

**TITLE:** ANTIFUNGAL ACTIVITY OF *Colubrina glandulosa* PERKINS AGAINST *Trichophyton rubrum* AND *Candida* spp.

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**ABSTRACT:** *Colubrina glandulosa* Perkins is a specie native to Brazil, belonging to the family Rhamnaceae. It can be found in biomes like Amazon, Cerrado and Atlantic Forest. This territorial spread, gave him popular names such as: falso-pau-brasil, saguari, sobrasil, sucurujuva, among others. There are several studies on their use in reforestation of degraded forests and in agroforestry systems, such as their wide use in the timber industry. However, in the literature, there are no studies on its bioactive components, as well as its mechanisms of action. Based on this, the objective of this study was to evaluate the antifungal activity of ethanolic extracts of the leaves and roots of *C. glandulosa* against the strains of *Trichophyton rubrum* and *Candida* spp. The antifungal action was performed by broth microdilution method. Fungal strains were provided by Santa Casa de Misericórdia de Sobral and subsequently subjected to identification by chromogenic and vitek system and ATCC. The species used were: *T. rubrum* (LABMIC 0203, 0204, 0209 e 0210), *Candida albicans* (LABMIC 0107 e 0108), *C. parapsilosis* (ATCC 22019) e *C. krusei* (LABMIC 0124). Initially 100 µL RPMI medium were added to all 96 wells. After, serial dilutions were carried out extracts of leaves and roots at a concentration of 2,5 to 0,015 mg/mL. Finally, 100 µL of inoculum were placed in all wells. Both, leaf and root extracts, did not present antifungal activity against *Candida* spp, but root extracts were efficient with Minimum Inhibitory Concentration (MIC) of 0,15 e 0,31 mg/mL and Minimum Fungicidal Concentration (MFC) of 0,30 e 0,62 mg/mL against *T. rubrum*. The ethanolic extract of the *C. glandulosa* root showed pharmacological potential, being able to be explored in new studies for the production of phytotherapies.

**Keywords:** antifungal activity, *Colubrina glandulosa*, extracts, microdilution method.