CHARACTERIZATION OF NATIVE EDIBLE FUNGI WITH ALIMENTARY POTENTIAL IN THE TULIJÁ-TZELTAL CHO 'OL REGION OF CHIAPAS, MEXICO.

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Introduction. In México, there is a tradition of eating edible fungi since prehispanic times (Sánchez et al., 2009) Thus, fungi cultivation is important and Chiapas has great potential for edible fungi cultivation; attributable to a diversity of fungi species and climates as well as organic residues (Beutelspacher, 2008). However, only a few studies have been carried out in this region on the selection of edible fungi that have productive potential or the solid culture mediums of specific species, both determining factors for optimal crop cultivation. Taking this as our framework, the aim of this study is: Evaluate under laboratory conditions, the growth of mycelium of a species of edible fungi.

Methodology. a) Collection: The collections were carried out in the municipalities of Tila and Salto de Agua, in the Tulijá Tzeltal-Cho'ol region of Chiapas. b) Isolation by fungi tissue: The caps of the collected fungi that were in a good state and free from earth and insects were selected. With the aid of a scalpel, cuts were made in the shape of small squares (approx. 0.5 mm), These squares were disinfested in 0.1% sodium hypochlorite for minute. Finally one square was placed on each Petri dish together with PDA culture medium. The dishes containing the isolates incubated between 25-28°C darkness. After 8 days the cultures with the best appearance were selected for the next stage of the experiment. c) Evaluation of mycelium growth on two solid culture mediums: Small circles that presented mycelium growth were removed using a punch from the previously selected cultures. The experimental design for this particular research was completely random with two

(PDA and Malt) and six repetitions per treatment.

Preliminary results. In Figure 1.it can be observed that the C02 isolate at 120 hrs experienced the most mycelium growth (2.07 cm) in the culture medium based on Malta T2, while the least mycelium growth (0.53 mm) was displayed by those fungi that grew on the T1 Potato Dextrose Agar (PDA) culture medium.

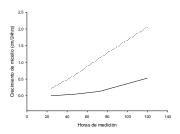


Figure.1. Mycelium Growth (cm/24hrs) on two types of solid culture medium (PDA and Malt).

Conclusions. it was evident that a specific species of edible fungi grew best on one type of culture medium than another.

References

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