

TWENTY
TWENTY
FIVE



SUSTAINABILITY

IT'S IN OUR NATURE



THE GRAIN THAT GIVES.

When you choose sorghum, you're doing something good not only for yourself but for the world around you. This small, powerhouse grain is packed with essential nutrients that support your health, providing fiber, protein and antioxidants. Beyond nutrition, sorghum contributes to environmental sustainability. It requires less water to grow than

many other crops, helping to conserve precious resources. Its deep root systems promote soil health, reduce erosion and provide protection for wildlife. By choosing sorghum, you're making a positive impact on our ecosystems, protecting biodiversity and promoting a healthier planet for future generations.

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SUPER GRAIN. SUPER FARMERS.

Sorghum is grown by dedicated farmers right here in the U.S., making the United States the world's largest producer of this versatile and nutritious grain. There are approximately **50,000 sorghum farmers** in the U.S., of which **97% are family operations**.

These farmers are committed to raising sorghum sustainably, ensuring a consistent and reliable supply. By choosing sorghum as an ingredient, you're not only opting for a super grain but also supporting U.S. farmers and contributing to the U.S. economy.

THE RESOURCE CONSERVING CROP[®]

Sorghum checks all the boxes. This giving grain is resilient and well suited to thrive in changing climates with uncertain growing conditions. It's resistant to heat and drought, helps reduce soil erosion, improves soil health and conserves precious resources.



RESILIENT

Sorghum is a resilient grain well suited to thrive in changing climates and uncertain growing conditions.



RESISTANT

Sorghum is incredibly resistant to heat and drought.



RESOURCE-CONSERVING

Sorghum requires less water than comparable grains, conserving our precious natural resources.¹

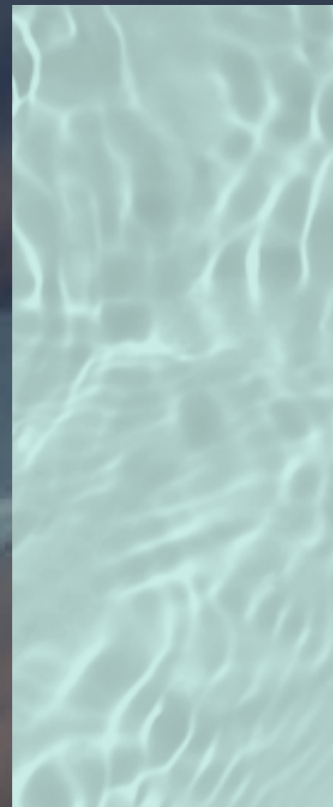
SUPERIOR WATER CONSERVATION

36%
LESS WATER



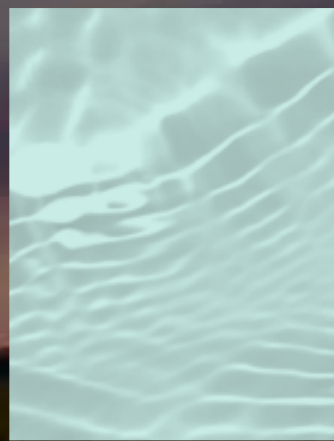
91%

FED BY RAIN



One of sorghum's superpowers is its adaptability to climate challenges such as heat and drought, requiring an amazing 36% less water than other grains.¹ That's a savings so significant it could supply the annual water usage of over 16 million homes. Nationally, 91% of sorghum acres are fed by rain alone.²

COULD SUPPLY
16MM
HOMES WATER



YIELD VS. WATER USAGE

Sorghum, known for its water-efficient characteristics, exhibits remarkable adaptability to climate challenges like heat and drought. Explore the comparison of sorghum's water usage and yield against similar grains to witness its outstanding performance.

