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Organic Farming in Spain 2007

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Key documents

- Organic farming statistics at the MAPA Homepage
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1 Introduction

Spain is a European Mediterranean country where organic production is still better developed than the domestic organic market. Reasons for this situation are:

- a) The natural conditions of the land allow a higher diversity of production;
- b) A relatively moderate use of agro-chemicals in most rural areas of the country;
- c) Numerous and various agricultural ecosystems;

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- d) A favourable climate for early cultivation;
- e) A domestic organic market with unstable distribution and trade structures.

Approximately 80 % of the typical Mediterranean crops grown organically are exported, mostly to the central and northern European countries, especially in the winter season.

The 'pioneer' organic farmers were strongly motivated to produce organic products for internal and local consumption and were organized in cooperatives. One national support association for organic farming helped conventional farmers to convert to organic, making contracts for those products for which traders (mostly from other European countries like France, Germany or United Kingdom) could guarantee a market.

Today the organic farming sector is more complex, characterized by highly diversified production in all regions. More conventional farmers are converting to organic farming. They are better organized and have more information available than the 'old' organic farmers, because conventional farmers' organizations now have organic sections providing support.

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Currently organic farming represents the most realistic and attractive economic alternative to conventional agriculture, so that more young farmers decide to stay in the rural areas.

2 Development of Organic Agriculture

Organic farming in Spain began at the end of the 1970s, with small farms linked to small organic consumer groups in the cities, and it was basically promoted by young people coming from the cities. The first initiatives related to organic production and organic consumption were located in Catalonia.

The Spanish organic farming sector has shown a slow but steady growth in the course of its development. Although the introduction of agri-environmental support measures for organic production through the Common Agricultural Policy came later than in other EU countries. After the introduction of support payments for organic farming in the past five years, a speeding-up has been observed. As shown in the figure, the area of land devoted to organic farming grew very slowly up until 1995. From 1996 to 2003 a substantial increase in the number of growers and land under organic management took place, due to increases in the regions of Castilla-León, Extremadura and Andalucía, partly due to the agri-environmental support scheme for organic farming.

In the year 2004 a short stagnation in the growth of land under organic cultivation can be seen as well as in the number of organic operators, especially organic farmers (see figure). The same trend was observed in

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other EU countries as well.

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Figure: Development of organic farming in Spain 1991-2006 (Click on picture to enlarge)

Source/Further information is available at the MAPA homepage.



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Figure: Development of organic operators in Spain 1991-2006

Source/Further information is available at the $\underline{\mathsf{MAPA}}$ homepage.

As can be seen in the figure, the number of organic farms increased by more than 10.28 % from the year 2001, from 15,609 to 17,214 organic farms in 2006. This increase was even more impressive for organic processors: it doubled from 914 (2001) to 1,942 processors (2006). The same goes for importers: there were 28 in 2001 and 55 in 2006. The total number of organic operators is 19,211. The area of organically managed land increased from 485,079 hectares to 926,390, and thus nearly doubled. Currently around 3.5 % of agricultural land is organic. The average size of an organic farm is greater than in conventional farming.

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One relevant aspect in the development of organic farming in Spain over the last years has been the rapid growth of organic husbandry. The number of organic farms with animals has increased from 1,879 in 2005 to 2,428 in 2006. The number of head of organic animals has increased from 359,196 to 489,222 in the year 2006.

3 Regional Distribution of Organic Farms

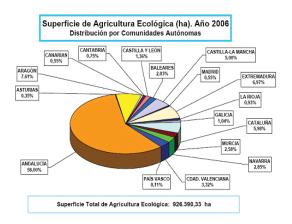
At the start of the 1990s, the region of Catalonia was the first in areas devoted to organic farming and the number of organic industries; since 1993 the region of Andalucía has taken the lead.

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Currently the region with the highest number of organic farms is Andalucía (6,195 farms), followed by Extremadura (3,671 farms). Andalucía accounts for more than the half of organic land in Spain with

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537,269 hectares, followed by Aragón (70,515 hectares). In the case of Andalucía this growth can be attributed to the regional Organic Action Plan which supports the development of organic agriculture with different measures.



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Figure: Distribution of organic land by region 2006 (Click n picture to enlarge); <u>Source/Further information is available at the MAPA homepage</u>

Other Spanish regions with significant numbers of organic farms are Castilla-La Mancha (1,121 farms), the community of Valencia (991 farms) and the Canary Islands (909 farms). Recently in some other regions the number of farms has increased substantially, due to improved support from the regional administrations.

Other regions with a significant amount of organic land are Extremadura (64,557 hectares), Catalonia (55,355 hectares) and Castilla-La Mancha (46,335 hectares).

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In terms of processing companies, Catalonia holds the first position with 386 companies, followed by Andalusia with 351, Valencia with 181, Murcia with 124 and Aragón with 111 organic industries. There are only 55 importers; most of them are located in Catalonia (31).

4 Farm Structure and Land Use

The property structure in the South and the middle of the country is characterized by large farms, with agricultural workers managing the land. In the North and in some parts of the East at the Mediterranean, the agricultural land is highly splintered. Most farms here are family-run.

One peculiarity of organic farming in Spain is the great diversity of production, due to the variety of production systems, climate and crops (from pastures to subtropical crops).

On the other hand, the amount of organically farmed land is not directly related to the number of farms in a region. For example, in Aragón 727 producers cultivate 70,515 hectares. And in the Canary Islands alone 909 producers cultivate 5,113 hectares

The main use of organic agricultural land in Spain are for pastures, forage and prairies (378,820 hectares), followed by forest and wild collection (89,451 hectares). The main organic crops are cereals and leguminous crops (113,304 hectares), followed by fallow land (55,158 hectares) as the most significant land use. Olive trees (93,431.90 hectares), dry fruits, like almond (44,600 hectares); aromatic and medicinal plants (15,051 hectares); vineyards (16,831 hectares), seedling and nursery plants (7,419.94 hectares), fruit (3,866 hectares),

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including citrus and tropical fruit (2,184 hectares) and vegetables (5,039 hectares).

