



## PISTACHIO

<b>Crop</b>	Pistachio
<b>Location</b>	Iran
<b>Problem</b>	Saline water and soil
<b>Date</b>	May 2016 - October 2017
<b>Duration of study</b>	18 months
<b>Water EC</b>	13.26 dS/m

A study was carried out by comparing the output obtained on two plots with identical conditions, one irrigated with untreated water and the other irrigated with water treated with Aqua-4D®.

Aqua-4D® enables a better dissolution and better distribution of the minerals in irrigation water. The salts remain dissolved in water and those not absorbed by the plant are carried off under the rhizosphere.

Salts are no longer crystallized in the soil pores and no longer inhibit the nutrition of the plant.



# Ecological and chemical-free

## Well water quality during validation period - deteriorating

PH	EC [dS/m]			
during validation	initial state	after 3 months	after 6 months	after 18 months
7.50	12.81	13.26	13.83	15.37

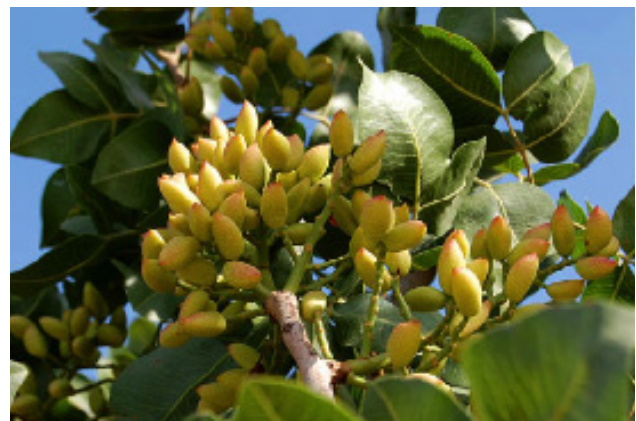
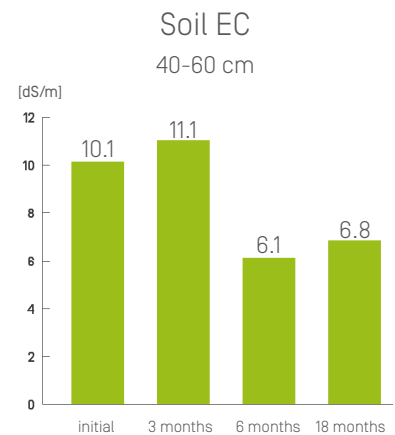
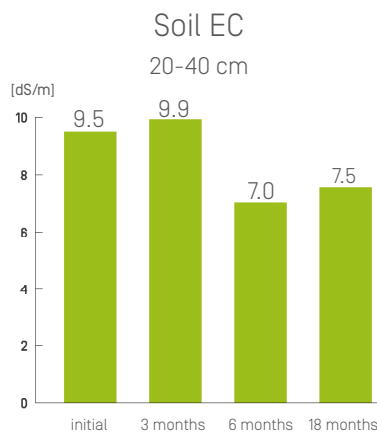
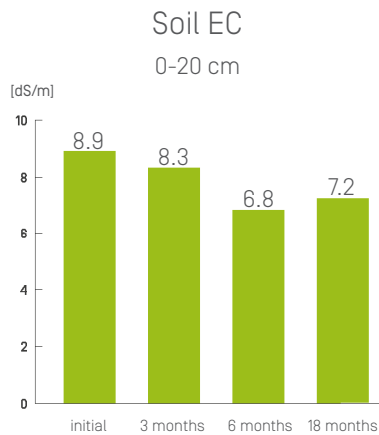
The EC of the water coming from the well increased by 2.56 during the validation period.

## The Aqua-4D® system was installed in May 2016

After 3 months we can see that the soil EC is increasing between 20-40 cm and 40-60 cm - the salt coming from the first layer is being leached down. In the long term we can observe that the leaching process through the whole soil profile and soil EC decreases at 20-40 cm and 40-60 cm.

After 18 months, between 0-20 cm we can see that the soil EC dropped from 8.9 to 7.2. This illustrates the lixiviation effect taking place in the first layers of the soil. The irrigation water initially had an EC of 12.81, which is extremely high; decreasing the EC of the soil in such conditions would normally be very difficult.

Decreasing the EC of the soil in such conditions would normally be very difficult but was made possible by the Aqua-4D® system's leaching effect."



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