ENZIMATIC PROFILE OF SPORE SURFACE PROTEINS FROM METARHIZIUM ANISOPLIAE.

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The entomopathogenic fungus Metarhizium anisopliae (Metsch.) Sorokin is a well-characterized, broad host-range arthropod pathogen employed in biological control of agricultural pests. Entomopathogenic fungi actively invade their hosts through the cuticle by mechanical pressure, via apressorium formation, and enzymatic degradation by synergistic action of hydrolases. The present work describes the enzymatic profile of spore surface proteins from M. anisopliae. Spores from M. anisopliae were immersed and strongly shacked in extraction buffer for surface proteins extraction. The resulting supernatant was filtrated and used as source for enzymatic analyses. We detected distinct enzymatic activities possibly related with *M. anisopliae* host infection process in enzymatic assays and zymograms. Lipolytic, proteolytic and chitinolytic activities among others were detected in *M. anisopliae* spore surface. The proteins present externally on spore surface were analyzed also in SDS-PAGE and 2-D electrophoresis. The next stages of this work will be the purification and characterization of the spore surface enzymes from *M. anisopliae* and elucidation of its function in the host infection process.

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