β –1,6-linked Galactofuranose-rich Peptidogalactomannan of *Fusarium oxysporum* is Important in the Activation of Macrophage Mechanisms and as a Potential Diagnostic Antigen

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Introduction: *Fusarium* species are common hyaline soil saprophytes and plant pathogens. In humans, they cause superficial infections in immunocompetent individuals, and severe and disseminated diseases in immunocompromised hosts. Recently, two different galactofuranose-containing antigens have been isolated from the cell wall and culture supernatants of *Fusarium*. As the antigen is released in the culture medium, it could be a target for a *Fusarium*-specific serological assay. The chemical characterization of fungal antigens is important to allow a rational interpretation of the cross reactivity between pathogenic species, thus helping selection of immunodominant components that can be of diagnostic use. **Objectives:** Our present study aimed to analyze the major glycoconjugate present on the *F. oxysporum* cell surface by a combination of chemical and spectroscopic methods, and how the glycosylation of *F. oxysporum* glycoconjugate influences the recognition and uptake of *F. oxysporum*. **Conclusion:** The difference in patient serum reactivity using a PGM from *F. oxysporum* characterized in the present study as compared with a PGM from *C. resinae*, that presents the same epitopes recognized by serum from patients with aspergillosis, could be considered a potential diagnostic antigen and should be tested with more sera.