

May 30 - 31, 2011
Poznań, Poland

17th International Conference for Renewable Resources
and Plant Biotechnology

NAROSSA[®] 2011



PPM

Pilot
Pflanzenöltechnologie
Magdeburg e.V.

Sponsored by

ÖHMI

Monday, May 30

09:00	Welcome Coffee / Registration
10:00 - 10:30	Opening and Greetings
10:30 - 11:30	Plenary Lectures
11:30 - 11:40	Technical Break
11:40 - 13:00	Lectures
13:00 - 14:00	Lunch
14:00 - 15:20	Lectures
15:20 - 15:45	Coffee Break / Poster viewing
15:45 - 18:00	Posterpresentation / Discussion
Evening Programme / Official Dinner	

Tuesday, May 31

09:00 - 11:00	Lectures
11:00 - 11:15	Coffee Break
11:15 - 13:00	Lectures
13:00 - 14:00	Lunch
14:00 - 15:30	Lectures
15:30 - 16:00	Final Discussion
16:00	End of the conference

under the honorary patronage of

ESCORENA European System of Cooperative Research Networks in Agriculture

Monday, May 30

09:00 Welcome Coffee / Registration

10:00 OPENING and GREETING

PLENARY LECTURES

10:30 Coordinated strategies for economic growth and optimisation of renewable feedstocks in Europe

Melyn F. Askew

Census-Bio, Wolverhampton, United Kingdom

11:00 The role of intellectual capital in the development of agribusiness

Grzegorz Spychalski

Institute of Natural Fibres and Medicinal Plants, Poznań, Poland

- 11:40 **Genetic improvement of oat hulls and their potential for use as a renewable resource**
Steffen Beuch, Bodo Saake², Jürgen Puls³, Dirk Kahlke⁴, Stefan Geiser⁴
Nordsaat Saatzucht GmbH, Granskevit, Germany
² *University of Hamburg, Dept. of Wood Science, Chemical Wood Technology, Germany*
³ *von-Thünen-Institut (vTI), Institute for Wood Technology and Wood Biology, Hamburg, Germany*
⁴ *Peter Kölln KGaA, Köllnflockenwerke, Elmshorn, Germany*
- 12:00 **The new variety of industrial hemp “Wielkopolskie” for non-food application**
Mieczysław Kowalski, Maria Kowalska, Henrik Burczyk²
Breeding and Seed Producing Farm “KOW-MAR”, Blaszk, Poland
² *Institute of Natural Fibres and Medicinal Plants, Poznań, Poland*
- 12:20 **Main directions of breeding work in the Institute of Bast Crops and Phyto-Pharmaceutical Raw Stuff in Ukraine**
Viktor Kabanets
Ukrainian Academy of Agrarian Sciences, Institute of Bast Crops and Phyto-Pharmaceutical Raw Stuff, Hlukhiv, Ukraine
- 12:40 **Propagation of valuable genotypes of *Aesculus hippocastanum* L. by micropropagation**
Karolina Wielgus, Aleksandra Luwańska, Karolina Jarzyniak, Joanna Makowiecka
Institute of Natural Fibres and Medicinal Plants, Dept. of Biotechnology, Poznań, Poland
- 13:00 - 14:00 **Lunch**
- 14:00 **Use of plant biotechnology methods for flax breeding in Latvia**
Dace Grauda, Andra Mikelsona, Aija Auzina, Veneranda Stramkale², Isaak Rshal
University of Latvia, Institute of Biology, Salaspils, Latvia
² *Agricultural Science Centre of Latgale, Vilani, Latvia*
- 14:20 **Organic methods of oil flax protection**
Krzysztof Heller, Katarzyna Wielgusz, Małgorzata Byczyńska
Institute of Natural Fibres and Medicinal Plants, Poznań, Poland
- 14:40 **The application of ultrasonic treatment of flax fibres for the production of cottonin and spindleless blended yarns**
Zdzisław Czaplicki, Jerzy Mańkowski, Waldemar Cierpucha
Institute of Natural Fibres and Medicinal Plants, Poznań, Poland
- 15:00 **Ways of processing of bast crops in Ukraine**
Rubil Hiliazetdinov
Ukrainian Academy of Agrarian Sciences, Institute of Bast Crops and Phyto-Pharmaceutical Raw Stuff, Hlukhiv, Ukraine
- 15:20 - 15:45 **Coffee break / Poster viewing**
- 15:45 - 18:00 **Posterpresentation / Discussion**

