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Poplar and Willow News

*Newsletter of the International Poplar Commission
"Poplar and Willow News"*

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Initial note

Dear Readers,

Welcome to the newsletter of the International Poplar Commission (IPC). Below, you will find information on international conferences hosted by the National Poplar Commissions of the different member countries, as well as other events of interest related to the production of and research in poplar and willow. This bulletin also informs and reviews the main activities of the IPC and other organizations and circulates useful information to the community working on Salicaceae. Likewise, it contains a selection of publications of various types, including papers, abstracts, books and new reference works.

We invite you to participate by submitting your articles, papers, research reports, interviews and other materials. Send contributions to salicaceas@gmail.com.

Kind regards,

The Editorial Board

Past Events

2018 Woody Crops International Conference, July 23 to July 25 2018. Rhineland, Wisconsin, USA.

An International Short Rotation Woody Crops Conference took place last year in Rhineland, Wisconsin. The event was a joint meeting of the Short Rotation Woody Crops Operations Working Group of the United States of America, the Poplar and Willow Council of Canada, Working Party 2.08.04 (Poplars and Willows) of the International Union of Forestry Research Organizations (IUFRO), Working Party 1.03.00 (Short Rotation Forestry) of IUFRO, Task 43 (Biomass Feedstocks for Energy Markets) of the International Energy Agency Bioenergy Agreement (IEA Bioenergy), and the Environmental and Ecosystem Services Working Party of the International Poplar Commission (IPC). The event was organized locally by the Northern Research Station of the United States Department of Agriculture (USDA) Forest Service under Ronald S. Zalesny, Jr., Supervisory Research Plant Geneticist and Coordinator of the Working Party 2.08.04 of IUFRO.

During the course of the two-day conference held at Nicolet College, close to 50 people from the United States of America, Canada, Belgium, Croatia, New

Zealand, Poland and Serbia participated in the technical programme. The programme included twenty-nine oral presentations and eight poster presentations. Topics were related to short rotation woody crops, including genetics and physiology, phytotechnologies, biomass production, ecosystem services, stakeholders, bioproducts, harvesting, and logistics. Abstracts of presentations (including posters) have been published in a [Conference Report](#) in a special issue of the open access online journal Forests. The title of the issue is Short Rotation Woody Crop Production Systems for Ecosystem Services and Phytotechnologies. Peer-reviewed papers based on conference presentations and others are also published in the Forests [special issue](#). Among the conference proceedings is a special publication about [Low-Resource Aspen Breeding and Nursery Selection Strategies](#).

Immediately prior to the main conference, a two-day field tour presented the Populus breeding and testing programme of the Natural Resources Research Institute (NRRI) of the University of Minnesota in northern Minnesota. The first day's visits included an extensive series of poplar field trials established between 2015 and 2018 in the Cohasset area. As well, participants were shown field trials and nursery collections established over a 20-year period near Grand Rapids. On the second day, the group visited the main facility of the NRRI in Duluth to meet the Director Dr. Rolf Weberg. Afterwards they travelled through northeast Minnesota and northern Wisconsin to Rhinelander for a visit to the Institute for Applied Ecosystem Studies of the USDA Forest Service. The pre-conference tour was organized by Bernie McMahon of NRRI.

Following the conference, many of the participants also took a three-day field tour of phytoremediation trials with poplars and willows in eastern Wisconsin. Most of the six stops on this tour were associated with the Great Lakes Restoration Initiative, which aims to accelerate protection and restoration of the largest system of fresh surface water in the world. More specifically, the objective is to reduce untreated runoff from urban watersheds to mitigate the impacts of nonpoint source pollution on nearshore health. Poplar and willow plantations provide an efficient and cost-effective means of



Bernie McMahon leading pre-conference field tour.

reducing runoff and achieving that objective. These plantations were seen in landfill phyto-buffer projects at Bellevue (near Green Bay), Menominee Falls (near Milwaukee), a landfill groundwater recycling project at Whitelaw (near Manitowoc), and a landfill phytoremediation project at Manitowoc. Other stops showed the Ecolotree EBuffer® system for leachate and contaminated groundwater interception at Fond du Lac and the Sand Creek Consultants green infrastructure and storm water management project at Menominee Falls. Ron Zalesny of the USDA Forest Service led the post-conference tour.

