

**ESALQ****USP****VIII International School – 2024 - Class: 011225 Tropical Biobased Production Systems | July 15th - 26th****Coordinators: Profs. Aline Silva Mello Cesar, Brunno da Silva Cerozi and Rafael Munhoz Pedroso****Esalq/USP Campus (Av. Pádua Dias, n. 11) - Auditorium - Nicolau Athanassof Pavilion (Department of Animal Science)**

| Monday - July 15th | Activity |
|---|---|
| 8:30 am - 10:00 am | Registration - Welcome Coffee |
| 10:00 am - 10:15 am | Welcome (Dean and Coordination) |
| 10:15 am - 11:30 am | Opening Class: Overview of Brazilian Agriculture Prof. Rafael Munhoz Pedroso (Department of Crop Science) |
| 11:30 am - 1:30 pm | Lunch Break |
| 1:30 pm - 5:00 pm in front of the Central Building | Official Photo and Tour – Campus Orientation to Evaluation/Final Project (coordinators) |
| Tuesday - July 16th | Activity |
| 8:00 am - 9:30 am | Milk production in the tropics (lecture and visit to Bezerreiro) Prof. Carla Maris Bittar (Department of Animal Science) |
| 9:30 am - 9:45 am | Coffee Break |
| 9:45 am - 11:30 am | Final Project Preparation 1 (students) |
| 11:30 am - 1:00 pm | Lunch Break |
| 1:00 pm - 6:00 pm | Technical Visit: Usina Iracema, Grupo São Martinho - Coord. Prof. Rafael M. Pedroso |
| Wednesday - July 17th | Activity |
| 8:30 am - 12:00 am Auditorium, Dep.Entomology | Challenges for Integrated Pest Management (lecture and visit to Laboratories) Prof. João Roberto Spotti Lopes (Department of Entomology and Acarology) |
| 12:00 am - 1:30 pm | Lunch Break |
| 1:30 pm - 5:00 pm | Final Project Preparation 2 (students) |
| Thursday - July 18th | Activity |
| 8:30 am - 9:30 am | Tropical Planted Forest Management Prof. Rodrigo Eiji Hakamada (Department of Forest Science) |
| 9:30 am - 9:45 am | Coffee Break |
| 9:45 am - 10h45 am | An outlook for food and agriculture in the next decades Prof. Fábio Marin (Department of Biosystems Engineering) |
| 10:45 am - 11:00 am | Coffee Break |
| 11:00 am - 12:00 am | Remote sensing applied to agricultural monitoring Prof. Ana Cláudia dos Santos Luciano (Department of Biosystems Engineering) |
| 12:00 am - 1:30 pm | Lunch Break |
| 1:30 pm - 3:45 pm | Technical Visit: Clínica do Leite – Coord. Prof. Aline Silva Mello Cesar |
| 3:45 pm - 4:00 pm | Coffee Break |
| 4:00 pm - 5:00 pm | Final Project Preparation 3 (students) |
| Friday - July 19th | Activity |
| 8:30 am - 9:30 am | Harnessing Synergy: How Integrated Agriculture-Aquaculture Feeds the Future Sustainably Prof. Brunno da Silva Cerozi (Department of Animal Science) |
| 9:30 am - 9:45 am | Coffee Break |
| 9:45 am - 10h45 am | Past, Present, and Future of Arabica Coffee Genetics: From Domestication to the Challenge of Climate Change - Prof. Douglas Silva Domingues (Department of Genetics) |
| 10:45 am - 11:00 am | Coffee Break |
| 11:00 am - 12:00 am | Theobroma cacao: How tropical pathogens threaten the world chocolate supply Prof. Paulo Teixeira (Department of Biological Sciences) |
| 12:00 am - 1:30 pm | Lunch Break |
| 1:30 pm - 5:00 pm | Technical Visit: AgTech Valley (Parque Tecnológico e PwC) - Coord. Prof. José Belasque Junior |
| Saturday - July 20th | Free |
| Sunday - July 21st | Free |
| Monday - July 22nd | Activity |
| 8:15 am - 8:45 am | Open Ceremony (Coordination) - Advanced School on Tropical Agriculture |
| 8:45 am - 9:45 am | Economics and Natural Resource Use in Brazilian Agriculture Prof. Joaquim Bento de Souza Ferreira Filho (Dep Economics, Administration and Sociology) |
| 9:45 am - 10:00 am | Coffee Break |
| 10:00 am - 11:00 am | Irrigated agriculture for supporting the world food security Prof. Durval Dourado Neto (Department of Crop Science) |



