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Portugal

Cistus ladanifer as a source of phenolic compounds with antifungal activity Barros L^{1,2}, Dueñas M², Alves CT³, Silva S³, Henriques M³, Santos-Buelga C², Ferreira ICFR¹ ¹CIMO-ESA Polytechnic Institute of Bragança, Portugal; ²GIP Faculty of Pharmacy, University of Salamanca, Spain; ³IBB Centre of Biological Engineering, University of Minho, Braga,

A screening of the antifungal potential of phenolic extract of Cistus ladanifer from Northeast Portugal, against Candida species was performed. The extract was characterized by HPLC-DAD-ESI/MS. Phenolic acids and derivatives, ellagic acid derivatives and flavonoids, such as catechins, flavonols and flavones, were found in the sample. The most abundant group was ellagic acid derivatives in which punicalagin gallate, a derivative of punicalagin attached to gallic acid, was found in highest amount. These compounds could be related to the strong inhibition of C. albicans, C. glabrata and C. parapsilosis growth. Moreover, the best antifungal activity was against C. glabrata, where the studied extract was able to cause at least 3 Log of reduction at concentrations below $50 \,\mu g/mL$ and a total growth inhibition at concentrations above $625 \,\mu g/mL$ mL.

CISTUS LADANIFER AS A SOURCE OF PHENOLIC COMPOUNDS WITH ANTIFUNGAL ACTIVITY

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