



## DISEASE MANAGEMENT OF LEAF SPOT IN MUSKMALLOW FROM GLASSOCORDIA BOSVALLEA(L.F.)

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### ABSTRACT:

Muskmelon (*Abelmoschus Moschatus*) belongs to family Malvaceae is very important medicinal and commercial purpose. It is used to control various diseases and disorders. The seeds are of great economic importance used in manufacturing of perfumes brewing and pharmaceuticals industries. This plant gets affected by various pests and diseases, of these leaf spot are more important. In the diseases development fungal pathogen *Alternaria hibiscum* plays a crucial role in distinction and foliage of leaves and ultimately yield loss is occurred.

In order to control the leaf spot disease caused by *glassocardia bosvallea*, the plant extract of *glassocardia bosvallea* was used and found effective to reduce the growth of fungal pathogen.

**Keywords :** Musk mallows, Phyto extracts, ambrette plants; *Moschatus*; *glassocardia bosvallea*.

### INTRODUCTION:

Musk mallows (*Abelmoschus Moschatus*) belong to family Malvaceae. Distributed all over the world. Pods are used as vegetables, the seeds containing aromas similar to the musk *Kasturi* obtained from Musk Deer (*Moschus moschiferus*). It's used in perfumes industries; blending of chewing tobacco, and ingredients of several medicines. The seed coat yields an automatic oil used in cosmetics; scents;. It's also used for imparting Musky odours like pan Masala and incense sticks (Srivastava, 1995).

Musk mallows gets affected by various pests and diseases. Among those Mosaic diseases; anthracnose and leaf spot disease are more important. The initial symptoms of leaf spot disease caused by *Alternaria hibiscum* are appearance of dark brown spots on healthy leaves. Spots are more prevalent on leaf margins. (Sing and Gupta, 1961; Wakle and Kareppa, 2000; Wakle, 2015). The dark brown patches covers all most all parts of leaf surface causes defoliation and killing the plants, that causes high economic losses to the farmers. Therefore attempts has-been carried out for control leaf spot disease caused by *glassocardia bosvallea*. from leaf extract of.

### MATERIAL & METHODS:

For evaluation of efficacy of plants extract *glassocardia bosvallea*, the herbs were collected, washed and grinded. 10 grams of herbs used and

prepared 100 ml. extract with sterilized distilled water and used as mother extract. The different dilution we're prepared as

1.0;1.5;2.0;2.5;3.0;3.5;4.0. from the mother's extract. the pathogen *glassocardia bosvallea*. *glassocardia bosvallea*. were used for assay the antifungal activity of *glassocardia bosvallea*. The culture were maintained on Potato Dextrose Agar (P.D.A.) media and used for bioassay by Piosined food techniques (Manik Khandare and Wakle; 2009). 10 ml. of extract of each concentrations mixed with 100 ml. of Czepakdox Agar medium, and without extract treats as a controls. 5 mm. Mycelial disc were cut from 10 days old culture of *glassocardia bosvallea*. *hibiscum* inoculated aseptically at the centre of the each plates, for each treatment three replicate were maintained. After 7<sup>th</sup> day's of incubation period diameter of fungal growth of pathogen *Alternaria hibiscum* were measured and determined as percent control efficacy.

### RESULTS & DISCUSSION:

From table Effect of *glassocardia bosvallea*. On linear growth of *Alternaria hibiscum*. Reveals that as increased in incubation period the linear growths of *Alternaria hibiscum* is increased, and increased in concentrations of extract of *glassocardia bosvallea* there was decreased in growth of *Alternaria hibiscum*. The concentrations like 2.0; 2.5, 3.0 were found more effective to check

the growth of pathogen *Alternaria hibiscum* while concentrations 3.5 were found more effective to in control the leaf spot disease of Musk mallows. (Khandare and Wakle;2009) also used the plant extract in seedlings diseases in sonamukhi ; (Wakle G.L.;2015) used phyto extract of *Jatropha curcas* and found effective to reduce the growth of fungal pathogen. similar results were published by Mishra and Tiwari(1992), Shirsikar Kadam(1992), Robinsons et.al. (1998) and Sarvamangal and Dutta (1993).

**Table:** Effect of *Glassocardia Bosvallea* on linear growth of *Alternaria hibiscum*.

Incub .								
Conc.	1	2	3	4	5	6	7	8
1.0	12	17	24	31	39	47	50	57
1.5	0.9	14.	18	25	33	40	48	50
2.0	0.0	5.3	10	16	23	30	37	43
2.5	0.0	0.0	5.6	9.0	14	21	29	37
3.0	0.0	0.0	0.0	0.0	5.0	8.0	15	23
3.5	0.0	0.0	0.0	0.0	0.0	5.9	12	15
4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control	15	23	33	45	54	59	62	70
S.E.=+_	0.4	0.6	0.9	1.2	1.7	2.0	2.6	2.8
C.D.=0.05	1.4	2.0	3.2	3.9	4.3	4.9	5.3	5.9

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