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| 11:00 am - 12:00 am | Harnessing the power of plant-microbe interaction for sustainable agriculture Prof. Lucas William Mendes (Cena) |
| 12:00 am - 1:30 pm | Lunch Break |
| 1:30 pm - 2:30 pm | Center for Carbon Research in Tropical Agriculture Prof. Carlos Pellegrino Eduardo Cerri (Department of Soil Science) |
| 2:30 pm - 3:30 pm | Soil health and Carbon sink Prof. Mauricio Roberto Cherubin (Department of Soil Science) |
| 3:30 pm - 4:00 pm | Coffee Break |
| 4:00 pm - 5:00 pm | Marginal Soils: Unveiling New Horizons through Strategic Use and Management Prof. Tiago Ferreira (Department of Soil Science) |
| 5:00 pm - 6:00 pm | Pedology and soil properties in Northern and Sub-Saharan Africa: challenges and opportunities for sustainable agriculture - Prof. Adnane Beniaich (UM6P) |
| Tuesday - July 23th | Activity |
| 8:30 am - 9:30 am | Challenges in nutrient use efficiency in coffee Prof. Tiago Tezotto (Department of Soil Science) |
| 9:30 am - 10:30 am | Biomass Production for Bioenergy Prof. Thiago Liborio Romanelli (Department of Biosystems Engineering) |
| 10:30 am - 11:00 am | Coffee Break |
| 11:00 am - 12:00 am | Potassic Clays as alternative source of potassium for agriculture Prof. Antonio Carlos de Azevedo (Department of Soil Science) |
| 12:00 am - 1:30 pm | Lunch Break |
| 1:30 pm - 2:30 pm | Phosphate mining and fertilizer production - Prof. Abdellatif El Ghazi (UM6P) |
| 2:30 pm - 3:30 pm | Phosphate fertilizer management in Brazilian agriculture Prof. Paulo Pavinato (Department of Soil Science) |
| 3:30 pm - 4:00 pm | Coffee Break |
| 4:00 pm - 5:00 pm | Phosphate fertilizer management in African agriculture - Prof. Leonardus Vergutz (UM6P) |
| 5:00 pm - 6:00 pm | In field X-ray spectrometry: fast & clean diagnose of soil & plant nutritional status Prof. Hudson Carvalho (UM6P) |
| Wednesday- July 24th | Activity |
| 8:30 am - 9:30 am | Final Project Preparation 4 (students) |
| 9:30 am - 9:45 am | Coffee Break |
| 9:45 am - 12:00 am | Final Project Discussion (coordinators and students) |
| 12:00 am - 1:30 pm | Lunch Break |
| 1:30 pm - 5:00 pm | Technical Visit: Raízen – Costa Pinto Unit - Coord. Prof. Rafael M. Pedroso |
| Thursday- July 25th | Activity |
| 8:30 am - 9:30 am | Eucalyptus pulp production in Brazil Prof. Francides Gomes da Silva Junior (Department of Forest Sciences) |
| 9:30 am - 9:45 am | Coffee Break |
| 9:45 am - 10h45 am | Data science: general concepts and some applications in Agriculture Prof. Clarice G.B.Demétrio, Cristian M.V.Lobos e Marcelo A.da Silva (Department of Math, Chemistry and Statistics) |
| 10:45 am - 11:00 am | Coffee Break |
| 11:00 am - 12:00 am | “Cachaça” Science, Technology and Art Prof. André Alcarde (Department of Food Science and Technology) |
| 12:00 am - 1:30 pm | Lunch Break |
| 1:30 pm - 5:00 pm | Final Project Preparation 5 (students) |
| Friday- July 26th | Activity |
| 8:30 am - 10:00 am | Students Presentations |
| 10:00 am - 10:30 am | Coffee Break |
| 10:30 am - 12:00 am | Students Presentations |
| 12:00 am - 1:30 pm | Lunch Break |
| 1:30 am - 3:00 pm | Students Presentations |
| 3:00 pm - 3:30 pm | Coffee Break |
| 3:30 pm - 5:00 pm | Closing Session (Dean and Coordination) |

*Final Project proposal: During the course, students will be encouraged to work on creating an innovative project whose theme will be **Food and Nutritional Security in Tropical Production Systems**. At the end of the course, students will present their projects to the Esalq community and guests, and the best projects can be presented at global meetings in which A5 takes part.