

ARE “NUMBER OF DAYS” IMPORTANT IN SOYBEAN PRODUCTION?

An article from the Univ. of Arkansas titled “[A historical assessment of the number of days required to plant the Arkansas soybean crop](#)” provides results from research that was conducted to quantitatively analyze the number of acres planted per suitable fieldwork day and the total number of fieldwork days available for soybean planting in Arkansas. The study results are based on number of suitable fieldwork days per week in the late Mar.–early June period, which the authors define as the optimal soybean planting window in the state. However, the authors also state that “This study also provides evidence that annual soybean revenues in Arkansas could potentially be greater...if more soybean acres were planted in a timelier manner”.

In Mississippi and Arkansas., respectively, there have been an average of 15.4 and 17.0 days suitable for fieldwork in April over the last 20 years [2005-2024]. What this means in terms of planted acreage using different planting capabilities is shown in the below table.

Since Miss. and Ark. producers have harvested an average of 3.014 and 2.220 million soybean acres, respectively, over the last 5 years, the tabled data show that producers in each state can easily have their soybean acreage planted in the month of April even when using the estimated average minimum number of days suitable for fieldwork [9.3 and 12.5 for Miss. & Ark., respectively] over the last 20 years. Of course, there will be some acreage—e.g. doublecropped—that will necessarily be planted “late”. Also, most Midsouth soybean producers have other crops to plant at this time. However, a soybean producer can use the below information to see that each state’s entire soybean acreage can be planted in the “early” planting window of April to ensure the best probability for maximum yield.

Number of soybean acres that can be planted in April in Mississippi & Arkansas using 2005-2024 estimates of the minimum, average, and maximum number of days suitable for fieldwork in that month in each state.			
Days suitable for fieldwork in April^a	Planting Capability	Acres that can be planted in	
		Mississippi	Arkansas
Minimum = 9.3/12.5	300 acres/day	2,790,000	3,375,000
Average = 15.4/17.0		4,620,000	5,100,000
Maximum = 22.6/24.7		6,780,000	7,410,000
Minimum = 9.3/12.5	500 acres/day	4,650,000	6,250,000
Average = 15.4/17.0		7,700,000	8,500,000
Maximum = 22.6/24.7		11,300,000	12,350,000
Minimum = 9.3/12.5	700 acres/day	6,510,000	8,750,000
Average = 15.4/17.0		10,780,000	11,900,000
Maximum = 22.6/24.7		15,820,000	17,290,000
^a From NASS . Minimum, average, and maximum no. of days suitable for fieldwork in Miss. [first no.] and Ark. [second no.] in the 2005-2024 period.			

Information in an article titled “[Weeds can grow off-label in just 4 days](#)” shows just how little time [number of days] may be available for the timely application of a herbicide to growing weeds. For instance, some weed species may grow as much as 1.25 in./day, so that means that they will add 5 in. in 4 days. If they were found when 3 in. tall, then they will have added another ~5 in. height in 4 days and will be much harder to kill if a spray application was delayed for any reason. So for best results, weeds should be treated with herbicide when they are small. Even a delay of 2 or more days will likely result in

unacceptable control vs. their being sprayed when first found.

So the answer to the question posed in the title of this article is an emphatic “YES”—i.e. number of days are VERY IMPORTANT to the issues and inputs that arguably matter the most in Midsouth soybean production. Midsouth soybean producers must exercise due diligence to ensure that inputs such as planting and application of POST herbicides are done in a timely manner to ensure maximum benefit.

Composed by Larry G. Heatherly, Jan. 2025, larryh91746@gmail.com