# PROGRAMME FOR THE NATIONAL SYMPOSIUM ON MUSHROOMS:

“Trends and Innovations in Mushroom Science”

from 27-28 April 2017 at
ICAR-Directorate of Mushroom Research, Solan

## 27.04.2017

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<tr>
<th>Time</th>
<th>Activity</th>
<th>Speaker(s)</th>
<th>Abstract No</th>
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<tr>
<td>8.30-9.30</td>
<td>Registration</td>
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<td>9.30-11.00</td>
<td>Inauguration</td>
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<tr>
<td>9.30-9.35</td>
<td>Welcome</td>
<td>VP Sharma</td>
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<tr>
<td>9.35-10.00</td>
<td>Theme Lecture-I</td>
<td>Recent trends and innovations in mushroom diversification in India</td>
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<td>10.00-10.25</td>
<td>Theme Lecture-II</td>
<td>Changing global scenario in mushroom industry</td>
<td>Manjit Singh</td>
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<td>10.25-10.55</td>
<td>Address by Chief Guest</td>
<td>PL Gautam</td>
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<tr>
<td>10.55-11.00</td>
<td>Vote of Thanks</td>
<td>Satish Kumar</td>
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<tr>
<td>11.00-11.30</td>
<td>Tea</td>
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<tr>
<td>11.30-1.30</td>
<td>Session-I: Germplasm</td>
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<tr>
<td>11.30-11.50</td>
<td>Keynote-I</td>
<td>Future prospects of mushroom biodiversity in India</td>
<td>TN Lakhanpal I-K-1</td>
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<tr>
<td>11.50-12.10</td>
<td>Lead Lecture-I</td>
<td>Mushroom diversity of eastern ghats (Kolli hills) from southern India</td>
<td>M Kumar and V Kaviyarasan I-L-1</td>
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<tr>
<td>12.10-12.20</td>
<td>Oral-I</td>
<td>Diversity and ethnobotany of genus <em>Volvariella</em> sp. in north west India</td>
<td>Munruchi Kaur I-O-1</td>
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<td>12.20-12.30</td>
<td>Oral-II</td>
<td>Wild edible mushrooms from Nagaland State of India</td>
<td>AO Toshinungla and Chitta Ranjan Deb I-O-2</td>
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<td>12.40-12.50</td>
<td>Oral-IV</td>
<td>Indian mushroom diversity collection at ICAR-DMR culture bank, Solan</td>
<td>Anupam Barh et al. I-O-4</td>
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<td>13.00-13.10</td>
<td>Oral-VI</td>
<td>Geographical mapping of mushroom wealth in Maharashtra</td>
<td>VK Bhalerao et al. I-O-6</td>
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<tr>
<td>13.10-13.20</td>
<td>Oral-VII</td>
<td>Diversity of ectomycorrhizal genus <em>Russula</em> Pers. from sal forest of North West India</td>
<td>Jitender Kumar and NS Atri I-O-7</td>
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<tr>
<td>13.20-13.30</td>
<td>Oral-VIII</td>
<td>Macrofungal assemblages in moist deciduous forests of Western Ghats, India</td>
<td>M Krishnappa I-O-8</td>
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Simultaneous Poster session will be held for Session-I. Posters may be displayed at 11.00 in the DMR museum of TOT building

13.30-14.00 Lunch

14.00-15.30 Session-II: Biochemistry/ Biomolecules

14.00-14.20 Keynote-I Medicinal mushrooms – issues for consideration and action RD Rai II-K-1

14.20-14.30 Oral-I Biochemical comparison of commonly cultivated mushroom varieties of Kerala RM Zacharia et al. II-O-1

14.30-14.40 Oral-II Isolation, screening and characterization of amylase producing bacteria from white button mushroom compost Neerja Rana et al. II-O-2

14.40-14.50 Poster Session Break

14.50-15.00 Oral-IV Textile dye decolourization by a thermostable immobilized laccase isolated from in vitro cultured Ganoderma lucidum Aarti Tuli et al. II-O-3

15.00-15.10 Oral-V Study of antioxidant activity in Lentinula edodes (shiitake) using different extracts Navreet Kaur et al. II-O-4

15.10-15.20 Oral-VI Pleurotus ostreatus polysaccharides with antioxidant and antimicrobial properties Gagandeep Kaur et al. II-O-5


Simultaneous Poster session will be held for Session-II. Posters may be displayed at 14.00.

