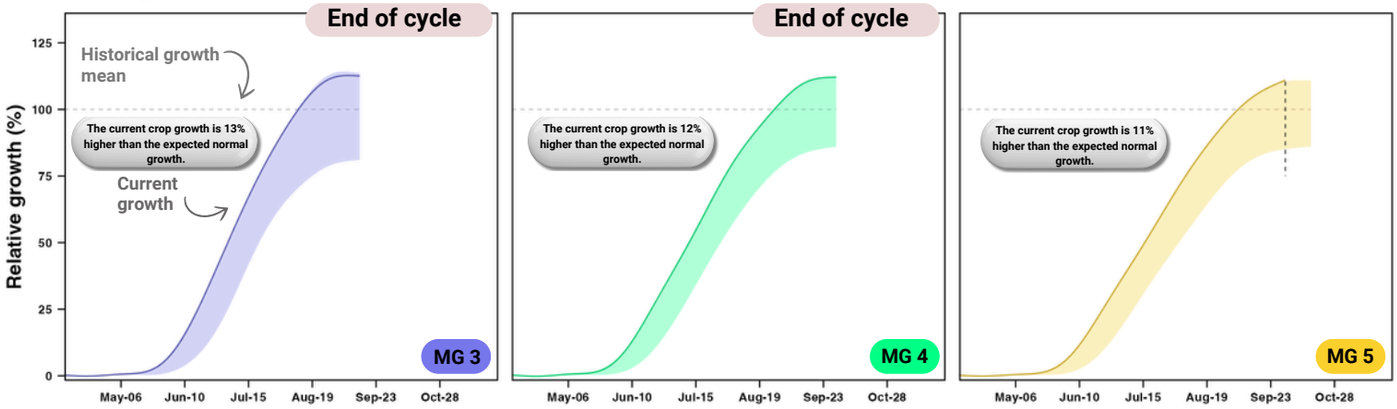
The stage and nodes indicate the current crop development as of the date of this report.

Contact information: areis@missouri.edu

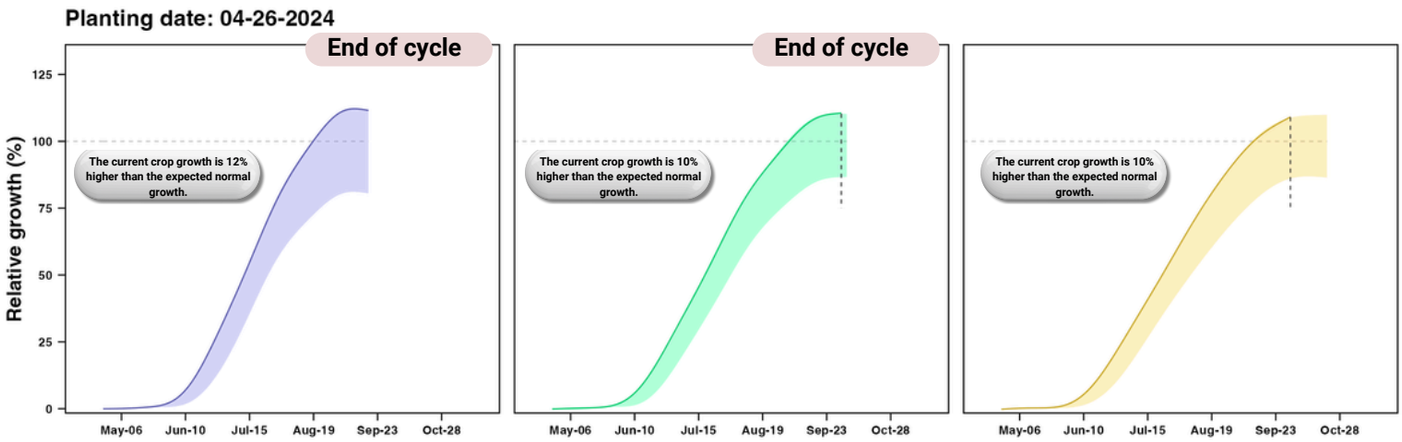
Extension University of Missouri | Variety Testing Program University of Missouri | Missouri Soybean Center University of Missouri | MISSOURI SOYBEANS