All six of the hosting organizations for the conference held business meetings during the event.

(Source: Poplar and Willow Council of Canada, <http://www.poplar.ca>)



Poplar plantation on closed landfill at Bellevue, WI, USA.



Post-conference field tour group at Orchard Ridge landfill.

Seventh International Poplar Symposium. New bioeconomies: Exploring the potential role of Salicaceae. From 28 October to 4 November. Buenos Aires, Argentina.

Within the framework of the functions of the Working Group 2.08.04 of IUFRO, the Seventh International Poplar Symposium (IPS VII) was held from 28 October to 4 November Argentina at the headquarters of the National Bank in Buenos Aires. It was organized by Silvia Cortizo (National Institute for Agricultural Technology, Argentina and Working Group 2.08.04 Deputy Coordinator), Ana María Garau (University of Buenos Aires, Argentina), Esteban Borodowski (National Poplar Commission, Argentina), Corina Graciano (National University of La Plata, Argentina), Joris Van Acker (University Gent Laboratory of Wood Technology and Working Group 2.08.04 Deputy Coordinator), Deqiang Zhang (Beijing Forestry University, China and Working Group 2.08.04 Deputy Coordinator), and Ronald S. Zalesny (USDA Forest Service and Working Group 2.08.04 Coordinator).

This meeting focused on analysing the management and conservation of genetic resources, the ecophysiological factors that define

the production and the sustainability of poplar and willow plantations, the use of technologies that maximize the genetic potential to obtain timber and non-timber products, and the conservation or rehabilitation of degraded environments.

On the first day of this Symposium, the group visited the Paraná Delta, which has the largest forest of Salicaceae in the country. There, the attendees divided into two groups, one oriented towards the production of willows and the other towards poplars. The INTA (Instituto Nacional de Tecnología Agropecuaria), Delta del Paraná Agricultural Experimental Station, and other establishments located in the delta islands provided the sites for the tour, which offered the participants an excellent opportunity to exchange experiences and discuss management alternatives around the world. In addition, attendees enjoyed a boat trip through the different rivers and streams of the Paraná Delta.

From 29 October to 1 November, seminars were held on topics of interest, in which around 80 people participated and more than 100 papers were presented. Authorities from INTA, from the Secretariat of Agribusiness of the Nation, from the Faculty of Agronomy of the University of Buenos Aires, and from the Faculty of Agrarian and Forestry Sciences of the University of La Plata began the first day with a few words of welcome. Prominent academics and researchers from around the world participated in the event and shared their knowledge



Attendees of the Seventh International Symposium, during the field trip in Neuquén.



Silvia Cortizo in front of the assistants of the trip to the Paraná Delta.



Attendees of the Seventh International Symposium, during the field trip in Neuquén.

and work experiences. The seminars dealt with the following topics: "Genetics, improvement and conservation of genetic resources", "Molecular biology", "Physiology", "Pathology", "Environmental applications", "Management of plantations" and "New bioeconomies".

The symposium also included an optional 3-day trip to Neuquén, where attendees visited

establishments with different types of plantation management. Plantations varied by productive objective and by their management of irrigation. In addition, the group also toured El Chocón, to visit the paleontological museum and the hydroelectric dam.

Upcoming Events

XXV IUFRO World Congress 2019. “Forest Research and Cooperation for Sustainable Development”.

Curitiba, Brazil; 29 September - 5 October 2019.

