

Research Institute of Organic Agriculture Forschungsinstitut für biologischen Landbau













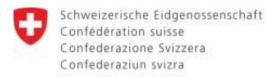
Organic Agriculture Worldwide: Key results from the FiBL-IFOAM survey on organic agriculture worldwide 2013 Part 2: Crop data

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Revision: 4.4.2013

Organic Agriculture Worldwide: Key results from the FiBL-IFOAM survey on organic agriculture worldwide 2013: Part 1: Global data and survey background

- Data compiled by the Research Institute of Organic Agriculture FiBL, Frick, Switzerland, in cooperation with the International Federation of Organic Agriculture Movements IFOAM, based on national data sources and data from certifiers.
- Supported by: Swiss State Secretariat of Economic Affairs (SECO) and NürnbergMesse, the organisers of the BioFach World Organic Trade Fair
- Data as published February 2013 in FiBL & IFOAM (2013) The World of Organic Agriculture. Statistics and Emerging Trends 2013. Frick and Bonn
- > For updates check www.organic-world.net
- > This Präsentation ist available online at: http://www.organicworld.net/yearbook-2013-presentations.html
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- © Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, February, 2013



Swiss Confederation

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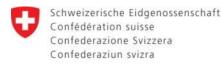




The Global Survey on Organic Agriculture: Supporters

The 14th survey on organic agriculture workdwide was supported by:

The Swiss State Secretariat of Economic Affairs SECO, Berne



Swiss Confederation

Federal Department of Economic Affairs FDEA State Secretariat for Economic Affairs SECO

 Nürnberg Messe, the organizers of the BioFach World Organic Trade Fair



> 200 experts from all parts of the world contributed to the FiBL-IFOAM survey 2013.





The World of Organic Agriculture 2013

The 14th edition of ,The World of Organic Agriculture', was published by FiBL and IFOAM in February 2013.*

Contents:

- Results of the survey on organic agriculture worldwide;
- Organic agriculture in the regions and country reports;
- Albania, Australia, Canada, Hungary, Kosovo, Montenegro, the Pacific Islands, Saudia Arabia, Serbia and The United States of America.
- Chapters on the global market, standards & legislations, voluntary standards, PGS and European market
- Numerous tables and graphs.
- > The book can be ordered via IFOAM.org and shop.FiBL.org.
- *Willer, H, Lernoud, J, and Kilcher, L. (2013) The World of Organic Agriculture. Statistics and Emerging Trends 2013. FiBL, Frick, and, IFOAM,Bonn







Website www.organic-world.net

- Detailed statistics in excel format (in progress)
- > Graphs & Maps
- > Data revisions
- News and background information







About this presentation

- There are 3 presentations summarizing the key results of the FiBL-IFOAM survey on organic agriculture worldwide 2013 (data 2011). Apart from the global data, key results on crop and on regional data are presented.
- More information is available at the password area of www.organic-world.net
- The following three presentations are available at http://www.organic-world.net/yearbook-2013presentations.html:
 - Part 1: Global data 2011 and survey background
 - Part 2: Land use and key crops in organic agriculture 2011
 - > Part 3: Organic agriculture in the regions 2011





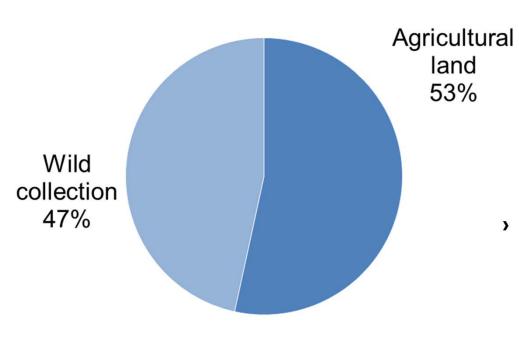
The 14th Survey on organic agriculture world-wide

- The 14th survey on organic agriculture worldwide was carried out by the Research Institute of Organic Agriculture FiBL in cooperation with the International Federation of Organic Agriculture Movements (IFOAM) and further partners.
- The survey was carried out between July 2012 and February 2013.
- > Data were received from 162 countries.
- New countries included: Dominica, Guinea Bissau, Kosovo and Tonga.
- > Updated data on area and producers were available for 135 countries.,
- Data were provided by almost 200 country experts (representatives from NGOs, certification bodies, governments, researchers).
- The following data were collected: Area data (including land use and crop details); Producers, other operator types; Domestic market values; Export and imports data; Livestock data (animal heads and production tones);
- The results are published in the yearbook "The World of Organic Agriculture 2013" and at www.organic-world.net.





Definition of organic areas



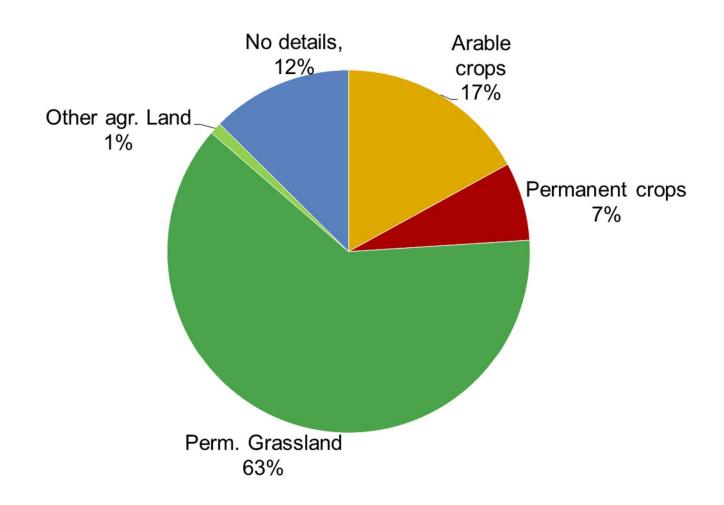
Source: FiBL-IFOAM Survey 2013

- Agricultural land (37.2 million hectares in 2011)
 - Cropland
 - Arable land (cereals, vegetables etc.)
 - Permanent crops (fruit, grapes, olives ...)
 - Cropland, no details (=arable land and permanent crops with no further details)
 - Permanent grassland
 - Other agricultural land
- Non-agricultural areas (32.5 million hectares in 2011)
 - > Wild collection/Bee keeping
 - Forest
 - Aquaculture
 - > Grazing areas on non-agricultural land





World: Use of organic agricultural land 2011 (total: 37.2 million hectares)







Main land use types in organic agriculture 2011

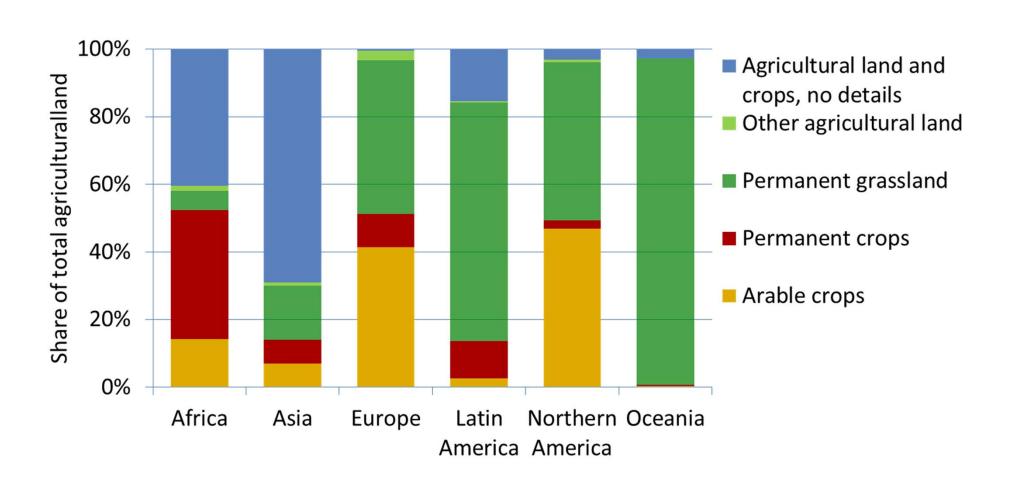
- The <u>chart of the share of land</u> <u>use types in the regions shows:</u>
 - For a large part of the organic agricultural land in both Africa and Asia, land use information is not available
 - Africa has a large proportion of permanent crops; these are mainly cash crops such as coffee, tropical fruit and olives.
 - > Europe and North America use about half of their organic agricultural land as grassland, and the other half is arable land. In Europe the share of permanent crops is higher than in North America, mainly due to olives and

- grapes grown in the Mediterranean countries.
- Latin America has little arable land compared to the large grazing areas (Uruguay and Argentina). It has a comparatively high share of permanent crops (mainly coffee).
- Oceania is characterized by the large grazing areas of Australia.
 The Pacific Islands produce a large range of tropical crops; New Zealand produces a lot of fruit.





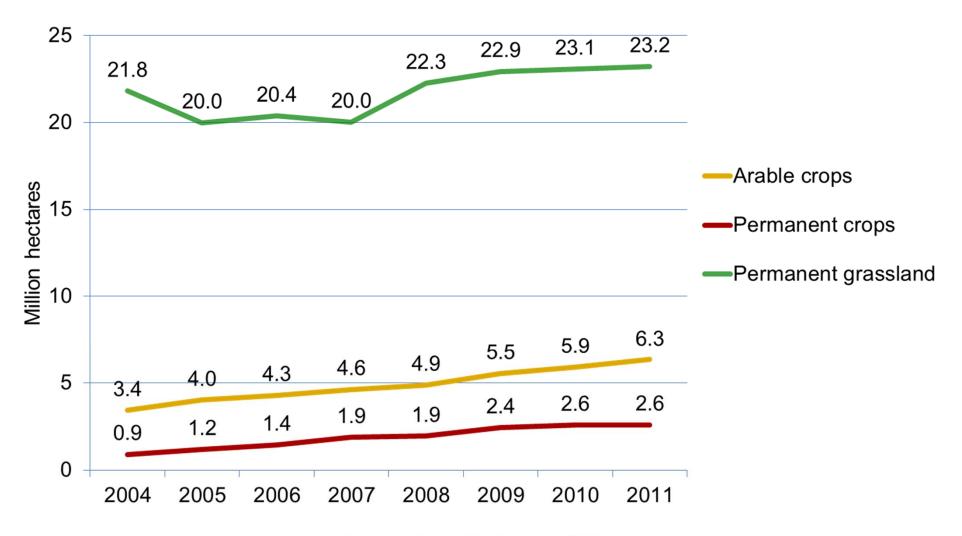
Agricultural land use by region in organic agriculture 2011







