











# First Circular National Symposium on

Trends & Innovations in Mushroom Production Technologies, Diversification, Processing and Consumption

# 31st January to 2nd February 2019 at

Integrated Mushroom R&D Project HAIC Agro R&D Centre, Murthal (Haryana)

Organized by HAIC Agro R&D Centre

in collaboration with

MHU Karnal,
ICAR-DMR Solan,
DCRUST Murthal
&
NIFTEM , Kundli



#### **Background**

Mushroom cultivation is a novel component of agriculture that can be easily integrated in the farming system to enhance the income of the farmers, or can even be taken up as an independent activity on commercial scale. Land requirement for mushroom cultivation is very less and major input is the agro-waste. In fact, the next revolution in agriculture is going to be based on our ability to effectively recycle the agro-wastes. Returns and productivity in mushroom cultivation are very high because of the vertical nature of its farming.

The current world edible mushroom production per annum is 37 million ton. The production of mushrooms worldwide has been steadily increasing after world war II with major contribution from countries such as China, Netherlands, Poland, USA, etc. China accounts for over 85% to the total world mushroom production. **India produces only 0.13 million ton mushroom** of which 3/4th is button mushroom. Accordingly, consumption/person/year of mushrooms in India is <0.1 kg as compared to more than 20 kg in China.

Button mushroom cultivation as a seasonal activity has gained popularity in Haryana and **HAIC Agro R&D Centre, Murthal** (Sonepat) has played a pivotal role. This centre was set up as a registered society with Commissioner & Secretary, Dept. of Agriculture, Haryana as the Chairman of General Body. Since year 2000, it has been managing the project 'Integrated Mushroom Research and Development Project' set up by Government of Haryana to address the demand of quality spawn, pasteurized compost and casing soil by mushroom growers of the region.

National Institute of Food Technology Entrepreneurship and Management (NIFTEM) located at Kundli in Sonepat District was conceptualized by Government of India as a "One Stop Solution Provider". The institute intends to act as a "Centre of Excellence" and an apex world class centre of global standards in the area of food technology and management so as to cater the needs of various stakeholders such as entrepreneurs, industries, exporters, policy makers, government and existing institutions.

**Deenbandhu Chhotu Ram University of Science & Technology (DCRUST), Murthal** came into being on 6<sup>th</sup> November 2006 by upgrading erstwhile Chhotu Ram State College of Engineering, Murthal through an Act 29 of 2006 of the Legislature of the state of Haryana with the vision to facilitate and promote studies and research in emerging areas of higher education with focus on new frontiers of science, engineering, technology, architecture, management studies, humanities and also to achieve excellence in these and connected fields.

Maharana Pratap Horticultural University (MHU), Karnal came into existence on 28th November, 2016, with the vision to focus on all round development of education, research & extension of Horticulture in the state. The site for University is situated 21 km from Karnal on National Highway number one (NH-1) leading to Ambala. It is 146 km from Delhi and connected with Nilokheri Railway station.

**Directorate of Mushroom Research** was established in 1983 as National Centre for Mushroom Research and Training, which was renamed as NRC on Mushroom in 1997 and upgraded to Directorate in December 2008. The Directorate is located at Solan- The Mushroom City of India and has been addressing the needs of the country through research and trainings at DMR and AICRP centres.

**HAIC Agro R&D Centre** in collaboration with different organizations of the region is organizing this symposium at Murthal to discuss trends and innovations on various aspects of mushrooms.