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Table: Area (hectares) by crop type in organic farming in Spain, 2006

Land use	2005	2006	Change
Cereals and legumes	96'313,94	113'304.55	19'990.61
Vegetables	3'854,04	5'039.28	1'185.76
Citrus	1'810,00	2'184.24	374.24
Fruit trees	3'565,70	3'866.32	300.62
Olive trees	91'485,20	93'431.90	1'946.70
Vineyards	15'990,58	16'831.56	840.98
Dry fruit (mostly almond trees)	41'360,37	44'600.11	3'239.74
Subtropical fruit and bananas	635.42	773.24	137.82
Aromatic and medicinal plants	14'628.44	15'051.32	422.88
Forest and wild collection	184'807.03	189'451.81	4'644.78
Pastures, forage and prairies	268'239,47	378'820.08	110'580.61
Fallow (set aside) and green manure	76'445.82	55'158.74	21'287.08
Seedlings and small plants	2'828.21	7'419.94	4591.73
Others	5'605.43	457.73	5147.7
Total	807'569.65	926'390.33	118'821.06

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In 2006 there were 2,428 farms with animal husbandry, of which 1,135 are cattle and 625 sheep farms. These farms were mainly situated in Andalucía (1,267) and Catalonia (334). However, animal farms also exist in all the regions of Spain, like the Balearic Islands or Galicia.



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Figure: Distribution of Spanish organic land by crops and crop groups. Source MAPA 2007; Source/Further information www.mapa.es/es/alimentacion/pags/ecologica/documentos.htm

5 Processing

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Although the size of the organic processing industry in Spain is still small, it has been growing continuously in the last five years at an annual rate of 10 % to 22 %.

The bulk of the firms are pre-processing companies such as oil mills or businesses canning fruits and vegetables or peeling nuts. They usually produce for external markets (the European Union and - in the oil and wine sector - the United States and Japan). A small number of organic processors produces bread and other cereals, wine, juices, canned fruit and vegetables, soya products, bread spreads and baby food.

The most relevant processing industries deal with vegetable production, wine and olive oil. The animal processing industry is growing faster, especially the meat industry.

Products that keep for a short time only (e.g. milk) are distributed throughout the country via small firms with good, specialized distribution systems. These firms, however, still sell health food products for the most part and not primarily organic products. The conventional processors have not yet directly entered the organic market, although their awareness is growing.

The majority of organic processing industries are owned by one family, normally not involved in cooperative structures or associated with other processors, and are not connected with big warehouses or other distribution systems.

6 State Legislation, Standards and Certification

6.1 State Legislation and Standards

Organic farming was first regulated by the private standards of Vida Sana (Vida Sana in 1982 and 1984) and the Organic Farming Coordination, CAE in 1984 and 1985.

Organic Farming was officially regulated in Spain in 1989, with the National Regulation of Generic Denomination 'Organic Agriculture', which was applied until the EU Regulation 2092/91 on Organic Agriculture came into force. Originally, the National Regulation Council for Organic Agriculture (CRAE) was responsible for monitoring and inspecting organic farming produce all over the country.

In 1989, a national law concerning the criteria for the labelling of organic production was approved. The CRAE (Regulation Committee on Organic Agriculture; Consejo Regulador de la Agricultura) was established as the authority in charge of all matters related to organic agriculture.

After that, a Royal Decree (RD) 1852/1993 established a new regulation for organic farming, based on EU Regulation (CEE) 2092/91, and at the same time the Spanish regions assumed official responsibility in the monitoring of organic production. Under the same law (RD 1852/1993) the Advisory Group CRAE of the National Ministry for Agriculture, Fisheries and Food MAPA was created. This group includes organic stakeholders, regional and central authorities as well as the directors of the regional public certification bodies.

This CRAE Council has also structured different working groups. One of the most active is called 'Rules, Monitoring and Inspection'. This working group has developed and set six standards for areas not covered by the Council regulation 2092/91, mostly in organic animal production. The most relevant areas are:

- Standards for rabbit production
- Standards for processing of compounded feed for livestock
- Standards for milk and processing of dairy products
- Standards for traceability of meat and meat products in

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slaughterhouses

- Standards for deer (Cervus elaphus) production
- Standards for aquaculture

These common standards are voluntarily adopted and implemented at regional level by the authorities responsible. Regional authorities can also develop and implement their own standards in some specific areas, as was the case for the CAAE aquaculture standards in Andalusia.

In 2006 this working group developed organic wine standards with the participation of organic stakeholders. This standard has now been approved as a national standard. So far the organic stakeholders are not formally involved in any specific structure for organic farming standards.



Figure: The CRAE logo and the Spanish version of the European organic logo

Until 2001, the denomination 'ecológico' (ecological), 'biológico' (biological) and 'orgánico' (organic) and the corresponding abbreviations 'eco' and 'bio' were protected trough EU regulations 2092/91 and 1804/99. Food labelled with these terms must be produced according to the laws related to organic farming. In 2001, the Spanish Government adopted a law which allowed the use of the term bio and biological for products not coming from organic farming. Since January 2006 these terms have again been protected.

6.2 Certifying Organizations

In Spain a state public inspection and monitoring system was introduced in 1989 as well as the national CRAE logo (see the figure). After the approval of EU regulation 2092/91, a decentralization process began in Spain. In 1993, MAPA transferred responsibility for monitoring organic production as well as promotional tasks to the 17 Spanish 'Autonomous Regions' (AC). The transfer occurred progressively between 1994 and 1997. Most of the Autonomous Regions assumed the basic pattern of the CRAE. In the first stage the same national logo was adopted by all the regions, but the acronyms of the public monitoring bodies were changed or supplemented (see table).