End-of-season growth prediction

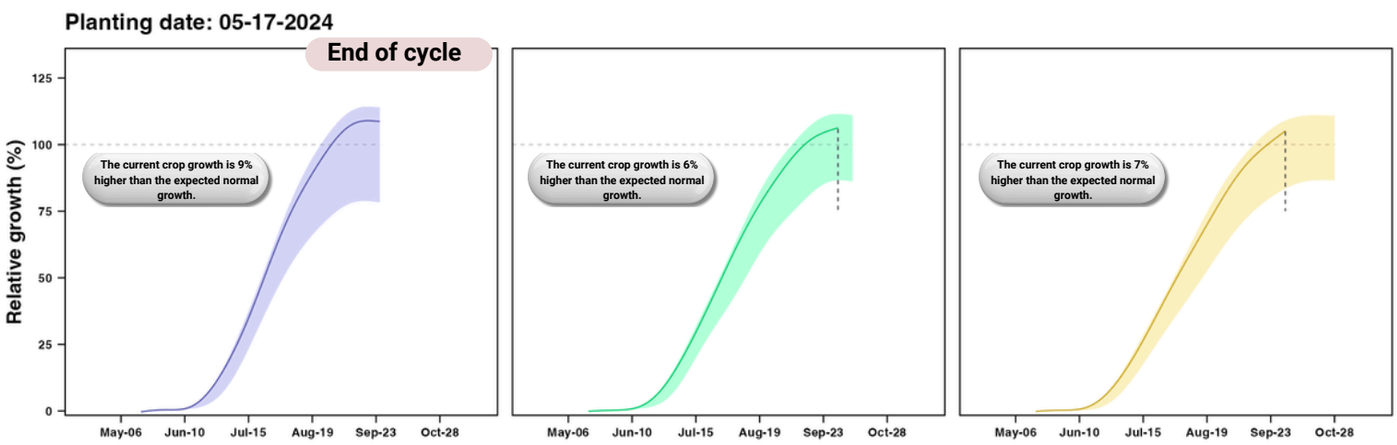
Planting date: 04-05-2024



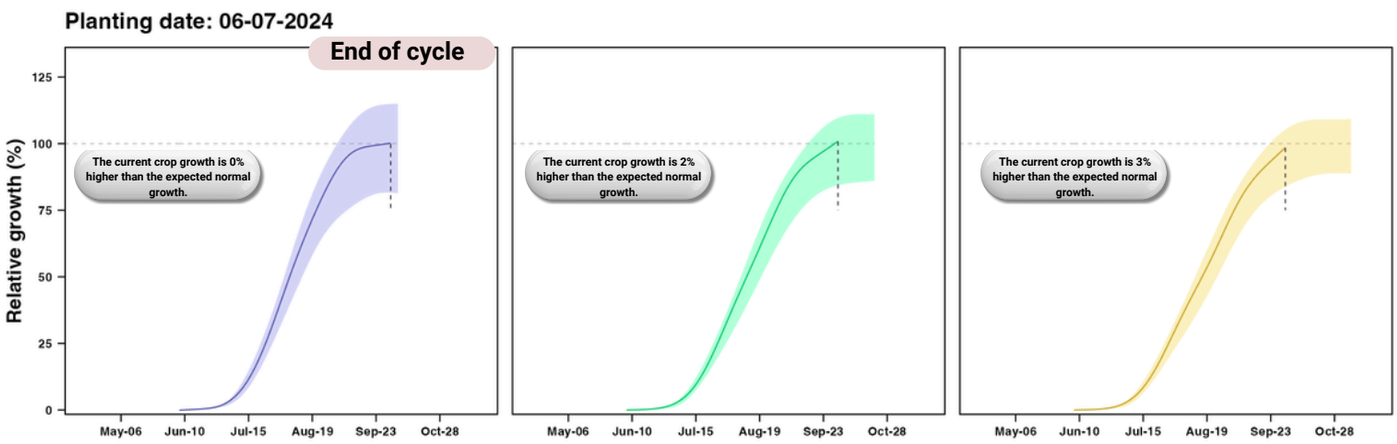
Planting date: 04-26-2024



Planting date: 05-17-2024



Planting date: 06-07-2024



Normal growth distribution | Current growth | Current growth distribution MIN/MAX

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.

Contact information:
areis@missouri.edu

Soil water content

Planting date: 04-05-2024

Soil layer

	0-9in	9-23in	23-54in
Bradford (Armstrong loam)	75%	82%	76%
Alma (Higginsville silt loam)	75%	83%	85%
Vandalia (Mexico silt loam)	72%	77%	71%

04-26-2024

	0-9in	9-23in	23-54in
Bradford (Armstrong loam)	75%	79%	74%
Alma (Higginsville silt loam)	74%	82%	82%
Vandalia (Mexico silt loam)	70%	74%	70%

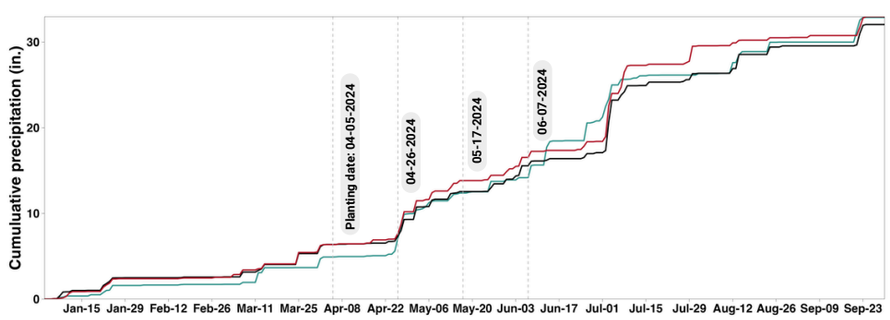
05-17-2024

	0-9in	9-23in	23-54in
Bradford (Armstrong loam)	72%	80%	74%
Alma (Higginsville silt loam)	69%	79%	80%
Vandalia (Mexico silt loam)	65%	72%	68%

06-07-2024

	0-8in	8-30in	30-60in
Bradford (Armstrong loam)	71%	76%	70%
Alma (Higginsville silt loam)	72%	77%	75%
Vandalia (Mexico silt loam)	62%	68%	63%

Rainfall



Drought Stress

Planting date:	MG 3	MG 4	MG 5
04-05-2024	-	-	1%
04-26-2024	-	-	0%
05-17-2024	-	5%	0%
06-07-2024	-	18%	5%

Drought stress is estimated by the cumulative crop transpiration reduction.

Contact information:
areis@missouri.edu