Immunolacalization of acidic polysaccharides on the surface of conidial and mycelial forms of *Fusarium oxysporum*

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Fusarium oxysporum, a phytopathogen fungus, has been described as an opportunistic agent of emergent human infection. In severely immunocompromised patients, this fungus can cause disseminated disease and has recently emerged as the second most common pathogenic mould (after *Aspergillus*) (1). A crude polysaccharide (CP) obtained from the mycelium cell wall by alkaline extraction and fractionated by high performance anion exchange chromatography (HPAEC), yielding three major fractions: FI (neutral fraction), FII and FIII (acidic fractions). Galactose, mannose and glucose were present in all fractions while the glucuronic acid was the uronic acid identified. CP and FIII reacted strongly with rabbit serum originated to whole cells of *F. oxysporum*, in ELISA experiments (2). In this work, rabbit immune serum to whole cells of *F. oxysporum* was pre-incubated with acidic fractions (1h/37ºC) and used in flow cytometry (FACs) and indirect immunofluorescence (IFI) experiments, in order to verify the presence of these fractions on the surface of conidial and mycelial forms of the fungus. We showed that both acidic fractions were present on surface of the conidia and mycelium and were able to inhibit the immune reaction with rabbit serum. This results confirm that they are important epitopes in *F. oxysporum* structures. Preliminary studies which analyze the interaction between conidia and murine peritoneal macrophages are being made in phagocytic assays in which the relevance of the acidic fractions in the interaction fungi-macrophage will be determined.

Key words: Fusarium oxysporum, acidic polysaccharides, FACS.
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