

Program of the 8th IUFRO International Poplar Symposium

Tuesday, October 4

14:00 Opening of the 8th IUFRO International Poplar Symposium

Dr Ronald S. Zalesny Jr., Chair of the IUFRO 2.08.04 group on Poplar and Willow Genetics

Prof Dr Saša Orlović, Director of the Institute of Lowland Forestry and Environment, Chair of the 8th IPS Organizing Committee

14:30-16:00 Plenary Lectures

Dr Raju Soolanayakanahally, Agriculture and Agri-Food Canada

„Agriculture and the environment - bridging the divide through willows“

Dr Nerea Oliveira, Forest Research Center of the National Institute of Agricultural and Food Research and Technology - Spanish National Research Council (INIA-CSIC)

“The multi-faceted potential of poplar in the drive towards a circular bioeconomy“

16:00-18:00 Session 1: Genetics, Genomics, Breeding and Conservation

16:00-16:15 Jaroslav Durkovic: „Cell wall compositional assessment of grey poplar hybrids“

16:15-16:30 Zvonimir Vujnović: „Initial works for the production of generative seedlings and selection of European black poplar (*Populus nigra* L.) clones“

16:30-16:45 Paweł Przybylski: „Identification on the basis of genetic markers of poplar clones used in woodlots and plantations in Poland“

16:45-17:00 Macy Gosselaar: “Impact of differentially expressed genes in monoclonal and polyclonal plantings of *Populus deltoides* for agricultural nitrogen mitigation”

17:00-17:15 Weronika Żukowska: “Genetic resources of black poplar in Poland: the current state of knowledge and future research”

17:15-17:30 Naayaa Mehta: “Genetic engineering for enhanced phytoremediation”

17:30-17:45 Dalibor Balian: “Comparative indicators of morphological traits of black poplar leaves in situ and ex-situ”

17:45-18:00 Branislav Cvjetković: “The first step in testing new poplar clones for biomass production in Bosnia and Herzegovina”

Wednesday, October 5

12:00-12:30 Plenary Lectures

Dr Teresa Cerrillo, INTA, Argentina

“Current challenges and opportunities in the improvement and conservation of poplars and willows. The role of the Working Party on Domestication and Conservation of the International Poplar Commission”

12:30-13:00 Session 2: New Bio Economics – Livelihoods, Ecosystem Services, Carbon Credits

12:30-12:45 Emile Gardiner: „Early dynamics of carbon sequestration relative to spacing of an Eastern cottonwood planting“

12:45-13:00 Fabian Przepióra: „Willows and Poplars as habitat trees – pioneer tree species in natural riparian forest host rich and diverse assemblage of tree-related microhabitats“

13:00-17:00 Session 3: Physiology and Ecophysiology

13:00-13:15 Sanchari Kundu: „The protective effects of putrescine leaf spray in the response of hybrid poplar (*Populus nigra* x *maximowiczii*, clone NM6) plants to salt stress“

13:15-13:30 Jingyi Fu: „Chemical weed control does not benefit short rotation poplar plantation growth in a deep soil“

13:30-13:45 John Major: „Assimilation efficiencies and gas exchange responses of four *Salix* species in elevated CO₂ under soil moisture stress and fertilization treatments“

13:45-14:00 Benye Xi: „Variations in water-balance components and carbon stocks in poplar plantations with differing water inputs over a whole rotation: implications for sustainable forest management under climate change“

14:00-14:15 Nan Di: „Diurnal and nocturnal transpiration behaviors and their responses to environmental factors of *Populus tomentosa* in the North China Plain“

14:15-14:30 Alicia Fuertes Sánchez: „Adapting 3-pg parameters to deciduous trees: poplar short rotation plantations under mediterranean conditions“

14:30-14:45 Anaïs Thomas: „Leaf and tree water-use efficiencies of *Populus deltoides* x *P. nigra* in mixed forest and agroforestry plantations“

14:45-15:00 Barb Thomas: „Can previous exposure to drought influence future drought responses in young male and female aspen clones?“

15:00:15:15 Jiaxin Wang: „Leaf mass per area, nitrogen, and δ¹⁵N reflect water and nitrogen use and trade-offs across eastern cottonwood and seven hybrid poplars“

15:15-15:30 Lama Traboulsi: „Response of the poplar root system architecture to a local soil mechanical stress“

