## Organic Farming Research Worldwide – An Overview

By HELGA WILLER

FIBL SWITZERLAND

WEB: WWW.FIBL.ORG

Research in organic farming has increased considerably in recent years. Up to now, activity has been greatest in Europe, but recently organic research has increased in other parts of the world, and more and more players are appearing on the scene. Research is mostly carried out in a national context, but international coordination and cooperative efforts are increasing. This article summarizes some key facts about organic farming research worldwide.

## **Key institutions**

Europe is the cradle of organic farming research; and it was where the first biodynamic research was conducted as early as the 1920s. Today there are many specialized organic research institutions. For instance, there are private institutes like Forschungsring (Germany), FiBL (Switzerland, Germany, Austria), the Organic Research Centre Elm Farm (UK), the Louis-Bolk-Institute (NL), the Bioforschung Austria and government-funded institutes such as the International Centre of Organic Food Systems (ICROFS) in Denmark.

Furthermore there are many specialized university chairs and institutes (e.g. in Bonn, Budapest, Kassel, Munich, Newcastle, Tartu, Vienna, Wageningen, and Warsaw). In addition, many key agricultural research institutions in Europe have taken organic projects on board, even where the institution has no specific organic focus, like Aarhus University in Denmark; Wageningen University and Research Centre in

the Netherlands; INRA, France; von Thünen-Institute, Germany; Agroscope, Switzerland; Gumpenstein, Austria.

In most other parts of the world organic farming research is mostly carried out at universities, even though only a few have specialized university chairs. The universities that do include the University of Georgia in Tbilisi, at Iowa State University and Dan Kok University in the Republic of Korea. There are numerous other universities that, even though they have no chairs for organic farming, play an important role in organic farming research and teaching. In Africa, for instance, two universities in Nigeria, the Universities of Ibadan and of Abeokuta, and in Uganda, the Martyrs University, have a leading organic research role in the continent. In Latin America, the Autonomous University of Chapingo in Mexico and the University of La Molina in Peru have been important in the development of organic farming research. In North America there are many universities with research and teaching activities, Washington State University being one of them.

However, state research institutes are also key players. In Canada, there is the government-funded Organic Centre of Canada (OACC), which has the mandate to carry out research but also coordinate related activities in the country.



The Brazilian Agricultural Research Corporation (EMBRAPA), now has scientists at 27 research centres working on a common project entitled "Scientific and technological basis for the development of organic agriculture in Brazil." In Australia, too, organic research is mainly carried out at state research institutes.

Outside Europe, there are only few private organic research institutes. One of them is the Rodale Institute in the US.

## Some key funding programs

In many parts of the world organic farming research is largely government-funded, in some cases, though, the organic industry also contributes some funding. Few countries have specific funding programs for organic farming research, however, an increasing number of research projects are conducted by state research institutes as well as universities.

In Europe, funding mechanisms tend to be through government support within the framework of specific organic research programs to which (mainly but not exclusively) state institutions can apply for funding. In Germany government support for organic farming research takes place within the framework of the Federal Organic Farming Scheme (BOEL). The BOEL money is available to the whole research community, consisting of state research stations, universities, private institutes and consultants. In Switzerland, organic farming research in both the private, e.g. FiBL, and state research stations, is carried out under the mandate of the Federal Office for Agriculture (FOAG). In addition, FiBL has succeeded in attracting substantial funding from the organic sector and industry.

Under the European Union's Research Framework Programmes a large number of organic farming projects have been funded, the



Source: FiBL

first having been started at the beginnings of the 1990s. A second noteworthy initiative is the CORE Organic project in which 11 government funding agencies work together to fund common research projects. This cooperative project, funded under the European Unions' ERA-Net scheme between 2004 and 2007 (phase II has just started), launched eight transnational organic farming projects in 2007.

In the US there are two major funding schemes: the Cooperative State Research, Education and Extension scheme (CSREES) and the US Farm Bill. For 2009, 17.3 million US dollars were granted under the CSREES scheme. Under the current US farm bill, 105 million US dollars will be made available (2009-2012).

The first African
organic conference
with a strong
scientific focus took
place in May 2009,
organized by the
Martyrs University in
Kampala, Uganda.

The Australian Government has been the major investor in organic research and development in Australia. One of the current research priorities for organic farming is to develop an Australian Organic "Hub," through which gaps in organic research topics can be identified and research institutions and partners can collaborate.

