

Adaptation of Forest Ecosystems to Air Pollution and Climate Change

TENTATIVE SCIENTIFIC PROGRAM

Monday, 22 March 2010

Arrivals to Grand Haber and other hotels in Kemer-Antalya

18:00 – 19:30 Business meeting (For IUFRO officers)

20:00 Reception and ice breaker

Tuesday, 23 March 2010

9:00-9:30 Organizational remarks and welcome by Elena Paoletti and Yusuf Serengil

9:30-10:30 Session I (Chair: Marcus Schaub, Switzerland)

MONITORING

9:30-9:45 Marcus Schaub

Review talk

9:45-10:15 Wim de Vries, Matthias Dobbertin, Han van Dobben, Gert Jan Reinds, Marcus Schaub and SveinSolberg

Impacts of nitrogen deposition and climate change on forest ecosystems in Europe derived from long-term monitoring: an overview

10:15-10:30 Ovidiu Badea, Stefan Neagu, Diana Silaghi

Long-Term Monitoring Of Air Pollution Effects On Selected Forest Ecosystems In Romanian Carpathians Mountains

10:30-11:00 Coffee break

11:00-12:15 Session I Continues

11:00-11:15 Banu Karabiyik and Doğanay Tolunay

Monitoring of Forest Condition in Turkey.

11:15-11:30 Nurgül Karloğlu, Ünal Akkemik, Nesibe Köse

The pollen monitoring in the Belgrade Forest - September 2008 to September 2009 -.

11:30-11:45 Mikhail V. Kozlov, Elena L. Zvereva, Vitali E. Zverev

Sources Of Variation In Responses Of Terrestrial Biota To Industrial Pollution.

11:45-12:00 Seppo Nevalainen, Martti Lindgren, Antti Pouttu, Jaakko Heinonen, Marke Hongisto and Seppo Neuvonen

Changes in Forest Health on the Extensive (Level I) Monitoring Plot Network in Finland During 1995-2008.

12:00-12:15 Sasa Orlovic, Vladimir Crnojevic, Boris Antic, Milos Rovcanin, Vladan Minic, Zoran Galic, Ante Vujic

Intensive Monitoring Of Forest Ecosystems In Serbia.

12:15-13:30 Lunch

13:30-15:00 Session IV(Chairs: Andrzej Bytnerowicz, USA, Yusuf Serengil, Turkey)

ATMOSPHERIC DEPOSITION, SOILS, AND NUTRIENT CYCLES

13:30 -13:45 Andrej Bytnerowicz

Review Talk

13:45-14:00 Stephanie J. Connolly, Huffman, Edward L., Edwards, Pamela J.

Addressing Atmospheric Deposition for Forest Management on the Monongahela National Forest, West Virginia, USA.

14:00-14:15 Karen Wuyts, An De Schrijver, Jeroen Staelens, Kris Verheyen

Inorganic Nitrogen Leaching And Soil Acidification In Forest Edges Under High Deposition Load.

14:15-14:30 Jennifer D. Knoepp, James M. Vose, and Wayne T. Swank

Long-term biogeochemical cycling in Coweeta Hydrologic Laboratory, North Carolina, USA.

14:30-14:45 Selma Y.Korkanç, A. Hızal, N. Özyuvacı

Effect Of Land Use Types, Soil Depth And Topographical Factors On Soil Organic Carbon Variability.

14:45-15:00 Sabine Braun, Christian Schindler, Beat Rihm, Sebastian Leuzinger

Towards A Critical Ozone Flux For Forest Trees

15:00-15:30 Coffee break

15:30-17:00 Session II Continues

15:30-15:45 Pająk Marek and Jasik Michał

The Level Of Heavy Metals (Zn, Pb, Cd) Content In Soil And Pleurozium Schreberii In The Brynica District, Forest Inspectorate Świerklaniec Southern Poland

15:45-16:00 R. Mohanraj, J. Saravanan and S. Dhanakumar

Estimation Of Carbon Stock In Kolli Hills, Easternghats, India With Emphasis On Carbon Pool In Above Ground Biomass, Litter, Woody Debris And Soils

16:00-16:15 Mehmet Özcan, Ferhat Gökbulak

Gap Size and Surrounding Forest Types Effect on Variations of Selected Soil Chemical Parameters Along the Gradient in Broadleaf Forest Openings

16:15-16:30 Sandy Adriaenssens, Jeroen Staelens, Roeland Samson, Pascal Boeckx, Kris Verheyen

Spatial And Temporal Variability Of Throughfall Water And Dry Deposition Along A Vertical Gradient In A Beech Canopy

16:30-16:45 Christian Huber, Hans Peter Dietrich, Wendelin Weis, Axel Göttlein

25 Years Of Monitoring And Research At The Nitrogen Saturated Forest Högwald. What Are The Practical Implications For Forest Management?

