

COMPARATIVE STUDY OF *SCEDOSPORIUM APIOSPERMUM*,
SCEDOSPORIUM PROLIFICANS AND *PSEUDALLESCHERIA BOYDII*: THE ROLE
OF SURFACE GLYCOCONJUGATES

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The genus *Scedosporium* contains two medically significant species of mycotic agents, *S. apiospermum* and *S. prolificans*. *S. apiospermum* is the anamorph, or asexual state of *Pseudallescheria boydii*, and both sharing the same risk factors for infection as well as clinical spectrum and histopathologic features. *S. prolificans* is a recently recognized agent of bone, soft tissue, and joint infections that occurs with highest frequency in children and young adults. *S. prolificans* may also cause potentially fatal disseminated infections in immunocompromised hosts [1]. In the present study, these fungal species were compared using parameters as immunoreactivity and surface molecules. Cross-reactivity was studied by ELISA using peptidopolysaccharides extracted from micelial forms. Peptidorhamnomannan (pRM) from *P. boydii* and *S. prolificans* reacted positively with *P. boydii* whole-cell antisera raised in rabbit up to dilution 1:3200. *S. prolificans* whole-cell antisera, however, did not react with *P. boydii* pRM, suggesting that immunodominant epitopes present in *S. prolificans* are absent or inaccessible in *P. boydii* surface. Previous studies on *P. boydii* and *S. prolificans* demonstrated that pRM from both species were involved in the fungal recognizing by peritoneal macrophages [2]. The interaction between these species and murine peritoneal macrophages will be analyzed in phagocytic assays in which the relevance of the surface glycoconjugates in the interaction fungi-macrophages will be determined.

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[1] Tadros TS *et al.* 1998. Hum Pathol. (11):1266-72.

[2] Silva MID *et al.* 2006. XXXVI Reunião Anual da SBBq.