# International coordination and cooperation efforts

#### Conferences

The first international conferences on organic farming research were the international scientific conferences of the International Federation of Organic Agriculture Movements (IFOAM). The first one took place in Sissach, Switzerland in 1977, then called the "International IFOAM Scientific Conference." Since 2005 this conference (now named "Organic World Congress") has been held in cooperation with the International Society of Organic Farming Research (ISOFAR), which shares the responsibility of organizing the scientific part of the each congress. The scientific conference proceedings give a unique overview of ongoing organic farming research worldwide and of the key players.

Regional scientific conferences are becoming more and more important. There was an Asian conference in 2008, hosted by the Dan Kok University in South Korea. The first African organic conference with a strong scientific focus took place in May 2009, organized by the Martyrs University in Kampala, Uganda; the next one will be held in Zambia in 2012. A very successful initiative is the Latin American/Caribbean series of conferences for producers and researchers; the fourth taking place in October 2009 in El Salvador.

#### **Networks**

In 2003, the International Society of Organic Agriculture Research (ISOFAR) was founded by the German Institute of Organic Agriculture (IOL) in Germany and the Research Institute of Organic Agriculture (FiBL). The goals of ISOFAR are to promote research in organic agriculture by facilitating global cooperation in re-





Source: FiBL

search and education and knowledge exchange. The individual scientist members of ISOFAR are from all parts of the globe, although the majority reside in Europe where ISOFAR is based.

At the recent Africa Organic Conference in Kampala, Uganda, the Network for Organic Agriculture Research in Africa (NORA) was launched with the aim of boosting organic farming research in the continent. There are other transnational initiatives, including the Mediterranean Organic Agriculture Network (MOAN). Coordinated by the Mediterranean Agronomic Institute in Bari, MOAN has research as its main focus. There are also numerous national initiatives, such as the Italian Network of Organic Researchers (RIRAB) and the Colloquium of Organic Researchers (COR) in the UK.

Together with IFOAM, ISOFAR facilitated a discussion among scientists from European countries to draw up an organic research agenda for

the next 20 years. Published in 2008, this agenda constitutes the first publication of the Technology Platform TP Organics, which joins the efforts of

The International
Society of Organic
Agriculture Research
(ISOFAR) was founded
in 2003 to facilitate
global cooperation
in research
and knowledge
exchange on Organic
Agriculture.

industry and civil society in defining organic research priorities and defending them vis-à-vis the policy-makers. The platform was launched in December 2008. TP Organics is hosted by the

IFOAM EU Group, based in Brussels. Recently a technology platform was also set up for Hungary.

### Journals, websites and newsletters

Journals, websites and newsletters are important communication tools for researchers. Increasingly, researchers are also publishing in general peer reviewed journals and this has helped increase the scientific credibility of organic farming research. Recently ISOFAR has announced that it will launch a scientific journal in association with Springer Science.

The open access Organic Eprints Archive has almost 10,000 entries now. Only two percent of the papers are from outside Europe. It would be good if more research institutions would use this archive. A disadvantage is that many peer-reviewed scientific papers are subject to the copyright of the publishers and cannot, therefore, be archived publicly.

#### **ORCA**

The proposed Organic Research Centres Alliance (ORCA) intends to internationally network and

strengthen existing institutions with scientific credentials and to empower them into becoming centres of excellence in transdisciplinary organic agriculture research. ORCA is a joint initiative of the Food and Agriculture Organization of the United Nations (FAO), the Swiss Research Institute of Organic Agriculture (FiBL) and the Danish International Centre for Research in Organic Food Systems (ICROFS). More partners, including IFOAM and ISOFAR, have joined since its establishment.

#### Outlook

Organic farming research has developed rapidly in the past few years. Many countries, including developing countries, are increasing their efforts to promote organic farming research. It is expected that in the near future research output will increase substantially as well as coordinated projects and cooperative efforts.

Literature related to this text is available at www.organic-world.net/research.html

Key Links	
www.isofar.org	International Society of Organic Agriculture Research (ISOFAR)
www.coreorganic.org	CORE Organic
www.organic-center.org	Organic Centre
www.orgprints.org	Organic Eprints
www.fao.org/organicag/oa-portal/en/?no_cache=1	Organic Research Centres Alliance (ORCA)
www.qlif.org	Quality Low Input Food (QLIF)
www.tporganics.eu	Technology Platform TP Organics

