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ANTIFUNGAL ACTIVITY OF *Hedychium coronarium* J. ESSENTIAL OIL AGAINST *Fusarium oxysporum* S. AND *Thanatephorus cucumeris* F.

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Introduction: *Fusarium oxysporum* and *Thanatephorus cucumeris* are fungi which causes some diseases in great vegetal cultures in Brazil - like banana and beans. *Hedychium coronarium* is a native plant from Asia that currently occurs in Brazil, where it is used in popular medicine to treat infeccions in general. **Objective**: The objective of this work was to evaluate the effect of the essential oil from leaves of *H. coronarium* on the *in vitro* growth of *F. oxysporum* and *T. cucumeris* colonies. **Material and Methods**: Discs of 5 mm diameter from isolated cultures of each fungi were placed in the center of 90 mm diameter Petri dishes with potato dextrose agar. In the periferic area of the dishes four discs of filter paper were placed with 10 µL of essential oil, extracted by a distillation system. As a control treatment, discs without essential oil were used. A completely randomized design was used with four replications (of four dishes). Every 24 hours, for 8 days, the growth of the fungi were evaluated by measuring the diameter of the colonies. **Results and Discussion**: After 92 hours colonies of *F. oxysporum* with 37.4 mm diameter have been observed in the treatment of essential oil, while in the control it was of 66.4 mm. Colonies of *T. cucumeris* reached 11.9 mm with essential oil and covered the dishes in the control. The results showed that the essential oil from leaves of *H. coronarium* has inhibitory effect on the *in vitro growth* of *F. oxysporum* and *T. cucumeris*, which suggests the potential of its use in agriculture, mainly regarding banana and beans culture. **Conclusion**: However, field experimentations and toxicological tests must be done to determine the applicability and effectiveness of this in *ex vitro* conditions.

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