15.30-16.00 Tea and Poster session

14.00-17.20 Session-III: Genetics & Breeding

16.00-16.20 Keynote Development of hybrids in button mushroom in India Manjit Singh III-K-1

16.20-16.35 Lead Lecture-I Genetic improvement of Pleurotus species Harpreet S Sodhi III-L-1

16.35-16.50 Lead Lecture-II DNA barcoding of mushrooms - Prospects and problems MC Yadav III-L-2

16.50-17.00 Lead Lecture-III Characterization of WRKY transcription factor in Agaricus bisporus and its possible role Shwet Kamal III-L-3

17.00-17.10 Oral-I Assessment of diverse strains of oyster mushroom for their cultural, morphological and yield attributes under foothill condition of Pasighat, Arunachal Pradesh RC Shakywar III-O-1

17.10-17.20 Oral-II Evaluation of different Pleurotus spp. under mid hill conditions at Meghalaya Baiswar P et al. III-O-2
17.20-17.30  Tea  
17.30-19.10  Session-IV: Post harvest and extension studies  
17.30-17.50  Keynote-I  
Mushroom cultivation: a sustainable avocation for rural tribal population of Chhattisgarh State  
MP Thakur and Deepti Jha  
17.50-18.05  Lead Lecture-I  
Mushroom technology as a social enterprise – The way forward  
Meera Pandey & G Senthil Kumaran  
18.05-18.20  Lead Lecture-II  
Innovative approaches for popularization of mushroom among youth and women in Southern India  
Reen Mary Zacharia  
18.20-18.30  Oral-I  
Post Harvest studies on *Macrocybe gigantea* (Giant Mushroom) for increasing shelf life  
Geeta Sharma and Megha Suman  
18.30-18.40  Oral-II  
Marketable value added products of oyster mushroom  
Sujata Makkar *et al.*  
18.40-18.50  Oral-III  
Mushroom standards for fresh and dried mushrooms and their products  
BL Attri  
18.50-19.00  Oral-IV  
A study on mushroom consumer behaviour: Implications for mushroom farming, marketing and public health policy  
Mahantesh Shirur *et al.*  
19.00-19.10  Oral-V  
Mushroom information dissemination through internet technologies  
Y Gautam  
Simultaneous poster session for Session III and IV  
19.10-19.45  General Body meeting of members of MSI.  
Fellowship of Rs 25000/ to attend the international symposium  
Dr. HS Garcha Award.  
Financial report of MSI.  
Change of constitution of MSI regarding election of President.  
All the Indian authors should be member of MSI.  
Rate of proceeding of all conference to be fixed and proforma invoice to be sent to all the libraries.  
19.45-21.30  Dinner  
28.04.2017  
9.30-11.20  Session-V: Mushroom Production & Protection  
9.30-9.45  Lead Lecture-I  
Modern farm design in button mushroom  
BL Dhar  
9.45-10.00  Lead Lecture-II  
Recent trends in compost production technology in India  
B Vijay  
10.00-10.15  Lead Lecture-III  
Pest status of mushrooms and their bio-management  
Anju Sudhakar Khanna  
10.15-10.30  Lead Lecture-IV  
Culture stability, commercial scale cultivation and shelf life studies on the silver-silk straw mushroom, *Volvariella bombycina*  
OP Ahlawat *et al.*
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<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker(s)</th>
<th>Type</th>
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<tr>
<td>10.30-10.45</td>
<td>Lead Lecture-V</td>
<td>Holistic approaches for management of pest and diseases in mushrooms</td>
<td>Satish Kumar et al.</td>
<td>V-L-5</td>
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<tr>
<td>11.05-11.20</td>
<td>Oral-III</td>
<td>Utilization of nitrogen rich supplements for quality and quantity improvement of <em>Lentinula edodes</em> and <em>Calocybe indica</em> and its propagation in villages of Haryana</td>
<td>Satyawati Sharma et al.</td>
<td>V-O-3</td>
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11.20-12.00 **Tea and poster session**