Year	Region	Acronym Name	Webpage
		Ivanie	
1993	Andalucía	CAAE *	
1994	Valencia	CAE-CV	www.cae-cv.com
	Cataluña	CCPAE	www.ccpae.org
	Balearic Islands	CBPAE	www.cbpae.org
1995	Castilla y León	CAECyL	www.caecyl.com
	Aragón	CAAE	www.caaearagon.com
	Canary Islands	CRAE	www.gobiernodecanarias.org/agricultura/
1996	Madrid	CAEM	www.cpaen.org

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	Euskadi	CVPAE	http://www.nasdap.ejgv.euskadi.net /r50-4633/es/contenidos /información/5671/es 2729/es 12935.html
	Asturias	COPAE	www.copaeastur.org
	La Rioja	ECCYSA / CPAE	www.larioja.org/agricultura
	Extremadura	CEPAE	http://aym.juntaex.es/organizacion/ explotaciones/cepae/
1997	Galicia	CRAEGA	www.craega.es
	Navarra	CPAEN- NNPEK	www.cpaen.org
	Cantabria	ODECA (CRAE)	www.odeca.com/
1998	Extremadura	CRAEX **	www.juntaex.es/consejerias /eic/dgc/ecologica/consejo.html
1999	Murcia	CAERM	www.caermurcia.com

^{*} Now CAAE Andalucía is a private association. ** Monitoring body for processors

In some Autonomous Regions the certification, inspection and monitoring of organic farming, was assumed directly by the Regional Administration governments, on a provisional basis, until the specific council or committee was created by law.

In three of the Autonomous Regions (La Rioja, Basque country and Castilla La Mancha), the regional Administration itself has undertaken these tasks, without creating any stakeholder structure or a council for them.

In most of the Autonomous Regions, regulation councils for Organic Farming (Andalusia, Asturias, Balearic Islands, Canary Islands, Cantabria, Castilla-León, Catalonia, Galicia, Murcia and Navarra (also Extremadura for organic processed and imported products)) or organic farming committees (Aragón, Madrid and Valencia (also Extremadura for organic production)) were created.

In Extremadura, there are two separate structures, one for organic production and the other for processed and imported organic products: Extremadura Committee for organic agriculture production (CEPAE) and Regulatory Council of Extremadura for organic Agrofood (CRAEX), respectively.

Councils and Committees have a broader stakeholder representation, and are obliged to reserve some seats for the Regional Authorities, which have no voting rights. The board members must be elected every four years by the registered organic farmers. They do not participate in the inspection tasks, as this is done by professional employees or independent contractors acting as inspectors in accordance with EN-45011

The legal function of the Councils/Committees is to organize and supervise the certification system for organic farming, to promote organic farming products and to advise the regional government in policy actions. The difference between Councils and Committees is only their legal framework and name; in practice, both operate with similar rules. Councils and Committees have a special professional team for inspection, monitoring and certification of organic products, separate from the promotion activities. Currently, MAPA assumes responsibility for the monitoring of imports from third countries, and represents Spain in the EU Commission.

The public funding from the Regional Authorities is different in each autonomous region, ranging from 60 to 90 % of the total budget. Therefore we talk about a semi-public funded system, as operators have to organize the monitoring services and to pay for these services.

These entities have also to promote organic farming and organic food

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separate from the monitoring tasks. This system ensures the participation of the organic operators in the certification process and is trustworthy for consumers in Spain, as the majority trust only publicly supported structures, although gradually consumers also trust private certification bodies

Currently a private system is in force in two regions, Andalucía and Castilla La Mancha, and a mixed system operates in Aragon. Some private trademarks, like that of Vida Sana, or more recently of SEO (Spanish Society of Ornithology) Bird-Life, are used as recommendation seals for consumers.



Logo of Vida Sana and CAAE, two private trademarks

Consumers can distinguish organic products on the market via numbered labels or counter labels which all packed produce units have to include, besides their own brand or specific logo, with the name or code of the monitoring body or authority and the legend 'Organic Farming'.

That means that the organic farm or organic processor where the organic product has been produced is under one inspection or monitoring system, i.e. the corresponding authorities or monitoring entities of each Spanish Region. That is the only official guarantee for consumers that this produce is of this quality and complies with the rules established under Regulation (CEE) 2092/91

Recently the parliament of Catalonia approved a special regulation in order to separate the tasks of the semi-public certification bodies in organic farming from the regional authority's area of responsibility regarding standard setting and accreditation.

Five of these semi-public regional certification bodies have an elected president, who belongs to the organic section of the conventional general small and medium-sized farmers' organization COAG, a member of COPA-COGECA.

Since 1993, there has been a National Regulation Committee for organic agriculture (CRAE), established as an advisory body for the Ministry of Agriculture, Fisheries and Food MAPA, on the issues of standards, research, support and monitoring. Furthermore, the new

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CRAE is a forum for exchange between representatives of organic producers, processors, traders and their associations as well as consumers and the relevant authorities, managed by the Government Central Administration of Spain.

All regional authorities and the technical directors of the regional public or private certification bodies meet regularly once a month with the MAPA Central Authorities to coordinate implementation or organic certification rules. Some of the regional certification bodies (11 in total) are working together in INTERECO (Asociación Agroecológica para la Promoción de la Agricultura Ecológica (www.intercoweb.es), which was originally launched to structure an inputs certification system in organic farming.

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Recently some additional private certification bodies were authorized in Andalusia and in Castilla-La Mancha (see www.mapa.es).