# **National Symposium**

on

# Trends & Innovations in Mushroom Production Technologies, Diversification, Processing and Consumption

## **National Advisory Committee**

Dr. Ramesh Yadav, Chairman, Farmer's Commission, Haryana

Sh. Jagdish Chander, IFS, Managing Director, HAIC Agro R&D Centre

Dr. Chindi Vasudevappa, Vice Chancellor, NIFTEM, Kundli

Prof. Rajendra Kumar Anayath, Vice Chancellor, DCRUST, Murthal

Prof. K.P Singh, Vice Chancellor, CCSHAU Hisar/MHU Karnal

Dr. Manjit Singh, Ex-Director, DMR Solan

Mrs. Pushpa Subramaniam, Secretary, MOFPI

Prof. J.S Rana, Registrar, NIFTEM, Kundli

Prof. Manjit Aggarwal, Dean Research, NIFTEM, Kundli

Prof. Ashutosh Upadhyay, Head of Department, FST, NIFTEM, Kundli

Dr. D.S Dahiya, Dean, College of Horticulture, MHU Karnal

Dr. S.K Sehrawat, Director of Research, MHU Karnal

Dr. Samar Singh, Director of Extension Education, MHU Karnal

Dr. T.N Lakhanpal, Ex-Prof. HPU, Shimla

Dr. NSK Harsh, Scientist G & Former Group Coordinator, Research FRI Dehradun

Dr. R.P Singh, Ex-Prof., G.B.P.U.A.T Pantnagar

Dr. Amit Pandey, FRI, Dehradoon

### **Organizing Committee**

**Convener:** Sh. Jagdish Chander, IFS

Executive Director,

HAIC Agro R&D Centre

Managing Director,

Haryana Agro Ind. Corp. Ltd.

Organizing Secretary: Dr. Ajay Singh, Scientist Incharge

HAIC Agro R&D Centre, Murthal

Registrar, MHU, Karnal

**Co-organizing Secretary:** Dr. V.P Sharma, Director

Directorate of Mushroom Research

Solan

Prof. Kiran Nehra, Chairperson

Dept. of Biotechnology,

**DCRUST Murthal** 

Dr. Sunil Pareek

Associate Professor,

NIFTEM, Kundli

# **Organizing Committee Members**

Dr Shwet Kamal, DMR Prof. Anil Sandhu, DCRUST

Dr. Vinod Kumar, MHU Karnal Dr. Sonu Kumar, MHU Karnal

Mr. M.P. Singh, HAIC Mr. Satish, MHU Karnal

Mr. Vivek Garg, MHU Karnal Mr. Ranjeev Sharma, HAIC R&D

Mr. H.K. Sharma, HAIC R&D Mr. Vikas Kaushik, HAIC R&D

Mr. Ashish Gautam, HAIC R&D Ms. Sandhya, HAIC R&D

Mr. Vikas Chauhan, HAIC R&D Ms. Seema, HAIC R&D

Ms. Sujata Makkar, DCRUST Ms. Parveen Kaur, DCRUST

Ms. Renu, DCRUST Ms. Avantika, DCRUST

Mr. Hitesh, DCRUST Mr. Pushkar Dutt, NIFTEM

Mr. Nishant, NIFTEM Mr. Alok Sagar, NIFTEM

# **Scientific Program**

The main purpose of the conference is to cover the latest trends on production, mechanization and processing technologies, and provide a platform for interactions on latest trends in mushroom research and development in the country. In addition to the scientific deliberations, the event will provide an opportunity for mushroom growers/entrepreneurs to interact with mushroom scientists. An optional field visit to showcase the seasonal and commercial cultivation, spawn making, processing is part of the program.

Authors are invited to submit abstracts latest by 21<sup>st</sup> January 2019 at e-mail **symposiummurthal@gmail.com.** Abstracts should be prepared in appropriate format and poster should be of 4'X3' size. Interested participants may register their names by sending an email containing their contact address and proposed area/topic for the symposium.

#### Themes areas will include:

- 1. Spawn, Compost and cultivation technologies of Button mushroom (Agaricus bisporus)
- 2. Biodiversity and diversification into speciality mushrooms
- 3. Label claims, residue analysis, GAP for Pest and Disease management
- 4. Mushroom processing, products, product quality, safety standards and consumption
- 5. Economics, marketing, linkages and policy issues
- 6. Farmers' viewpoint and future needs

# Some Key note speakers:

Dr. Manjit Singh, Ex-Director, DMR Solan

Dr. V.P Sharma, Director, DMR Solan

Prof. M.P Thakur, Director Instructions, IGKV, Raipur

Prof. Krishnamoorthy, Director, Centre for Plant Protection Studies, TNAU, Coimbatore

Dr. Ashutosh Upadhyay, Head of Department, FST, NIFTEM, Kundli

Dr. R.P Singh, Ex-Prof., G.B.P.U.A.T Pantnagar

The symposium will consist of keynote lectures, plenary sessions, oral and poster presentations.

