ALTO Garden Highlights Water-Saving Potential of Hydroponic Cultivation

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Los Angeles, CA – September 22, 2026 – Water availability remains an important issue for California agriculture, leading to an emphasis on methods of producing food while using water more efficiently. At a time when water is a limiting factor, California-based leading manufacturer of hydroponic tower systems, ALTO Garden, is pointing to the water-saving potential of hydroponic growing by bringing nutrient-rich water directly to plant roots and making better use of space.

Recent reporting by AgNet West highlighted water availability as one of the key issues currently confronting California farmers and rural communities. In a September 17 report, concerns were raised about water storage, droughts, changing weather patterns, snowpack and reservoirs as California tries to grapple with ways to ensure a reliable supply of water for agriculture.

Water plays a critical role in California's agricultural economy. According to the California Department of Water Resources (DWR), roughly 9.6 million acres are irrigated with about 34 million acre-feet of water on average each year. The dry climate and the lack of precipitation during part of the growing season means that irrigation is often critical to the production of many of the crops for which

California is known.

Source:
https://water.ca.gov/Programs/Water-Use-And-Efficiency/Agricultural-Water-Use-Efficiency?utm_source=chatgpt.com

Hydroponic Cultivation Offers a Water-Efficient Alternative

Hydroponics is an innovative method for growing plants. These plants are not grown in soil. Instead, their roots are submerged in water which contains all the nutrients necessary for growing plants. In some cases, this water can be recycled and reused for irrigation.

According to the U.S. Department of Agriculture's Agricultural Research Service, controlled-environment agriculture which includes hydroponics and vertical farming can reduce water use by up to 90% compared to conventional farming. These methods allow food production, even during warmer months, though controlled-environment agriculture may require a large amount of capital to build and construct greenhouses.

Source: https://www.ars.usda.gov/research/project/?accnNo=448412

The University of California Agriculture and Natural Resources discusses another benefit of hydroponics. According to UC ANR, hydroponics is a water-efficient growing method which uses significantly less water than typical outdoor soil-rooted gardening. Moreover, it allows closer spacing of plants due to vertical planting, thus maximizing the yields of those with limited access to water and space.

Growing More in a Smaller Footprint

ALTO Garden has designed innovative hydroponic tower equipment which enables plants to grow vertically instead of horizontally over a large surface area. Such a method allows people to grow lettuce, vegetables, herbs, or other plants in a relatively small space.

Growing plants vertically may be especially beneficial in situations where space is limited. Therefore, home, school, classroom, educational or other settings can use hydroponic towers to grow food without taking up much space.

"Water efficiency is becoming increasingly important as growers and communities look for practical ways to produce fresh food while making better use of limited resources," said Jensen Lee, Owner of ALTO Garden.

Water Efficiency Becomes Increasingly Important for Food Production

Hydroponics is not a replacement for traditional forms of agriculture, which are vital to California's food supply. Controlled-environment horticultural systems offer one possible alternative for specific crops and specific needs related to

conservation of water, intensification of production, and local food production.

Agriculture is beginning to think about ways to adapt to current realities about its water future, and innovations that allow its growers to produce more food with less water could prove to be a valuable addition to the conversation. By enabling intensified production with greatly decreased water consumption that can be located close to consumers, hydroponic and vertical farming systems offer a unique contribution to adapting agriculture for the 21st century.

About ALTO Garden

ALTO Garden, based in Los Angeles, California, is a manufacturer of hydroponic and aeroponic tower systems which provide solutions for growing fresh lettuce, vegetables, herbs, and other suitable crops while making efficient use of water and available space. ALTO Garden serves home growers, educational environments and others interested in adopting hydroponic growing methods.