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ANTIFUNGAL ACTIVITY OF THE LEAF ESSENTIAL OIL OF CITRUS AGAINST ALTERNARIA ALTERNATA IN VIVO

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ABSTRACT

The essential oils were extracted by hydro-distillation from the leaves of citrus by using hydrodistillation. The largest yields were recorded with *Citrus limon* L (1.02%) and *Citrus sinensis* (0.96%).GC/SM of the essential oil of *Citrus* reveled limonene (7.18 –36.10%), ß- pinene (4.35 - 30.0%) and linalool (0.21 –63.03%) as the principal major compounds. Essential oils of citrus exhibit a strong inhibiting effect on the development of *Alternaria alternata* on leaves and potato. Low concentrations generate the lowest severity indexes of disease for all citrus species. According to the results, the essential oils of citrus could be used as potential antifungal agents for the control of *Alternaria alternata in vivo*.

KEYWORDS: Citrus, Essential Oils, *Alternaria Alternata*, Potato, *In Vivo* Antifungal Activity