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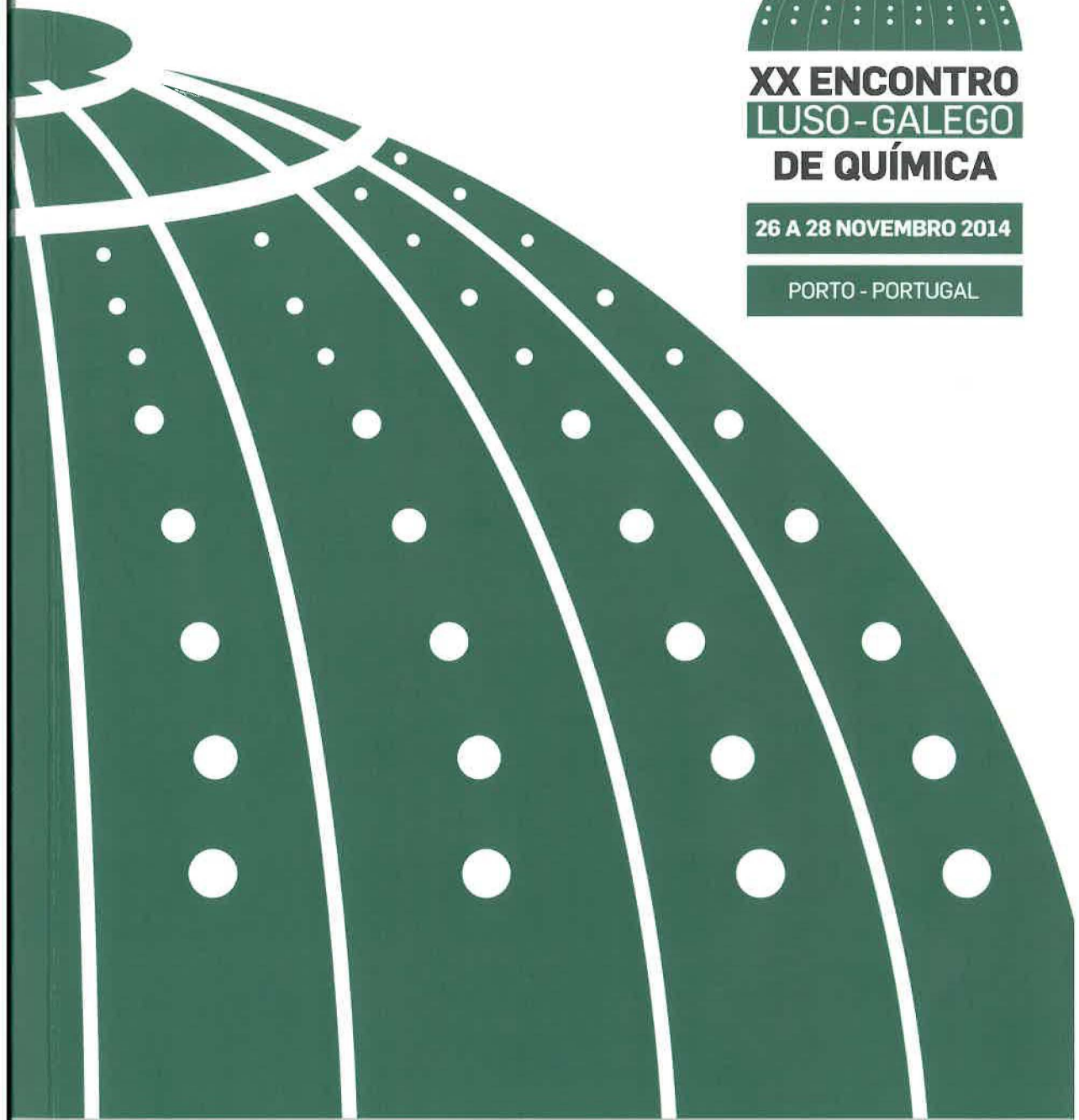

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QS20

Phytochemicals in *Rubus ulmifolius* Schott methanol/ water extract and its antifungal properties against *Candida* species

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POSTER

The use of medicinal plants is an ancient practice, in part due to the evidenced richness in phytotherapeutic properties [1]. Currently, a wide variety of studies have been carried out, towards the investigation of these natural matrices, clarifying effects, health benefits and even mechanism of action of some of their bioactive compounds, namely phenolic compounds [2,3]. In parallel with these advances, an increasing incidence of opportunistic fungal infections has been observed, associated with development of antimicrobial drugs-resistant by the microorganisms [4]. In this sense, alternatives to the current antifungal drugs are necessary.

In this work, the antifungal potential of *Rubus ulmifolius* Schott (Rosaceae) methanol/ water (80:20, *v/v*) extract, prepared from flower buds, was evaluated against nineteen *Candida* strains, belonging to the species *C. albicans, C. glabrata, C. parapsilosis* and *C. tropicalis*, by using the disc diffusion halo assay. The obtained results were expressed as inhibition zones (mm).

R. ulmifolius extract was effective against eleven *Candida* strains, maintaining the inhibitory effect at 24h, 48h and even 72h. At the tested concentration (50 mg/mL), the inhibition zones ranged between 9-15 mm for *C. albicans*, 16-19 mm for *C. glabrata* (16-19 mm) and 9-10 mm for *C. parapsilosis*. Regarding *C. tropicalis*, only impairment on the cellular growth was observed. The most abundant compounds found in the extract were ellagitannin derivatives, such as a sanguiin H-10 isomer and lambertianin C. Besides ellagitannins, flavonoids such as quercetin and kaempferol based flavonol conjugates were also found, being quercetin 3-*O*-glucuronide and quercetin 3-*O*-glucoside the most abundant [5].

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