



# heptabiol

## Success cases

**Dose:**  
Heptabiol is a product for application by fertigation at doses of 2-5 l/ha

**Success case** of application in woody species, combined with Mycorrhiza Aegis Sym Irriga in Olive tree



Control



HEPTABIOL in Olive tree

**Success case** of application in horticultural species, combined with Team Horticultural Mycorrhizae in Pepper



Control



HEPTABIOL in Pepper



www.atens.es

Grow the strength of your crops



# heptabiol

## PLANT EXTRACTS



Quality, care, production and balance



Certified by the main quality and ecology organizations

# heptabiol



**Root Biostimulant** made from **7 botanical extracts**. Its action modulates hormonal metabolism in order to promote root development, flowering and fruit formation.

With rooting effect, it modulates the growth of the plant and protects it against thermal and salt stress.

It promotes rapid effective mycorrhization by activating beneficial soil microorganisms.



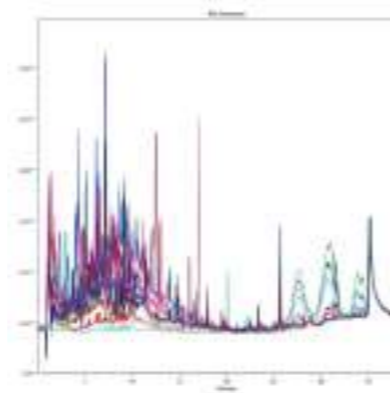
## Main Benefits

**Heptabiol** acts at different levels both with the plant and with microorganisms and, in addition, it regulates the interaction between crops and fungi and bacteria present in the soil.

- Stimulation of root growth through auxins.
- Protection against water stress.
- Increased antioxidant activity.
- Improvement of the response to biotic stress by stimulating the jasmonic acid pathway.
- It favors the flowering and ripening of the fruit due to its auxin content.
- Strengthening of cell walls.
- Stimulation of the growth of Mycorrhizae and Trichodermas.

## Composition:

**HEPTABIOL** is composed of plant extracts from 7 Mediterranean plants. In this unique composition, and thanks to UHPLC-ESI-QTOF-MS technology, **ATENS** has detected more than 1061 plant compounds. Furthermore, after multiple metabolomic tests, **ATENS** has been able to verify that the plants treated with **HEPTABIOL** via the radical route have been able to absorb a total of 355 different natural molecules, of which 276 are also translocated at leaf level.



## The combination of HEPTABIOL with Mycorrhiza reduces the time to reach an effective mycorrhization.

**HEPTABIOL** promotes the microbiological activity of the rhizosphere and of the inoculums of bacteria that stimulate plant growth. Its content in quercitine enhances the growth of the mycorrhizal mycelium, as well as its branching. Thus facilitating the encounter between the fungi and the root of the crop.

## HEPTABIOL was applied immediately after transplanting

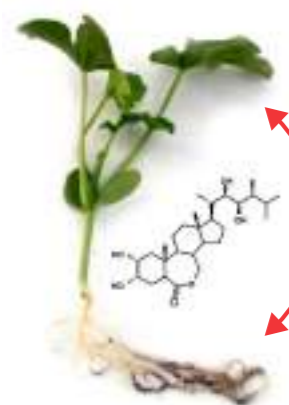
Results after 7 days of application



Control    1 l/ha    2 l/ha    4 l/ha    5 l/ha

**\*NOTE:** One of the **ATENS** metabolomics assays on **HEPTABIOL** has been the subject of a dedicated scientific study and is available in OpenAccess mode. This assay was performed on melon plants.

Lucini, L., Roupael, Y., Cardarelli, M., Bonini, P., Baffi, C., & Colla, G. (2018). A Vegetal Biopolymer-Based Biostimulant Promoted Root Growth in Melon While Triggering Brassinosteroids and Stress-Related Compounds. *Frontiers in plant science*, 9, 472.



- Leaves (7)**  
 Campesterol  
 24-epi-campesterol  
 (5- $\alpha$ )-campestan-3-one  
 6- $\alpha$ -hydroxy-castasterone  
 cathasterone  
 3-dehydro-6-deoxoteasterone  
 (22- $\alpha$ )-hydroxy-campest-4-en-3-one
- Roots (5)**  
 teasterone  
 typhasterol  
 campesterol  
 24-epi-campesterol  
 (5- $\alpha$ )-campestan-3-one

