

Abstract

HUMYPHEMOL Biocomplex H

Study of effects of one heteropolymer of earthworms humus in complex with phenolic compounds of olive leaves (MOL) Micronized Olive Leaves on Olea Europaea-Ogliarola Salentina affected by Xylella fastidiosa.

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Vermicomposting differs from conventional composting because the organic material is processed by the digestive systems of worms in the Lumbricidae family.

The experiment was designed with randomized ground treatments: (1) T1, Control (without modifying the soil); (2) T2, HM product (VERMICOMPOST WITH ADDED of polyphenols of European olea leaves MOL in variable ratios. In the DPPH test, the MOL has demostred an IC50 value of 0.18 mg / mL. Therefore, the use of the biocomplex H RICH IN BACTERIAL COMMUNITIES POSITIVELY INFLUENCES THE XYLEMATIC VASES, cancels the effect of water stress, consequently oxidative stress and blocking the advance of the xylella.

The response is definetly positive. HUMYPHEMOL can act as preventive and as phytoterapeutic innovative method to treat olive trees infected by Xylella.

In the picures below we have the begin of treatment March 2020 and the Finish of treatment June 2020. The treatment have had a very good response and it will be do again for another tranche of months.



Before treatment



After treatment



1 Detail before treatment. Leaves affected by xylella (Red arrow). Leaves that were in the early stage of yellowing ,yellow arrow.



