

# WATER & SOIL LTD.

## AGRICULTURAL AND FOOD TECHNOLOGIES

### Water saving technologies

#### Our products and services

Water Retainer is an organic components-based soil conditioner which helps to reduce water usage and diminish the effects of drought and dehydration. Water Retainer increases yield and reduces costs in home and urban gardening, in agriculture and for parks and golf course maintenance.

“Sustainable products for a sustainable world”

#### Our value proposition

The dramatic growth of world population requires an increase in agriculture output of at least 65% over the next 15 years.

While we face a multitude of resource constraints, water is at the core. With draughts and dry periods continuously on the rise, further accelerated by the climatic change effects water retention is key.

Our solution addresses the core issue of water retention and can be applied to over 3 billion hectares worldwide. With reduced irrigation needs and an increase in yields, the solution offers an outstanding return of investment to its buyers.



RESISTANCE

Plants can withstand longer periods without water or draught. The reduced fluctuation in ground water supply makes for a more resilient bio culture.



SAVE WATER

Plants require up to 50% less water which reduces the risk of drying out and can be used elsewhere.



HIGHER YIELDS



HEALTHIER PLANTS

Tests show that a more stable groundwater supply helps microorganisms live better in the soil. This results in better uptake of nutrients in plant root systems.



ORGANIC & BIODEGRADABLE

The liquid soil conditioner is based on organic materials and degrades without any residues within three months in the soil humidity.

#### Who we are

Water & Soil Ltd. was established in 2014 to produce and commercialise the Water Retainer. The method and formula to increase the retention of water in the soil was invented by a team of chemists, mechanical engineers, economists and microbiologists in response to the major issue of scarcity of water.

#### Our work

Water Retainer is currently being sold in Hungary and distribution agreements are currently under negotiation for Poland, Morocco, South Africa, UK and Ireland.

Expansion focus are over 100 countries with periods of mild draughts in Europe, Latin America, Africa, Middle-East, India, China and Australia.

The product has the license for the use in organic farming.



[www.waterandsoil.eu](http://www.waterandsoil.eu)

## WATER & SOIL WATER RETAINER

### HOW IT WORKS

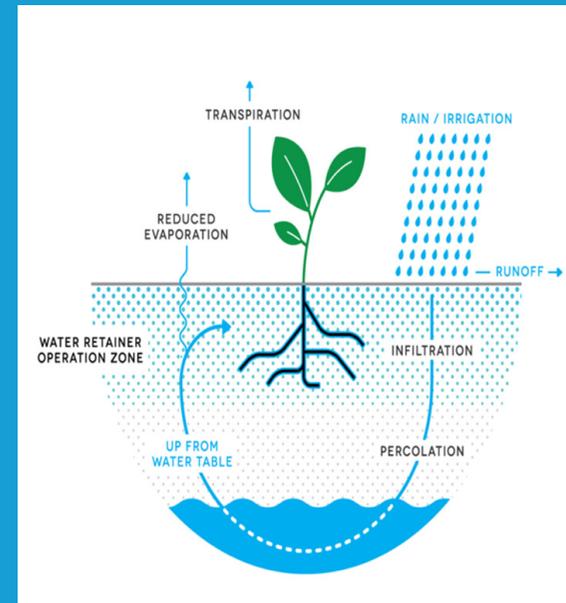
Water retainer is a water- based organic lotion applied to the ground by spraying or irrigation.

The hydrophilic character of the conditioner allows:

- Rain and irrigation water to pass unhindered to the water table.
- Upcoming soil moisture is deterred from passing and evaporating on the surface but is instead wed to water droplets
- Even the stronger hydrophilic roots now draw the water droplets towards the roots

Water retainer creates three clear advantages:

- Steadiness in the water balance through reduced evaporation and increased water uptake by the roots system
- Can be applied in any vegetation culture and any soil type without modifying the root system
- Humidity is taken from the air and trapped in droplets across the roots



## IRRIGATION COST SAVING FOR GOLF CLUBS

### FROM THE USE OF WATER & SOIL WATER RETAINER

Ten litres of Water Retainer per hectare were sprayed onto the surface of the fairway. In a second step, the residuals on the grass were washed off by 2.5 mm of irrigation.

Over a one-month period, we applied 50% less irrigation every second day for the treated part of the fairway.

Without visible difference in the condition of the fairway between treated and untreated control area, at this dosage of Water Retainer about 25% of irrigation water are saved.

With doubling the dosage to 20 litres/ha, we were able to reduce irrigation by a further 25%, so an overall saving of 50% of irrigation for this period.