Many distinguished scientists in mushroom science have accepted our invitation to join the symposium as keynote or plenary speakers. We believe that all of the participants will have a chance to touch frontiers of the present fields and discuss future directions of advances in science and technology of mushrooms.

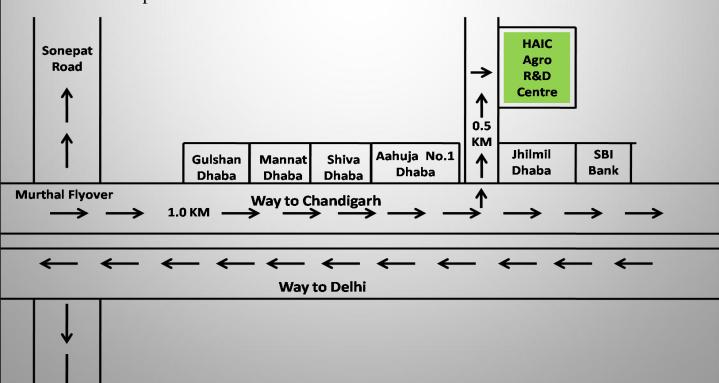
#### Weather

The average temperature of Sonepat in first week of February will be around 24<sup>o</sup>C high and 12<sup>o</sup>C low. Please bring your winter coat & other belongings as per your convenience.

#### Location

Murthal Village

The HAIC Agro R&D Centre is located in NCR on National Highway No. 1 (G. T. Road) about 50 km from ISBT, New Delhi towards Chandigarh and 10 km from Sonepat railway station. The nearest airport is New Delhi and the distance between HAIC Agro R&D Centre, Murthal & New Delhi Airport is 70 KM. The location of the centre falls within one of the growing industrial belts of Haryana extending from Kundli to Panipat.



For the detailed guidelines for preparing abstracts and papers, please visit the website: www.haic.co.in , www.dcrustm.ac.in , www.niftem.ac.in , www.mhu.ac.in

Deadline for abstract submission is 21st	January 2019
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Registration	For Symposium only	Additional fee for field visit	Total
Full Participants	Rs. 750.00	Rs. 250.00	Rs. 1000.00
Students	Rs. 200.00	Rs. 100.00	Rs. 300.00
Mushroom Growers/Entreprenures/	Free	Free	
others			
	Contact us		

#### **Emails:**

#### For registration:

symposiummurthal@gmail.com (Dr. Sunil Pareek & Ms. Sandhya), Ph. 8397083267

#### For submission of abstract:

abstractsymposiummurthal@gmail.com (Dr. Kiran Nehra & Mr. Vikas Kaushik), Ph. 9996060515

For transport and accommodation: (Mr. Ashish & Vikas Chauhan), Ph. 9992413331

Efforts will be made to arrange the accommodation in University guest houses. Those wishing to stay in hotels costing Rs 1800 to 4000/-per day may contact following nearby Hotels:

- 1. Park Blu 0130-4091200, 29 info@parkblu. Com
- 2. Kanak Resort 9910305599, kanakgarden@gmail.com
- 3. Ethnic India 0130-2366651, 9215744805, ethnic@hry.nic.in
- 4. Primrose Regency- 9896371953, primroseregency@gmail.com

# **Registration form**

1. Full Name in Block letters :

2. Designation :

3. Present address :

4. Participating as : Keynote Speaker/Scientist/Student/others

(Please specify)

5. Email and Tel. numbers :

6. Sex :

7. Title of Abstract/Presentation:

8. Accommodation : University Guest House/Hotel

(Please specify)

9. Are you interested in field visit: Yes/No

10. Details of fee : Do registration by making payment online

in the official account of the centre as

given below & inform by email

symposiummurthal@gmail.com

Name of A/c: HAIC Agro R&D Centre

A/c No.: 65025721487

Bank & Branch: SBI, G.T Road, Murthal

IFS Code: SBIN0050228