

First Report of *Trichoderma piluliferum* and *T. asperellum* Isolates from *Victoria amazonica* Identified by Molecular Techniques

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Fungi of the genus *Trichoderma* are cosmopolitan. Its easy handling and cultivation *in vitro*, stability and practicality make it a major target for biotechnological research in the production of hydrolytic enzymes and the biological control of plant pathogens. Given the difficulty and complexity of the taxonomy, molecular phylogenetic studies have become common and are an important tool for the understanding this group. Of aquatic plant *Victoria amazonica* were obtained from the stem, six isolates that are being evaluated for production potential of hydrolytic enzymes. To identify, at the species level, these isolates by molecular biology, was held monosporic cultures for preservation in mineral oil, Castellani and in 10% glycerol. From suspensions of spores in glycerol, 10µL was inoculated into 20 mL of PD and cultivated to 26°C, 100 rpm, for 40hs and drew up the genomic DNA. Of these, was held PCR for the ITS 1 and ITS-2 regions of rDNA followed by sequencing. The sequence obtained was given and compared with the NCBI genomic bank and confirmed the gender observed in microculture by the morphology of reproductive structures - presence of the triad. The sequencing decode 667 to 759 bp of the *Trichoderma* isolates identifying the species *T.piluliferum* and *T. asperellum*, with 98% and 97% identity respectively, both with 100% reliability. As bibliographic *T. piluliferum* was isolated from marine environments in China, and in search of aquatic plant which suggests the action of environment on the speciation of this group.

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