

Dr Marja Ruohonen-Lehto

Nationality: Finnish

Date of birth (Optional): October 17, 1957

Participation in COST Action FP0905:

Member of MC, Member of STSM committee, Member of WG 2

ESR at the time of starting the Action: No

Contact data:

Institution/Organisation: Finnish Environment Institute (SYKE)

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Personal webpage (if available)

Institute web page: www.environment.fi/syke

Research area and species (key words):

Molecular genetics; microbiology; virology; biosafety research on genetically modified (GM) plants; environmental risk assessment of GM organisms; monitoring environmental effects of GMOs

CURRICULUM VITAE (Max 2 pages)

<p>Present position Senior Adviser, Finnish Environment Institute (since 1995-present) Environmental risk assessment and risk management of genetically modified organisms</p>
<p style="text-align: center;">University education:</p> <p>Doctor of Philosophy, 1998 (Genetics) Licentiate of Philosophy, 1987 (Genetics, Microbiology, Virology) Master of Science, 1985 (Genetics, Microbiology, Virology) All degrees from the Division of Genetics, Department of Biosciences, University of Helsinki</p> <p style="text-align: center;">Professional Career</p> <p>1995 - present; Senior Adviser, Finnish Environment Institute; Environmental risk assessment and risk management of genetically modified organisms Post-doctoral studies: April - December 2000; Visiting Research Fellow, Institute of Biological Sciences, University of Wales, Aberystwyth, UK April - December 2000, July - August 2001, July - August 2002; Visiting Research Worker, Institute of Grassland and Environmental Research, Aberystwyth, UK</p> <p>1993 - 1995; Researcher/Junior Lecturer, Department of Genetics, University of Helsinki 1991 - 1992; Visiting Scientist, Iowa State University, Department of Animal Science, Ames, Iowa, U.S.A. 1987 - 1991; Junior Fellow (The Academy of Finland), Institute of Biotechnology, University of Helsinki 1985 - 1987; Researcher, Institute of Biotechnology, University of Helsinki</p>
<p>Others</p> <p>Membership of national professional bodies:</p> <ul style="list-style-type: none">• The Board for Gene Technology, an expert and a presenting official (1995-present)• The Advisory Board for Biotechnology, member and deputy member (1996-present)• The Advisory Board for Genetic Resources, member (2007-present)• Expert Group of the Ministry of Agriculture and Forestry on co-existence, member and deputy member (2004-2005)• Agricultural Research Board of the Ministry of Agriculture and Forestry, member (1999-2001)• Several <i>Ad Hoc</i> -working groups on diverse issues related to GMOs and biosafety <p>International activities:</p> <ul style="list-style-type: none">• National expert in several EU expert working groups under the directive 2001/18/EU (e.g. risk assessment, risk management, monitoring), in the meetings of the competent authorities of the directive 2001/18/EU and other EU forums dealing with issues related to GMOs and biosafety since 1995• The chair of the working group on transgenic fish in the Norway-Canada workshop on risk assessment for emerging applications of living modified organisms (Montreal, Canada, June 2007)• Active participation in numerous scientific meetings on GMO risk assessment and biosafety since 1996• Vice-chair of the OECD Working group on the harmonization of regulatory oversight in biotechnology since 2007, head of the delegation since 1998 and member since 1996• National expert (risk assessment, risk management) in the Finnish delegation in the COP-

MOP/3 and COP-MOP/4 to the Cartagena Protocol

- National expert in the EU Council Working Party on International Environment Issues (WPIEI) on biosafety since 2006
- Nordic-Baltic collaboration projects on biosafety and risk assessment since 1995-

Research Projects (relevant to Action)

Selected Publications and Communications (relevant to Action)

Schwager, M., Törmäkangas, K., Ruohonen-Lehto, M. *et al.* (2010). Life history perspective – risk assessment of transgenic oilseed rape (*Brassica napus* L.) in Finland. Manuscript in preparation.

Ruohonen-Lehto *et al.* (2010). Does GM-herbicide resistance help in persistence of white clover (*Trifolium repens* L.)? Manuscript in preparation.

