



Reinke

EDIBLE BEANS

Published by Reinke Manufacturing Co., Inc. | 1040 Road 5300 Deshler, NE 68340 | 402-365-7251 | www.reinke.com

Are known worldwide as a staple food due to their affordability, high nutritional value, and long shelf life.

Edible beans are versatile in the kitchen, offer a full protein profile when combined with grains, and are environmentally sustainable to grow. Despite being noted as a nutritional powerhouse, here are some lesser-known facts about Edible Beans:

- ▲ There are over 40,000 recorded bean varieties, though only a small fraction are widely cultivated.
- ▲ Beans have cultural symbolism—In Nicaragua, beans are given to newlywed couples as a symbol of good luck and prosperity.
- ▲ World's tallest bean plant was grown in the U.S.A., and reached a height of over 46 feet (14 meters).

Bean Facts

The most common types of Edible Beans include: kidney, pinto, black, chickpeas (or known as garbanzo), navy, cannellini, lima, adzuki, soybeans (also known as edamame), and lentils. They come in a variety of sizes, shapes, and colors.

Edible beans are highly sustainable, functioning as a “nitrogen-fixing” crop that enhances soil health, needs minimal fertilizer, while consuming less water compared to other crops.

Members of the legume family develop a symbiotic relationship with Rhizobia bacteria that operate the nitrogen factory. When these bacteria are living in the soil near the planted seed or are attached to the seed coat at planting, they enter the plant's roots and multiply. The bacteria fix or capture atmospheric nitrogen gas, convert it to ammonia and make it available to the plant. The plant reciprocates by providing organic compounds to sustain the bacterial colony in the plant's root nodules. (WVU Extension Service, 2021).

When beans are incorporated into the crop rotation cycle, they break the pest and disease cycles, thus decreasing reliance on chemical pesticides.

Using Center Pivot Irrigation

Using center pivot irrigation is an excellent choice for Edible Beans, as they require consistent moisture during blooming and pod fill. By providing uniform water application,

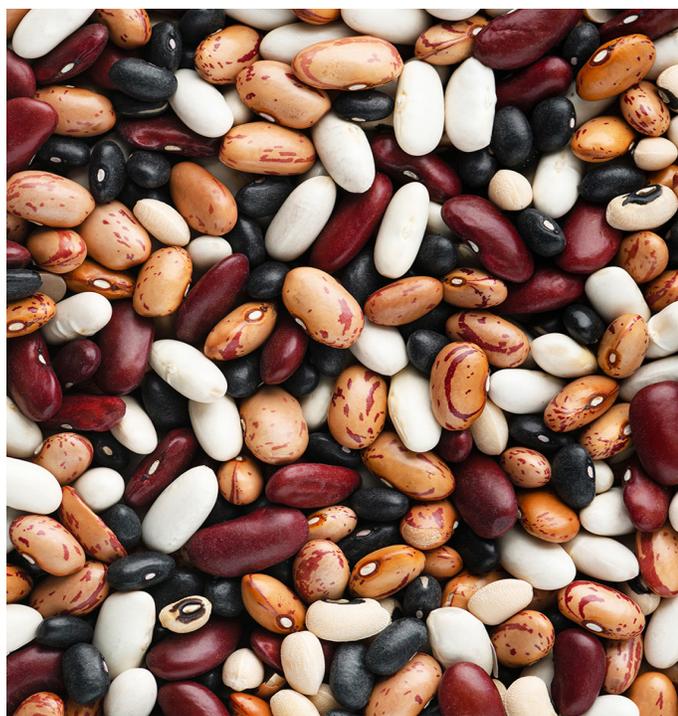


irrigation helps to prevent stress on the beans and promotes consistent growth—both of which are essential for optimizing yields and enhancing quality.

Based on the data to date, Dean Yonts' advice is: "Don't let that first irrigation be delayed too long because that is when the most damage to your potential yield can occur." Delaying irrigation also affected the rate of plant maturity, the irrigation specialist said. Early in the season, it resulted in a delay in plant maturity by as much as three to four days. Water stress at the end of the season also delayed maturity, but it was not as pronounced. (UNL, 2008).

A Reinke center pivot system gives the grower flexibility other irrigation methods are unable to provide. It introduces efficiency, along with water management, all while having a strong economic value.

Every Reinke irrigation system is unique, and tailored with custom features to accommodate the precise requirements of the grower. Reinke irrigation systems are constructed with high-quality materials and innovative engineering.



Smart Irrigation Tools

Growers can incorporate smart irrigation tools with a Reinke irrigation system. The tools put the grower in complete control of their operations from any smart device, anywhere. Thanks to technology, the grower can amplify irrigation strategies with unparalleled accuracy.

Save water and keep crops healthy by irrigating before plants show signs of stress. Know exactly when and how much water to apply. Track, compare and report irrigation practices. (CropX, nd).

Utilizing both agronomic data and irrigation control allows the grower to promptly adapt to shifting conditions and make necessary adjustments. Growing conditions and yields are optimized, resulting in high-quality crop production.

Conclusion

To achieve superior Edible Bean production, center pivot irrigation is essential. When precision irrigation is paired with smart technology, the grower has the ability to maximize water efficiency throughout the development of the crop.

For personalized recommendations on irrigation systems and technology setups, contact a Reinke dealer. Discover how the right irrigation system can align with your fields and production goals. Reinke irrigation systems deliver unmatched quality, innovation, and efficiency to growers worldwide.

References:

WVU Extension (2021). Legumes & Nitrogen Fixation. <https://extension.wvu.edu/lawn-gardening-pests/news/2021/11/01/legumes-nitrogen-fixation>

University of Nebraska-Lincoln Institute of Agriculture and Natural Resources (2008). Irrigating Dry Beans – Research Leads to Changes. <https://cropwatch.unl.edu/irrigating-dry-beans-%25E2%2580%2594-research-leads-changes/>

CropX (nd). CropX System Irrigation Planning. Use Every Drop Wisely. <https://cropx.com/cropx-system/irrigation-planning/>



Find your dealer at
[www.reinke.com/
find-a-dealer.html](http://www.reinke.com/find-a-dealer.html)

@reinkeirrigation

@Reinke_Irr

@reinkeirrigation

Reinke Manufacturing Co., Inc.

Reinke Irrigation