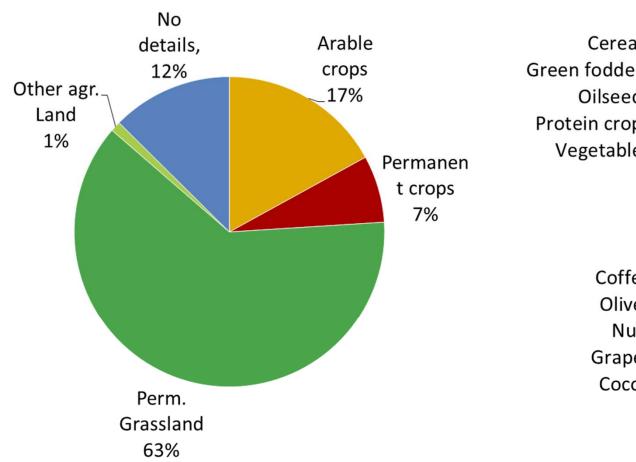
Development of land use types in organic agriculture 2004-2011

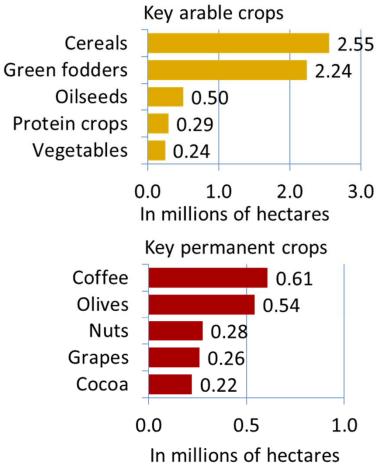






World: Use of organic agricultural land 2011 (total: 37.2 million hectares)



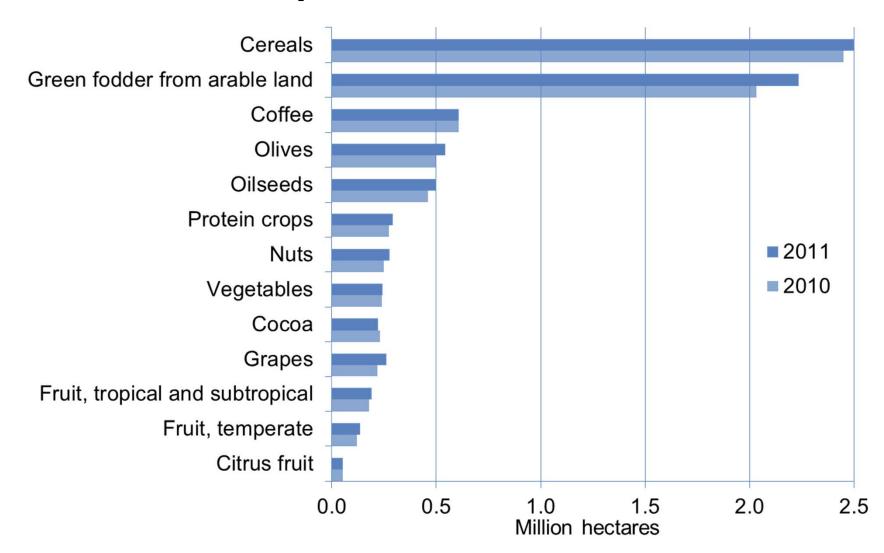








Key crop groups in organic agriculture: 2010 and 2011 compared







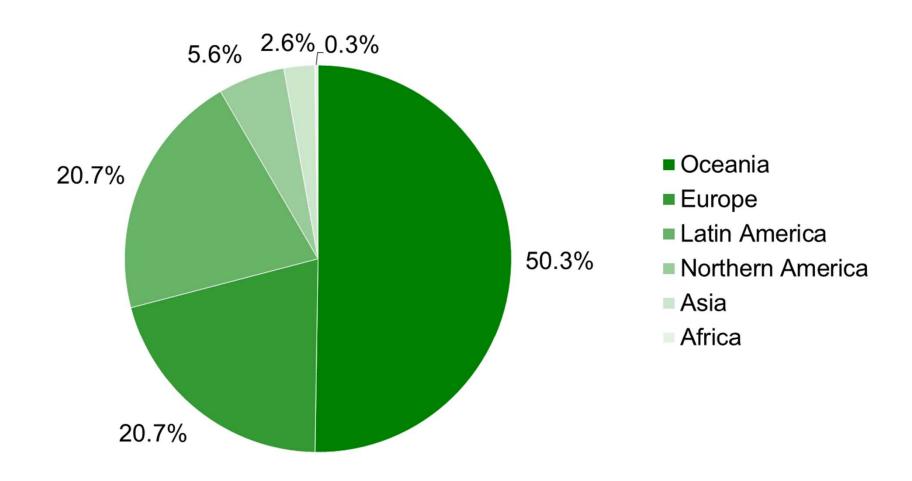
Organic grassland/grazing areas 2011

- With a total of at least 23.4 million hectares, the organic grassland/grazing areas constitute almost two thirds or 63 percent of the organic agricultural land.
- The organic grassland/grazing areas account for 0.7 percent of the world's total grassland/grazing areas.
- An increase of 0. million hectares or 1.3 percent was reported compared with 2010.
- Half of the organic organic grassland/grazing areas is located in Oceania (50 percent of the organic grassland/grazing area or 11.6 million hectares), followed by Europe (21 percent or 4.8 million hectares) and Latin America (21 percent or 4.8 million hectares).





Organic permanent grassland/grazing areas by region 2011 (total 23.4 million hectares)







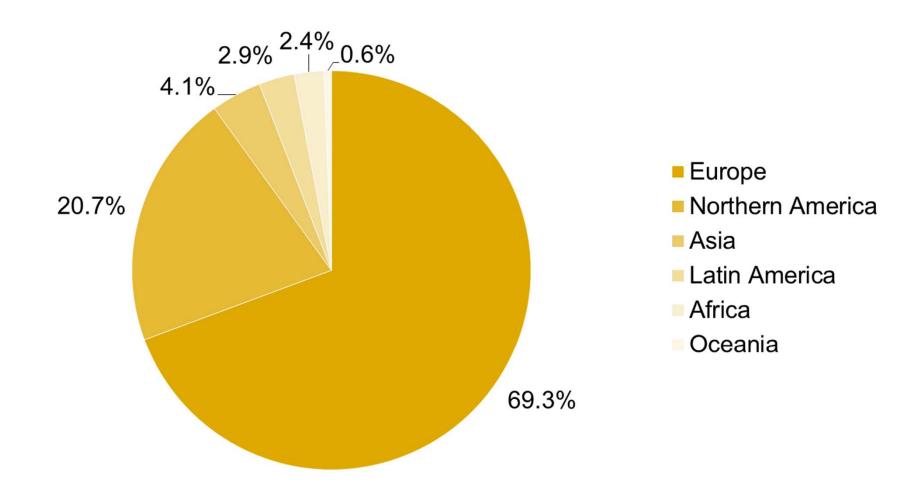
Organic arable land 2011

- With a total of at least 6.3 million hectares, arable land constitutes 17 percent of the organic agricultural land.
- > The organic arable land accounts for 0.44 percent of the world's total arable land.
- An increase of 7 percent compared with 2010 was reported.
- Most of the organic arable land is located in Europe (4.4 million hectares), followed by North America (more than 1.3 million) and Asia (459'664 hectares).
- Most of this category of land is used for cereals including rice (2.5 million hectares), followed by green fodder from arable land (2.2 million hectares), oilseeds (almost 500'000 hectares) and vegetables (0.24 million hectares).





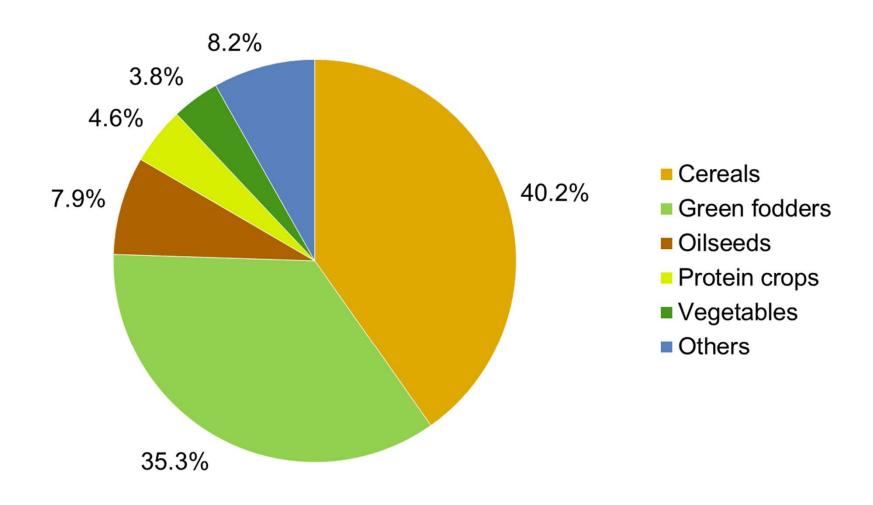
Organic arable land by region 2011 (total 6.3 million hectares)







Organic arable land worldwide by main crop groups 2011 (total 6.3 million hectares)







Permanent cropland 2011

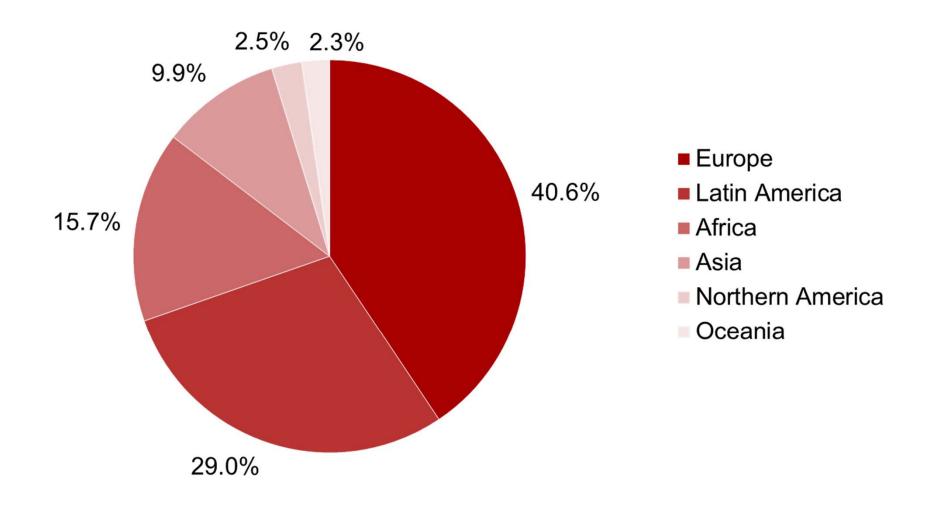
- Permanent crops account for approximately seven percent of the organic agricultural land, amounting to 2.6 million hectares, which is 1.75 percent of the world's permanent cropland.
- Compared with the previous survey (data 2010), 0.01 million hectares more were reported.
- With 7 percent, permanent cropland has a higher share in organic agriculture than in total agriculture, where it accounts for approximately three percent of the agricultural land.
- Most of the permanent cropland is in Europe (more than 1 million hectares), followed by Latin America (0.75 million hectares) and Africa (0.4 million hectares).
- > The most important crops are coffee (with 0.6 million hectares reported, constituting 23 percent of the organic permanent cropland), followed by olives (0.54 million hectares), nuts (0.27 million hectares), grapes (0.26 million hectares), and cocoa (0.22 million hectares).