7 State Support for Production, Promotion and Action Plans

7.1 Organic Promotion Campaign

In autumn 2006 the Spanish Ministry of Agriculture MAPA launched a Campaign for Organic Farming (2006-2008), with the slogan 'Cultura-Lógica, Agricultura Ecológica, es cultura, es de lógica' and with a budget of EUR 2.32 million, co-financed by the European Union.

The main target groups are Spanish families, market actors, teachers, education and consumer associations.

The campaign topics are environmental and sustainability issues, as well as nutritional, health and quality aspects of organic products. Press releases and some articles are produced for the specialist press, and there is an internet webpage. Actions with retailers and big wholesalers are also planned.

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The main aims of this campaign are the following:

- a) To stimulate the consumption of organic products;
- b) To enhance the knowledge of consumers about organic farming and its products;
- c) To stimulate interest and awareness among producers about the use of the EU logo;
- d) To inform about the EU Standards regulating the organic production system and its monitoring system, with dissemination measures, and also the use of the national and the EU logo.

The elements of the campaign are to inform a wide range of media, including TV and general press, information at selling points, advising journalists, an Internet website, educational material for children, and specialized material for hotels and caterers. Two guidebooks - one for consumers and one for processors - will be published.

The Campaign is concentrating it efforts on 'Organic Weeks' during the two years of the Campaign. Non-financial support from the producer sector is expected. The Campaign will be presented at all Regional Authorities in order to achieve dissemination all over Spain. Support of the local and regional sector will be sought in order to achieve a maximum of synergies (multiplying effects). The Campaign will also try to make synergies and complementary effects with regional and local promotion campaigns. More information is available at www.vivelagriculturaecologica.com.

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7.2 Organic Action Plan at national level

The Ministry of Agriculture MAPA has established several and frequent

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meetings and dialogues with the organic sector in 2004 and early 2005. In May 2005 MAPA organized a stakeholder debate on Organic Agriculture in Spain, with the aim to establish the main guidelines for specific actions to enhance the development of organic farming in Spain. The debate focussed on three main topics:

- a) Analysis of the production and processing of organic products and the role of organic farming for rural development;
- b) Improving the internal organic market and the marketing of organic products and organic farming sector structure,
- c) Institutional framework for organic farming.

The National Organic Action Plan (Plan Integral de Actuaciones para el Fomento de la Agricultura Ecológica) has the overall aim to establish the basic lines for the policy action of MAPA in the field of organic farming from 2007 to 2010, in collaboration with other departments of the state administration. It also aims at a consensus with the Regional Authorities and the representatives of the organic sector. The final purpose of the Action Plan is to contribute to the development of the organic sector in Spain by applying a set of specific actions in all organic production, processing, marketing, distribution and consumption chains, and also in education and research areas.

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More specific aims of the National Organic Plan are structured in 3 strategic objectives:

- Objective 1
 - To promote the development of organic farming, in particular the primary sector, with education, research, inputs regulation, rural development tools, and recognition of the <u>particularities</u> of organic farming.
- Objective 2
 - To improve knowledge and to promote the consumption and marketing of organic products. The most relevant challenge in Spain is to stimulate the internal demand through adequate information for consumers, accompanied by the improvement of marketing structures.
- Objective 3

To improve institutional collaboration and management resources for the organic sector, thus contributing to a better coordination, improving communication and the collaboration between actors of the private and public sector.

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More information is available at http://www.mapa.es/es/alimentacion/pags/ecologica/plan_integral.htm.

The Spanish Society of Organic Agriculture SEAE has supported the Awards for Organic Foods and Biodiversity, donated by the 'Fundación Biodiversidad' and the Environmental Ministry, in eight categories in the last three years. For more information see www.fundacion-biodiversidad.es.

8 Regional Organic Action Plans

Several regions are now developing support actions to promote organic farming in Spain.

• Andalusia has finished the first Regional Organic Action Plan, developed during the period from 2002 to 2006, with a budget of EUR 33.6 million. About 65% of the money was devoted to supporting conversion to organic production, 9% was for research, 8.6% for improving the processing of organic products, 6% to supporting organic consumption. The rest (7.4%) was for different measures, supporting the education system, organic certification and better coordination of the organic sector. The plan has supported 45 projects with a sum of EUR 2.8 million. In this region the first General Directorate for organic farming was established. The Andalusian regional government is now finalizing the second Organic Action Plan (2007-2013). More information is available at

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http://www.juntadeandalucia.es/agriculturaypesca/portal/opencms/portal/navegacion.jsp?entrada=tematica&tematica=650

- The Community of Madrid has also launched a regional organic action Plan (2005-2007), investing EUR 3 million.
- Castilla-La Mancha has launched an Organic Action Plan (2007-2011), investing EUR 44 million. More information is available at www.castillalamancha.es/clmagro/pb/eventos2/ eventos.asp?REG=687&AREA=servicios&pagina=detalle.
- The Regional Government of Extremadura has announced an Organic Action Plan for 2007.
- Catalonia has published the 'White book of organic farming' in close cooperation with organic sector experts, with the aim to develop an action plan (see http://www.gencat.net/darp/e/agroalim/llibrebl/cllibr70.htm).
- In 2007 the Basque Parliament approved a regional law with several measures to promote organic farming and to achieve 20 % of organic farming land by 2020.
- Asturias has also presented a Regional Organic Action Plan (2007-2009), investing EUR 14.7 million.

9 State Support for Organic Production

There was no particular support for organic farming before the EU agrienvironmental support scheme was in force. In Spain these measures came into force later than in other EU countries (only in 1995). In 1995 the EU Regulation 2078/92 was integrated into Spanish legislation, opening up the possibility of promoting environmentally friendly production methods. In some regions these subsidies were not offered until 1998. This fact has influenced the development of the organic sector in Spain.

In the period 2001 to 2005, the number of livestock farmers receiving these aids had increased by 300 percent, and the number of organic farmers with crop production increased by 39%. The total number of supported farmers increased from 7,696 in 2001 to 11,293 in 2005 (47% more).

