STUDY ON THE GERMINATION OF ASCOSPORE OF HYSTERIUM DULCII SP. NOV.

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Spores are both the end and the begining of the development of fungi. It was found that most of the nutrients showed different effects with their different nutrients concentation and also show temperature influences the amount of spore germination in Ascospore.

Earlier, Hansford (1961) has attempted to germinate the Ascospore of several species of Meliola bothe in the laboratory in different media and on their hosts in the natural condition. Later on Thite (1925) also tried to germinate the Ascospore Meliola jasminicola both in laboratory indifferent media & Natural condition.

We have stuided mode of Ascospore germination of genus Hysterium dulcii sp.nov. on different medi for 24 hours at 25 to 30^{0}c temperature obseve the germ tube growth and % of their germination.

Key Words: Ascomycetes, Hysteriaceae, Hysterium, Ascospore

INTRODUCTION

Germination of Ascospore requires various factors physical factors like temperature & It was fund that nutrients of different concentration shows different effects of spore germination. Sexena and Khan (1971). For first time noted that the spores of some species exhibited poor germination or no germination at all in water while excellent germination took place in nulrient solutions. Ascomycetes fungi well germinate in nutrient solution. Temperature influence the amount of spore germination in fungi Ascosporeof Hypoxylon dianthrauston Ouellette (1970) shows spore germination in temperature betn 30-50^{0}c. In addition to this Ascospore of Chaetomium thermophile Celerin and Ferqus (1971) had minimum temperature of 30^{0}c for their germination A range of maximum temperatere for spore germination of fungi is found between 20 and 59^{0}c but majority of fungi have the maximum temperature range between 20 to 35^{0}c. In the present paper mode of Ascospore germination of genus. Hysterium dulcii sp. nov. on 4 different media.The Germination of Ascospore in four different medium show different effect of % germination for 24 hours at 25 to 30^{0}c temperature.

MATERIALS AND METHODS

Collection of Ascomycetes fungi of genus. Hysterium dulcii sp. nov. In envelops, plastic bags these materials were collected in Udgir region the collected infected plant material was brought in laboratory, thir fruiting bodies were crushed & sproes relased . These spore were taken in conical flask then add sterile distilled water the spores suspension was filtered through four
layers of muslin cloth the spore suspension is taken in test tube (As a stock deposit) plugged with cotton and preserved at 26 ±1^{0}c.

The following types of mdeia were used during investigation.

i) 10 ml distilled water is taken in to the conical flask and add one drop of spore suspension.

ii) 100 ml distilled water containing 1gm. Glucose (1% Glucose solution) add on drop of spore suspension.

iii) 10ml - distilled water containing on drop of host tissue (leaf extract) and add one drop of spore suspension.

iv) 10 ml distilled water containing one drop of leaf extract added one drop 1 % Glucose solution and spore suspension.

On drop of spore suspension with medium is taken on a glass slide and covered with cover slip these slides kept petriplate the petriplate covered inside wetted blotter paper. These petriplate kept in incubator for 24 hours at 25 to 30^{0}c temperture

It was obsered that 2 hours the germination of spores starts. These slides are observed directly under the high power research microscope and study the % of spore germination.

RESULT AND DISCUSSION

It was observed % of germination on different media at 25-30^{0}c temperature. The data on the % germination of Ascospore of Hysterium dulcii sp.nov. are presented in Table :Genus Hysterium dulcii sp.nov. on dead stem of Pithecellobium dulce Benth.

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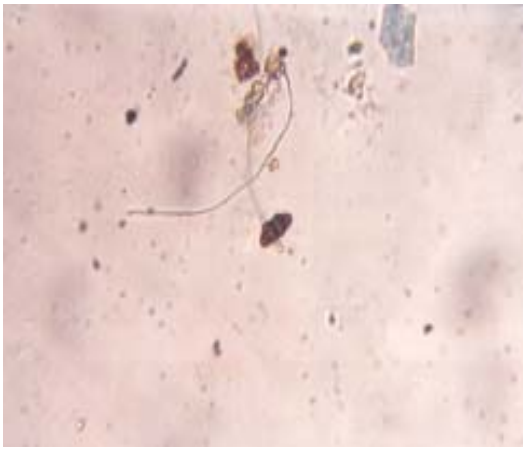
S.N. Medium	% of spore Germination After hours			
	6	12	18	24
1. Distilled water	0 %	0 %	1 %	2%
2. Distilled water +1% glucose solution	0 %	2 %	10 %	20 %
3. Distilled water + Host tissue (leaf extract)	0 %	4 %	15 %	30 %
4. Distilled water+ Host tissue(leaf extract) +1% Glucose solution	0 %	8 %	20 %	60 %

Every after 6 hours these slides observed under microscope and studied mode of the Ascospore germination. The % of spore germination in distilled water. Shows lowest % germination it ranging from 1-2%. In 1% Glucose medium % of germination ranges. 10-20%. In distilled water host tissue (leaf extract) i.e. natural media shows 15-30 % germination. While excellent germination occured in nutrient solution host tissue (leaf extract) +1 % glucose medium shows higest % of germination which ranges from 20-60%.

The natural medium of host tissue (leaf extract) provides essential elements which stimulates the germination and Glucose is providing additional factors to high percentage of spore germination.



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