

# Comparing Nystatin and betel leaf extract action towards the growth of *Candida albicans*

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## ABSTRACT

**Introduction:** *Candida albicans* infection of the vagina is one of the commonest fungal which causes distress among women. In Malaysia, Nystatin pessary is commonly used to treat *Candida Albicans* infection. However, traditionally, women have been known to use Piper betel (Sireh) leaves for a quick relief. We compare the effect of Nystatin pessary and betel leaf extract in lab-grown *Candida Albicans*. **Materials and Methods:** The active ingredients of Piper betel leaves was extracted and tested against lab-grown *Candida albicans* on Saboruad Dextrose Agar (SDA). Active ingredients from Piper betel leaves were extracted at concentrations of 0.2545%, 0.1273%, 0.0636%, and 0.0318%, respectively. We also tested on Nystatin, a chemically produced anti-fungal. **Results:** The betel leaf extract confirmed significant anti-fungal activities against *Candida albicans*. In SDA medium, Piper betel extract had a maximum 29.0 mm inhibition zone at 0.2545% concentration. However, 10 mg Nystatin only has 8.0 mm of inhibition zone. The p-value is 0.000\*, indicating a highly significant difference compared to Nystatin. **Conclusion:** Betel leaf extract has good anti-fungal effects against *Candida albicans* and is better than Nystatin.