

# 3<sup>RD</sup> WORLD PLANT GENOMICS AND PLANT SCIENCE CONGRESS & 4<sup>TH</sup> WORLD MYCOLOGY AND MUSHROOM CONGRESS

July 15-16, 2019  
Osaka, Japan

## Transform papers into food

Siddhant<sup>1</sup>, Ukaogo op<sup>2</sup>, Singh R<sup>3</sup>, Kumar M<sup>3</sup>

<sup>1</sup>Durgesh Nandini Degree College, India

<sup>2</sup>Abia State University, Nigeria

<sup>3</sup>Independent Researcher, India

Eight different kinds of papers, viz., glaze paper, brown paper, newspaper, magazine paper, chart paper, kite paper, rough copy paper and A-4 size printing paper and two types of cardboards viz., corrugated cardboard and card board were evaluated for different manifestations of white oyster mushroom *Pleurotus florida* Strain-P1. Among them newspaper was later treated as a control. The mushroom utilized all the substrates for their growth and sporophore formation. Majority of substrates took almost equal time for spawn run primordial development and fruit bodies maturation. The yield parameters such as yield, biological efficiency, number of mushroom fruit bodies and average weight of sporophores

varied among themselves. The crop of mushroom was harvested in three flushes where yield and biological efficiency ranged 190-495 gm, 38-99% for the substrate used. Magazine paper (450 gm; 90%) and card board (495 gm; 99%) produced significant ( $P=0.05$ ) yield and biological efficiency over control. They also produced significant number of mushroom fruit bodies (56 and 64, respectively). Corrugated cardboard (10.29 gm) was found significant in terms of average weight per sporocarp. The percentage yield of different substrates was also evaluated. Among the substrates, card board contributed 14 % of total mushroom production followed by magazine paper (13%) and newspaper (12%).

**Plate:** Fruit bodies of *Pleurotus florida* on



A) Rough copy paper

B) Magazine paper

C) Corrugated cardboard

D) Brown paper

E) Cardboard

## Biography

Siddhant, M.Sc., Ph.D., FAELS, MIAER, FIARA, Assistant Professor, Department of Botany, Durgesh Nandini Degree College has completed his PhD in 2009 from Dr. RML Awadh University, Faizabad (India). He has been involved in research in mushrooms for the last 10 years. He has published more than 20 papers in reputed journals.

siddhant.ani@gmail.com