In the period 2000 to 2006 organic production was a priority aim of the Rural Development Programme in Spain. But in the new Programme from 2007 to 2013, organic farming was not included as a horizontal measure at national level.

In Spain there were more restrictions on farmers receiving payments for organic farming. The organic farming payments were varied by crop and region. In 1997 the regions of Catalonia, Galicia and Madrid granted no financial support to organic farmers (support, however, was established for the year 2000). In two further regions (Asturias and Madrid regions) support for organic farmers was established in the middle of 1997.

Originally it had been planned to grant full support to conversion for organic farmers in the first year. In the second year, producers should receive 80 % of the total payments per hectare (differentiated by crops) and, in the next 3 years, 60 %. More information is available at http://www.mapa.es/es/desarrollo/pags/magam/Intromedidas.htm.

Currently, the farmers receive a fixed payment per crop and year, set by each autonomous region. In most cases, this payment is lower than in other European member states. Organic olive tree farmers in Andalusia receive only half the payment of the farmers in Tuscany (Italy); around EUR 350 per hectare.

In 2001 organic farmers in Spain received EUR 31,705,690 in all Spanish regions (EUR 22,945,110 from the European Agricultural Guidance and Guarantee Fund (EAGGF).

10 Research

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In the early days, organic farming research was developed by the farmers themselves, as researchers in the European Mediterranean countries, including Spain, were not interested in organic farming until the end of the 1980s. Before that some individual initiatives provided some studies about the environmental problems caused by conventional farming systems. Organic research in Spain started in the early 1990s, with some isolated projects promoted by individual initiatives carried out by researchers, the majority of whom were members of the Spanish Society for Organic Farming SEAE. This private association was created with the main aim to give scientific support to the organic farming sector.

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At seven biannual congresses organized by SEAE during the last 15 years, more than 1,000 papers have been presented and published. These events have provided a meeting point for researchers and advisors to exchange information, discuss (with invited organic stakeholders) and disseminate research results and also to discuss research priorities.

Funds dedicated to organic farming in Spain were historically very small and for short term projects. Until now no private institution supports organic research. In the most relevant public research system, funds for organic farming were included as a priority area in the last national research plan during the period (1996-1999), with funds from the national and some regional governments, but the major part of these funds was reoriented to integrated agriculture research activities.

So, state support for organic research in Spain in 1997 was only one to five percent of the total budget devoted to organic farming research in Germany, Sweden and Denmark (Isart & Llerena, 1999). This fact and the diversified organization of research in Spain explain the low development of organic farming research in Spain.

Although there are no specific data on organic research investment in Spain, we can estimate for the period 2001 to 2004 an annual average of EUR 700,000 to 900,000 per year were spent on organic farming research (Porcuna et al., 2005). In this period the National Research Programme (PNI) of the National Institute for Agrarian Research (INIA) devoted EUR 1,743,462 (435,865 per year) for 20 organic projects of 26 research groups. Some of them have received additional financial support for other projects from regional research programmes (Porcuna et al., 2005).

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The new PNI from the Ministry for Education and Sciences (MEC) at national level (named now 'National Plan for Scientific Research, Development and Technology Innovation' (PNIDIT), for the period 2004 to 2007, has introduced some priorities related to organic food and farming. In this framework we found 21 research projects dealing directly with or having a relation to organic farming.

Table: Recent organic research projects financed by INIA 2004-2007

Year	Nr	Regions/Places	Acronyms of the Research Groups	Topics
2004	2	Asturias, Valencia	SERIDA; IVIA (2)	Mediterranean vegetable agrosystems; Animal pastures with apple crops on the Atlantic Coast
2005	7	CLM, Cataluña Navarra, Murcia, Madrid	ITyGG, IMIDA,	Comparison of sheep milk production systems in the Pyrenees; comparison of pesticides and fertilizer contamination in pepper crops under greenhouse conditions, identification of GMOs genes in soya varieties; selection and conservation of traditional

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2006	6	Aragón, Andalucía Asturias, CLM, Cataluña, Galicia Cantabria, Murcia Extremadura, La Rioja	CITA; IRTA, CIEA/UPC; CIFA Las Torres/Tomegil Sevilla IFAPA; SERIDA; CMA-EI Chaparrillo;	germoplasma for organic farming, biodegradable for vegetables crops, organic wine aromatic quality Factors affecting organic production and consumption decisions; comparison of fatty acids and CLA in organic and conventional milk; evaluation of organic Japan Plum-tree cultivation, pastures in organic agrosystems on the Atlantic Coast; traditional varieties of vegetables for organic farming, crop protection and weed control in organic apple cultivation
2007	4	Andalucía Murcia Valencia	CAyP, IFAPA, IMIDA, IVIA, (4)	Cover crops and hedges in olive plantations, nematodes as soil quality bioindicators, contamination comparison of melon cultivation under greenhouse conditions, use of harvest residues to mitigate climate change
	19	13 CCAA *	25 groups	18 themes

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Sources: Elaborated with information provided by the INIA President July, 2007.

In total 19 organic research projects involving 26 research groups in 13 regions, dealing with 18 different themes, have been financed since 2003 by the PNIDIT/INIA system. Another 43 research projects, involving 22 further research groups and 2 additional regions, were dealing with low input and environmentally friendly agriculture practices. One INIA representative (Garcia-Baudin, 2006), compiled a list of 21 research projects in the period 2004 to 2006.

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The Andalusian Organic Action Plan includes one specific programme for research projects in Organic Farming with EUR 1,800,000 during the period 2002-2006 (EUR 360,000 per year), for small size organic research projects (maximum budget of EUR 120,000). Finally, 110 organic research project proposals were presented and only 24 were approved; EUR 2.1 million were spent in three years.