Source: FiBL & IFOAM Survey 2013

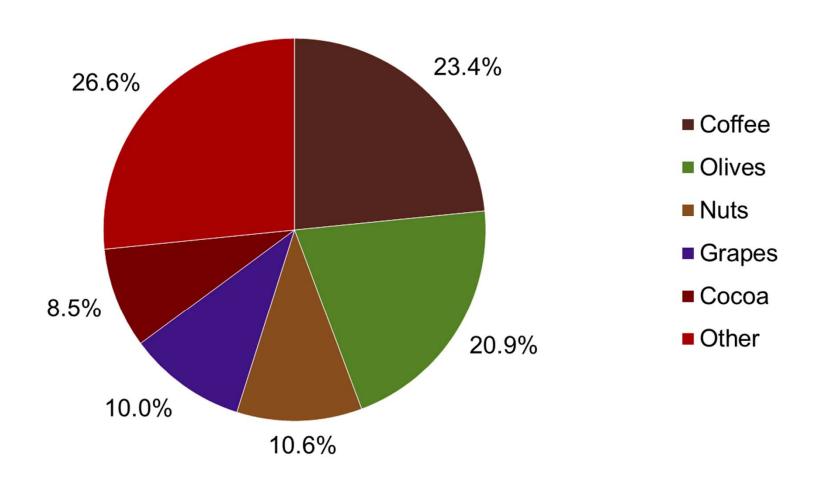
Organic permanent cropland by region 2011 (total 2.6 million hectares)







Organic permanent cropland worldwide by main crop groups 2011 (total 2.6 million hectares)







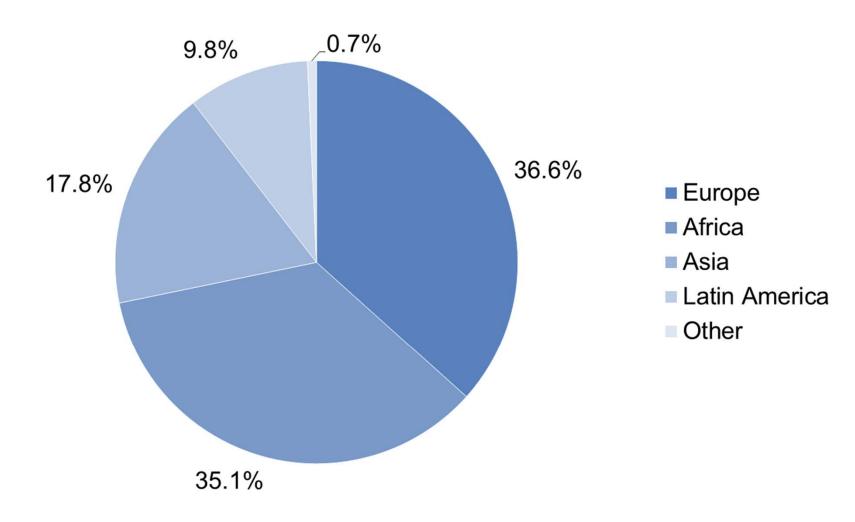
Organic wild collection and beekeeping 2011

- A collection area (including beekeeping) of 31.6 million hectares was reported for 2011.
- The organic wild collection areas are concentrated in Europe, Africa, Asia and Latin America.
- The countries with the largest areas are Finland (mainly berries), followed by Zambia and India.
- Wild berries, medicinal and aromaric plants are the main crops in this areas.





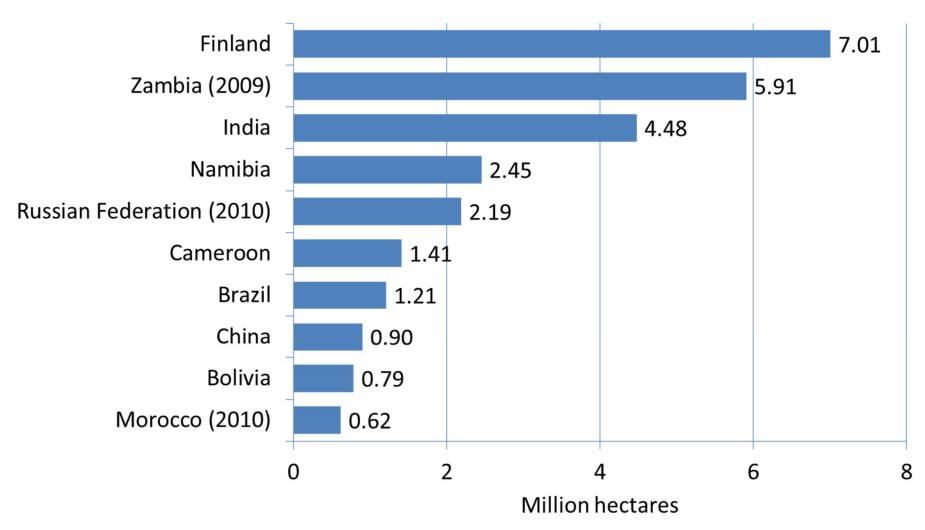
Geographical distribution of organic wild collection and beekeeping areas in 2011







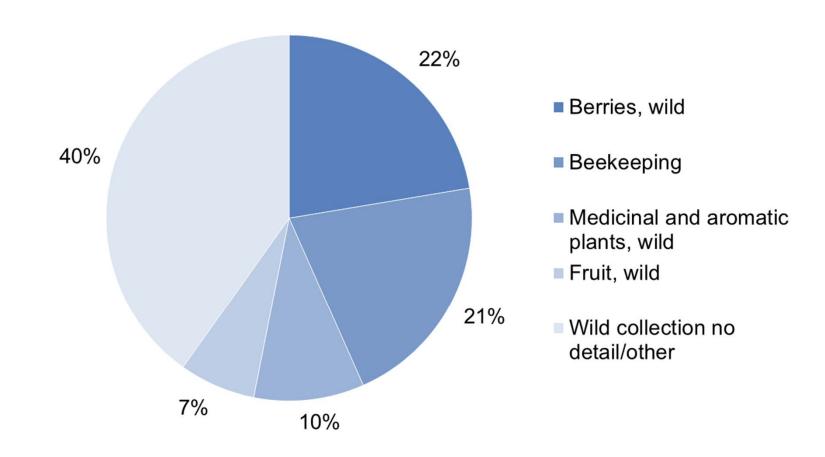
Organic wild collection & beekeeping: The ten countries with the largest areas 2011







Organic wild collection and beekeeping land worldwide by main crop groups 2011 (total 31.6 million hectares)







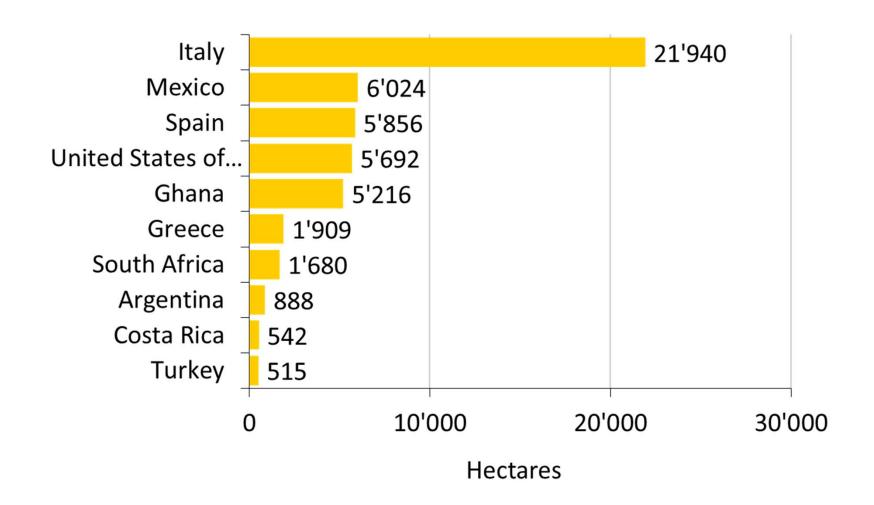
Organic citrus fruit 2011

- The area of organic citrus fruits includes oranges, lemons and limes, grapefruit and pomelos and 'other citrus fruits'.
- At least 50'000 hectares of citrus fruit are grown organically worldwide.
- > This constitutes 0.6 percent of the world's citrus area of 8.7 million hectares in 2010 (FAOSTAT).
- The countries with the largest organic citrus areas are: Italy, Mexico and Spain.
- As no crop details for the organic area were available for some of the world's leading citrus producers - China (2.1 million hectares), India (1 million hectares, and Brazil (almost 0.9 million hectares) - it can be assumed that the world figures for the area under organic citrus is higher.