Tuesday, May 31

- 09:00 Evaluation of different metal oxide nano particle finishes, for self-cleaning of cotton fabric
Sheikh Muhammad Nawaz, Babar Shahbaz, Zeeshan Nawaz, Rameez Ibraheem
University of Agriculture, Dept. of Fibre Technology, Faisalabad, Pakistan
- 09:20 Lime/shives composites applied in ecological building
Jerzy Mańkowski, Andrzej Kubacki, Jacek Kołodziej
Institute of Natural Fibres and Medicinal Plants, Poznań, Poland
- 09:40 Replacement of phthalates by renewable materials in rubber industry
Cristina Bergmann, Jürgen Trimbach, Zuhair Saleem ²
Klaus Dahleke KG, Hamburg, Germany
² *Pilot Pflanzenöltechnologie Magdeburg e.V., Germany*
- 10:00 Investigations of the relationship between the morphology of rapeseeds and their behavior in the oil pressing process
Heike Mühlmeil, Frank Pudel, Claudia Müller ², Ludger Alpmann ³, Helmut Aniol ⁴, Tobias Korrmann ⁵
Pilot Pflanzenöltechnologie Magdeburg e.V., Germany
² *Norddeutsche Pflanzenzucht Hans-Georg Lembke KG, Holtense, Germany*
³ *Deutsche Saatveredelung AG, Lippstadt, Germany*
⁴ *Ölmühle Anklam GmbH & Co. KG, Anklam, Germany*
⁵ *Automation & Software Günther Tausch GmbH, Neubrandenburg, Germany*
- 10:20 Potential and future prospects of dyeing plants: Madder *Rubia tinctorium* L., Annato *Bixa orellana* L., Dyer's broom *Genista tinctoria* L., Woad *Isatis tinctoria* L.
Katarzyna Schmidt-Przewozna, Jakub Kowalinski, Monia Tomassini ²
Institute of Natural Fibres and Medicinal Plants, Poznań, Poland
² *University Camerino, Italy*
- 10:40 Liquid-liquid reactive extraction: a promising method for the recovery of biopolymer building-blocks produced via fermentation-based processes
Agnieszka Krzyzaniak, Boelo Schuur, Andre de Haan
Technical University of Eindhoven, Eindhoven, The Netherlands
- 11:00 - 11:15 *Coffee break*
- 11:15 Preparation of rapeseed protein products for aquaculture feeding
Halime Adem, Ralf-Peter Tressel ², Hanno Slawski, Carsten Schulz
Gesellschaft für Marine Aquakultur mbH, Büsum, Germany
² *Pilot Pflanzenöltechnologie Magdeburg e.V., Germany*
- 11:35 Towards renewable sources of oil and protein for aquaculture feed
Paul P. Kolodziejczyk, Crystal L. Snyder ², Xiao Qiu ⁴, Saleh Shah ⁴, E. Chris Kazala ², Randall J. Weselake ²
Biolink Consulting Inc., New Denver, Canada; ² University of Alberta, Dept. of Agricultural, Food and Nutritional Science, Edmonton, Canada
³ *Alberta Innovates - Technology Futures, Vegreville, Canada*
⁴ *University of Saskatchewan, Dept. of Food & Bioproduct Sciences, Saskatoon, Canada*

Tuesday, May 31

- 11:55 **Ecological and economic optimisation of biogas plants**
Matthias Sonnleitner, Georg Häring, Wilfried Zörner, Vic Hanby ²
Centre of Excellence for Renewable Energy Research, Ingolstadt University, Germany
² *Institute of Energy and Sustainable Development, De Montfort University, Leicester, United Kingdom*
- 12:15 **The production of annual plant biomass for the needs of renewable energy in Poland**
Henryk Burczyk, Maria Mackiewicz-Talarczyk
Institute of Natural Fibres and Medicinal Plants, Poznań, Poland
- 12:35 **Polish cultivar of white mulberry (*Morus alba* L.) and new directions of utilization**
Małgorzata Łochyńska, Grzegorz Oleszak ²
Institute of Natural Fibres and Medicinal Plants, Poznań, Poland
² *Experimental Farm of the Institute of Natural Fibres and Medicinal Plants, Pętkowo, Poland*
- 13:00 -14:00 **Lunch**
- 14:00 **The cycle of biogenic elements as basic fact of energy and biomass renewability**
Sékou Traoré, Amadou Diarra, Sékou Magassouba ², Macki Traoré ⁵
University of Conakry, Polytechnic Institute, Conakry, Guinea
² *Institute of Medicinal Plants. Dobreka, Guinea*
³ *University of Sonfonia, Dept. of Economics, Conakry, Guinea*
- 14:20 **Biomass logistics: The key challenge of minimizing supply costs**
Ina Ehrhardt, Holger Seidel
Fraunhofer-Institute for Factory Operation and Automation IFF, Magdeburg, Germany
- 14:40 **Sustainable biofuels - an international overview of existing approaches**
Jörg Kretzschmar, Thilo Seidenberger
German Biomass Research Centre, Leipzig, Germany
- 15:00 **Economy and logistic in forming of market of bast crops products in Ukraine**
Ihor Marynchenko
Ukrainian Academy of Agrarian Sciences, Institute of Bast Crops and Phyto-Pharmaceutical Raw Stuff, Hlukhiv, Ukraine
- 15:30 - 16:00 **Final discussion**
- 16:00 **End of the conference**

