



Antifungal Activity of Propolis Against *Fonsecaea pedrosoi*, a Chromoblastomycosis Agent

Tatiane C. DABOIT¹, Claiisson J. DOS SANTOS¹, Luisa de A. SALLES², Daiane HEIDRICH³,
Cheila D.O. STOPIGLIA¹, Gilsane VON POSER², & Maria L. SCROFERNEKER^{3*}

¹ Programa de Pós-Graduação em Medicina: Ciências Médicas, Faculdade de Medicina,
Universidade Federal do Rio Grande do Sul. Rua Ramiro Barcelos,
2400 - CEP: 90035-003 - Porto Alegre - RS - Brazil

² Faculdade de Farmácia, Universidade Federal do Rio Grande do Sul.
Av. Ipiranga, 2752 - CEP: 90610-000 - Porto Alegre, RS, Brazil.

³ Instituto de Ciências Básicas da Saúde, Universidade Federal do Rio Grande do Sul.
Rua Sarmiento Leite, 500 - CEP: 90050-170 - Porto Alegre, RS, Brazil

SUMMARY. Chromoblastomycosis is a subcutaneous mycosis caused by dematiaceous fungi, being *Fonsecaea pedrosoi* the main etiologic agent in Brazil. Propolis is a resinous material collected by honeybees, with variable composition and pharmacological properties, including antifungal activity. The antifungal activity of ethanolic extracts of propolis (EEP) obtained from different municipalities of the state of Rio Grande do Sul, Brazil, against *F. pedrosoi* strains was assessed. The EEP showed MIC values between 625 and 2500 µg/mL and the best antifungal activity were obtained with the propolis collected in Santo Antônio da Patrulha and Candelária. All extracts showed the presence terpenoids with similar chromatographic behavior while flavonoids were abundant in the most active samples. The quantification of phenolic compounds demonstrated that there is no correlation between their concentration and antifungal activity. Thus, it can be concluded that the activity is linked to a qualitative chemical composition and not to the general amount of phenolic compounds.

KEY WORDS: Antifungal activity, Chromoblastomycosis, *Fonsecaea pedrosoi*, Phenolic compounds, Propolis.

* Author to whom correspondence should be addressed. E-mail: scrofern@ufrgs.br