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Program and Abstracts

Antifungal activity of endemic *Origanum virens* from Portugal

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Origanum virens is widely used in Portuguese, and Mediterranean, cuisines. Although it is used as a food condiment, it is also used in traditional medicine as an antiseptic.

The antifungal activity of *Origanum virens* essential oil on *Candida albicans* ATCC 10231 and physico-chemical characterization of several extracts were evaluated. The essential oils were obtained from the aerial parts of the plant by hydro-distillation and minimal inhibitory concentration (MIC) as well as the minimal lethal concentration (MLC) were used in order to assay the antifungal activity against *Candida albicans*. MIC and MLC values were 0,005% and 0,040% respectively, ranging from 0,005% to 0,080% of essential oil. Concentrations lower than MIC values strongly prevent fungal growth (fig.1). The antifungal effect is time and concentration dependent, it is observed after 6 hours of incubation for lower concentration (0,040%) and after 2 hours of incubation of essential oil with *Candida albicans* for higher concentrations. It is difficult to attribute the activity of a complex mixture to particular constituents. Nevertheless, it is reasonable to speculate that the activity of this oil can be related to the presence of carvacrol and thymol.

The antioxidant activity of several extracts (methanol, ethanol and water) was also evaluated. Very promising results were obtained, indicating a high antioxidant activity of the extracts.

Keywords *Origanum virens*; antifungal activity, physico-chemical characterization, antioxidant activity

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