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**Title:** Antimicrobial efficacy of Moringa oleifera leaf and seed extract against Candida species - An invitro study

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**Background:** The emergence of antimicrobial resistance is posing a global challenge for human health. Opportunistic Candida species have developed resistance to a wide range of antifungals. The increasing clinical prevalence of multidrug-resistant *Candida* species such as *C. glabrata* highlights the potential for fungi to pose a serious future threat if we fail to steward and deploy novel antifungal treatments. *Moringa oleifera* is a native Indian tree belonging to Moringaceae family, commonly known as “drumstick” or “horseradish” tree. *M. oleifera* leaves contain  $\beta$ -carotene, vitamin E, and protein and its seeds contain bioactive related molecules, such as flavonoid, isothiocyanates, glucosinolate, and thiocarbamate.

**Aim:** The current study aimed to evaluate and compare the antimicrobial efficacy of aqueous and ethanolic extract of *M. oleifera* leaf and seed extract against *C. albicans* and *C. glabrata*.

**Methods:** Aqueous and ethanolic extract of dry powdered leaves and seeds of *M. oleifera* was prepared and the antifungal activity of the Moringa oleifera leaf extracts was determined using agar well diffusion method. Their zones of inhibition were compared with standard antifungal, 1% clotrimazole.

**Results:** The zone of inhibition against *C. albicans* was greater for the ethanolic extract of *M. oleifera* seed (22mm) when compared to ethanolic *M. oleifera* leaf extract (19mm) and their aqueous extracts (13mm, 14mm respectively). The zone of inhibition against *C. glabrata* was more for ethanolic extract of *M. oleifera* seed (21mm) when compared to ethanolic extract of *M. oleifera* leaf extract (20mm) and their aqueous extracts (14mm, 13mm respectively).

**Conclusion:** The ethanolic extract of *M. oleifera* seed showed the highest antifungal activity against *C. albicans* and *C. glabrata*.