Coordinated Call for a Transnational Research Activity under the ERA-ARD Net Bioenergy – an opportunity or threat for the rural poor

Project Title: Reduction of impact of biofuel production to food stock

Project Summary:
Project objectives and main activities are:

- To investigate and select oil-seed plants, which could be grown in the soil of poor quality and with less inputs of mineral and organic fertilisers, also which could be grown as under sowing for food crops seeking to reduce usage of herbicides.
- To evaluate their growing possibilities under different climatic conditions.
- To investigate optimal mixture composition of esters, made from oil of the selected plant seeds, waste fat of animal origin and used cooking oil, satisfying standard requirements as well as usage of glycerol as biofuel component.
- To investigate and to evaluate possibilities to use as forage the following waste products of oil and biodiesel fuel production: oilcake, production phases of phospholipids and glycerol.
- To evaluate impact of the produced biodiesel on exploitation properties of diesel engine and gas emissions.
- To perform technical-economic grounding of the impact of the developed biodiesel fuel production technologies on the changes in production volumes in food industries.
- Investigation of the role of regional, national and public policies for bioenergy on food security.

Project Outputs:

- Growing technologies of new oil-seed plants, which could be grown in the soil of poor quality and with less input of mineral and organic fertilisers, also which could be grown as under sowing for food crops seeking to reduce usage of herbicides.
- Biodiesel fuel production technologies by using new kinds of oil and fatty waste.
- Evaluation of influence on environment of new kind of biodiesel fuel.
- Evaluation of the impact of the development of biodiesel fuel production technologies on the changes in production volumes in food industry.
- Evaluation of the role of regional, national and public policies for bioenergy on food security.

Start date: 02.01.2009
Duration: 3 years
For further information
Research Coordinator: Prutenis Janulis
Lithuanian University of Agriculture, Lithuania
Contact
Tel.: +370 37 75 22 92
Fax: +370 37 75 22 92
Email: prutenis.janulis@lzuu.lt
Website: http://www.lzuu.lt
Partners:
Institute of Fuels and Renewable Energy (IFRE), Poland
National University of Life and Environmental Sciences of Ukraine (NULESU), Ukraine