Also some support, estimated at an average of EUR 0.3 million per year for 12 small private innovation and experimental organic projects, has been given since 2001 by the Valencia Research and Innovation Programme of the Valencia Regional Government.

In 2003 the organic farming research network 'Agroecomed' was created in Catalonia and the Balearic Islands. It unites nine research groups from five public universities (UB, UAB, ESAB/UPC, ETSEA/UdL and UIB) and three public research centres (IRTA Cabrils, CREAF and LEAAM/Agroecologia/CID/CSIC). Agroecomed has made available publications and organized different events. More information can be found at http://www.ub.es/agroecologia/agroecomed/ca/index.htm.

Looking at the quantity of research papers presented in the six SEAE congresses, organic research is carried out on more than 42 different crops. The most important crops are tomatoes, vines, pepper, lettuce

^{*}All regions except Balearic Islands, Castilla y León and Pays Basque

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and artichoke. Except for vines, the research bears no direct relation to the relevant organic production in Spain (fruits, vegetables and olives). In terms of crop groups, vegetables (greenhouse and field vegetables), citrus trees and cereals have been better studied.

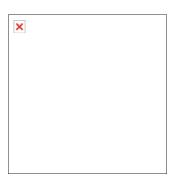
Regarding the topics in organic farming research in Spain, the most important are related to crop disease control, especially on citrus trees and soil fertility. There are an increasing amount of research projects related to livestock, adaptation of vegetable varieties and other themes. Some sociological aspects have been taken up by organic research projects, but without consideration of the farm level. Biodiversity studies on soil have also increased.

However, collaboration on organic research projects between research groups from different centres is slowly increasing. There is a small trend to create interdisciplinary research teams, although the agronomists are still dominating. Most of the research is applied research, and it is often carried out on-farm, in close cooperation with organic farmers and extensionists and thus in a more participatory approach than in conventional agriculture.

Regarding research methodology, most organic research is still carried out in a conventional way: on-farm or on the fields of the research centres, mostly aiming at the direct implementation of the results.

Although there are some examples (regional programmes in Andalusia and Valencia) where the opinion of the organic farmers is taken into account, the main decisions about research priorities are taken by the researchers and not in consultation with farmers.

There is still no specific national programme on organic farming research or a specific research centre in Spain. The only semi-public centre for organic education and research and rural development is the Consortium Centre for Organic Farming CIFAED established in 2002 in Santa Fe, Granada (Andalusia) in the framework of the Andalusian Organic Action Plan (www.cifaed.es). Also the 'Instituto Andaluz de Investigación y Formación Agraria, Pesquera, Alimentaria' has assumed tasks in organic farming education and research at regional level in Andalusia (www.juntadeandalucia.es/innovacioncienciayempresa/ifapa). Finally, at national level the Ministry of Education and Sciences (MEC) has announced the establishment of a National Centre for Organic Research in Plasencia (Extremadura) for the year 2008.



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Figure: Logo of the Spanish Society for Organic Agriculture SEAE.

11 Advice Services for Organic Farming

Until 2006 there was no public support for advice for organic farmers in Spain; this was also the case for all farmers. Recently, Andalusia has started to offer such a service to new farmers. In the past, however, only private small specialized organizations offered such services.

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Generally, advice is mainly given by private advisory bureaus. Small producer groups or organic associations, which are frequently organized in co-operatives, are more and more employing organic advisors. For example, there are some areas in Catalonia which created and support plant protection groups on organic farming (ADV). For these groups technical advisors are employed with some support from the Regional Administrations.

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Some advisors working on organic farming in the departments of the regional agricultural administration offer advice in different issues, especially on biological pest control, and they share positive experiences to share with farmers.

12 Information, Education and Training

11.1 Information and Education in Organic farming

There are some informative magazines in organic farming in Spanish. The one more known is named 'La Fertilidad de la Tierra', appearing four times per year.

Some organizations, like CAAE, Ekonekazaritza, SEAE and Vida Sana, are publishing regularly internal newsletters in a magazine format in Spanish.

There is also a magazine on organic farming in Catalan at: http://www.agrocultura.org/.

La 'Actualidad Ecológica' from the association CAAE, has received an award in this type of publication.

The Spanish Seeds Network (Red de Semillas, RdS), publishes an Internet newsletter, Red de Semillas (www.redandaluzadesemillas.org), on the topic of traditional and/or conservation varieties of high quality.

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Recently SEAE, together with the University of Murcia, launched the first Issue of a scientific magazine named 'Agroecología', which intends to be a reference source in this topic for Spain and Latin America.

Some private organizations (Association CAAE, Association Vida Sana, Biolur, L'Espaci de Recursos Agroecológicos and, more recently, SEAE) have also published some booklets with some easy and practical information for organic farmers on certain topics (compost, crop protection, organic inputs, establishment of hedges, etc.). Also some public certification bodies with training programmes (CAAE, CRAEX Extremadura), have published some books on organic farming. SEAE has published the most relevant and much sought-after handbook on organic farming. There are also some other publishing companies (Icaria, MundiPrensa, Eumedia and others) that have brought out organic farming books in Spanish. More detailed information can be found at the webpage www.agroecologia.net

In 2004 the 382-page book named 'Knowledge, Techniques and products for organic food and animal husbandry' by Labrador, J.; Porcuna, J. L.; Reyes, J. L. (2004), a SEAE-edited publication' received a special award from the Ministry of Agriculture (MAPA) for dissemination materials in the agriculture sector.

