# In vitro study of the antifungal potential of Apiaceae hydroalcoholic extracts against Candida species

Natália Martins,[1,2] Isabel C.F.R. Ferreira[1] Lillian Barros,[1] Mariana Henriques[2], Sónia Silva[2]
[1]IBB - Institute for Biotechnology and Bioengineering, Centre of Biological Engineering, University of Minho, Braga, Portugal.
[2]Mountain Research Centre (CIMO), ESA, Polytechnic Institute of Bragança, Portugal.

The use of medicinal plants is an ancient practice, but recently there is an increasing interest towards the evaluation of their bioactive properties. Opportunistic fungal infections, linked with higher rates of fungal resistance to the current antifungal drugs, have deserved special relevance in the last decades. Candida albicans was identified as the main responsible agent for those infections, but other non-Candida albicans Candida (NCAC) species have been also found [1]. Thus, it is urgent to discover new alternatives against those pathogens with high resistance.

In the present work, the antifungal potential of hydroalcoholic extracts obtained from two Apiaceae plants (Coriandrum sativum L. and Pimpinella anisum L.), commonly used in folk medicine, were evaluated against a total of 19 Candida strains (from the species: C. albicans, C. glabrata, C. parapsilosis and C. tropicalis).

The fruits of Coriandrum sativum L. (coriander) and Pimpinella anisum L. (anise) showed similar antifungal potential considering the studied strains, being effective against three of the nineteen strains. However, regarding the tested Candida species, the extracts presented considerable variations. Whereas coriander was effective against C. parapsilosis (ATCC22019 and 513143) and C. tropicalis (ATCC750), anise was effective against C. parapsilosis (513143 and 491861) and C. albicans (558234). Furthermore, the inhibitory zones were different at 24 and 48h. Further studies are being carried out in order to characterize the mechanism of action and the compounds responsible for the bioactivity, but the use of these extracts seems to have potential in antifungal therapy.

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References:

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