

Seminar “Peptaibols - naturally occurring peptides as biopesticides”

On November 16th, DTU held a seminar “Peptaibols - naturally occurring peptides as biopesticides”. Attendees included Assoc. Prof. Ph.D. Lucca Sella from Padova University (Italy), Ph.D. Nguyen Minh Hung - Director of the DTU Molecular Biology Center, and staff of DTU Molecular Biology Center and the DTU Institute for Medicine, Biology and Pharmacy.



Assoc. Prof. Dr. Lucca Sella speaking at the seminar

Assoc. Prof. Dr. Lucca Sella presented research results about Peptaibols - compounds which can be biochemically synthesized from *Trichoderma* ssp (an antagonistic fungus with phytopathogenic fungi). After testing in affected grapevines, Peptaibols have shown to be effective against the *Botrytis cinerea* pathogen. 30 synthetic analogues of Peptaibols were tested in different plants. Particularly, Pep 3 and Pep 4 are effective against *Magnaporthe oryzae* in rice.



DTU staff attending the seminar

Magnaporthe oryzae can reduce total annual rice production by 10 to 30%, or even lead to 100% loss if not controlled. To control rice blast diseases, farmers now only have chemical pesticides, which are highly effective but leave high pesticide residues in terrestrial and aquatic ecosystems as well as in the rice.

Dr. Nguyen Minh Hung, Director of the DTU Molecular Biology Center, in cooperation with Assoc. Prof. Dr. Lucca Sella, an expert of plant pathogens, did research to design a new safe and eco-friendly pesticide against rice blast diseases. This research is part of the Vietnam-Italy Protocol Projects and is the first National project led by DTU.

The seminar was an opportunity not only for DTU staff to acquire knowledge from the prestigious Padova University, but also to open new research collaborations between DTU and Padova University in the near future.

(Media Center)