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Fungal Diseases of Plants from Ambadi Forest Nursery, Kannad, Dist Aurangabad. (M.S.),India

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Abstract: Ambadi Nursery is reach with forest plants, maintained by forest department, Kannad, Dist. Aurangabad, Maharashtra. 16 forest plants were found to be infected with different fungal organisms, in rainy and winter season due to low temp and high humidity. Powdery mildew and leaf spot disease was dominant in seedlings in Ambadi nursery.

Keywords: Nursery Disease , Fungal Pathogen, Seedlings

1. Introduction

In Kannad taulka of Aurangabad district, Ambadi nursery is one of best of nursery maintained by forest department under Maharsahtra Government. Tectona grandis, Abadirachta indica, Emblica officinalis, Dalbergia sissoo, Tamarindus indica, Terminalia arjuna, Butea monesperma, ficus religiosa, Santalum album Annona squamosa were most dominant plants in nursery bed.

The seedings developed by nursery are supplied to the Forest, Schools, non government organisation for plantation. Due to low temp and high humidity. These seeding were affected, and reduces their vigour. In this study it is observed that seeding are most suceptible for fungal disuses in Ambadi Nursery.

2. Material and Methods

The infected disased leaves and stems of seedlings were collected. In laboratory for identification of fungi ,transfere section, blotter test, culture on media method was used. With the help of available literature pathogens (Causal organism) are identified and preserved in laboratory for

further study. The herberium of disased plants of nursery were maintained.

3. Result and Discussion

A total of 16 plant species were found to be associated with different fungi in Ambadi Nursery located at Andhaner, Kannad taluka of Aurangabad district in Maharashtra, India.

In the present study Powdery Mildew and leaf spot diseses was found to be most dominanton seedlings. Diseases was reported on leaves, stem, but not roots. It was observed that mostly leaves were succeptible to fungal attack due to favourable environment (Low temp.and high humidity) in the month of October, November and December.

It is observed that necessary that nursery forest plant species should be protect from fungal diseases. Due to such attack of fungi on nursery plants causes huge loss to nursery plants.

This present study may help nursery officer to understand about diseases occurance, infecting organisms and host plant of fungal pathogens. This knowledge of given fungi and seellings can be useful in reducing the fungal disease in Ambadi Nursery Kanand, Dist. Aurangabad, Maharashtra.

Table 1: Diseases reported on Nursery Plants, Fungal Pathogens, parts infected and period of appearance in Ambadi Nursery, Kannad

Sr	Name of Plants	Disease	Pathogen	Parts infected			Davis d of apparance
				Leaves	Stem	Root	Period of apperance
1	Abrus precatorius	Powdery Mildew	Oidium abri.	+	+	-	November
2	Annona Squamosa	leaf spot	Cercospora Sp	+	-	-	November
3	Azadirachta indica	Powdery Mildew	Oidium azadirachtae	+	-	-	October
4	Butea monoperma	Leaf spot	Phoma Sp.	+	-	-	November
5	Cassia fistula	Leaf spot	Colletotrichum Sp.	+	-	-	November
6	Dalbergia sissoo	Powdery Mildew	Phyllactinia dalbergae	+	-	-	September
7	Emblica officianlics	Leaf spot	Macrophamina phaseolina	+	-	-	October
8	Ficus racemosa	Leaf spot	Collectotrichum sp	+	-	-	October
9	Ficus religiosa	Leaf spot	Collectortichum gleosporioides	+	-	-	October
10	Ixora pavetta	Powdery Mildew	Erysisphe	+	-	-	November
11	Mangifera indica	Powdery Mildew	Oidium mangiferae	+	-	-	December
12	Pongamia pennata	leaf spot	Macrophamia phaseolina	+	-	-	December
13	Santalum album	Powdery Mildew	Oidium santalacearum	+	-	-	October
14	Tamarindus indica	Powdery mildew	Oidium tamarindiae	+	-	-	October
15	Tectona grandis	Powdery mildew	Uncinulla tectonae	+	-	-	November
16	Terminalia arjuna	Leaf spot	Collectotrichum sp.	+	-	-	November

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References

- [1] Bakshi B.K. Forest Pathology Principal and Practice in Forestry, Controller of Publication, 1976, Delhi 252.
- [2] Butler E J. Fungi of India. Biotech book Publication Delhi 1997,Pg. 220
- [3] Hemant, P. Marus, Satya H.N., Silawat S.C. field study of antifungal activity of some plant in forest nursery of Indox, *Journal of Trop forestry*, 2014,30:73-81.
- [4] Kothari K L and M.K .Bhatnagar and Naik S.M. On interesting Powdery Mildew on *Tectona grandis* Linn. From Rajasthan. *Univ.Udaipur res.Stud* 1965,3: 149-150
- [5] Pawar V.P. Vaidya A. Patil Occurrence of powdery mildew on some wild plants from Khandesh region of Maharashtra State. *Recent Research in Science and Technology*, 2011, 3:94-95.
- [6] Sharma I.M. Chemical control of Powdery Mildew of Mango in Himachal Pradesh *Plant disease research*, 1992,7 (2): 282-283

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