16:45-17:00 Andrzej Bytnerowicz, Darrel Jenerette, Robert Johnson, Nancy Grulke, Mark Fenn and Edith Allen

Estimation Of Atmospheric Dry Deposition Of Gaseous Reactive Nitrogen To Forests And Other Ecosystems Of The San Bernardino Mountains, Southern California

Wednesday, 24 March 2010

9:00-11:00 Session III (Chair: Rainer Matyssek, Germany)

RESPONSE INDICATORS AND MECHANISMS OF ACTION

9:00-9:15 Rainer Matyssek

Review Talk

9:15-9:30 William J. Manning and Elena Paoletti

Ethylenediurea Applications In The Study Of Ozone Effects On Trees

9:30-9:45 Carlo Calfapietra, Paolo de Angelis, Alessandra Lagomarsino, Ingmar Tulva

Does CO₂ Stimulation End Suddenly When Fumigation Is Stopped?

9:45-10:00 Mehmet Misir, Nuray Misir, Cemile Ülker, Pembegül Moradaoğlu, Alper Bulut and Erhan Bülbül

Above- And Belowground Ecosystem Biomass And Carbon Storage Capacity For Spruce Natural Stands In Eastern Black Sea Region In Turkey

10:00-10:15 Elina Oksanen, Viivi Hassinen, Boy J.H.M. Possen, Elina Vapaavuori, Matti Rousi

Molecular Studies Of Populus Tremula Indicate A High Sensitivity To Prolonged Wet Conditions

10:15-10:30 Egbert Beuker, Alix Bell, Martti Lindgren, Antti-Jussi Lindroos, Mike Starr, Liisa Ukonmaanaho

Effects Of Temperature And Moisture Conditions On Defoliation And Litterfall Of Norway Spruce (Picea Abies L. Karst.) Forests In Finland

10:30-10:45 Matthias Dobbertin, Matthias Arend, Thomas Kuster, Pierre Vollenweider, Madeleine Goerg-Günthardt

The Effect Of Drought And/Or Air Warming On Growth And Leaf Symptoms Of Three European Oak Species - First Results From The Querco Model Ecosystem Experiment –

10:45-11:00 Algirdas Augustaitis

Meteorology Of September As Key Indicator Of Global Environmental Changes And Their Impact On Forest Ecosystem.

11:00-11:30 Coffee break

11:30-12:30 Session IV (Chair: Gerhard M.Starck, Germany)

ECOLOGICAL IMPACTS AND GENETIC ASPECTS

11:30-11:45 Gerhard M.Starck

Review Talk

11:45-12:00 Om Rajora

Genomics responses and genetic effects of global climate change and air pollution in forest trees.

12:00-12:15 René Kerner, Maren Olbrich, Christian Lindermayr, J. Barbro Winkler, Sarah Sturm, Dieter Ernst, Gerhard Müller-Starck

*Long term impact of ozone on transcript and protein expression profiles of European beech saplings /(*Fagus sylvatica* L.).*

12:15-12:30 Sacha Bohler, Kjell Sergeant, Isabelle Lefèvre, Sébastien Planchon, Yves Jolivet, Lucien Hoffmann, Jean-François Hausman, Jenny Renaut, Pierre Dizengremel.

Effects of ozone on the vegetative development of poplar leaves.

12:30-13:30 Lunch

13:30-14:45 Session IV Continues

13:30-13:45 Mauro Centritto, Alessio Fortunati, Emanuele Pallozzi, Tsonko Tsonev, Violeta Velikova, Carlos Di Bella and Francesco Loreto

An Overview On The Plants Isoprenoid Emission: Effect Of Leaf Ontology, Rising Temperature, Drought, And Fire.

13:45-14:00 Rebekah J Wagner, Margot W Kaye, Jason P Kaye and Marc D. Abrams

Physiological and morphological responses of temperate deciduous tree seedlings to increased temperature and precipitation regimes in the northeastern United States.

14:00-14:15 Konnert, M., Degen, B., Kätzel, R. and Maurer, W.

