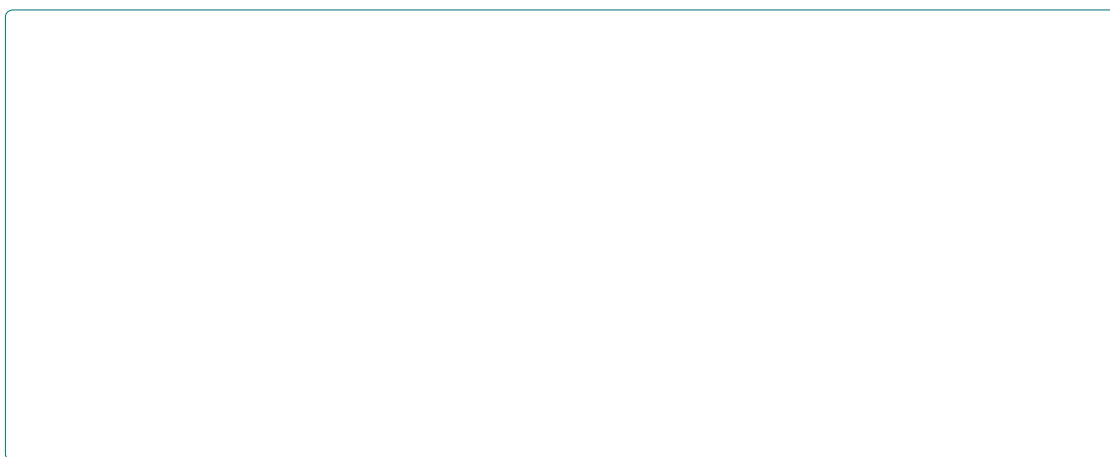


Study on the Effect of Temperature on the Growth of Mushrooms

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Keywords: Mushrooms, Temperature, Growth, Yield, Nutritional Value

Introduction

Mushrooms are a type of fungi that are widely consumed around the world. They are a good source of protein, fiber, and various vitamins and minerals. Mushrooms are also known for their health benefits, including improving heart health, boosting the immune system, and reducing inflammation. The cultivation of mushrooms is a growing industry, and it is important to understand the factors that affect their growth and yield. One of the most important factors is temperature. Mushrooms are typically grown at temperatures between 15°C and 25°C. However, different species of mushrooms have different temperature requirements. For example, some species grow best at lower temperatures, while others grow best at higher temperatures. Understanding the temperature requirements of different mushroom species is essential for successful cultivation. This study aims to investigate the effect of temperature on the growth and yield of mushrooms. We will grow mushrooms at different temperatures and measure their growth and yield. We will also analyze the nutritional value of the mushrooms grown at different temperatures. The results of this study will be used to optimize the cultivation of mushrooms and to improve the nutritional value of the mushrooms grown.

room by racking vertically. Mushroom cultivation can help reduce vulnerability to poverty and strengthens livelihoods through the generation of a fast yielding and nutritious source of food and a reliable source of income, Mushrooms are being grown on commercial scale in many parts of the world, China produces 64 % of all edible mushrooms in the world and 85% of all oyster mushrooms all over the world (*Pleurotus* spp.) is also produced in China, These mushrooms have the ability to colonize and degrade a wide variety of lingo-cellulosic wastes with relatively short cycle, Many studies have been conducted to test the ability of *Pleurotus* to grow on different agro wastes, such as cassava peels, cotton seed hulls, coffee husks, wheat straw, barely straw, saw dust and sinar straw tomato fruit pulp and peel, coffee pulp, sugarcane residues. These by-products are left to rot in the yeld or are disposed of through burning. These residues associated with mycelium also have a great potential for use as fodder animal and

12. *P. ostreatus* 13. 14. 15-21. *Pleurotus cystidiosus-2* 201. *Pleurotus cystidiosus-2* 5% 100 (5 40 .

500 -2 3 *et al.* (15). *Pleurotus cystidiosus-2* () *Pleurotus cystidiosus-2* (/100)= 100 (+ + + +) *Pleurotus cystidiosus-2* 10. 1, -2 , a a a a (a 2). 10. 2, a a a a (a 3)

Overall Appearance	Colour	Crispiness	Flavour	Taste	Acceptability
4=Excellent	4=Excellent	5=Crispy	4=Excellent	4=Excellent	4=Highly Acceptable
3=Good	3=Good	4=Moderate Crispy	3=Good	3=Good	3=Acceptable
2=Fair	2=Fair	3=Less Crispy	2=Slightly Odorous	2=Fair	

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... a a a a (a 5).

... a a , ... a a a a , 10 ... a ...
a a 5, ... a a ...
a -2 ... , ... a a a a ...
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... a a a a , ... a a a a ...
... a a a a (a 6).

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a a 6, ... a a ...
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a 3 .13 , 3 .24 a 33. 5 ...
a ... - a a .

... f t

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a 1.01 , 2.55 a 10.05 (a a ... 2).

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-2(-2) ... - a , a a ...
a 1.01 , 2.55 a 10.05 ...
a a a .

... f ... C ... t ... t

2(-2) ... - a , a a a ...
a 5.30 , 5.60 a 4.32 (a a ... 3).

3, ... a ...
-2(-2) ... - a , a a a ...
a 5.30 , 5.60 a 4.32 ...
a a a .

Overall Appearance	Colour	Crispiness	Flavour	Taste	Acceptability
4=Excellent	4=Excellent	5=Crispy	4=Excellent	4=Excellent	4=Highly Acceptable
3=Good	3=Good	4=Moderate Crispy	3=Good	3=Good	3=Acceptable
2=Fair	2=Fair	3=Less Crispy	2=Slightly Odorous	2=Fair	2=Less Acceptable
1=Poor	1=Poor	2=Leathery	1=Bad odour	1=Poor	1=Not Acceptable
		1=Not Crispy			

Table 4: Score of Sensory Evaluation for Pre-mature PCYS-2 Mushroom Soup.

Overall Appearance	Colour	Crispiness	Flavour	Taste	Acceptability
4=Excellent	4=Excellent	5=Crispy	4=Excellent	4=Excellent	4=Highly Acceptable
3=Good	3=Good	4=Moderate Crispy	3=Good	3=Good	3=Acceptable
2=Fair	2=Fair	3=Less Crispy	2=Slightly Odorous	2=Fair	2=Less Acceptable
1=Poor	1=Poor	2=Leathery	1=Bad odour	1=Poor	1=Not Acceptable
		1=Not Crispy			

Table 5: Score of Sensory Evaluation for Mature PCYS-2 Mushroom Soup.

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