

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

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NEED FOR NEW ANTIFUNGALS



15 to 71% of denture wearers
80 to 95% of HIV-infected individuals



Candida infection is a significant concern for human health in vulnerable populations due to the emergence of new resistance mechanisms in the microorganisms.

Moringa oleifera

Native Indian tree

Antioxidant, anti-hyperglycemic properties

Antibacterial activity against both Gram positive bacteria.

AIM

To compare the antimicrobial effectiveness of *Moringa* leaf and seed extracts against *C.albicans* and *C. glabrata*.

MATERIALS AND METHODS

Culture of *Candida*

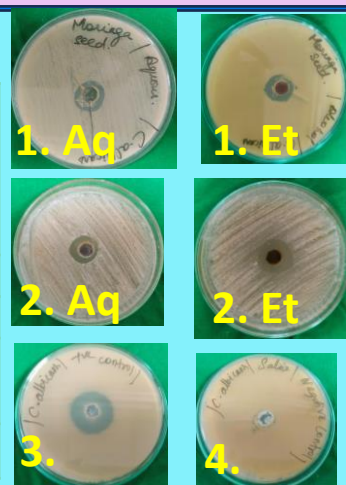
Isolation of *Candida albicans* and *Candida glabrata*

Preparation of aqueous and ethanolic extract of *M.oleifera* leaves and seeds

Antifungal activity
Well diffusion method

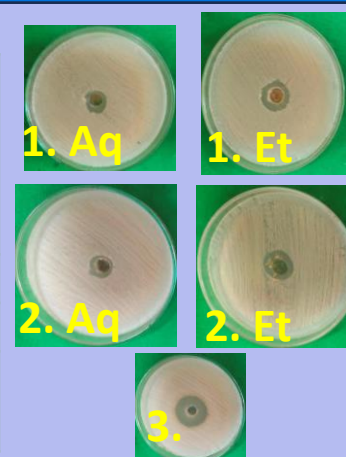
RESULTS: Efficacy against *Candida albicans*

S.N	Extract	Mean Zone of inhibition (mm)		P value
		Aqueous (Aq)	Ethanolic (Et)	
1	M.oleifera seed	13	22	0.0001
2	M.oleifera leaf	14	19	0.018
3	Positive control (1% clotrimazole)	29		
4	Negative control (saline)	8		



Efficacy against *Candida glabrata*

S. No	Extract	Mean Zone of inhibition (mm)		P value
		Aqueous (Aq)	Ethanolic (Et)	
1	M.oleifera seed	14.3	21.3	0.004
2	M.oleifera leaf	13	20	0.001
3	Positive control (1% clotrimazole)	28		



DISCUSSION

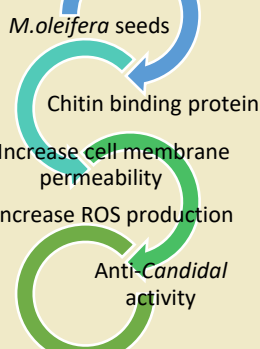
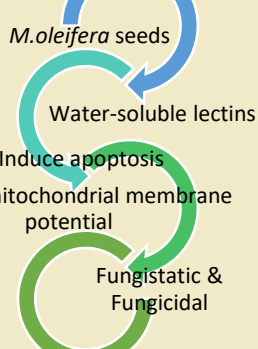
Anti-fungal activities of aqueous and alcoholic leaf extracts of *Moringa oleifera* Lam. on *Candida albicans* isolated from diabetic foot infections

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Inhibition zone - Ethanolic extract of *Moringa oleifera* leaf > aqueous

ORIGINAL RESEARCH
Evaluation of Antifungal Activity of *Moringa oleifera* Seeds on Oral *Candida* Isolated from Type 2 Diabetic and Nondiabetic Complete Denture Wearers
From: "Kannan" / Annals of Biomedical Research, Volume 6, Issue 1, 2023, pp. 1-5, 4 pages
Mishra Karim

Moringa seed coat extract > effective than seed endosperm



CONCLUSION

Ethanolic extract of *M. oleifera* seed showed highest antifungal activity against *C. albicans* and *C.glabrata*