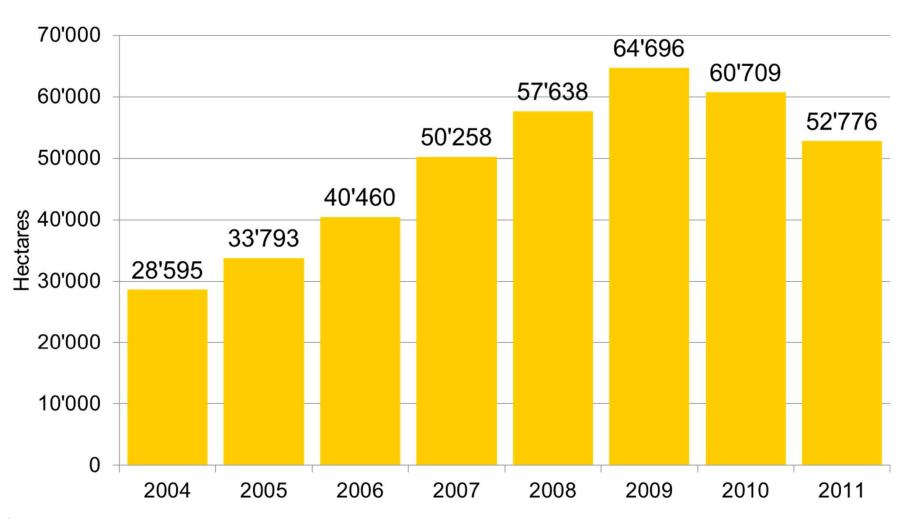
Organic citrus area: The ten countries with the largest areas 2011







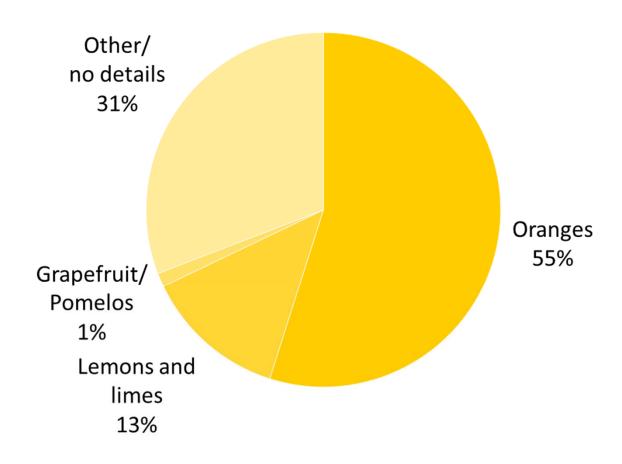
Organic citrus fruit: Growth of the organically managed land 2004-2011







Organic citrus fruit: Use of organic citrus fruit area 2011







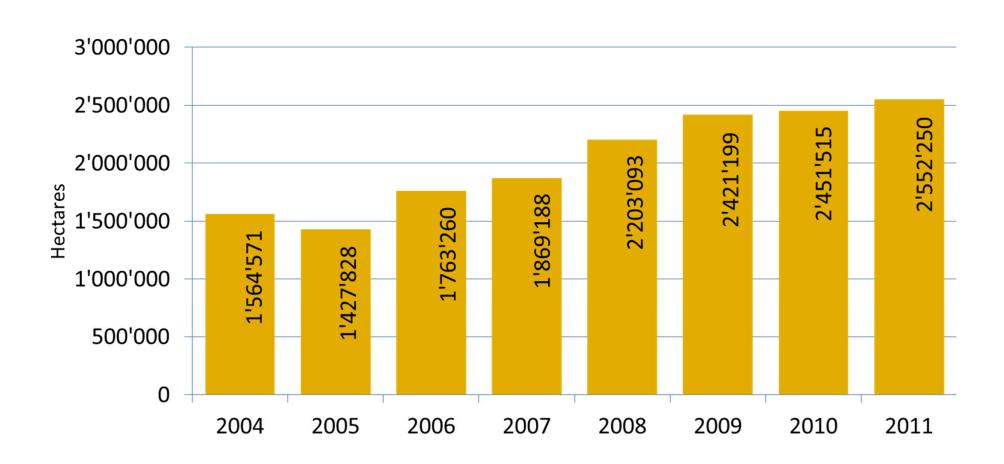
Organic cereals 2011

- At least 2.5 million hectares of cereals are under organic management. Comparing the organic figure with FAO's figure for the world's harvested cereal area of almost 700 million hectares in 2010 (FAOSTAT), 0.4 percent of the total cereal area is under organic management.
- > Cereals include wheat, spelt, barley, oats, grain maize, rye, and triticale.
- > The key cereal producers worldwide are India (97.7 million hectares), China (90 million hectares), the United States (57 million hectares), and the Russian Federation (32 million hectares).
- Of these four countries, information on the organic cereal area was available only for the United States, which is the largest organic producer. Here, almost 370'000 hectares or 0.6 percent of the cereal area was organic (2008). The United States is followed by Turkey with more than 210'000 hectares, Canada (2009 data) and Germany (both with more than 200'000 hectares).
- Some countries reach proportions that are far higher than the global cereal proportion of 0.4 percent. For example, Austria (9.6 percent), Sweden (9.1 percent), Estonia (7.5 percent), and Lithuania (5.4 percent) greatly exceed 0.4 percent.
- As some of the world's large cereal producers (such as India, China, and the Russian Federation) did not provide land use and crop details, it can be assumed that the cereal area is larger than that shown here.
- > Even though the organic cereal area has increased by more than 50 percent since 2004 (1.6 million hectares), the cereal area did no show a great increase in 2011.
- The available data on the conversion status indicate that 17 percent of the organic cereal area was inconversion in 2011 (less than half a million hectares). If this is indicative, there could be a considerable increase in supply of organic cereals in the near future.





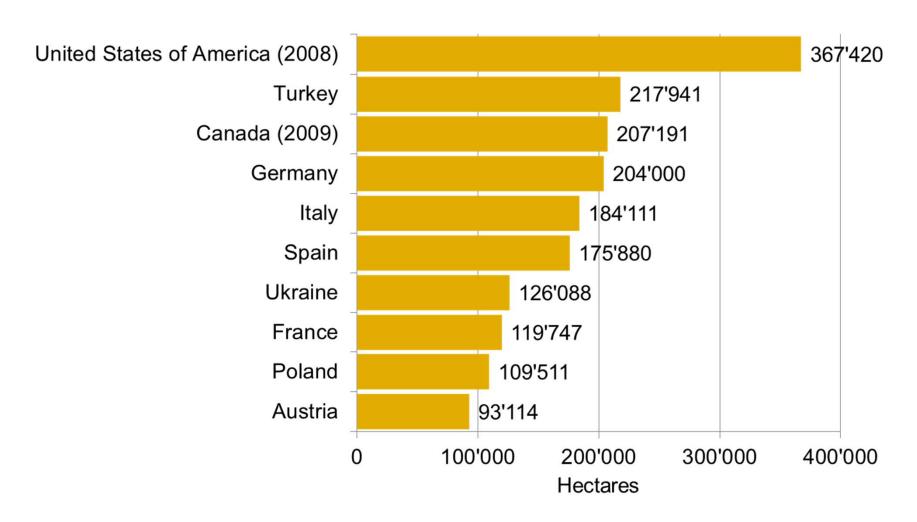
Organic cereals: Growth of the organically managed land 2004-2011







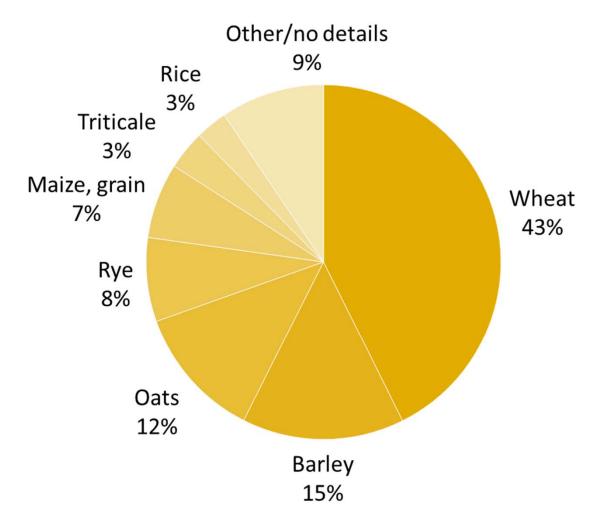
Organic cereals: The ten countries with the largest areas 2011







Organic cereal land worldwide by main crop groups 2011 (total 2.5 million hectares)







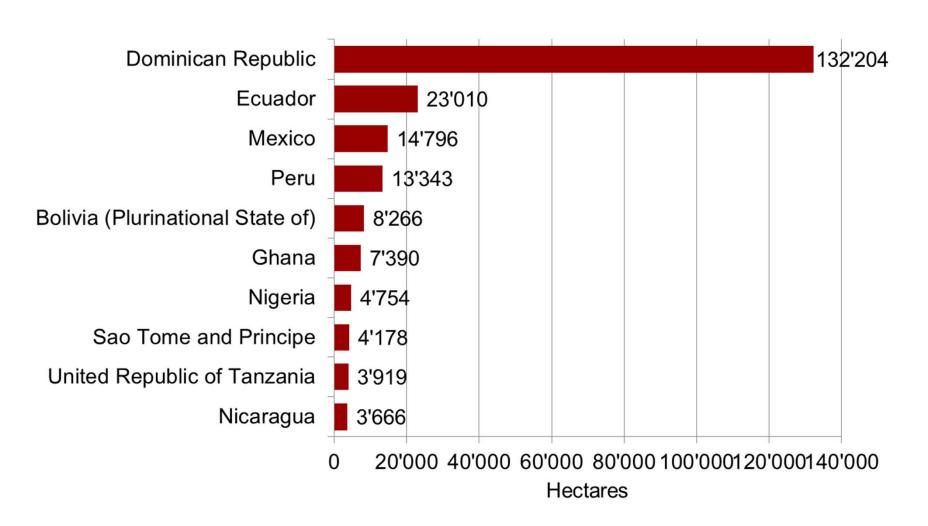
Organic cocoa 2011

- Almost 222'000 hectares of organic cocoa were grown organically in 2011.
- The countries with the largest cocoa area are Dominican Republic, Ecuador, Mexico and Peru.
- 2.3 percent of the world's harvested cocoa bean area of
 9.5 million hectares are organic. (FAOSTAT, 2010 data).
- The world's leading coca producers are Ivory Coast, Ghana, Nigeria and Indonesia. With the exception of Nigeria, data on organic cocoa area were available for all these countries.





