

TEN BENEFITS OF ALFALFA IN THE WEST

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With all the water limitations we have in the west, we frequently hear the refrain: **Why do we grow a high water-using crop such as alfalfa? What good is it anyway?**

You may not realize it, but your diet likely benefits from alfalfa almost every day. Almost every citizen ‘eats’ alfalfa *each day* in the form of milk with your cereal, cheese on your burrito, that pizza on game day, or a hamburger for lunch. Western-grown alfalfa is really an ‘engine of food production’ which feeds millions of people and contributes considerably to soil conservation and the environment.

But What about Water? Despite its importance to the Western economy, alfalfa can annually use more irrigation water than some other crops. This is an important concern given current and future water scarcity issues. These factors have led some to consider whether other crops besides alfalfa might help mitigate rising water demands. As these decisions are explored, it is critical to weigh the many reasons why alfalfa is actually a suitable crop for the West. Here are some of the key values of alfalfa in western regions:

1. **High water use efficiency** – While it is true that more total irrigation water is applied to alfalfa than many other crops, alfalfa can actually have greater water use efficiency because it has deep roots, a long growing season, and the whole plant is harvested.
2. **Irrigation flexibility** – Irrigation can stop at almost any point in the season without causing long-term damage to the crop. This flexibility reduces risk of water system delivery failures and makes alfalfa suitable for future potential water banking/leasing programs.
3. **Low input** – Alfalfa requires less chemical (nitrogen and pesticides) and tillage inputs than most other crops, making it less expensive and more environmentally-friendly.
4. **Resilient and adaptable** – Alfalfa can grow in almost any elevation and nearly any soil type. It is also much less sensitive to weather conditions (early or late frosts) than many other crops.
5. **Benefits other crops in rotation** – Crops that follow alfalfa usually have greater yield and require less pesticides, along with much less or no nitrogen fertilizer.
6. **Improves soil, water, and air quality** – Alfalfa helps reduce soil erosion through less tillage and year-round ground cover. It also builds many other aspects of soil health.
7. **Pollinator and insect diversity** – Alfalfa is one of the major sources of pollen that contributes to healthy bees and other pollinators that are vital to the fruit and vegetable industries throughout the West.
8. **Wildlife habitat** – Alfalfa supports various wildlife species including birds, herbivores and important species such as foxes, hawks, and eagles.
9. **Harvest flexibility and storage** – A flexible harvest window and storage options make alfalfa suitable for transport, and for livestock feed and export markets.
10. **Low risk and local food production** – The risk and instability of markets are generally lower for alfalfa than many other crops

Summary

If alfalfa were not a suitable and profitable crop in the West, its production would have declined or ceased long ago. It has become such an integral and foundational aspect of Western agriculture that major disruptions in this industry could cause irreversible and long-lasting negative effects. As water scarcity increases in the future, more viable crop options other than alfalfa might become available, but the numerous benefits and flexibility of alfalfa should not be easily overlooked – especially considering that few if any crops can handle variable growing and irrigation conditions like alfalfa.

For a longer version of this article, go to: https://digitalcommons.usu.edu/extension_curall/2085/

For additional reading

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