Genetic Long-Term Monitoring In Forests – Early Warning And Controlling System For Ecosystematic Changes

TREE PHYSIOLOGY LECTURE by

14:15-14:30 Marc D. Abrams and Sarah E. Johnson

Age Class, Longevity And Growth Rate Relationships: Is Global Change Causing Protracted Increases In Radial Growth In Old Trees?

14:30-14:45 Glória Pinto, Sónia Silva, Celeste Dias, Armando Costa, Barbara Correia, Joana Branco, Patrícia Gonçalves, Carlos Correia, José Moutinho, Berta Macedo and Conceição Santos

Impact Of High Temperature On Photosynthesis, Carbon Metabolism And Lipid Peroxidation Of Cork Oak Plants

14:45- 15:00 Coffee break

15:00-16:15 Session V (Chair: Yusuf Serengil, Turkey)

WATER CYCLE

15:00-15:15 Yusuf Serengil

Review Talk

15:15-15:30 Urša Vilhar, Primož Simoncic

Impact Of Climate Change On Water Status Of Managed And Non-Managed Forests In Kočevski Rog.

15:30-15:45 Mirosław Żelazny , Aleksander Astel, Anna Wolanin, Stanisław Małek

Spatiotemporal Dynamics Of Surface Water Chemical Composition In A High Mountain Area.

15:45-16:00 H. Meesenburg, B. Schultze, J. Scherzer, C. Fiebiger, S. Hentschel, J. Sutmöller

Actual And Future Water Availability At Forest Ecosystems In Saxony-Anhalt, Germany: Evaluation Of Effects Of Climate Change And Stand Development.

16:00-16:15 Frederic Vermeiren, Mike Starr, Johan Neiryndck, Arne Verstraeten, Peter Roskams

Long Term Water And Nutrient Budgets For 5 Forest Stands In Flanders, Belgium

16:15-16:30 Antonio del Campo, Antonio Molina, Rafael Herrera

Hydrological approach to implement water-saving silviculture in planted Aleppo pine stands in eastern Spain.

16:30-16:45 Coffee break

16:45-18:30 Session V Continues

16:45-17:00 Pristova, Tatiana

Water Migration Of Air Pollutants In Forest Ecosystems.

17:00-17:15 Mahmut Reis, Alaaddin Yüksel, Fatih Tonguç, Abdullah E. Akay

A Study On Hydrological Properties Of Litter For Various Stand Types.

17:15-17:30 Alaaddin Yüksel, Mahmut Reis, Abdullah E. Akay, Fatih Tonguç

Climate Change In Mediterranean Region And Its Effects On The Forests: Kahramanmaraş Case.

17:30-17:45 Yurtseven, İbrahim,

Forecasting of Monthly Inflows to Büyükçekmece Dam by Three Different Artificial Neural Network (ANN) Methods

17:45-18:00 Süleyman Özhan, Ahmet Hızal, Kamil Şengönül, Ferhat Gökbülak, Yusuf Serengil, Mehmet Özcan

Some Physical and chemical properties of streamwater generating from broadleaf forest covered watersheds

18:00-18:15 Ünal Asan, Kamil Şengönül and Yılmaz Bilensoy

Elaboration of Water Use Policy of the Kackar Mountains Regarding Local Demands, Natural Balance and Energy in the Barhal Çayı Watershed Area

18:15-18:30 Luangjame, J., Munklarat, C., Kanuraj, P.

Water Use Of Teak Plantation In Thongphaphum District, Kanchanaburi Province

18:30-19:30 Poster Session

Conference dinner

17:00-18:30 Poster session

Thursday, 25 March 2010

9:00-11:00 Session VI (Chair: Annemarie Bastrup-Birk, Finland)

MODELING AND RISK ASSESSMENT

9:00-9:15 Annemarie Bastrup-Birk

Review Talk

9:15-9:30 Carlo Calfapietra, Arianna Morani, David Nowak

Air Pollution And Carbon Removal By Urban Forestry In New York City

9:30-9:45 Chris Eastaugh and Hubert Hasenauer

Impacts Of Extant Regional Climate Change On Forest Growth In Austria

9:45-10:00 L. François, P. Warnant, M. Dury, A. Henrot, E. Favre, M. Ouberdous, A. Hambuckers

Response Of The European Forests To Human Perturbations: A Modelling Approach For The 21st Century

10:00-10:15 John Bradford, Kirk Wythers, Peter Reich

Increasing Weather Variability Augments Uncertainty About The Impact Of Climate Change On Forest Productivity