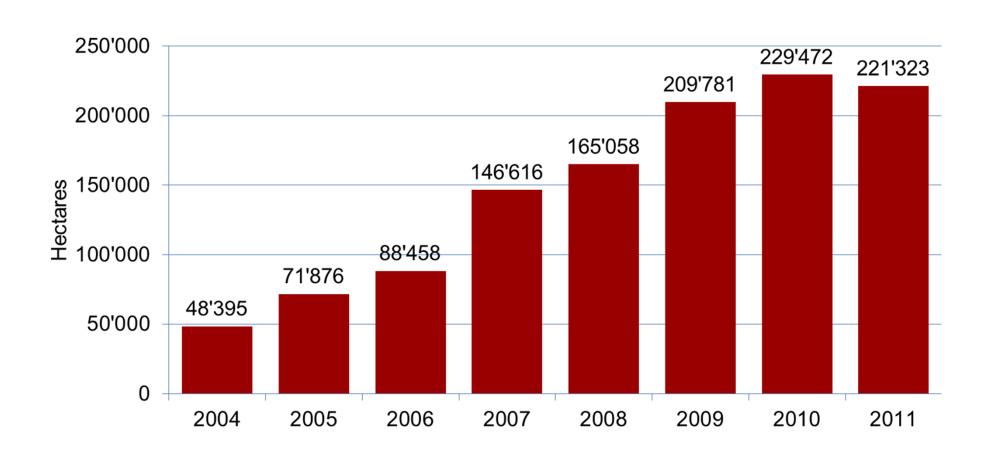
Organic cocoa area: The ten leading countries 2011







Organic cocoa: Growth of the organically managed land 2004-2011







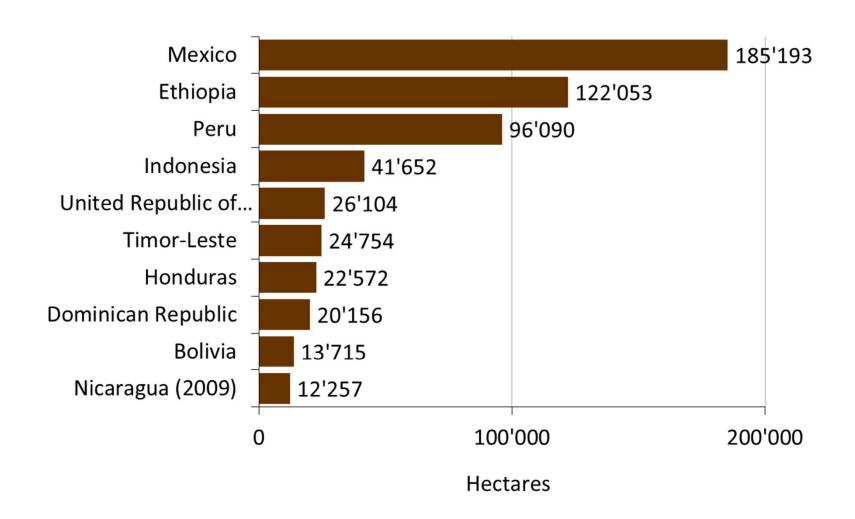
Organic coffee 2011

- Over 600'000 hectares of coffee were grown organically in 2011. This constitutes 6 percent of the world's harvested coffee area of 10.2 million hectares in 2010 according to FAOSTAT.
- The world's leading producers are Brazil (2.1 million hectares), Indonesia (1.2 million hectares), Mexico and Colombia (each with almost 0.8 million hectares), and Vietnam (0.5 million hectares). Data on the organic production were available for all of these countries with the exception of Brazil.
- In organic farming, the largest areas are in Mexico (185'000 hectares), Ethiopia (122'000 hectares) and Peru (96'000 hectares). Bolivia has the highest share with 51 percent of organic coffee, followed by Peru: (27 percent), Tanzania (26 percent), and Mexico (25 percent). Some of these high percentages must be attributed to the fact the coffee is grown more extensively in organic agriculture and often in association with other crops.
- > The organic coffee area has more than trebled since 2004.
- The available data on the conversion status indicate that eleven percent of the organic coffee area was in conversion in 2011 (68'000 hectares). If this is indicative, a slight increase in supply of organic coffee could be expected in the near future.





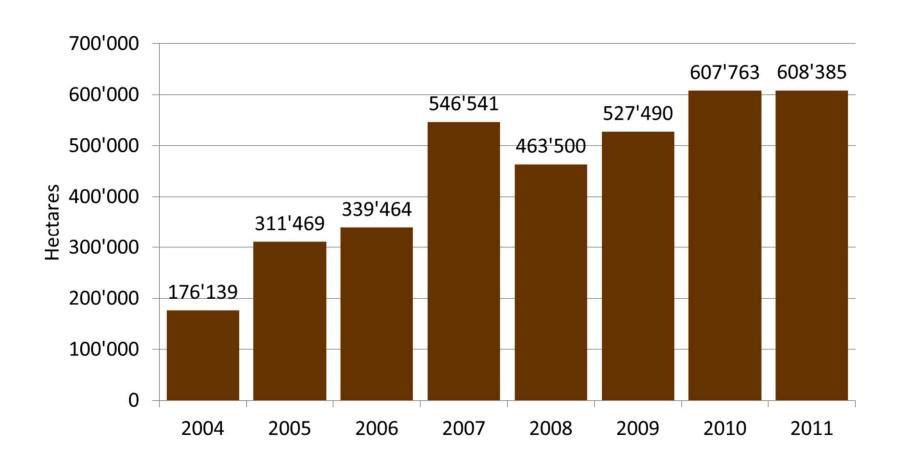
Organic coffee area 2011: The ten countries with the largest areas







Organic coffee: Growth of the organically managed land 2004-2011







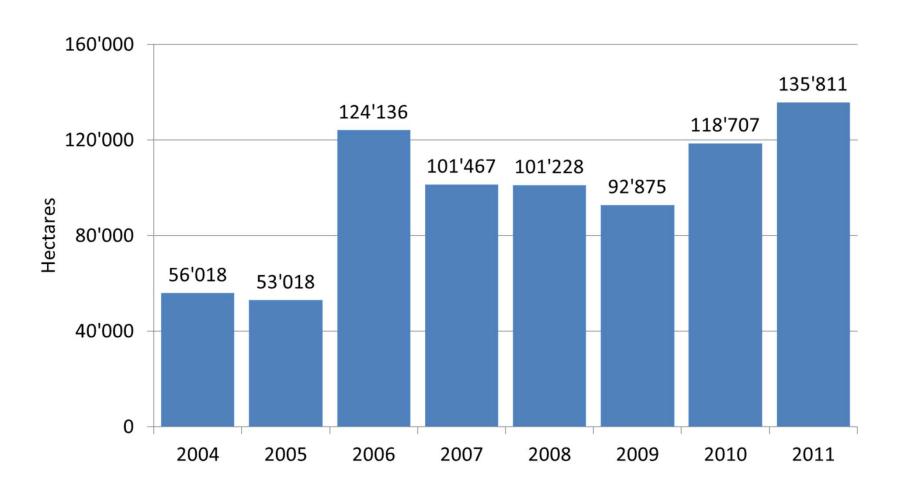
Organic temperate fruit 2011

- > The total area under organic temperate fruit production recorded here (almost 136'000 hectares), is 1.2 percent of the total area of temperate fruit grown in the world (11.5 million hectares in 2010 according to FAOSTAT).
- Of the six most important temperate fruit growing countries in the world (China, Russia, Iran, India, Turkey, the United States and Serbia) only three (Iran, Turkey, and Serbia), provided data on area of organic temperate grown in 2011. It can therefore be assumed that the organic temperate fruit area is higher.
- The countries with the largest organic temperate fruit areas are Poland (36'000 hectares), Italy (18'000 hectares), Turkey (11'000 hectares), and France (9'000 hectares). The highest proportions are in the Czech Republic (35.6 percent), Austria (17.4 percent), Latvia (14.7 percent), and Denmark (13.5 percent).
- Since 2004, when data on land use and crops were collected for the first time (almost 60'000 hectares), the temperate fruit area has more than doubled. However, some of the increase must be attributed to continually improving availability of crop data.
- > The key temperate fruits are apples, with almost half of the temperate fruit area, and almost 40 percent of the apple area in Poland, followed by pears, apricots, and plums.
- The available data on the conversion status indicate that a relatively large part of the total temperate fruit area (36 percent) is in-conversion. If this is indicative, there could be a considerable increase in supply of organic temperate fruit in the near future.





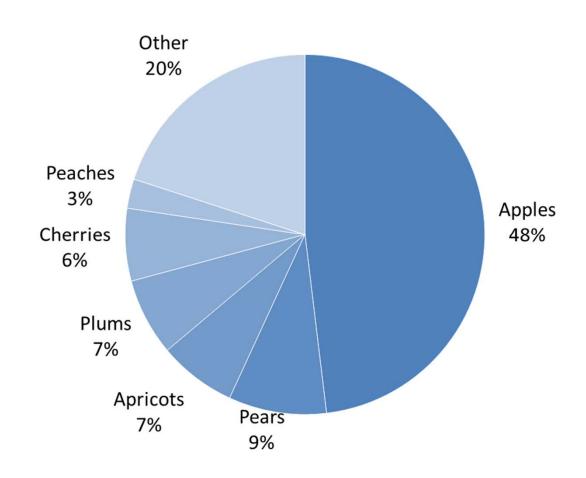
Organic temerpate fruit: Growth of the organically managed land 2004-2011







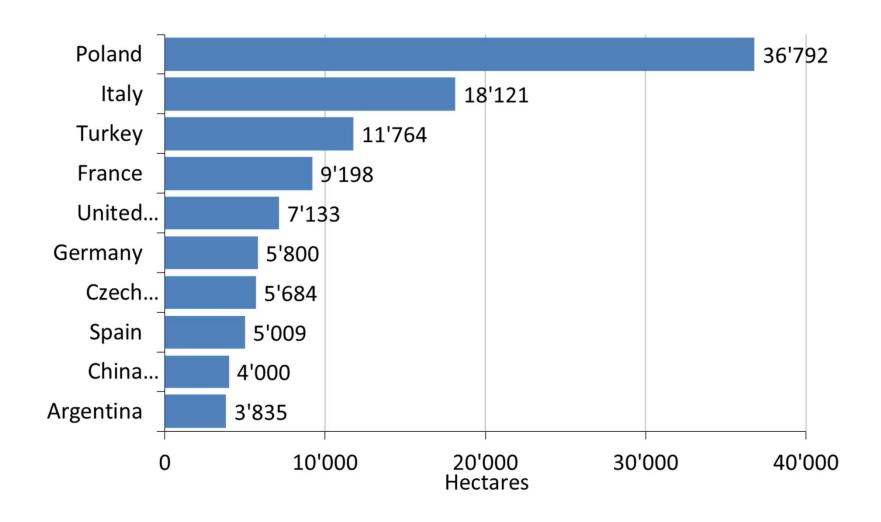
Organic temperate fruit land worldwide by key fruit types 2011