15:30-15:45 Iqra Sarfraz: „Characterization of salt response in poplar plants over-expressing a tonoplast aquaporin“

15:45-16:00 Lorenzo Della Maggiora: „Effect of heterogeneous salinity on *Populus alba* L. „Marte“ clone using a split-root system“

16:00-16:15 Pierrick Priault: „Early effects of two planting densities on growth dynamics and water-use-efficiency in *Populus deltoides* x *P. nigra* and *Robinia pseudoacacia* short rotation plantations“

16:15-16:30 Heidi Renninger: „Physiological and biochemical drivers of soil carbon accumulation in eastern cottonwood and hybrid poplar taxa“

16:30-16:45 Elizabeth Rogers: „Intrinsic and extrinsic factors influencing *Populus* water use: A literature review“

17:00-18:30 Poster Session

Thursday, October 6

11:00-12:00 Plenary Lectures

Dr Niels Theves, Central Asia Office of World Agroforestry (ICRAF)
„From traditional to modern poplar-based agroforestry in Central Asia“

Dr Ian McIvor, New Zealand Institute for Plant & Food Research
„Getting to the root of the matter – bioengineering with poplars and willows in a changing climate“

12:00-13:45 Session 4: Pests, Diseases and Climate Change Impacts

12:00-12:15 Jaroslav Durkovic: „Volatile organic compounds in defence responses of hybrid poplar to *Phytophthora cactorum* and *Phytophthora plurivora*“

12:15-12:30 Leopold Poljakovic-Pajnik: „Poplar aphids and their influence on physiological status of different poplar clones“

12:30-12:45 Rashmi Sehrawat: „Biological control of insect/pest of poplar defoliator (*Closterotomus cupreatus*)“

12:45-13:00 Patrick N McGovern: „Leveraging *Populus* field trials to manage environmental and human-induced change“

13:00-13:15 Flor Alvarez Taboada: „An on-line system based on sentinel 2 imagery to detect and monitor forest health status in poplar plantations“

13:15-13:30 Courtney Siegert: „Soil carbon and nitrogen changes relative to biomass productivity in *Populus* bioenergy plantations“

13:30-13:45 Kalpana Tyagi: „Screening of *Populus deltoides* clones for disease resistance against foliar pathogen“

13:45-15:15 Session 5: Environmental Applications

13:45-14:00 Raul Jeronimo Pradana Yuste: „Looking for *Salicaceae* plant material suitable for cultivation with industrial wastewater: towards multipurpose plantations“

14:00-14:15 Joel Jensen: „Soil organic matter quality and stability are influenced by *Salix* species identity and composition“

14:15-14:30 Ronald Zalesny: „Enhancing ecosystem services with agroforestry phytoremediation buffer systems in the Great Lakes basin, USA“

14:30-14:45 Hamdi Aouinti: „Phytoextraction potentialities of *Populus alba* L. and *Pinus halepensis* Mill. in the depollution of heavy metals contaminated soils in mining waste“

14:45-15:00 Ryan Vinhal: „Early growth and coppice performance of hybrid poplars grown for phytoremediation“

15:00-15:15 Andrej Pilipović: „Water use efficiency and growth performance of poplars and willows grown in soils from landfills in the Great Lakes basin, USA“

15:15-17:15 Session 6: Production Systems– From Traditional Plantations to Modern Agroforestry

15:15-15:30 Flor Alvarez Taboada: „Development of merchantable volume equations for major hybrid poplar clones in Spain using stem data obtained from Terrestrial Laser Scanner“

15:30-15:45 Hussein Maklada Muklada: „Variation in willow nutritional feed value based on cultivar and harvest regime“

15:45-16:00 María Lucia Mañueco: „Capillary rise in a non-irrigated poplar deep-planting afforestation“

16:00-16:15 GholamReza Goodarzi: „Investigation of suitable planting distance on wood production and qualitative characteristics of superior poplar clones in Markazi province, Iran“

16:15-16:30 Leonardo Amthauer Gallardo: „Yield development of poplar, willow, aspen and black locust in two to six years rotation lengths for a total of 15 to 24 years in six different short rotation coppice long term experimental sites“

16:30-17:00 Closing of the Symposium

All the registered participants and observers will receive link for the participation at the symposium by email.

The time for the presentations is local time in Novi Sad - Central European Summer Time (GMT+2)

Unregistered participants and observers interested in participation should contact symposium organizers at 8thips2022@gmail.com to get the access links.