



AMC 2019

SPIRITS
SUPPORTING PROGRAM FOR INTERACTION-BASED
INITIATIVE TEAM STUDIES



京都大学
KYOTO UNIVERSITY

The 2nd workshop on
‘Genetic diversity and molecular breeding
in cultivated mushrooms’

PROGRAM

Date and place

Date: 13:00-18:00 on 1st Oct. 2019

Place: Reception room, Mie Center for the Arts, Tsu city, Mie Pref., Japan

<https://www.center-mie.or.jp/english/>

Time table

13:00 Opening remarks

Yoichi Honda (Kyoto Univ., Japan)

Biodiversity of mushrooms

13:10 Biodiversity of mushrooms in some conservation forest areas in north and northeastern Thailand

Saisamorn Lumyong (Chiang Mai Univ., Thailand)

13:25 Analysis and evaluation of diversity of wild and cultivated germplasm resources of *Auricularia heimuer*

Fangjie Yao (Jilin Agricultural Univ., China)

13:40 Mitochondrial type diversity in *Lentinula edodes*

Hyeon-Su Ro (Gyeongsang Nat. Univ., Korea)

13:55 Molecular markers to genome-based breeding in mushrooms

Won-Sik Kong (Nat. Inst. of Horticul. and Herb. Sci., RDA, Korea)

14:10-14:25 Panel discussion (1) chaired by Hyeon-Su Ro

Genomic comparison of mushrooms

- 14:25 Genomic comparisons of cultivated and wild *Lentinula edodes* in China
Ruiheng Yang (Inst. of Edible Fungi, SAAS, China)
- 14:40 In search of a conserved genetic circuitry of fruiting body development in mushroom-forming fungi
László Nagy (Inst. of Biochem., Biol. Res. Cent., Hungary)
- 14:55 Comparative genomic project on *Lentinula* genus
David Hibbett (Clark Univ., USA)
- 14:55-15:10 Panel discussion (2) chaired by László Nagy
- Coffee break (15:10-15:30)

Biology of *Cordyceps militaris*

- 15:10 Cultivation parameters and their effect on bioactive compounds of *Cordyceps militaris*
Sunita Chamyuang (Mae Fah Luang Univ., Thailand)
- 15:25 Seeing the world: photoreaction and photosensory mechanisms of *Cordyceps militaris*
Caihong Dong (Inst. of Microbiol. CAS, China)
- 15:40 The construction of CRISPR-cas9 gene editing system in *Cordyceps militaris* and its expectation
Tao Wei (South China Agricultural Univ., China)
- 15:55-16:10 Panel discussion (3) chaired by Sunita Chamyuang

Breeding and molecular genetics of mushrooms

- 16:10 A second type of sporeless oyster mushroom, *Pleurotus ostreatus*
Johan Baars (Wageningen Univ. & Res., Netherlands)
- 16:25 Breeding fungi for alternative purposes
Arend van Peer (Wageningen Univ. & Res., Netherlands)
- 16:40 Small secreted proteins (SSPs) act as a checkpoint for fungal development and metabolism in the white-rot fungus *Pleurotus ostreatus*
Yitzhak Hadar (Hebrew Univ. of Jerusalem, Israel)
- 16:55 Genome editing using CRISPR/Cas9 system in *Pleurotus ostreatus* and *Ceriporiopsis subvermispota*
Yoichi Honda (Kyoto Univ., Japan)
- 17:10-17:25 Panel discussion (4) chaired by Johan Baars
- 17:30 **Closing remarks**
Yoichi Honda (Kyoto Univ., Japan)

group photo

Mixer Speakers are invited to a mixer from 18:00 at Riz Cafe, in the same building.

This workshop is open to AMC2019 participants for free of charge.