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## Evaluation and Determination of Antifungal Potentials of Sap of Borassus Flabellifer

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### ABSTRACT:

The present study was conducted to evaluate in vitro Antifungal activity of Sap of Borassus Flabellifer. The Fungal strain like *C. Albicans* and *A. Niger* cause wide range of health complications to most people worldwide. Herbal products, phytomedicines, herbal remedies have been showing a remarkable growth due to less toxicity and side effects compared to synthetic medicines. We conducted research to determine Antifungal activity of Sap of Borassus Flabellifer by evaluating in four different volumes (0.25, 0.50, 0.75, 1.0ml) of Sap and zone of inhibition. We found that the sap of Borassus Flabellifer exhibits significant Antifungal activity of 14 to 26 mm zone of inhibition after 36hrs. By this research we found the Sap of Borassus Flabellifer exhibited significant Antifungal activity.

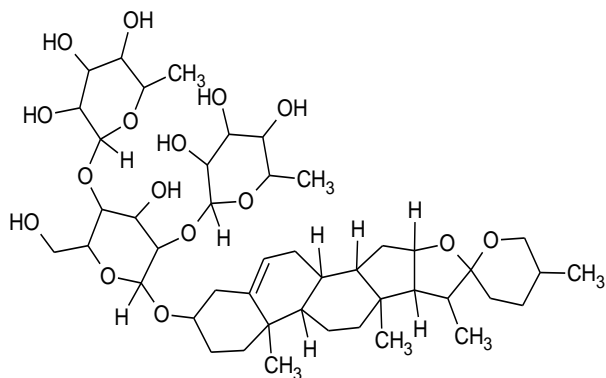
**KEY WORDS:** Borassus Flabellifer ; Antifungal Activity; Zone of Inhibition.

### INTRODUCTION:

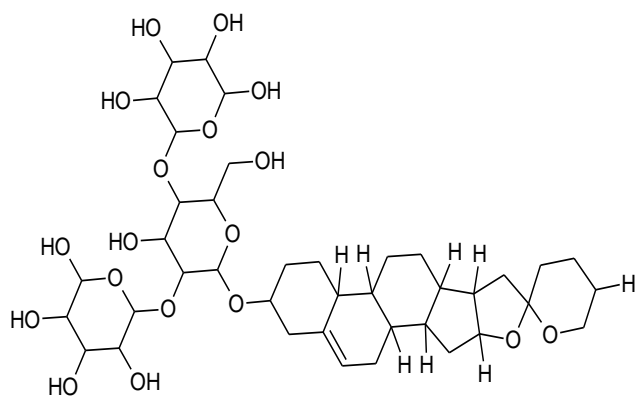
Numerous Plants are utilized for remedial action since long time as they display certain restorative property, and such pharmaceutical keeps on being drilled worldwide nowadays. Plant parts like leaves, seeds, bark, berries, sap, roots, or blooms are generally utilized for therapeutic property. The world Health Organization, gauges that eightieth of the populaces of some Asian and African nations shortly utilize herbal medicine for therapeutic efficacy. Some allopathic medicines additionally are utilized for Antifungal action, which are powerful in predominant the infection however some adverse drug reactions are common which found to be unhealthy. Around 70-80% populace worldwide of numerous nations relies on upon plants for essential medicines. Numerous Indian's still utilize these characteristic frameworks of traditional medication; it is free from harmfulness and gives esteem successful treatment. Some contagious strain of fungi like *C. Albicans* and *A. Niger* makes

difficulties in humans and animals all through the world, these infections are identified with low standard of cleanliness and due to lack of proper sanitation. The Sap of Borassus Flabellifer is indigenous or naturalized compound through around the world. It is especially found in India, Pakistan, Bangladesh, Nepal, Myanmar and Cambodia, where it is effortlessly planted. It can develop and creates in a wide range of soils with light to overwhelming surface and even on the poorest supplements supply. It lean towards in different sort of soils. It was discharged from stem of old Borassus Flabellifer trees. It likewise has water logging limit. The Sap of Borassus Flabellifer has been accounted for to have concoction constituents, for example, tetranortriterpenoids, azadirone, epoxyazadiradione, nimbin, gedunin, azadiradione, azadirachtinA, azadiradione, azadirachtol, deacetyl nimbin, and 17-hydroxyazadiradione. The Sap of Borassus Flabellifer has been accounted for to have antioxidant<sup>1</sup>, antifungal<sup>2,3</sup>,

anthelmintic<sup>4</sup>, antimicrobial<sup>5,6</sup>, hostile to tubercular<sup>7,8</sup>, antipryrial<sup>9</sup>, antibacterial<sup>10</sup>, nutritional and antimicrobial<sup>11,12,13</sup>, and disinfectant<sup>14,15</sup>.



BORASSOSIDES



DIOSCIN

**MATERIALS AND METHODS:**

The Sap of Borassus Flabellifer was gathered at a young hour in the morning from tallaguda village close to Ibrahimpattam, Rangareddy dist. With a specific goal to avert fermentation, calcium carbonate is included. The Sap of Borassus Flabellifer was taken in four unique volumes (0.25, 0.50, 0.75, 1.0ml) separately and assessed by zone of restraint or inhibition of the parasitic strain in supplement agar medium. The Sap of Borassus Flabellifer showed huge antibacterial action. Griseofulvin is utilized as standard medication, against contagious strain, for example, C. Albicans and A. Niger.

**PROCEDURE:**

**ANTIFUNGAL ACTIVITY:**

Antifungal activity on C. Albicans and A. Niger was determined by zone of inhibition at specific volumes (0.25, 0.50, 0.75, 1.0ml) of Sap of Borassus Flabellifer. The significant Antifungal activity was determined by using nutrient agar media and cup plate method.

**RESULTS AND DISCUSSION:**

The Antifungal activity of Sap of Borassus Flabellifer is studied with four unique volumes (0.25, 0.50, 0.75, 1.0ml) against C. Albicans and A. Niger, was observed by glass plate technique with supplement agar media and contrasted standard medication Griseofulvin at the fixation 50µg/ml against contagious strain. Information in Table No.1 obviously demonstrated that Sap of Borassus Flabellifer showed Antifungal action. The zone of restraint of the Sap of Borassus Flabellifer was between 14 to 26 mm at (0.25, 0.50, 0.75, 1.0ml) volume.

**Table No.1 Antifungal activity of Sap of Borassus Flabellifer with Standard Drug Griseofulvin**

Zone of Inhibition - Diameter (in mm)			
Name		C. Albicans	A. Niger
<b>Sap of Borassus Flabellifer (T) ml</b>	0.25ml	15	14
	0.50ml	20	17
	0.75ml	22	20
	1.0ml	26	25
<b>Griseofulvin (S) µg/ml</b>	50µg	28	30

**CONCLUSION:**

The recent study on Antifungal activity of Sap of Borassus Flabellifer was determined. The Sap of Borassus Flabellifer is found to have Antifungal activity as compared to standard drug used for the study.

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