



ACRENA

COMPANY

Acrena is a Cooperative born in 1982, producer and marketer of cucumbers, peppers, varieties of tomatoes, eggplants, melons and watermelons. There are 350 members who market their products through this SAT. They distribute 40% in the national market and 60% in the European Community.

INDUSTRY

Fruit and vegetables

LOCATION

Rambla Bernal 6 -
04710 El Ejido
(Almería, España)

TREATED CROPS

Cucumbers

TECHNOLOGY USED

BrioAgroViTA7
BrioAgro AquaPower

Savings of 35% of irrigation water were achieved during the trial period.

By using the BrioAgro devices at Acrena was achieved to reduce water consumption and therefore energy expenditure in irrigation. The BrioAgro system was connected to existing irrigation system on the farm to save costs on new installations and to be able to compare traditional irrigation with smart irrigation.



SAT ACRENA is certified by AGROCOLOR with extension to UNEGAP (including GLOBAL GAP), GRASP, Field to Folk (F2F), Tesco Nurture (TN) and BRC standards and protocols.

In addition to the cultivated hectares, they have their own seedbed of more than 4 hectares, three of which are wintered, with a multi-tunnel structure and equipped with modern climate control and irrigation technology.

The soil of the farm is clayey.

How this was done

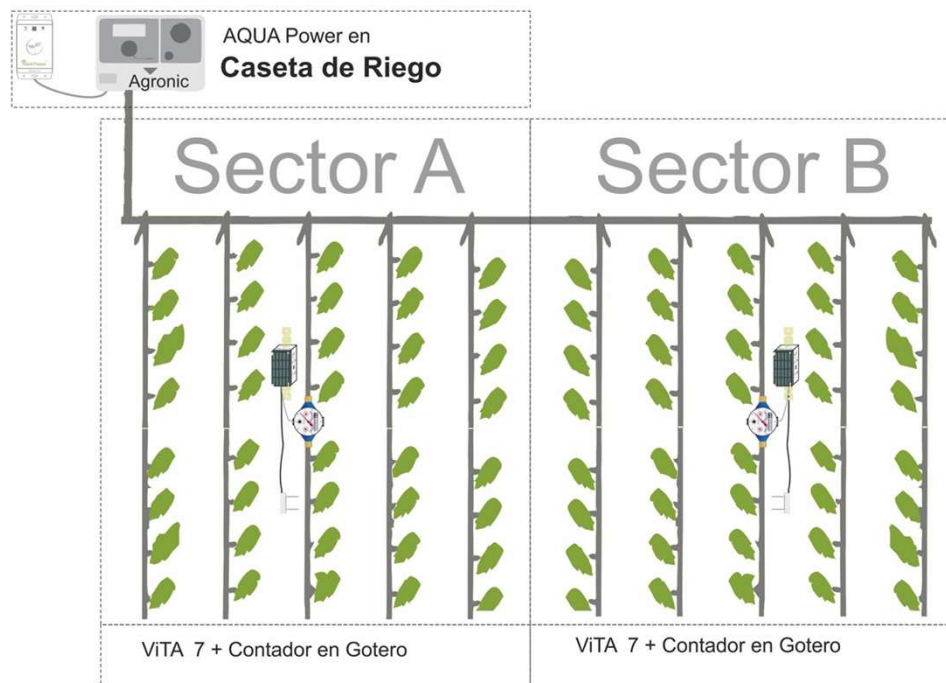
STEP 1

First of all, BrioAgro carried out a soil characterisation of its cucumber plantations. This data was used to adjust BrioAgro's calibration algorithm for irrigation optimisation in step 2.

Soil data obtained	
SAND	39,4%
CLAY	34%
LIMO	26,7%
ORGANIC MATERIAL	2,11%

STEP 2

A comparative irrigation test (A/B) was carried out to check whether it improved on what Acrena technicians were already achieving with manual irrigation. To do this, we installed two BrioAgro ViTA7 devices with drip meters to take data from sectors A and B, and a BrioAgro AquaPower in sector A connected to the existing irrigation programmer, carrying out automatic irrigation from 12/12/2022 to 12/01/2023, as shown in the following diagram:



Result

Sector A, using BrioAgro technology, has surpassed the objectives set for sector B, irrigated in the traditional way by Acrena technicians. The following has been achieved:

- **Water savings:** 35% less water was consumed in sector A than in sector B.
- **Energy savings:** 35% less energy was consumed in sector A for irrigation.
- **Irrigation in sector A was of higher quality,** as 100% of irrigations were within the correct irrigation thresholds for the crop (between readily available water and field capacity), while in sector B only 68% of irrigations were within these thresholds.



For a free A/B irrigation test on your farm with BrioAgro contact us at info@brioagro.com or call us on +34 687 08 70 13.