Laitinen P., Siimes K., Eronen L., Rämö S., Welling L., Oinonen S., Mattsoff, L. & Ruohonen-Lehto M. (2006). Fate of herbicides glyphosate, glufosinate-ammonium, phenmedipam, ethofumesate and metamitron in two Finnish arable soils. *Pest Management Science* **62**: 473-491. (On GM, herbicide-tolerant sugar beet).

Lohtander-Buckbee, K., Törmäkangas K. & Ruohonen-Lehto M. (2004). Ecological and biological research methods applicable for assessing and monitoring risks of genetically modified plants. In Finnish. *The Finnish Environment* **736**. Finnish Environment Institute. Edita Prima Ltd. Helsinki. 130 p.

Kemppinen, A., Pitkäljärvi, J. & Ruohonen-Lehto, M. (2003). Monitoring environmental effects of genetically modified organisms. In Finnish. *The Finnish Environment* **621**. Finnish Environment Institute. Edita Prima Ltd. Helsinki. 52 p.

Kostia S., Ruohonen-Lehto M., Väinölä R. & Varvio S.-L. (2000). Phylogenetic information in inter-SINE and inter-SSR fingerprints of the Artiodactyla and evolution of the Bov-tA SINE. *Heredity* **84**: 37-45.

Ruohonen-Lehto M.K., Renard C., Rothschild M.F., Edfors-Lilja I., Kristensen B., Gustafsson U., Larson R.G. & Varvio S.-L. (1998). Variable number of pig class I genes in different serologically defined haplotypes identified by a 3'-untranslated region probe. *Animal Genetics* **29**: 178-184.

Pitkäljärvi, J. & Ruohonen-Lehto, M. (1998). Guidelines for the assessment of environmental effects of genetically modified organisms. In Finnish. *Environment Guide* **44**. Finnish Environment Institute. Edita Ltd. Helsinki. 44 p.

Edfors-Lilja I., Ellegren H., Winterö A.K., Ruohonen-Lehto M., Fredholm M., Gustafsson U., Juneja R.K. & Andersson L. (1993). A large linkage group on pig chromosome 7 including the MHC class I, class II (DQB), and class III (TNFB) genes. *Immunogenetics* **38**: 363-366.

RESEARCH INSTITUTE

Introduction to the Finnish Environment Institute (SYKE)

The Finnish Environment Institute (also known as SYKE, after the Institute's Finnish acronym) is both a research institute, and a centre for environmental expertise. SYKE's research focuses on changes in the environment, and seeks ways to control these changes. Our expertise is based on long-term environmental monitoring, wide-ranging research results, and the Institute's highly-qualified staff.

Multi-disciplinary research into environmental issues

SYKE's research programmes assess environmental problems from a multi-disciplinary perspective, by integrating socio-economic considerations into scientific research. Research may focus on global environmental issues such as climate change and declining biodiversity, or on regional or local issues.

Expert help on environmental problems

SYKE's expert services can provide vital expert assistance on a wide-range of environmental issues for administrators, local authorities, industries, firms and other organisations. We can produce detailed environmental assessments drawing on expertise from many fields. SYKE also closely monitors environmental trends and the state of the environment in Finland in co-operation with regional environmental administration.

Information and co-operation

SYKE serves as the national centre for environmental data in Finland. The data stored in our information systems is widely used for environmental monitoring, environmental modelling, forecasting and impact analysis. SYKE co-operates closely with other research institutes, universities, environmental experts and businesses, both in Finland and internationally.

Organisation of the Finnish Environment Institute SYKE since 1 January 2010

The activities of SYKE take place in seven centres: the Freshwater, Marine Research, Natural Environment, Consumption and Production, Environmental Policy, and Data and Information centres, and the Laboratories. The main tasks of these centres are research, development and production of various services.

In order to coordinate and develop research activities associated with the whole organization, particular programmes will be launched. The strategic programme for climate change started at the beginning of 2010 and the new research programmes will be published in 2010.

For maintenance and support functions at SYKE, there are the units for Administrative Services and Communication, and the General Director's staff. The Chemicals Division is a special unit under the General Director. Its activities will at the beginning of 2011 be taken over by the new Safety Technology Authority (TUKES).