

Alan Corn - MS - 07-06-2026



Multispectral imagery of corn plot

Layer name	Acquisition time	Center	Area	Page
NDVI	7/5/26 6:57:20 PM CDT Duration: 00:07:10	42.6150116, -92.8448793 (WGS84)	32.375 ac	2-4
Orthomosaic - Alan - Corn - MS	7/5/26 6:57:20 PM CDT Duration: 00:07:10	42.6150116, -92.8448793 (WGS84)	32.387 ac	5

NDVI

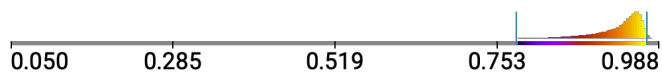
Index



Layer details

Acquisition time	7/5/26 6:57:20 PM CDT Duration: 00:07:10
Center	42.6150116, -92.8448793 (WGS84)
Area	~32.375 ac
GSD	2.016 in/px
Bands	1 (Index)

Histogram and legend



Visualization settings

Histogram equalization: Off
 Selected minimum value: 0.781
 Selected maximum value: 0.970
 Values out of range: Transparent

Statistics

Layer area: 32.375 ac
 Mean index: 0.92566
 Index SD: 0.04091
 Mean index (visible): 0.92729
 Index SD (visible): 0.03587

NDVI

Field Insights

Tuesday, May 19, 2026 - Sunday, July 5, 2026



Crop type: Corn

Planting date: Tuesday, May 19, 2026

Report language: English

Field location: , (42.615 lat, -92.8449 lng)

Weather data

Month	Average temperature (°F) 	Minimum temperature (°F) 	Maximum temperature (°F) 	Total precipitation (in) 	Total sunshine duration (hours) 	Total shortwave radiation (MJ/m²) 
May 2026	65.26	41.18	85.28	1.26	134.32	289.88
June 2026	69.17	51.26	88.88	6.41	356.87	697.69
July 2026	74.26	64.76	85.64	1.73	55.75	109.04

Current crop health and growth phase

The average NDVI value recorded at 0.92 indicates robust crop health, suggesting lush and vigorous vegetation in the field. The histogram data shows that the majority of NDVI values fall between 0.75 and 0.94, with a significant count of 1,511,794 observations at 0.94, highlighting a predominance of healthy corn plants across the field. The calculated growing degree days (GDD) at 497 further supports this positive assessment, demonstrating that the crop has been successfully accumulating heat units necessary for optimal growth during the early stages. Currently, the crop is in the BBCH/EC 1 growth stage, "Leaf Development," where the growing point remains below the soil surface, necessitating careful management to avoid waterlogging and other stressors that could impact development. Given the recent weather data, particularly the average temperatures ranging from 18.48°C to 23.48°C and precipitation levels peaking at 162.80 mm in June, the conditions have been generally favorable, although the high rainfall could increase the risk of waterlogging; thus, monitoring soil moisture, currently at an average of 0.28 m3/m3, is essential to prevent any adverse effects on the crop's growth.

Crop development and upcoming growth phase

As the corn crop transitions into the upcoming growth phase, BBCH/EC 2, "Stem Elongation," it will require increased nitrogen, water, and nutrients for optimal development. Farmers should ensure that soil nutrient levels are adequately maintained and consider implementing a nitrogen application strategy to support the crop's needs during this critical phase. Key field parameters to monitor include soil moisture levels, which are currently at 0.28 m³/m³; maintaining optimal moisture will be essential to prevent any stress during stem elongation. Additionally, keeping an eye on weather forecasts is crucial, as significant rainfall or dry spells could lead to challenges such as nutrient leaching or drought stress, respectively. The historical weather data indicates that July temperatures are rising; thus, it will be important to manage any potential heat stress by ensuring adequate soil moisture and avoiding excessive herbicide applications, which could exacerbate stress during this sensitive period.

Soil analysis

The regional soil composition is characterized by 39% sand, 38% silt, and 23% clay, which suggests a loamy texture that can provide good drainage while retaining moisture. However, the relatively high sand content may lead to challenges in moisture retention, particularly during periods of variable rainfall. Current soil moisture values range from 0.25 m³/m³ in May to 0.36 m³/m³ in July, indicating a slight increase over time; however, in June, it peaked at 0.28 m³/m³, reflecting the effects of significant rainfall (162.80 mm) during that month. These fluctuations in moisture levels highlight the impact of past weather, indicating a potential risk of both waterlogging during heavy rains and drought stress during dry periods. To support plant health, it is recommended to closely monitor soil moisture levels and consider implementing a targeted irrigation strategy, especially as the crop enters the critical stem elongation phase, to ensure consistent moisture availability without over-saturation. Additionally, soil moisture conservation practices, such as mulching or cover cropping, could further enhance water retention and improve overall soil health.

Conclusion

The current crop health in the field is impressive, with the corn (*Zea mays*) exhibiting robust growth, as indicated by a high average NDVI value of 0.92, reflecting excellent vegetation vigor. Comparing the crop development to expectations for this time of year—approximately six weeks post-planting—the corn appears to be progressing well, supported by 497 GDD accumulated, which aligns with the anticipated growth metrics for this development stage (BBCH/EC 1: Leaf Development). As the crop transitions into the critical stem elongation phase, the main tasks for the farmer in the upcoming weeks will include monitoring soil moisture and nutrient levels, particularly nitrogen, to ensure optimal growth conditions. Additionally, careful planning for irrigation will be essential to maintain adequate moisture levels, as well as avoiding stressors such as herbicide applications. Critical actions also include evaluating the need for fertilizer applications and being vigilant for any signs of pest or disease pressure as the crop matures, ensuring that interventions are timely and effective to maintain the health and productivity of the crop.

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Orthomosaic



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