From 29 September to 5 October, the IUFRO World Congress will take place in Curitiba, Paraná, Brazil. For the first time this event will take place in Latin America. The Brazilian Forest Service (SFB) and Embrapa (Brazilian Agricultural Research Corporation) are the organizers. The themes of the Congress are Forests for People, Forests and Climate Change, Forests and Forest Products for a Greener Future, Biodiversity, Environmental Services and Biological Invasions, and Forest, Soil and Water Interactions. The event will have more than 3 000 participants. Activities will include plenary, technical and poster sessions; technical excursions; events in the city integrating the participants and the city through activities with the forest theme; a thematic exhibition, with products, technologies and services available to the forestry sector and forestry and agroforestry research; and opportunities for pre- and post-congress courses.

All the information is available at <http://www.iufro2019.com/>

Articles of Interest

Release of “A Roadmap for Poplar and Willow to Provide Environmental Services and to Build the Bioeconomy”.

Advanced Hardwood Biofuels Northwest (AHB) - Washington State University Extension.

The Advanced Hardwood Biofuels Northwest project of the USA released a new paper in December 2018, published by Washington State University (WSU) Extension (<https://extension.wsu.edu/>). Written by a coalition of poplar and willow

researchers from across the United States, the article outlines how woody energy crops can be grown in environmental applications for renewable energy markets. The paper provides a summary of information and recommendations including: benefits, both environmental and otherwise, of growing poplar and willow and opportunities for using the biomass from these plantings; barriers to this new endeavour; and solutions to link biomass from poplar and willow grown for environmental applications to bioenergy markets.

The Roadmap is complemented by six discussion papers with case studies that provide examples of poplar and willow grown in environmental applications:

[Poplar for wastewater and biosolids management: an environmental application of the biocycle farm](#)

[Potential for a hybrid poplar industry using recycled water: an environmental application of poplar in Idaho](#)

[Willow buffers in agricultural systems: linking bioenergy production and ecosystem services](#)

[Developing a vegetative cover using shrub willow \(Salix spp.\) In New York state](#)

[Shrub willows: an ideal plant choice for living snow fences with multiple benefits](#)

[Short-rotation coppice system: environmental applications from Northern Ireland and the Republic of Ireland](#)

To see the executive summary and download the publication, visit: <http://cru.cahe.wsu.edu/CEPublications/EM115E/EM115E.pdf>

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News of the IPC

IPC Reform

After consultations and deliberations since 2012, a vote on the proposal (<http://www.fao.org/3/MX572EN/mx572en.pdf>) to amend the IPC Convention was held at FAO, Rome, on 6 February 2019, during a Special Session of the IPC. Of the 28 Member Nations present, 26 voted in favour; the proposal was thus endorsed in accordance with Article XII of the IPC Convention.

According to the IPC Convention and FAO General Rules, the amended text will now pass through the Committee on Constitutional and Legal Matters and FAO Council to the FAO Conference for its consideration and concurrence in June 2019. If the FAO Conference concurs with the proposed amendments to the IPC Convention, the new text will come into force and the title of the IPC will be **“International Commission on Poplars and Other Fast-Growing Trees Sustaining People and the Environment”**.

It is hoped that the amended convention will allow the successful approaches and networks developed by the IPC to be applied for new species and in new geographies.

The XXVI Session of the IPC to be held in FAO Rome, the week of 5 October 2020

The International Poplar Commission (IPC) will hold its twenty-sixth Session in Rome, Italy at FAO on 8-9 October 2020, preceded by three days of dedicated scientific and technical discussions (5-7 October). The theme for this Session is “The role of Salicaceae and other fast-growing trees in sustainable wood supplies and climate change mitigation». An important topic in this Session is expected to be the [IPC reform](http://www.fao.org/forestry/ipc/83645/en/) (see <http://www.fao.org/forestry/ipc/83645/en/>), as the Commission seeks pathways to apply the successful approaches and networks developed by the IPC to new species and in new geographies.

Co-hosted with Italy, the Session and technical discussions in FAO will be accompanied by informative and optional side events and study tours. Pre- and post-Session study tours will be organized in France and Italy, respectively. Side events on initiatives related to the theme of the XXVI Session will be held at FAO between technical meetings and the formal Session.

Please save the dates; the Secretariat and the host country will be sending more details in August 2019.

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