

*Nanobubbles elevate oxygen concentration between 100 and 300 percent and distribute it in a uniform manner. This creates a direct impact on crop productivity, health, and resistance.*

Oxygen is essential for the growth of living beings. However, in conventional irrigation systems, it is found in low concentrations which affect crop development. In this situation, nanobubble technology presents an innovative and sustainable solution for unlocking plants' genetic potential and making efficient use of water.

Nanobubbles are extremely small gas particles (2500 times smaller than a grain of salt) capable of concentrating high levels of oxygen.

Benjamin Labbe, project and innovation manager for the Chilean company Kapicua, of the Laevo Group, said that, upon being injected in water, they raise oxygenation by between 100 and 300 percent. This generates a series of benefits that allow for more profitability from the agricultural system.



In plants, nanobubbles favor the transport and absorption of key nutrients such as potassium and calcium which are decisive in determining the flavor, caliber, and color of the fruit.

In the water, they improve quality naturally by reducing pathogens and eliminating algae and mineral deposits. In the ground, they both inhibit the development of anaerobic pathogens and promote beneficial microbiology. Additionally, compaction is reduced through improved water movement

Case studies developed by Kapicua, in collaboration with public and private agricultural research centers, show a 14 percent increase in tomato productivity, an 18 percent increase in blueberry caliber, and up to a 25 percent reduction in water usage for lettuces. Additionally, there was a 66 percent decrease in Botrytis cinerea.

The company will be present at the Agricultural Water Summit Chile - 2021, during which it will demonstrate this technology's advances and development. The event seeks to be a meeting point for the agricultural industry with the purpose of analyzing key topics associated with the country's water situation as well as looking for innovative and sustainable solutions for preserving water in agriculture.



## **Tailored to the business**

Nanobubbles have been used principally for water treatment within aquaculture and in hydroponic systems in the case of agriculture. Kapicua is a pioneer in implementing this technology in the irrigation of crops outside of greenhouses.

This year, the company signed an agreement with Moleaer, the world leader in nanobubble-generating equipment, to become the brand's exclusive providers in Chile and Peru. In the months to come, they will also become present in Colombia and Ecuador.

“We are focused on offering our clients an integral solution. We have Moleaer equipment of varying sizes, models, and formats that we implement in accordance with the size of the project. We take care of improving the profitability of agriculture,” said Labbe.

This translates into field visits, the assembly of the project tailored to a specific business, and a process of accompaniment and consulting to ensure the optimal use of the nanobubbles

### **About the Agricultural Water Summit 2021**

The first edition of the Agricultural Water Summit - Chile 2021 will take place on April 20 2021 at the conference center of the Hotel Sun Monticello located in San Francisco de Mostazal, Chile.

This event, organized by the Yentzen Group, will touch on key issues regarding the impact of water scarcity in the different regions of Chile, as well as the importance of applying new technologies and optimizing current irrigation systems for the management and efficient use of water.