Posters

P 1.1 The influence of cadmium stress on the protein profile in *Linum usitatissimum* L. cultivars

Milena Szalata, Agata Pietrucka, Marlena Szalata², Aleksandra Luwańska, Karolina Wielgus
INF&MP; ² Poznań University of Life Sciences, Poznań, Poland

P 1.2 The content of biologically active substances in different varieties of white mulberry (*Morus alba* L.) grown in Polish climatic conditions

Katarzyna Grajek, Dominika Pieprzyk-Kokocha, Aleksandra Wawro, Emil Tyrolczyk,
Małgorzata Michałak
INF&MP, Poznań, Poland

P 1.3 The plant regeneration from seeds of Virginia mallow (*Sida hermaphrodita* R.) species in *in vitro* culture

Grażyna Mańkowska, Aleksandra Luwańska, Karolina Wielgus;
INF&MP, Poznań, Poland

P 1.4 Effects of different cytokinins on micropropagation of *Salvia officinalis*

Aleksandra Luwańska, Karolina Wielgus, Daniel Lipinski², Joanna Zeyland², Marlena Szalata²,
Ryszard Słomski²

INF&MP, Dept. of Biotechnology;

² Poznań University of Life Sciences, Dept. of Chemistry and Biotechnology, Poznań, Poland

P 1.5 Comparison of profiles of biologically active substances from leaves of *Morus alba* L. grown *in vitro* and *in vivo*

Karolina Wielgus, Aleksandra Luwańska, Sebastian Mielczarek², Agnieszka Gryszczynska²,
Milena Szalata, Joanna Makowiecka, Grażyna Mańkowska

INF&MP, Dept. of Biotechnology; ² INF&MP, Quality Control of Medicinal Products and Dietary
Supplements Dept., Poznań, Poland

P 1.6 Hybridization between selected energetic species of *Salix* and *Populus* under *in vitro* and *in vivo* conditions

Maciej Zenktelek, Maria Katarzyna Wojciechowicz, Łukasz Zarychta, Łukasz Piosik, Elżbieta
Zenktelek

Adam Mickiewicz University, Institute of Experimental Biology, Laboratory of General Botany,
Poznań, Poland

P 2.1 Enriched linen textiles as a material for “wellness” products

Romualda Marszałek, Mirosław Waclawek², Teresa Hernik, Andrzej Sapieja,
Barbara Binkowska, Anna Kicińska-Jakubowska, Bożenna Marcinkowska

INF&MP, Poznań, Poland; ² Linen Factory, Żyrardów, Poland

P 2.2 Nanoproducts in the refining of linen

Bogumila Tańska, Justyna Zielak, Maria Nowalinska, Bożenna Marcinkowska, Edyta Bogacz
INF&MP, Dept. of Spinning, Weaving and Finishing, Żyrardów, Poland

P 2.3 Results of breeding Polish and foreign biotypes of mulberry silkworm (*Bombyx mori* L.) in Polish conditions

Małgorzata Łochyńska, Andrzej Wojtaszewski
INF&MP, Poznań, Poland

P 2.4 Hemp fibres properties from different parts of the straw

Zaiga Zamushka, Ilze Baltina, Veneranda Stramkale², Guntis Strazds³

Riga Technical University, Riga, Latvia; ² Agricultural Science Centre of Latgale, Vilani, Latvia;

³ Association of Textile and Clothing Industry, Riga, Latvia

P 2.5 Adhesion improvement of hemp fiber polypropylene composites

Edgars Kirilovs, Silvija Kukle

Riga Technical University, Riga, Latvia

Posters

P 2.6 Polypropylene (PP) composites reinforced with stinging nettle (*Urtica dioica* L.) fibre

Jerzy Mańkowski, Dominik Paukszta², Jacek Kołodziej
INF&MP; ² Poznań University of Technology, Poznań, Poland