12.2 Organic Farming Training, Education and Knowledge Dissemination Events

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In the first stage of development of the organic farming sector in Spain, and until the end of the 1990s, tasks related to dissemination were assumed by the organic farming associations (like Vida Sana), some students' associations or groups interested in organic farming in some universities. This was the case with the students 'Colectivo Kybele' at the University of Madrid UPM; the 'Aula de Agricultura Ecológica' at the University of Seville US, the Permanent Working Group on Animal Husbandry and Agroecology at the University of Córdoba UCO. There

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are similar groups at other universities and colleges, like Barcelona, Valensia or La Laguna, Tenerife. These support groups have also organized some training events for producers as well as introductory and advanced courses for advisors and inspectors. At the moment, however, these groups are not very active.

Currently there are several courses for college graduates, and other training courses for practitioners offered by various private institutions, like Vida Sana and $\underline{\mathsf{SEAE}}$.

Recently some measures supporting rural development have been offered within the framework of the EU LEADER initiative: General farmers' organizations, like COAG or the National Confederation of Agricultural Cooperatives Enterprises of Spain (Confederación Nacional de Cooperativas Agrarias), provide some training in organic farming.

At university level, a Masters course in organic agriculture is currently being organized at the University of Barcelona UB, in close cooperation with the association Vida Sana, the oldest private organization promoting organic farming in Spain, and the Spanish Society for Organic Farming SEAE. This is the first (private) Masters course in organic farming in Spain. Some universities, like that in Córdoba UCO, Baeza, Jaén UNIA and Orihuela, Alicante UMH, have launched official Masters courses in Agroecology and organic farming. Other universities regularly organize postgraduate courses in organic farming and organic husbandry (Sevilla US, Lugo USC, Albacete ETSIA-UCLLM, Almería UAL, Valensia UPV). In Córdoba a PhD programme in agroecology is offered. Some universities and agronomy schools have included organic farming in their curricula.

In general some scientists and advisors working at universities, research centres, association members or governmental administrators are individually active in organic farming; in most cases, however, these are private initiatives.

Apart from the last biennial SEAE Congresses in Córdoba (2000), Gijón (2002), Almería (2004) and Zaragoza (2006), SEAE has been organizing regular and annual national and international conferences and seminars on different topics aimed at supporting knowledge exchange and dissemination in organic food and farming. Some examples are the first International Conference on Organic Olive Production in Génave (Jaén) in 2002, the first international Organic Citrus Conference in Gandía, Valensia in 2005, and the first International Conference on Organic Animal husbandry in Zamora (2004). Further seminars have been organized on different topical issues like water management in a sustainable way in Mallorca (2001); seeds and genetic resources for organic farming in Murcia (2003); protected areas and organic farming in Garrucha (2003); organic bananas in La Palma, Tenerife (2003); the future of dry areas with organic farming (2005). SEAE has also supported some regional congresses in Valensia (2002, 2005), Catalonia (2005) and Galicia (2006) and other regional events in Asturias and Madrid. All this information can be found at www.agroecologia.net.

13 Organic Farming Organizations

In Spain different small associations to support the development of organic farming were funded in the 1980s until 1993. A study found that there are about 20 national registered associations dealing with organic farming and 72 local, county, regional or national associations. Furthermore there are about 40 small local or regional associations of producers or of producers and consumers. There are many other support organizations at local and national level, and small local organic producer associations in Spain. In November 2007 the National Platform for the Promotion of Organic Agriculture MEDAE (Mesa Estatal de Defensa de la Agricultura Ecológica), was founded.

The most important supporting associations are the 'Friends of the Agricultural School of Manresa (AEAM)', SPAE Tenerife, Biolur Navarra, Ekonekazaritza, 'Aula de Agricultura Ecologica of Sevilla' and

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'Asociación de Agroecoloxia' in Galicia. The biodynamic association 'Asociación de Agricultura Biodinámica de España' was created in the early 1990s. In 1994 there was an attempt to organize a national federation of associations promoting organic farming, FANEGA, involving 14 different regional organizations, but this failed. In 1999 general farmers' organizations, like COAG, which were stronger and better organized than the organic farming movement, began to create internal sections for organic farmers, where most organic farmers are now integrated. Especially the organic section of COAG is strongly involved in the COPA-COGECA European Organic Group at European level

In 2001 in Benifaió, Valensia, a new attempt was made to create a national organic platform at a meeting organized by SEAE, but after a second meeting in Córdoba not enough consensus was achieved. In 2004, a broader alliance from environmental movements, organic farming associations and general farmer's organizations (COAG and COPA) was created for lobbying against GMOs in agriculture, as the new national government was expected to favour this strategy.

One year later, in 2002, the public certification body of Andalusia <u>CAAE</u>, which has the highest number of certified organic operators in Spain, changed its status and became a private association (<u>www.caae.es</u>), keeping the authorization as a certification body in Andalusia, and later extended this service to Castilla La Mancha. This Association, apart from its certification tasks, has started various promotional, advice and education activities in other Spanish regions. It has become a very relevant organic actor at the national level.

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During the past three years some organic processors associations have been created in several regions (La Rioja, Catalonia, Andalusia, Extremadura, Galicia, Valencia and Navarra, Valencia). Six of them joined together and created the National Federation of organic processors (FEPECO) in 2005 (www.fepeco.es).

Furthermore organic consumers have created the National Organic Consumers Federation involving around 11 different regional organizations in all the country, supporting direct local marketing. However, only the Andalusian Federation of Organic Consumers Associations (www.facpe.org), involving eight local associations, is now actively involved in promoting and lobby actions

In 2006, some meetings were held in Madrid and Seville in order to organize a common platform for lobbying and promoting organic farming. In 2007, three national organizations (SEAE, INTERECO and the Federation of Organic Producers and Processors / Federación Estatal de Productores y Elaboradores EcológicosFEPECO (www.fepeco.es) signed an Agreement with the Ministry for Agriculture, Fisheries and Food (MAPA) to organize activities to develop the organic farming sector in the Spanish Ministry. In 2007 a common 10 point agreement has been discussed and a lobby plan approved by six national organizations (Asociación CAAE, Asociación Vida Sana, FACPE, FEPECO, Intereco, Red de Semillas, 'Resembrando e Intercambiando') to defend and lobby for the development of organic food and the farming sector in Spain.

