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EVALUATION OF *Melaleuca* sp. OIL IN THE CONTROL OF *Pestalotiopsis longisetula*. A PHYTOPATOTHOGENIC FUNGUS IN STRAWBERRY CULTIVATION ON FIELD CONDITIONS

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Pestalotiopsis longisetula phytopathogenic fungus has been studied in order to understand the most efficient way of controlling this microorganism in strawberry cultivation. It has be found in plantations in Minas Gerais and Espírito Santo states since 2004. In the last three years, it has become a severe and expressive pathogen causing injury. This research aimed to evaluate the potential of *Melaleuca* sp oil on the *Pestalotiopsis longisetula* in field conditions. Strawberry mother plants, cv. Oso grande, was acquired from a specialized company in tissue culture. The disinfection of leaves were in alcohol (70%) for 30 seconds, in sodium hypochlorite with 0,5% of activate chloride, for 1 minute, and finally they were washed up in sterilized distilled water. Pieces of tissue were placed in Batata Dextrose Agar (BDA) medium. After proving the sanity of the material, the plants were transplantated for three aisle carried out inside the botanic laboratory of Universidade do Vale do Sapucai. In each aisle 128 plants were planted and grown for thirty days before receiving the following treatments: the treatment one received only water on the plants leaves; the second one was treated with *Melaleuca* sp. oil on the concentration of 1% and the third one, the plants were treated with Frowncide 500Sc and Amistar fungicide solution, also on the concentration of 1%. After treating the leaves with the above products they were injured and inoculated with *Pestalotiopsis longisetula* propagules. The inoculum was obtained through addition of 10 ml of distilled and sterilized water in the fungus colony growing in dish Petri. The suspension was adjusted to $1x10^6$ conidius ml^{-1}. The disease evaluation of was performed every three days during one month. The results showed that the disease symptoms appeared at the first evaluation in the control treatment, while the treated leaves with *Melaleuca* sp. oil and with the fungicides the symptoms only were observed after 5 and 8 days, respectively. The control treatment presented a percentage of *Pestalotiopsis longisetula* higher than 65%, while in the oil treatment the incidence occurred in 43% of the plants. For fungicides treatment the percentage was 25%. This result shows that it was not possible to use the *Melaleuca* sp. oil as a control for the *Pestalotiopsis longisetula* fungus, contrary to the results obtained by Oliveira and Fraga (2007) that had good results *in vitro* conditions. It is already known that not always the *in vitro* acquired results are reproducible in *in vivo* conditions.

Referencial bibliográfico

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