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RATIONALE

- Mucocutaneous opportunistic infections – *Candida albicans*
- Phenotypic switching, polymorphism and thigmotropism
- Non-albicans species
- Candida glabrata* - lacks phenotypic switching, drug resistant, immunocompromised

NEED FOR THE STUDY!

- Drug resistance
- Adverse effects
- Need for less toxic, more effective, easily available, bioactive
- Betel leaf – “neglected green gold of India”
- Vitex trifolia* – “sarvaroganivarani”

AIM

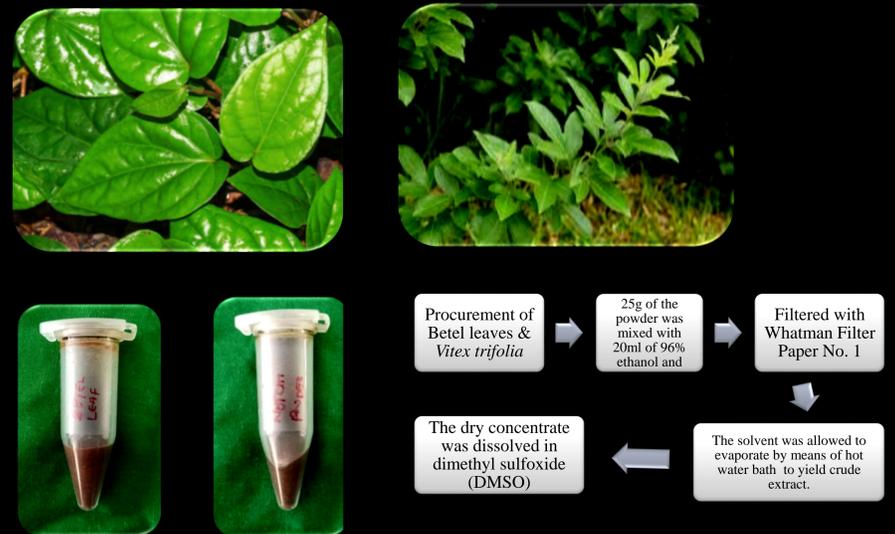
To evaluate the antifungal efficacy of *Piper betel* and *Vitex trifolia* leaves against *Candida albicans* and *Candida glabrata*

OBJECTIVE

- To evaluate the antifungal efficacy of *Vitex trifolia* leaves against *Candida albicans* and *Candida glabrata*
- To evaluate the antifungal efficacy of *Piper betel* leaves against *Candida albicans* and *Candida glabrata*
- To compare the antifungal efficacy of *Piper betel* and *Vitex trifolia* leaves against *Candida albicans* and *Candida glabrata*
- To prove the antifungal action of *Piper betel* and *Vitex trifolia* by molecular docking

METHODOLOGY

Collection of leaves and preparation of extract



Determination of antifungal efficacy

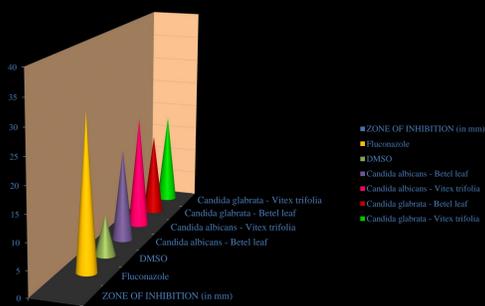


RESULTS

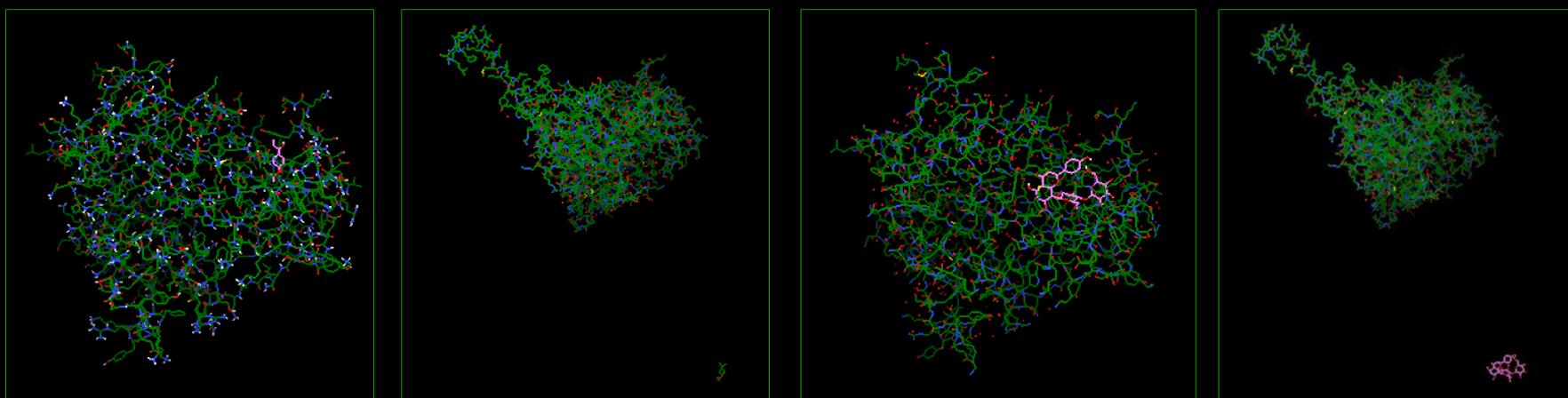


ZONE OF INHIBITION (in mm)	
Fluconazole	DMSO
30	8

	ZONE OF INHIBITION (in mm)	
	Betel leaf	<i>Vitex trifolia</i>
<i>Candida albicans</i>	18	22
<i>Candida glabrata</i>	16	18



Molecular docking



Betel leaf against *C. albicans*

Betel leaf against *C. glabrata*

Vitex trifolia against *C. albicans*

Vitex trifolia against *C. glabrata*

•Antifungal efficacy of *Vitex trifolia* is better than betel leaf
 •More effective against *Candida albicans* compared to *Candida glabrata*