Organic temperate fruit: The ten countries with the largest areas 2011







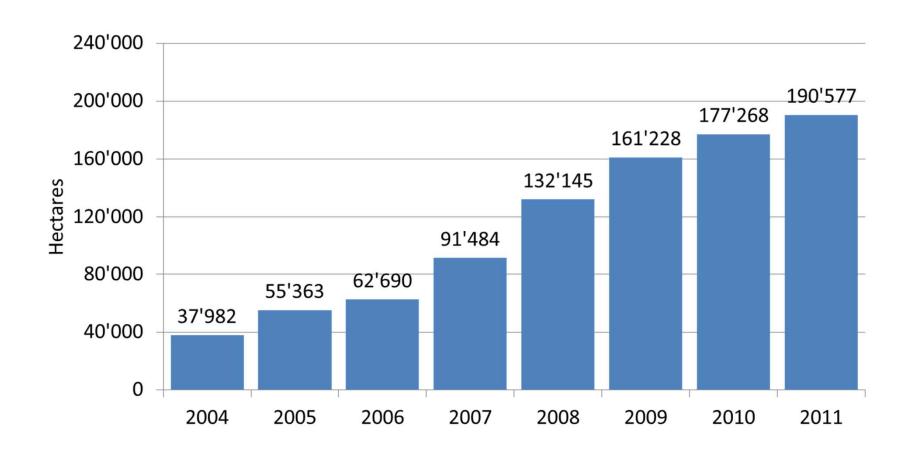
Tropical and Subtropical fruit 2011

- > The total area under organic tropical and subtropical fruit recorded here (190'000 hectares) is 0.8 percent of the total area of tropical and subtropical fruit grown in the world (22.8 million hectares in 2010 according to FAOSTAT data).
- Of the five most important tropical and subtropical fruit growing countries in the world (India, China, Uganda, Brazil, and the Philippines, all with more than one million hectares), only the Philippines provided data on the area under organic tropical and subtropical fruit grown in 2011.
- The largest growers for which data on the organic area were available (Mexico, Dominican Republic, Philippines, Ecuador, and Turkey) all have more than 10'000 hectares. Mexico, the Dominican Republic, and Turkey have also very high proportions, with more than ten percent of their country's total. In the case of the Dominican Republic, this is mainly due to a high share of bananas; and in the case of Mexico for mangoes and avocados.
- The largest proportions of organic tropical and subtropical fruit area are in Fiji (55 percent), Burkina Faso (26.6 percent; mainly mangos), and the Dominican Republic (25.8 percent; mainly bananas). By area, the key tropical and subtropical fruits are bananas, avocados, and mangos.
- Since 2004, when data on land use and crops were collected for the first time, the tropical fruit area has almost quintupled. However, some of the increase must be attributed to the continually improving data availability.
- > The available data on the conversion status indicate that more than eleven percent of the total tropical and subtropical fruit area is in-conversion. This suggests that an increase in supply in the near future may be expected.





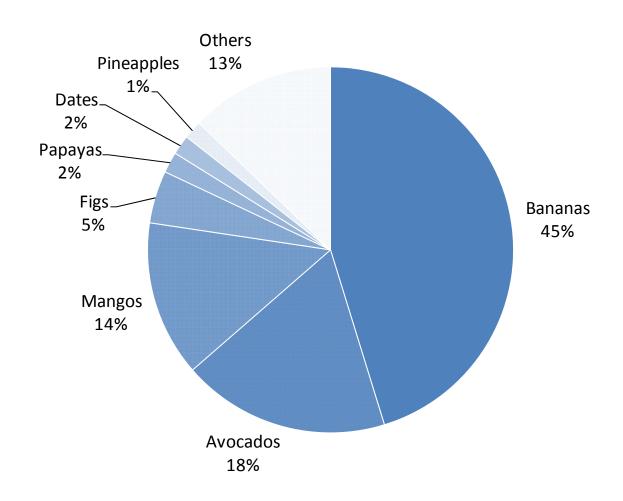
Organic tropical and subtropical: Growth of the organically managed land 2004-2011







Organic tropical and subtropical fruit land worldwide by main crop groups 2011







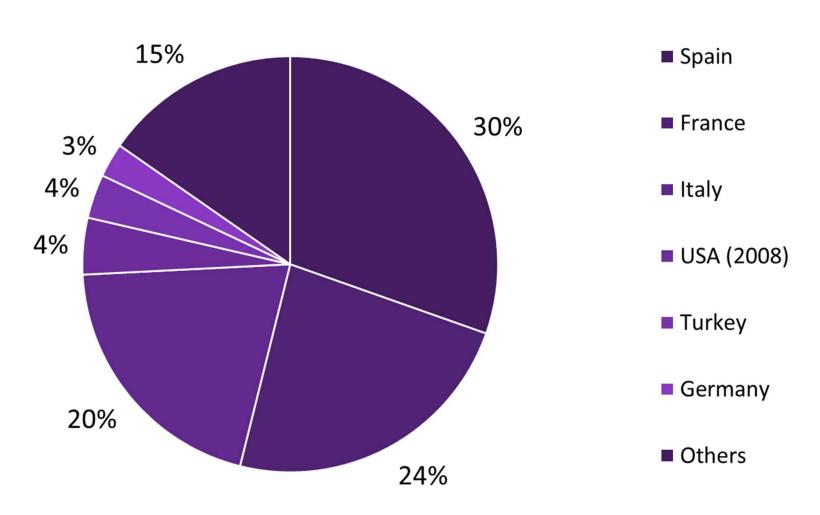
Organic grape area 2011

- Almost 260'000 hectares of organic grapes were grown in 2011, constituting 3.7 percent of the world's grape area (7.2 million hectares in 2010 according to FAOSTAT). In Europe (230'000 hectares), 5.3 percent of the harvested grape area is organic.
- Not all of the grape area listed in the table is used for wine making. The production of table grapes and of raisins is important in many countries, for example, Turkey.
- Of the five most important grape growing countries in the world (Spain, Italy, France, China, and Turkey), only China did not provide data on the area under organic grapes in 2011, although an older figure is available for that country.
- > The countries with the largest organic grape areas are, as for the total grape area, Spain, France, and Italy. Each of these countries has more than 50'000 hectares of organic grapes. The highest shares are also in these countries and in Austria with 9.5 percent of the total grape area of the country.
- Since 2004, when data on land use and crops were collected for the first time, the grape area has more than tripled. However, some of the increase must be attributed to continually improving availability of crop data.
- The available data indicate a large part of the total grape area (42 percent) to be in-conversion. If this is indicative, a considerable increase in supply of organic grapes may be expected, particularly from France, Italy, and Spain.





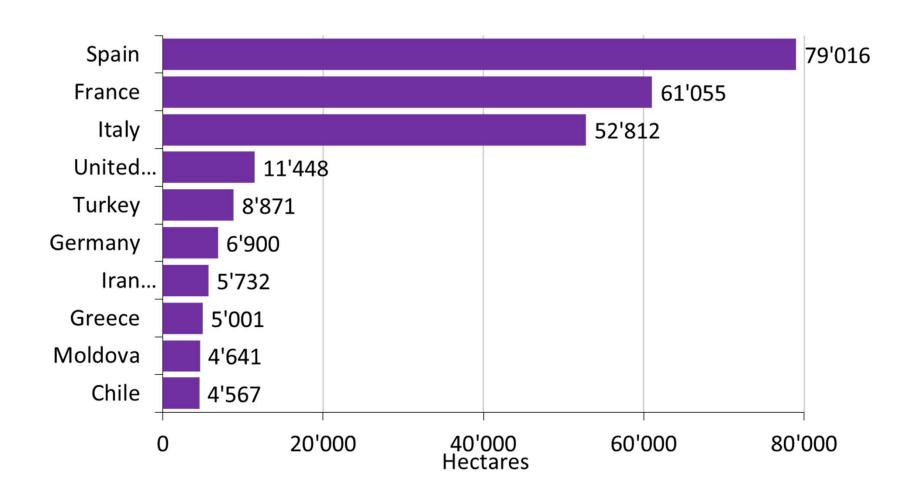
Organic grapes: Distribution of the organic area by country 2011







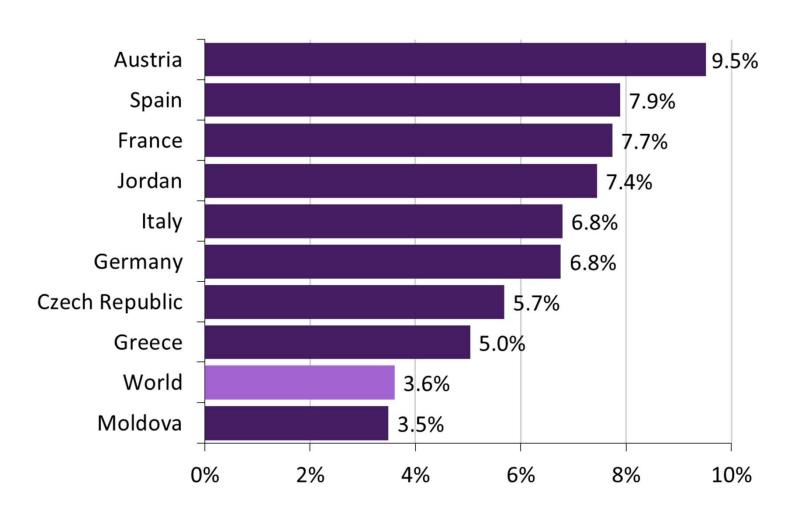
Organic grapes: The ten countries with the largest areas 2011







