Title: COLLECTION OF FUNGI PATHOGENIC IFPA-CAMPUS CASTANHAL

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Resumo

Culture collections directly contribute to studies represent an important source of biological resources allowing conducting numerous scientific papers. The preservation methods of microorganism cultures ensure the viability, morphology, physiology and genetics, keeping for a long time, slowing or halting cellular metabolism. This study aims to collect, identify and conserve pathogenic fungi come from areas of agricultural production in northeast Pará. Leaf samples and symptomatic fruits, native vegetables and fruit were collected from different producing municipalities in the state of Pará and were intended for Food Microbiology Lab IFPA-Campus Castanhal. The fruits were incubated in type boxes 'gerbox' at a temperature of 25 ± 2 ° C and photoperiod of 12 hours, for up to 72 hours. After that, they held up direct isolation in Petri dishes with agar medium cultured at 20% water. The fruit with clear sporulation of the pathogen was used for the direct isolation, without prior incubation, and analyzed using a stereoscopic microscope and light. After three days of incubation, mycelial discs were transferred to the medium of potato dextrose agar (PDA). In hardwood samples proceeded direct isolation, cutting the samples into small pieces with a diameter of approximately 4 mm² and dipped in 70% alcohol and 1% sodium hypochlorite for 1 minute, and distilled water for eliminating excess hypochlorite. Samples were plated on PDA culture medium (potato dextrose agar). After this procedure, the petri dishes were incubated at 25 ° C and 12 h light photoperiod 12h dark for 07-10 days for fungal growth and subsequent preparation of microscope slides and gender definition through taxonomic keys in the literature. The collection already has 45 isolates of Colletotrichum spp., From agricultural crops açaí (*Euterpe oleracea*), cocoa (*Theobroma cacao*) and peppers (*Capsicum annuum*) and Phomopsis spp. Leaves collected cupuacu (*Theobroma grandiflorum*), which are being preserved by three preservation methods: mineral oil, test tube with PDA (potato dextrose agar) and culture dishes in eppendoff, being subcultured every 3 months for maintenance and viability of pathogenic genetic diversity will be useful for research papers.

Keywords: preservation methods, feasibility, mycology collection.