SORGHUM



WATER NEEDED FOR FIRST BUSHEL 6.9 INCHES'

SOYBEANS



WATER NEEDED FOR FIRST BUSHEL 7.8 INCHES'

WHEAT



WATER NEEDED FOR FIRST BUSHEL 10 INCHES'

CORN



WATER NEEDED FOR FIRST BUSHEL 10.9 INCHES'

SERIOUS ABOUT *SOIL HEALTH*

Sorghum helps regenerate soil with increased organic matter, enabling it to retain more important soil nutrients and moisture. The stalks left standing in fields help add nutrients back into the soil, break up soil compaction, capture and retain moisture and reduce wind erosion.³ U.S. sorghum farmers are practicing some sort of conservation tillage on almost three-quarters of their acreage.

Sorghum grown with reduced tillage removes carbon from the atmosphere and stores it safely in the soil, cleaning our air and helping to fight climate change.

75%

U.S. sorghum farmers are practicing some form of conservation tillage on almost three-quarters of their acreage.

CARBON INTENSITY AND GREENHOUSE GAS EMISSIONS

Sorghum: The carbon intensity of sorghum is 5,798 grams of GHG per bushel.⁹ **2. Corn:** The carbon intensity of corn is 6,383 grams of GHG per bushel.⁹

FEEDSTOCK CARBON INTENSITY CALCULATOR

The feedstock with a carbon intensity of 5,798 grams of GHG per bushel has a lower environmental impact in terms of greenhouse gas emissions compared to corn, when measured per bushel.⁹

CATEGORY	PARAMETER	SORGHUM	CORN
HARVEST	Yield (Bushels/acre)	75	178.4
ENERGY	Diesel (Gallons/acre)	3.2	7.2
	Gasoline (Gallons/acre)	0.3	1.3
	Natural gas (ft.3/acre)	0.1	87
	Liquefied petroleum gas (Gallons/acre)	0	2.2
	Electricity (kWh/acre)	0.8	69.3
NITROGEN FERTILIZER	Ammonia (lbs. N/acre)	10.8	49
	Urea (lbs. N/acre)	22.2	36.3
	Ammonium nitrate (lbs. N/acre)	0	3.2
	Ammonium sulfate (lbs. N/acre)	2.2	3.2
	Urea-ammonium nitrate solution (lbs. N/acre)	21.1	50.5
	Monoammonium phosphate (lbs. N/acre)	3.95	6.3
	Diammonium phosphate (lbs. N/acre)	2.01	9.5
PHOSPHORUS FERTILIZER	Monoammonium phosphate (lbs. P ₂ O ₅ /acre)	20.2	29.6
	Diammonium phosphate (lbs. P ₂ O ₅ /acre)	2.2	29.6
POTASH FERTILIZER	K ₂ O (lbs. K ₂ O/acre)	1.7	59.9
LIMESTONE	CaCO ₃ (lbs./acre)	0	573
HERBICIDE	Herbicide (g AI/acre)	1278	1044.2

^{5, 6, 7, 8}

SUPPORTS ROBUST ECOSYSTEMS

This water-smart crop uniquely helps wildlife populations thrive as a preferred food choice for quail, pheasant and many other species of birds and deer. Sorghum plants have many leaves and a sturdy structure, creating the ideal habitat for wildlife and protection during harsh winters and extreme summer heat.⁴

WILDLIFE

Highly nutritious food choice for quail, pheasants and other species of birds and deer.

SORGHUM STALKS

Leaves and sturdy structure create a habitat for animals.

PROTECTION

Provides protection from harsh winters and extreme summer heat.



DOING MORE WITH LESS, NATURALLY

Sorghum is a champion for reducing the environmental footprint of fuel. Approximately one-third of the U.S. grain sorghum crop is used for ethanol production. Naturally drought tolerant, sorghum gives ethanol producers in water-stressed areas a smart choice to help farmers preserve regional resources.

When all emissions from producing and using sorghum ethanol are considered, the fuel has a life cycle carbon intensity of about 53.3 g/MJ, making it roughly **46% lower than gasoline's carbon intensity**.^{5, 6, 7, 8}

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