

## Entomopathogenic fungi vs. *Ascaris suum* embryogenesis

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The aim of this study was to evaluate the potential of the entomopathogenic fungi *Beauveria bassiana*, *B. brongniartii*, *Conidiobolus coronatus*, *Isaria fumosorosea* and *Metarhizium anisopliae* in the bioregulation of the dispersal stages of the parasitic nematode *Ascaris suum*.

Experimental cultures (with the presence of the fungus) and controls (no fungus), containing 10 ml of *A. suum* egg suspension, were incubated at 26°C for 28 days. Light microscopy observations of *A. suum* eggs were performed after 7, 14, 21 and 28 days. The API-ZYM<sup>®</sup> test (bioMerieux) was used to determine semi-quantitatively the activity of 19 hydrolytic enzymes. The cytotoxicity of the fungi was determined with the use of the tetrazole salt MTT.

None of the studied species of entomopathogenic fungi had an ovicidal effect on the *A. suum* eggs. Ovostatic action was observed on the 7<sup>th</sup> and 14<sup>th</sup> day of incubation with *I. fumosorosea*, *M. anisopliae* and *B. bassiana*. In the MTT assay, *M. anisopliae* showed moderate cytotoxicity, in contrast to the low cytotoxicity of other species. The lack of morphological changes in *A. suum* egg shells suggests that the antagonistic effect of the studied entomopathogenic fungi results from their cytotoxicity associated with the production of secondary metabolites.