

Title: EVALUATION OF ANTIFUNGAL ACTIVITY FROM *Trembleya phlogiformis* MART. & SCHR. Ex DC LEAVES.

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Abstract:

Trembleya phlogiformis (Melastomataceae) is a native shrub from Brazilian Cerrado. Species from this family are popularly used for treatment of kidney and bladder diseases, scabious, erysipelas, vaginal infections and as antiseptic. The aim of this study was verify the antifungal activity of the crude ethanol extract and fractions of leaves. The leaves were collected in Pirenópolis/GO and the voucher specimen was deposited in the Herbarium of UFG (UFG-47868). The crude ethanol extract was obtained by maceration of the leaves powdered and fractionated to yield fractions hexane, ethyl acetate, butanol and aqueous. The antifungal activity was performed by broth microdilution method. The crude ethanol extract showed good antifungal activity (MIC= 31.25 – 62.5 µg/ml) against *Candida tropicalis* ATCC 28707, moderate activity (MIC= 125 - 250 mg/ml) against *Candida albicans* (clinical isolate) 63U, *Candida krusei* ATCC 34135, *Candida parapsilosis* ATCC 22019, *Cryptococcus neoformans* var. *neoformans* ATCC 28957, *Cryptococcus neoformans* var. *gatti* (clinical isolate) L3. The hexane extract showed weak activity against some fungi. The ethyl acetate fraction had good inhibitory activity (MIC= 31.25 – 62.5 µg/ml) against *C. albicans* (clinical isolate) 63U, *C. krusei* ATCC 34135, *C. parapsilosis* ATCC 22019, *C. tropicalis* ATCC 28707, *C. neoformans* var. *neoformans* ATCC 28957, *Trichophyton mentagrophytes* ATCC 1148, *Tricophyton rubrum* ATCC 28189 and moderate inhibitory activity (MIC= 125 - 250 mg/ml) against *C. neoformans* var. *gatti* (clinical isolate) L3; The butanol fraction had good inhibitory activity (MIC= 31.25 – 62.5 µg/ml) against *C. albicans* (clinical isolate) 63U, *C. krusei* ATCC 34135, *C. parapsilosis* ATCC 22019, *C. tropicalis* ATCC 28707, *C. neoformans* var. *neoformans* ATCC 28957, *C. neoformans* var. *gatti* (clinical isolate) L3 and moderate inhibitory activity (MIC= 125 - 250 mg/ml) against *T. mentagrophytes* ATCC 11480, *T. rubrum* ATCC 28189. The aqueous fraction showed good inhibitory activity (MIC= 31.25 – 62.5 µg/ml) against *C. neoformans* var. *neoformans* ATCC 28957, *C. neoformans* var. *gatti* (clinical isolate) L3, moderate inhibitory activity (MIC= 125 - 250 mg/ml) against *C. albicans* (clinical isolate) 63U, *C. tropicalis* ATCC 28707, *C. krusei* ATCC 34135, *C. parapsilosis* ATCC 22019, *T. mentagrophytes* ATCC 11480. The ethyl acetate and butanol fractions showed better antifungal activity.

Key-words: *Trembleya phlogiformis*; antifungal activity; Cerrado.

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