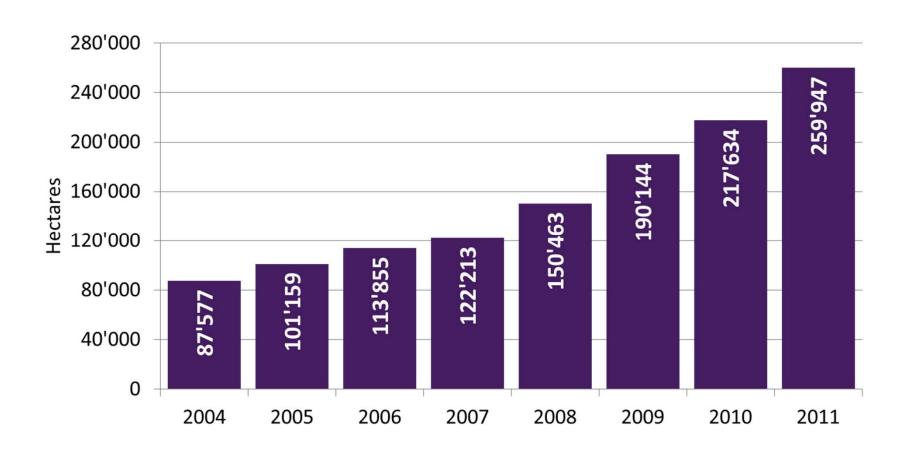
Organic grapes: The ten countries/areas with the highest shares 2011







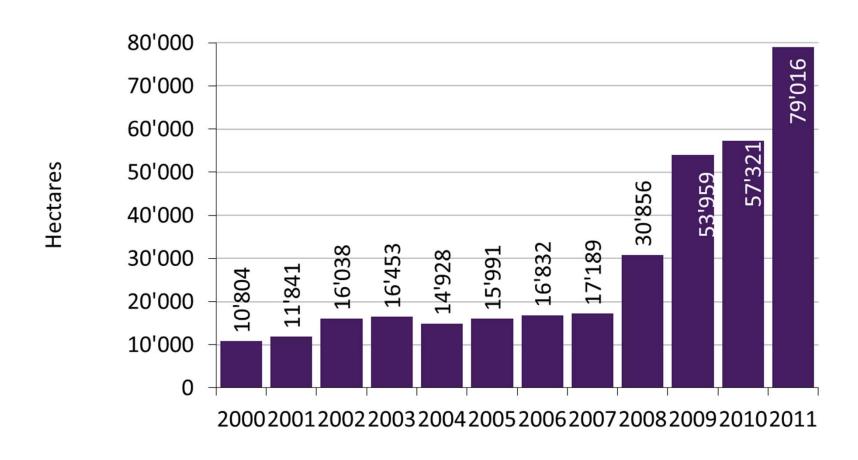
Organic grapes: Growth of the global organic area 2004-2011







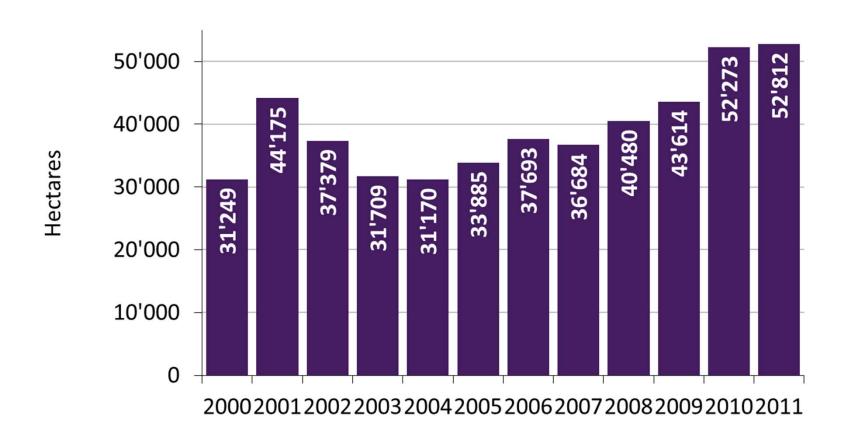
Development of the organic grape area 2000-2011 in Spain (including in-conversion areas)







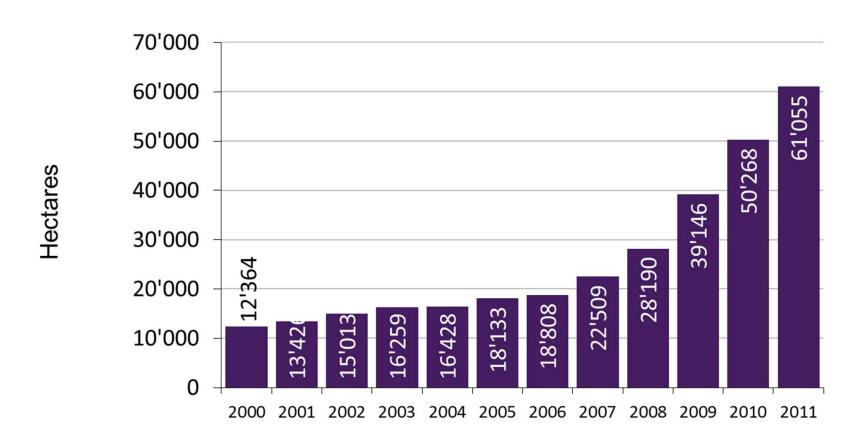
Development of the organic grape area 2000-2011 in Italy (including in-conversion areas)







Development of the organic grape area 2000-2011 in France (including in-conversion areas)







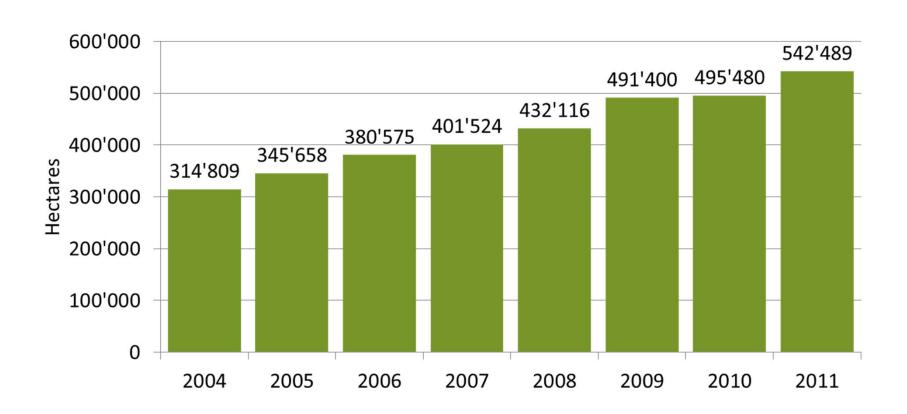
Organic olives 2011

- More than 540'000 hectares were reported to be under organic olive production in 2011. This is approximately 5.7 percent of the world's total harvested olive area (9.5 million hectares).
- > The main countries in which olives are grown are the countries around the Mediterranean. Spain is by far the largest grower with 2 million hectares, and Tunisia (1.6 million hectares), Italy (1.2 million hectares), and Turkey and Greece (each with 0.8 million hectares) are also important producers. For all these countries, data for the organic area are available. Spain has the largest area under organic olives (almost 170'000 hectares), followed by Italy (more than 140'000 hectares), and Tunisia (111'000 hectares).
- In Italy, the percentage of area under organic production is relatively high (12 percent). In Spain, 8 percent of the olive area is organic and in Tunisia 7 percent. France has the highest share of organic olives area, with 20 percent of all olives in France being organic.
- Since 2004, when data on land use and crops were collected for the first time, the olive area increased by 70 percent. However, some of the increase must be attributed to continually improving availability of crop data.
- The data available for a breakdown of the fully converted and in-conversion area shows that approximately two-thirds of the total organic area is fully organic. If the relative figures are indicative of the proportions of the total area, almost one third is in-conversion, and will be fully converted in the next few years. This has implications for the availability of organic olives in the near future.





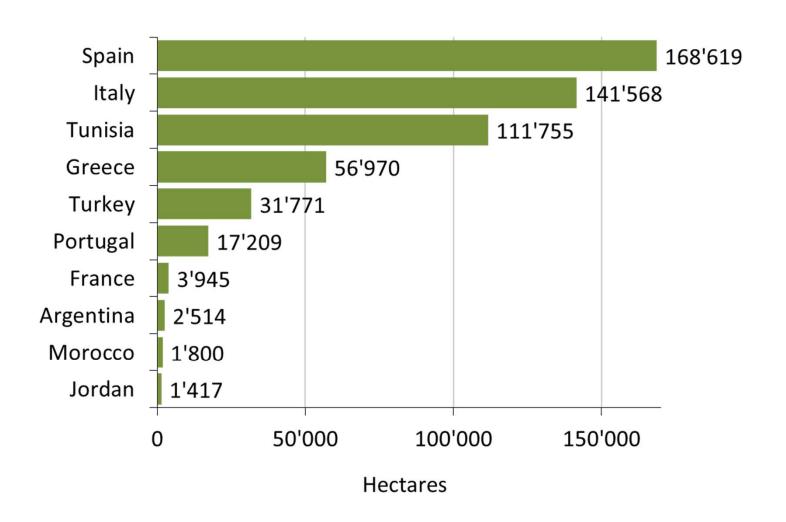
Organic olives: Growth of the organically managed land 2004-2011







Organic olive area 2011: The ten leading countries







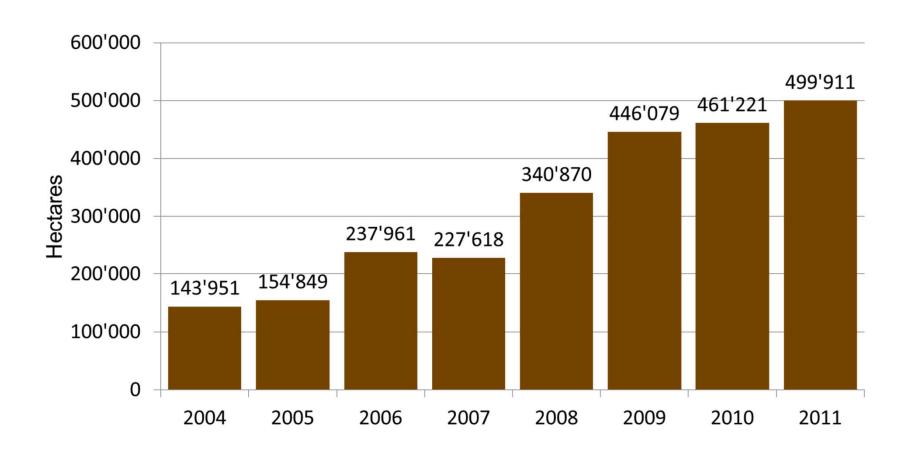
Organic oilseeds 2011

- An area of almost 500'000 hectares was reported to be used for growing organic oilseeds in 2011. This is approximately 0.3 percent of the world's total harvested oilseed area (more than 196 million hectares).
- The main countries in which oilseeds are grown are the United States, India, China, and Brazil (each with more than 20 million hectares). The United States (33 million hectares) is by far the largest grower. However, of these countries, data on the organic area were only available for the United States.
- The countries with the largest organic oilseed area are the United States, Romania, Kazakhstan, Canada, and Ukraine.
- > The highest shares are in Peru (soybeans and peanuts), El Salvador (sesame), Austria (soya and sunflower seed), Nicaragua (sesame), and Greece (sunflower seed).
- Since 2004, when data on land use and crops were collected for the first time, the oilseed area (2004: 140'000 hectares) has more than trebled. However, some of the increase must be attributed to continually improving availability of crop data.
- > One quarter of the organic oilseed area is for sunflower seeds, and another quarter is for soybeans.
- The data available for a breakdown of the total fully converted and in-conversion area shows that approximately two-thirds of the organic oilseed area is fully organic. If the relative figures are indicative of the proportions of the total area, 12 percent is in-conversion, and will be fully converted in the next few years. This has implications for the availability of organic oilseeds in the near future.