P 3.1 Agro fine chemicals' from flax for special medical textiles

Joanna Banach
INF&MP, Poznań, Poland

P 3.2 Protection composition based on hemp essential oil against pests

Ryszard Kaniewski, Romuald Górski², Józef Jakimcio-Turowski, Ewa Nowackiewicz
INF&MP; ² University of Life Sciences, Poznań, Poland

P 3.3 Pyrrolizidine alkaloids in *Tussilago farfara* L. plants - toxicity and safety of raw material

Mariola Dreger, Anna Krajewska-Patan, Marzena Pieszak, Małgorzata Górską-Paukszta, Artur Adamczak, Waldemar Buchwald, Przemysław Ł. Mikołajczak²
INF&MP; ² University of Medical Science, Dept. of Pharmacology, Poznań, Poland

P 3.4 *Platycodon grandiflorum* Jacq. A. DC. - promising medicinal plant

Mariola Dreger, Anna Krajewska-Patan, Waldemar Buchwald, Marzena Pieszak, Małgorzata Górską-Paukszta, Sebastian Mielcarek, Anna Forycka, Przemysław Ł. Mikołajczak²
INF&MP; ² University of Medical Science, Dept. of Pharmacology, Poznań, Poland

P 3.5 Phytochemical studies of rose species occurring in Poland

Artur Adamczak, Waldemar Buchwald, Sebastian Mielcarek, Agnieszka Gryszczyńska, Anna Gryś
INF&MP, Poznań, Poland

P 4.1 The role of Plant Breeding & Acclimatization Institute, National Research Institute in pre-breeding of perennial grasses for bioenergy purposes

Grzegorz Żurek, Danuta Martyniak
Plant Breeding & Acclimatization Institute, NRI, Radzików, Poland

P 5.1 Application of PLA nano-fibres for surface modification of air filters

Katarzyna Grajek, Emil Tyrolczyk, Zbigniew Skibniewski, Małgorzata Michałak
INF&MP, Poznań, Poland

P 5.2 The modification of flax woven using nano fibroin fibers as a modern filtering system

Emil Tyrolczyk, Katarzyna Grajek
INF&MP, Poznań, Poland

P 5.3 Comparative analysis of properties of flax lines to support fibres flax growing reintroduction in Latvia

Silvija Kukle, Veneranda Stramkale², Dace Kalnina, Dagmara Proberga, Guntis Strazds³
Riga Technical University, Riga, Latvia; ² Agriculture Science Centre of Latgale, Vilani, Latvia; ³ Association of Textile and Clothing Industry, Riga, Latvia

P 5.4 Immobilizing bioactive compounds on PLA nano-fibres

Katarzyna Grajek, Zbigniew Skibniewski, Emil Tyrolczyk, Czesław Ogurkowski, Małgorzata Michałak
INF&MP, Poznań, Poland

P 5.5 The influence of in-vegetation stem cutting on hemp (*Cannabis sativa* L.) yield

Jan Tymków, Lidia Grabowska, Michał Rębarz
INF&MP, Poznań, Poland

Organisers

PPM Pilot Pflanzenöltechnologie Magdeburg e.V.
Berliner Chaussee 66, 39114 Magdeburg, Germany
Institute of Natural Fibres and Medicinal Plants
ul. Wojska polskiego 71 b, 60-630 Poznań, Poland

Conference Venue

Institute of Natural Fibres and Medicinal Plants, Poznan, Poland

Official Language

English

Registration Fees

Regular	200 EUR
Presenters	150 EUR
Students	50 EUR
Official Dinner	20 EUR

Fees are to be paid to the bank account mentioned below not later than May 20, 2011. Cancellations without any costs are permitted until May 13, 2011. After that you will be required to pay full fee. A substitute may be made at any time.

Bank Details:

Stadtsparkasse Magdeburg
Bank code number: 81053272
Account number: 39253084
IBAN: DE18 8105 3272 0039 2530 84
BIC-/SWIFT-Code: NOLADE21MDG

Please indicate your name and „NAROSSA 2011“ as a code of payment.

Registration

Please register online at the conference website
www.narossa.de.

Accommodation

Recommended hotels:

Hotel Orbis Polonez, al. Niepodległości 36, 61-714 Poznań
e-mail: rez.polonez@orbis.pl; www.orbis.pl; www.accorhotels.com

Hotel Mercure Poznań, ul. Roosevelta 20, 60-829 Poznań
e-mail: H3393-RE@accor.com; www.mercure.com; www.accorhotels.com

Hotel Olimp, ul. Warmińska 1, 60-622 Poznań
(Sporthotel located in the walking distance from INF-conference venue.)
e-mail : olimp.hotel@olimpia.org.pl; www.olimpia.org.pl