

## LEONOTIS OCYMIFOLIA (BURM.F.): AN ETHNOPHARMACOLOGICAL REVIEW AND IN VITRO ANTIMICROBIAL ASSESSMENT

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The genus *Leonotis* (Lamiaceae) is commonly used in Africa as a traditional medicine for various ailments such as respiratory, epilepsy, stomach-ache, and skin diseases. Most of these species are found in South Africa, and *Leonotis ocymifolia* (Burm.f.) Iwarsson (klipdagga) is one of them. The recorded medicinal uses of *L. ocymifolia* include treating diabetes, hypertension, anemia, eczema, and several skin irritations. However, little is known about its antimicrobial activity. Therefore, this study aimed to investigate the antimicrobial potential of *L. ocymifolia* by reviewing its ethnomedicinal importance and testing extracts and fractions (ethyl acetate, n-hexane, and n-butanol) against six bacteria and three *Candida* pathogens. The results demonstrated that the n-hexane and n-butanol fractions exhibited the most noteworthy antimicrobial activity against all tested pathogens, with a mean MIC value of 0.25–0.06 mg/ml. Moderate activity was observed for all extracts against all bacteria tested, except for *Klebsiella pneumoniae*, where noteworthy activity (MIC value of 0.13 mg/ml) was found for the n-butanol fraction. When tested against the *Candida* species; *C. albicans* (ATCC 10231), *C. glabrata* (ATCC 90030), and *C. tropicalis* (ATCC 14114), the extracts were highly susceptible. All the extracts showed cidal effects against *C. glabrata* with MBC values of 0.13–1.00 mg/ml. The time-kill effects on *C. glabrata* were recorded with the n-butanol fraction at 1xMIC (0.13 mg/ml) and 1/2xMIC (0.07 mg/ml) and results indicated cidal effects better than the positive control Nystatin (0.13 mg/ml). *Leonotis ocymifolia* has demonstrated promising antimicrobial properties with high potential as a possible anticandidal agent.

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