

Press release

pre agro – The Largest European Research Project on *Precision Farming* is on its Way

In *pre agro* 26 partners from science, research and development, from public and private services as well as farmers are working in 22 modules to enhance precision farming. This project is probably the largest joint R+D activity on precision farming in Europe. It follows an interdisciplinary approach on analysing how precision farming can provide key issues of sustainability in land use and develops tools, protocols and standards for an integrated information management with precision farming. One final goal is a cross-sectoral solution in managing the flow of information from farms into relevant levels of the value-added chain in food production and vice versa. Scientific modules develop methods for non-invasive site and crop characterisation and link these information with decision making in crop management.

The project started in 2005 for three years. A preceding four year project of similar size provided key results and tools. The new project pulls together German expertise in site specific crop production, geo-sciences, information management and farming business. The research is concentrated on four different topics: (i) indicators of sustainability in crop management from the viewpoint of the value-added chain; (ii) harmonized and automated management of information for precision farming on the farm level; (iii) integrative analysis of site properties from fields and (iv) smart crop management with precision farming.

The project is a transdisciplinary project, i.e. also stakeholders from farms, organisations and consumers are integrated. The experiments are done in Germany on the fields of two farms with different sizes.

The project will provide:

- basics and methods for information systems in the use of precision farming (automated data collection, modelling of information flows within farms, cross linking of information within crop management),
- integrative information management for precision farming on the whole farm (information retrieval and information processing, linking external databases and standardising information exchange)
- basics, methods and tools to support decision making in precision farming (non-invasive site analysis with soil surveying and remote sensing, close sensing on the canopy, integrated crop management),
- technical steps, standards (e.g. agroXML) to exchange relevant information from crop production with organisations in the value chain of food production and vice versa,
- analysis of the impact of a broader adoption of precision farming on farm economy, landscape ecology and national economy,
- necessary steps in higher education and extension to promote precision farming in practical farming.

The project was invited to present its activities at the world's leading exhibition for agricultural machinery the *Agritechnica* in Hanover, Germany in November 2005. There the project also conducted a survey on the acceptance of precision farming through farmers. More than 2,000 one-to-one interviews were conducted with the visitors of the exhibition, which came from 75 nations. The results will be presented soon.

This project is funded by the German Federal Ministry of Education and Research (BMBF, Bonn and Berlin), grant reference 0339740/2. Further information on the project can be found at www.preagro.de.

Publication permitted with no charge, a copy is kindly requested.

Public relations of *pre agro*:

Dr. Reinhart Schwaiberger, phone +49-(0)8505 915300; email: info@diva-enterprises.de
Diva Enterprises, Hutthurm

Scientific coordination of *pre agro*:

Dr. Frank Dreger, phone: +49-(0)33432 82257, email: dreger@zalf.de
Dr. Jürgen Schwarz, phone: +49-(0)33432 82423, email: jschwarz@zalf.de
Leibniz-Centre for Agricultural Landscape Research (ZALF) e. V.; Müncheberg (www.zalf.de)