



HydroMaat®

MICROBIAL BIOSTIMULANT TO FACE HYDRIC STRESS

Benefits of use

HydroMaat is an innovative microbial biostimulant, specifically formulated to enable crops to cope with water stress conditions and achieve optimal growth and production. **HydroMaat** is an oil dispersion (OD), which allows optimum contact of the biostimulant with the roots of the crop.

Its formulation is based on the *Sinorhizobium meliloti* bacteria, strain B2352, naturally present in agricultural soils. This bacteria is capable, under water stress conditions, of regulating the genetic expression of the BetS protein, a glycine-betaine transporter, a molecule involved in the cell's osmoregulation.

The application of **HydroMaat** thus allows to minimise the negative effects of water stress during growth, keeping the plant's physiological and biochemical processes operational. In this way, the following parameters are maintained: level of photosynthesis, number of leaves and fruits, biomass production, nitrogen, phosphorus and potassium content. This makes it possible to achieve optimum yields even in the event of water deficit. **HydroMaat** also improves the efficiency of irrigation water, for a sustainable use of natural resources.



Composition

(%p/p)

Component	(%p/p)
<i>Sinorhizobium meliloti</i> strain B2353	2.5

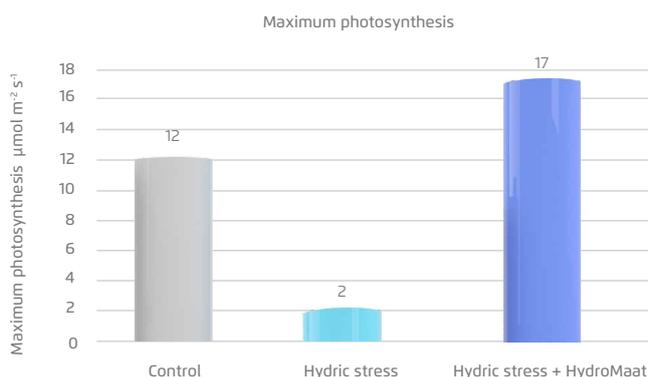
* Equivalent to a minimum of $1,0 \times 10^{10}$ UFC/ml

Efficacy Trials

Trial carried out in Italy on cucumbers

Cucumber crop under hydric stress, induced 20 days after transplantation

3 applications of HydroMaat : at transplanting, 7 and 14 days after hydric stress induction



General condition of the plants after the third treatment: on the left, untreated and on the right, treated with HydroMaat





System and time of application

HydroMaat can be applied to a wide range of crops. In order to maximise the efficiency of the product, it is recommended to carry out a preventive treatment before the water stress episode, and to carry out at least one additional application, 7 to 10 days later.

The **HydroMaat** bacterial strain must act in synergy with crop roots. It is therefore recommended to apply **HydroMaat** by irrigation, so that the bacteria can grow and multiply in the soil. Shake well before use. The product should be applied to loose, well-irrigated soil to ensure optimum drainage of the biostimulant to the roots of the crop.

Stability and storage

HydroMaat is stable for at least 3 years from the date of manufacture. Store in a refrigerated and ventilated place. Do not store for prolonged periods in direct sunlight. Keep away from children. Do not eat, drink or smoke while handling this product.

Dosage

CROP	DOSE	APPLICATION
Vegetables	3 L/HA	Preventive: apply at the time of transplant or before the period of water stress. During water stress : apply at the beginning of the stress, and repeat 7-10 days later.
Fruit Trees	3 L/HA	
Cereals	3 L/HA	Preventive: apply before the period of water stress. During water stress : apply at the beginning of the stress, and repeat 7-10 days later.

Compatibility

When mixing with any other product, conduct a compatibility test in small volume. For further information, technical advice or any other enquiries please contact your local distributor.