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<tr>
<th>Time</th>
<th>Oral-IV</th>
<th>Effect of substrate moisture on the production of straw mushroom, <em>Volvariella volvacea</em></th>
<th>BK Pani et al.</th>
<th>V-O-4</th>
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<tr>
<td>12.10-12.20</td>
<td>Oral-V</td>
<td>Studies on design of non-conventional energy based mushroom growing sheds for hilly regions</td>
<td>PK Bhargava</td>
<td>V-O-5</td>
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<td>12.30-12.40</td>
<td>Oral-VII</td>
<td>Designing and construction of aerated bunkers with spigot floor</td>
<td>Naveen Patwal</td>
<td>V-O-7</td>
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<tr>
<td>12.40-12.50</td>
<td>Oral-VIII</td>
<td>Cultivation and yield evaluation of wild <em>Pleurotus</em> spp. from Western Ghats of Maharashtra</td>
<td>AC Jadhav et al.</td>
<td>V-O-8</td>
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<tr>
<td>12.50-13.00</td>
<td>Oral-VIX</td>
<td>Opportunities of diversification of mushroom cultivation in India with special reference to straw mushroom</td>
<td>KB Mohapatra et al.</td>
<td>V-O-9</td>
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<td>13.00-13.10</td>
<td>Oral-X</td>
<td>Engineering Interventions In Indian Mushroom Industry</td>
<td>G Senthil Kumaran and Meera Pandey</td>
<td>V-O-10</td>
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<td>13.20-13.30</td>
<td>Oral-XII</td>
<td>Button mushroom compost making by using the spent substrate of the previous button mushroom crop</td>
<td>OP Ahlawat et al.</td>
<td>V-O-12</td>
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13.30-14.00 **Lunch**

14.00-16.00 **Session-VI: Medicinal & Mycorrhizal Mushrooms**

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<tr>
<th>Time</th>
<th>Keynote-I</th>
<th>Therapeutic potential of reishi - <em>Ganoderma lucidum</em> for prevention and treatment of cancer</th>
<th>KK Janardhanan</th>
<th>VI-K-1</th>
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14.20-14.35  Keynote-II  Cultivation aspect of *Morchella* spp.  TN Lakhanpal (Retired)  VI-K-2

14.35-14.50  Lead Lecture-I  Status of *Ophiocordyceps sinensis* (syn. *Cordyceps sinensis*) in India  RP Singh  VI-L-1

14.50-15.00  Lead Lecture-II  Effect of ectomycorrhizal application on the survival and growth of *Shorea robusta* under nursery conditions  Jitender Kumar and NS Atri  VI-L-1

15.00-15.10  Oral-I  Molecular identification and optimization of conditions for *in vitro* culture of *Cordyceps sinensis* et al.  Vikas Kaushik  VI-O-1

15.10-15.20  Oral-II  Morels: an elusive and sumptuous mushroom  Monika Thakur  VI-O-2

15.20-15.30  Oral-III  Kashmir morels: a review on distribution, diversity and ethnobotanical studies  Rukhsaar Sayeed et al.  VI-O-3

15.30-15.40  Oral-IV  Antibacterial effects of different extracts of *Lentinula edodes* strains  Navreet Kaur et al.  VI-O-4

15.40-15.50  Oral-V  *Ganoderma lucidum* and its potential against HSV  Krishna Kondragunta et al.  VI-O-5

15.50-16.00  Oral-VI  Selective estrogen receptor modulation (serm) and apoptosis induction of ergosterol peroxide from mangrove habitat mushroom *Fulviformes* sp  M Kalaiselvam and G Mano  VI-O-6

16.00-16.15  Tea and simultaneous poster session will be organized along with sessions

16.15-17.30  Session-VII: Yadavindra Young Scientist Award

16.15-16.30  Oral-I  Genetics and hybrid breeding of *Pleurotus* spp. for biotic and abiotic stresses  VK Bhalerao  VII-O-1

16.30-16.45  Oral-II  *In silico* investigation of 35 different species of genus *Pleurotus* and their inter-relationship amongst compatible mating groups  Anupam Barh  VII-O-2

16.45-17.00  Oral-II  Study of mycelial growth rate and extracellular enzyme activities as a combined tool to select the shiitake strains for cultivation on wheat straw  Sudheer Kumar Annepu  VII-O-3

17.00-17.15  Oral-IV  Taxonomy and Enzyme assay of *Trametes versicolor* Fr. from district Solan of Himachal Pradesh  Neha Thakur  VII-O-4

17.15-17.30  Oral-V  Production, characterization of dyes from *Pycnoporus sanguineus* and application of dye in textile fabrics  S. Chandra Sekaretnhiran and K. Perumal  VII-O-5

17.30-18.15  Plenary Session

17.30-17.45  Presentation of report of all the sessions by respective chair of the session

17.45-18.15  Compilation of recommendations of Symposium