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POTENTIAL USE OF OLIVE OIL MILL WASTEWATER TO CONTROL PLANT PATHOGENS AND POST HARVEST DISEASES

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ABSTRACT

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Olive oil mill wastewater, Antifungal activity, Plant and post-harvest diseases. The antifungal activity of olive oil mill wastewater (olive OMW) was investigated. The effect of sterilized, filtered and non-sterilized olive OMW was tested *in vitro* a) on mycelium growth of *Pythium* spp., *V. dahliae*, *S. sclerotiorum* and *F. oxysporum* f.sp. *lycopersici* on PDA medium, b) on sporulation of *Penicillium* species and *Botrytis cinerea* on infected with the pathogen fruits (mandarin and red pepper) and c) on tomato plants (seedlings) infected with the fungus *V. dahliae* or *S. sclerotiorum*. The *in vitro* results shows that the filter sterilized olive OMW inhibits the growth of all tested fungi mycelium. Olive OMW decreased fungi spores (conidia) number on infected fruits and acted positively on tomato plant growth.