Fostering healthy food systems through organic agriculture - Focus on Nordic-Baltic Region

International Scientific Conference Tartu, Estonia, August 25–27, 2009

International organizing committee

Estonia – Anne Luik and Marika Mänd (Estonian University of Life Sciences),

Airi Vetemaa (Estonian Organic Farming Foundation),

Eve Ader (Ministry of Agriculture)

Finland – Arja Nykänen (MTT Agrifood Research Finland)

Denmark – Vibeke Langer (University of Copenhagen)

Latvia – Elita Selegovska (Latvian University of Agriculture)

Lithuania – Vytautas Pilipavicius (Lithuanian University of Agriculture)

Norway – Jon Magne Holten (Oikos)

Sweden – Karin Svanäng (Swedish University of Agricultural Sciences)

Local organizers

Darja Matt, Elen Peetsmann, Sirli Pehme and Ragnar Leming (Estonian University of Life Sciences)

Editorial board of the proceedings - Special issue of the Agronomy Research

Editor: **Luule Metspalu** Technical Editor: **Sirje Mitt**

Language Editors: David Arney, Liisa Hansson, Marguerite Oetjen,

Ingrid H. Williams

List of reviewers of special issue

Georgina Alins, Esvet Acikgoz, Maarika Alaru, Niklaus Ammann, Randy L Anderson, David Arney, Margrethe Askegaard, Ona Auskalniene, Maija Ausmane, Eugenija Baksien, Konstantin Becker, Ingrid Bender, Kerstin Bergström, Alfred Berner, Stephane Blancard, Iossif Bogdevitch, Gajic Bosko, Kirsten Brandt, Luis Miguel Brito, Natalija Burbulis, Marina Carcea, Heather Darby, Kico Dhima, Ólafur R Dýrmundsson, Johan Ekroos, Vyacheslav Eremeev, Mohamad T. Farran, Ola Flaten, Zinta Gaile, Teresa Garde-Cerdan, Dace Grauda, Halina J. Hajyieva, Peter Hambäck, Preben Klarskov Hansen, Tim Haye, Abbas Hemmat, Geza Hrazdina, Edmund Hummel, Külli Hiiesaar, Christa Hoffmann, Suren Husted, Stephen Jones, Uffe Jorgensen, Malle Järvan, Jüri Kadaja, Kalju Kask, Veiko Kastanje, Matthias Koesling, Inese Kokina, Petr Konvalina, Janis Kopmanis, Jelena Korolova, Jaan Kuht, Daniel Kusche, Timo Kuosmanen, Eeva Kuusela, Ruth Lauk, Enn Lauringson, Enn Leedu, Ragnar Leming, Asta-Virve Liebek, Siiri Liiv, Heino Lõiveke, Franziska Löschenberger, Peeter Lääniste, Monika Messmer, Bent Egberg Mikkelsen, Zlata Milaković, Celso L. Moretti, Isabel Moureo, Inga Moročko-Bičevska, Erkki Mäeorg, Wytze Nauta, Christer Nilsson, Arja Nykänen, Sakine Özpınar, Aart Osman, Frank W. Oudshoorn, Lloyd B.Owens, Taimi Paal, Valentini Pappa, Sirli Pehme, Josephine Peigne, Angela Ploomi, Pernille Hasse Busk Poulsen, Rita Pupaliene, Priit Põldma, Henn Raave, Dolores Ma Jiménez Raigón, Isaak Rashal, Jesper Rasmussen, Endla Reintam, Bernard Rolland, Theo Ruissen, Are Selge, Karli Sepp, Regina Skuodiene, Jonas Slepetys, Remigijus Smatas, Eva Straková, Marge Starast, Eha Švilponis, Jan Szopa, Liina Talgre, Lucius Tamm, Avo Toomsoo, Eva Tumova, Inara Turka, Johanna Wallsten, Sandra Voca, Kaljo Voolma, Raffaele Zanoli, Dragan Žnidarčič, Fernando Sérgio Zucoloto.

Preface

The last NJF (Nordic Association of Agricultural Scientists) seminar 369 devoted to organic farming took place in Alnarp 2005, where the representatives of Baltic countries were not numerous. All the countries surrounding the Baltic Sea are responsible for the ecological conditions of the sea and the health of the people inhabiting the region. This is why the development of more sustainable agriculture as organic farming plays the major role. Therefore the title of our international conference - NJF seminar 422 taking place in Tartu, Estonia, August 25-27, 2009 - is "Fostering healthy food systems through organic agriculture – focus on Nordic-Baltic region". At the conference there are participants from all the countries around the Baltic Sea and also from all over the world but the dominating part is played by the Baltic countries. Hopefully the conference is encouraging the research in all the fields of organic farming and holding the conferences on organic farming becomes regular. For Estonia the conference has special importance because 20 years ago, in 1989 the first activities in organic farming were started by the Biodynamic Association of Estonia. The present conference is organized thanks to joint efforts of the NJF, the Ministry of Agriculture of Estonia, the Estonian University of Life Sciences and the Estonian Organic Farming Foundation. These proceedings contain papers presented at the conference.

Deep gratitude is expressed to the members of the international organizing committee consisting of Eve Ader, Ministry of Agriculture of Estonia, Jon Magne Holten, Oikos, Vibeke Langer, University of Copenhagen, Arja Nükanen, MTT Agrifood Research Finland, Marika Mänd, Estonian University of Life Sciences, Karin Svanäng, Swedish University of Agricultural Sciences, Vytautas Pilipavicius, Lithuanian University of Agriculture and Airi Vetemaa, Estonian Organic Farming Foundation. Thanks are also due to local organizers Darja Matt, Ragnar Leming, Sirli Pehme and Elen Peetsmann from the Estonian University of Life Sciences. Luule Metspalu deserves special thanks for help in editing the conference proceedings – the Special issue of Agronomy Research. On behalf of the organizing committee I wish all the participants and quests of the conference inspiring days of the exchange of experience and new ideas for promoting our common goals in developing organic farming.

Anne Luik Chair of the Organizing Committee Professor, Vice Rector Estonian University of Life Sciences







Special issue I

Plant production:

Soil fertility and nutrient management
Crop rotation, fertilisers and cultivars
Cropping Systems
Weed and pest management
Organic farming and environment