Seminar on Analysis of Drought-Resistant Gene Adaptation in Soybeans

On August 29th, the DTU Center of Molecular Biology held a seminar "Analysis of Adaptation of the GmNAC Drought-Resistant Gene in Vietnamese Soybeans". It was attended by Associate Professor Nguyen Phuong Thao, from the International School at the National University Ho Chi Minh City, Dr. Nguyen Minh Hung, Director of the DTU Center of Molecular Biology, PhDs from the Institute of Research and Development, DTU staff members and lecturers.

Dr. Thao is currently working at the International School of the National University Ho Chi Minh City. Over the past ten years, she has published a large volume of research, including twenty papers in international journals, including the journal of Plant Physiology and The Plant Cell, which are widely-read by specialists in plant biology.



Dr. Nguyen Phuong Thao

Dr. Thao talked about her project. Her research shows that, in a drought, that the soy genes will quickly adapt to increase resistance to lack of moisture. One of the gene families under investigation is NAC, a gene family coding transcription which regulate protein transcription activation in secondary root development, growth, wilting and reaction to environmental stress.

Dr. Thao and her colleagues compared the characteristics of ordinary soybeans with drought-resistant strains of soybeans to find their unique characteristics. This is important in the genetic engineering of soybeans and paves the way further research after these drought-resistant strains have been created.



Dr. Thao and PhDs from the DTU Institute of Research and Development

Dr. Thao and the DTU Center of Molecular Biology exchanged information, discussed how to adopt a common approach in plant biology research and how to collaborate on future research projects.

"Soy is considered to be a valuable and profitable plant worldwide," Dr. Thao explained. "Soy contains a lot of healthy vegetal oils, proteins, macronutrients and

minerals, which lower cholesterol and prevent diabetes, cancer and obesity. However, soy has a low resistance to drought, and production can fall by up to 40% due to environmental impact, particularly in droughts. We hope that our research will lead to ways of increasing drought-resistance through genetic engineering."

(Media Center)