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Currently only 16 organizations are members of the International Federation of Organic Agriculture Movements IFOAM. Most of these are located in Catalonia, Andalusia and Valencia. In 2000 SEAE was elected to represent the Spanish IFOAM members in the IFOAM European Union Regional Group. SEAE is also a member in the Board of the AgriBioMediterraneo.

In Spain, the majority of the organic producers is organized in the organic sections of the conventional farmers' organizations

National Platform for the Promotion of Organic Agriculture - Mesa Estatal de Defensa de la Agricultura Ecológica, MEDAE

In November 2007 the organic sector in Spain founded the national

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platform MEDAE to defend their interests for a sustanaible production system and to promote a common policy. The Spanish Society for Organic Farming (SEAE), Intereco (Association of Public Control Regional Authoritties), the Andalusian Committe for Organic Farming (CAAE), the Spanish Federation of Processors and marketers of organic Farmers (Fepeco), the Seeds Network, the Assotiation Vida Sana and the Andalusian Federation of Organic Consumer Organisations (FACPE), signed a document with 10 points/reason to support organic food and farming in Spain.

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Contact/Info: Spanish Society for Organic Agriculture SEAE

14 The Market

The first 'organic' products appeared in 1975 in Barcelona, as a small assortment of dietary products. 1978 saw the first exports of organic products (rice from Calasparra in Murcia), influenced by foreign traders.

The domestic market is very strongly shaped by health food products. The number of specialized organic shops and supermarkets (NaturaSi, TerraVerda, Ecoveritas, Las Ventas, etc.) are now a reality in the main cities of Spain (Barcelona, Madrid, Valencia, Sevilla, etc). But it is still difficult to find the full organic product range in the conventional distribution network. Very few organic products can be found in the conventional supermarkets, but some are promoting organic foods (Eroski, Mercadona, Carrefour, El Corte Ingles, etc.)

Direct sales from farms play a subordinate role. There are also some successful examples of weekly fairs.

The majority of health food shops (approximately 2,500) offer organic products, and they are still one of the most important marketing channels, especially in the cities, see http://www.terra.org/html/s/servicios/lista.php?subcat=13&cat=2. Approximately 40 local associations and consumer co-operatives are promoting and selling organic products, see http://www.terra.org/html/s/servicios/lista.php?subcat=13&cat=2 (www.facpe.org).

The export of raw materials and semi-processed products to other European countries, where the processors incorporate the ingredients into their product lines, is also of importance. The state provides some support to participate at such organic fairs.

Apart from the well known annual Biocultura consumers' fairs in Madrid and Barcelona, and the old and smaller Ecoviure Fair (Manresa, Catalonia), further organic fairs have been promoted by regional authorities and private initiatives in the last five years, such as

- the BioCórdoba (Andalusia)
- Ecocultura (Zamora, Castilla y León, la Mancha)
- Ecovalencia (Valencia), Bioterra (Irún, Pays Basque);
- recently Ecoviure in Manresa
- Ecoliva in Jaén.

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These events are organized by private associations (Vida Sana, Ecoviure, ADRSS), with some support from the central and regional administrations.

The Spanish market is worth EUR 300 million (2005). 2005 was an extremely successful year for the organic industry in Spain, which is growing at an annual rate of almost 50 %. The average per capita expenditure rate on organic food and drink was € 6 in 2005. 17,509 Spanish companies produce, process or import organic food, 5,483 of these are located in Andalusia. More information is available at

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www.biocordoba.com

15 Outlook

· Education and Information

The range and quality of activities in the field of education and information should be increased. Currently they are too academic and not sufficiently practical.

Advice

A working strategy with organic farmers and conventional farmers' organizations should be put in place, in order to establish an advisory system including farmers' experiences.

transfer of the results to the farmers is lacking.

Research

A research centre for organic farming at national level should be established soon. Coordination between the researchers and

• Standards and Regulation

Some of the producers and the regional public certification bodies organized in INTERECO aims to develop a common organic input evaluation system. More participation of the sector in discussions about standard setting is needed.

Inspection and Certification

The question is arising whether public or private certification bodies are the better option. Producers support the semi-public systems and ask for public support for this service. Some of the public inspection and certification bodies are improving their work and are being accredited according to EN 45011. Most of them are currently improving their own internal status in order to comply with EU 2092/91 as an independent body.

Marketing

Some barriers in the distribution channels must be overcome. Organic products are slowly entering conventional marketing channels in supermarkets.

Consumption and Promotion

More information for consumers is needed, like clear product labelling. Furthermore price ranges should be regularized in order to enhance national consumption.

Sector Organizations

There is a need to establish coordination and the development of the producer and consumer organizations. More support to improve participation is needed

Policy & Support

The agricultural ministry has launched a National Organic Action Plan. Several regional governments have followed the example of Andalusia and have started regional action plans to develop organic farming. Farmers need more support; more harmonization of payments for crops is needed at regional and at European level.

Processing

Processing needs more support and research. The sector is looking for organic processed foods in all product categories, especially meat.

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Author

Victor Gonzálvez Pérez, Director Técnico. Sociedad Española de Agricultura Ecologica (SEAE), Cami del Port, s/n. Edif ECA Patio interior 1º. Apdo 397. E-46470 Catarroja, Valencia, Spain. Tel: +34-961267200 Fax: +34-961267122.

seae@agroecologia.nethttp://www.agroecologia.net/

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Research Institute of Organic Agriculture FiBL Ackerstrasse, CH-5070 Frick Tel: +41-62-865 72 72 Fax:+41-62-865 72 73 Internet http://www.fibl.org Contact: Helqa Willer

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