

**Título**

ASSESSMENT OF ENDOPHYTIC FUNGI FROM LEAVES OF NATIVE AND CULTIVATED *Ilex paraguariensis* PLANTS

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**Resumo**

The *Ilex paraguariensis* (St.-Hil.) is a typical tree found in the southern region of Brazil. Your leaves are, mainly, used to make tea. *I. paraguariensis* can be explored by collecting leaves from native forest or be planted. The differences between the native and cultivated plants are great: the plant size, leaf size, steam color, and the cultivated plants are more susceptible to pests and diseases. The objective of this study was isolate and quantifies endophytic fungi from leaves obtained of native and cultivated plants of *I. paraguariensis*. It was collected about 200 leaves of different ages: cultivated (young and old) leaves, native (young and old) leaves. After, petioles was covered with paraffin and submitted in an immersion sequence: two times in sterilized distilled water, once time in a 70% alcohol solution, once time in a 3% sodium hypochlorite solution, again in a 70% alcohol solution and finally washed three times in sterilized distilled water. Then leaves was cut in circular pieces with 6 mm diameter and put in Petri dishes with PDA (potato-dextrose-agar) and incubated in 25 °C ± 2 °C for 30 days. It was observed 4406 fungal colonies: 1166 in cultivated-old leaves, 887 in cultivated-young leaves, 1280 in native-old leaves and 1023 in native-young leaves. Analysis of Variance (ANOVA) showed statistical difference ( $P < 0,05$ ) between treatments and factors (origin and age). Interaction between these factors (origin X age) is no significant. Next steps are to isolate and identify them, in order to know potentialities of these microorganisms.

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