10:15-10:30 Malek Stainslaw, Salim Belyazid, Sverdrup Harald

Modelling Changes In Forest Soil Chemistry In Spruce Forest Site At Istebna In Southern Poland Using The "Forsafe" Model

10:30-10:45 M. Baumgarten, C. Huber, H. P. Dietrich, Prof. Dr. Reiner Matyssek

Assessment Of The Ozone Risk In Different Forest Regions In Southern Germany (Bavaria) For The Years 2002 And 2003 Using Exposure And Flux Based Ozone Indices

10:45-11:00 Miloš Zapletal, Pavel Cudlín, Petr Chroust, Zbyněk Večeřa, Pavel Mikuška, Otmar Urban,

Radek Pokorný, Radek Czerný, Dalibor Janouš, Klára Taufarová

Ozone flux measurements over Norway spruce forest using gradient method and correlation with net ecosystem production

11:00-11:30 Coffee break

11:30-12:30 Session VII (Chair: He Shang, China)

SOCIAL AND POLITICAL ASPECTS INCLUDING ECOSYSTEM SERVICES

11:30-11:45 He Shang

Review Talk

11:45-12:00 Benzhi Zhou et al.

Impact of the 2008 Ice Storm on China's Forests

12:00-12:15 Elena Paoletti and William J. Manning

Ozone Impacts On Forest Ecosystem Services

12:15-12:30 Mirka Šprtová, Dalibor Janous, Michal V. Marek

Carbon Fluxes Between Forest Ecosystems And Atmosphere – Important Forests Role In The Carbon Sequestration

12:30-14:00 Lunch

14:00-15:00 Session VII Continues

14:00-14:15 Monique Carnol, Etienne Branquart, Bart Muys, Quentin Ponette, Kris Verheyen
Ecosystem Services In Mixed Forests And Monocultures: Comparing Stakeholders' Perceptions And Scientific Knowledge

14:15-14:30 Nuray Misir, Mehmet Misir, Hakki Yavuz, Cemile Ülker, Alper Bulut, Pembegül Moradaoğlu, Erhan Bülbül and Servet Pehlivan

Carbon Storage In Biomass Of Natural Scotch Pine Stands In Turkey

14:30-14:45 Md. Parvez Rana, Mohammad Shaheed Hossain Chowdhury, Md. Shawkat Islam Sohel, Sayma Akhter

Adaptation to climate changes through agroforestry practices: A case study from drought prone areas of Bangladesh

14:45-15:00 Pavel Cudlín, Paoletti Elena, Jan Pokorný, Josef Seják

Impact Of Environmental Change On Norway Spruce Forest Ecosystem Services In Middle Europe

15:00- 15:30 Coffee break

15:30-17:30 Session VIII (Chair: Nancy E.Grulke, USA)

INTEGRATED ASSESSMENT OF ANTHROPOGENIC STRESSORS AND ADAPTATIONS OF FOREST ECOSYSTEMS UNDER TEMPERATE AND XERIC CONDITIONS

15:30-15:45 Christian Andersen, Nancy Grulke

Review Talk

15:45-16:00 Yusuf Serengil, Betül Uygur

Climate Change and Ecology of Urban Watersheds

16:00-16:15 Elisabeth Graf Pannatier, Matthias Dobbertin, Alexander Heim, Maria Schmitt, Anne Thimonier, Peter Waldner, Beat Frey

Response Of Soil Carbon Dynamics To The 2003 Heat Wave And Drought In Three Mature Forests In Switzerland.

16:15-16:30 Matjaž Čater, Tom Levanič

*Physiological And Growth Response Of European Larch (*Larix Decidua* Mill.) And Pedunculate Oak (*Quercus Robur* L.) In Slovenia.*

16:30-16:45 Tene Armand, Tobin Brian, Dyckmans, Jens, Ray Duncan, Black Kevin and Nieuwenhuis, Maarten

Tree Response To Severe Climatic Stress.

16:45-17:00 Yannis Raftoyannis

Forest Fires And Adaptation Options To Climate Change.

17:00-17:15 Nancy Grulke, Karl Marrett, Max Marrett, Elizabeth Ballenger, Sabine Posch, Gina Patrick, David Jones, Michael Tausz

Interactive Effects Of N Deposition, O₃ Uptake, And Drought On Canopy Health Of Mature Jeffrey Pine

17:15-18:30 Side Event (Antropogenic Stressors and Forests of Turkey)

Friday, 26 March 2010

Scientific field trip

THERMESSOS NATIONAL PARK