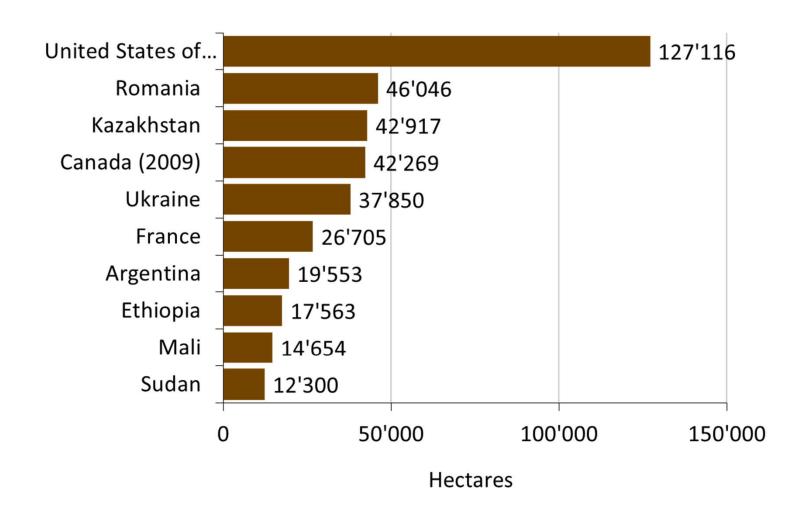
Organic oilseeds: Growth of the organically managed land 2004-2011







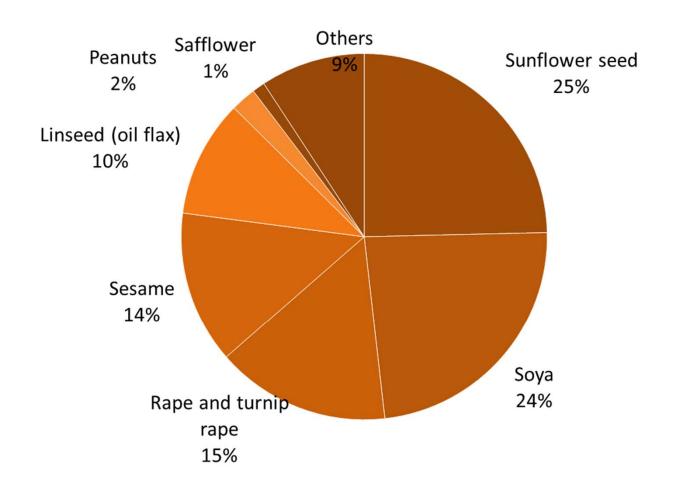
Organic oilseeds area 2011: The ten leading countries







Organic oilseeds land worldwide by main crop groups 2011 (total 0.49 million hectares)







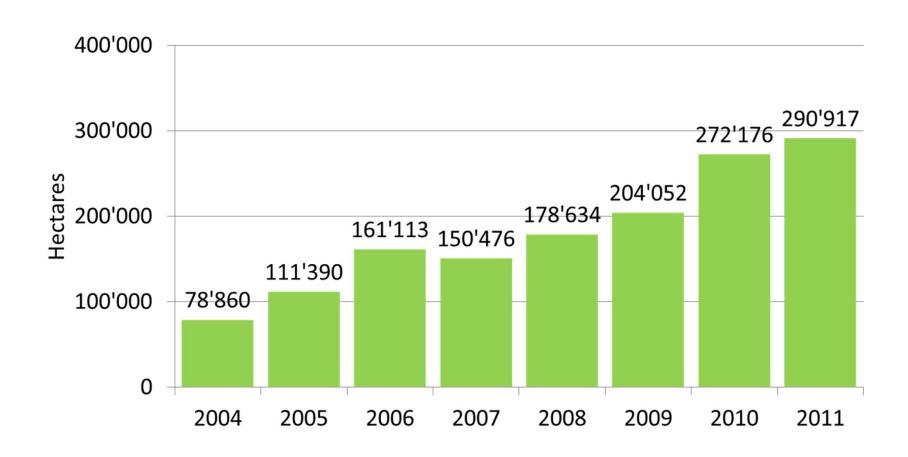
Organic protein crops 2011

- > The total area under organic protein crops recorded here (290'000 hectares), is 0.4 percent of the total area of protein crops grown in the world (71 million hectares in 2010 according to FAOSTAT).
- Not current data on the organic area were available from the three most important protein crop growing countries in the world (India, Niger, and Myanmar); with India (24 million hectares) by far the largest grower.
- > The countries with the largest organic protein crop areas are France, Spain, Lithuania, and Germany. Austria has the highest share of protein crop organic area with almost 70 percent.
- Since 2004, when data on land use and crops were collected for the first time, the protein crop area almost quadrupled from 78'000 to 290'000 hectares. However, some of the increase must be attributed to continually improving availability of crop data.
- Unfortunately, for protein crops a breakdown for individual crops is not available for many countries. For instance, Eurostat - the statistical office of the European Union - communicates only one figure for "dried pulses".
- The data available for a breakdown of the total fully converted and in-conversion area shows that approximately two-thirds of the total organic area for protein crops is fully organic. If the relative figures are indicative of the proportions of the total area, 25 percent is in-conversion, and will be fully converted in the next few years. This has implications for the availability of organic protein crops in the near future.





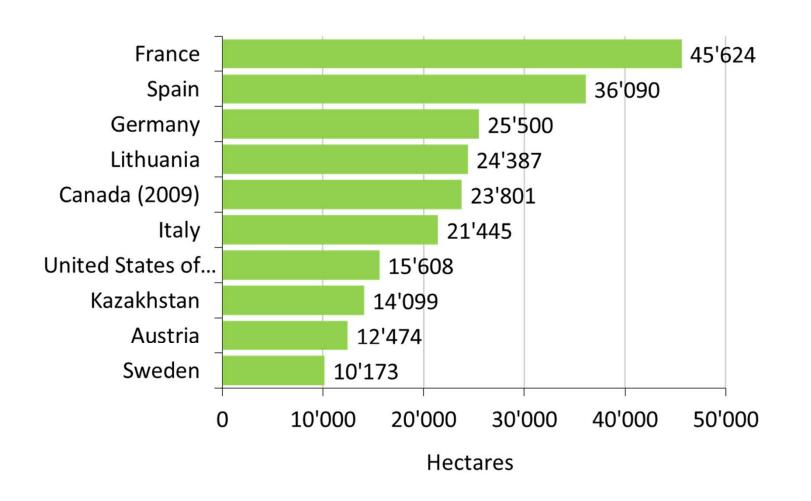
Organic protein crops: Growth of the organically managed land 2004-2011







Organic protein crop area 2011: The ten leading countries







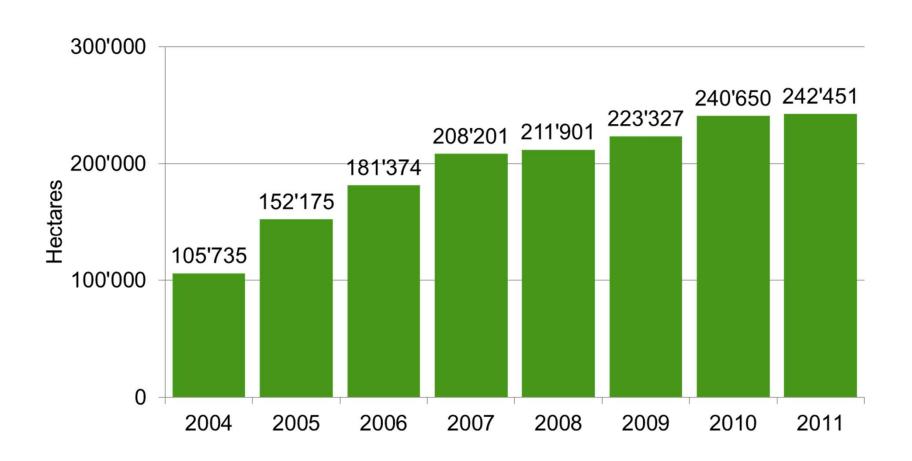
Organic vegetables 2011

- > The total area under organic vegetables recorded here (242'000 hectares), is 0.4 percent of the total area of vegetables grown in the world (60 million hectares in 2010 according to FAOSTAT).
- Of the three most important vegetable growing countries in the world (China, India, Nigeria, and Turkey), organic data are only available for Turkey.
- > The countries with the largest organic vegetable areas are the United States, Mexico, and Italy (each with more than 20'000 hectares).
- > The highest shares of the total vegetable areas are in Denmark, Switzerland, Austria, and Germany. These are also the countries in Europe that have the largest organic market shares for organic food.
- > Since 2004, when data on organic land use and crops were collected for the first time, the vegetable area has more than double from 100'000 to the current 242'000 hectares. However, some of the increase must be attributed to continually improving availability of crop data.
- Unfortunately, for vegetables, a breakdown for individual vegetable groups is available for only half of the organic vegetable area. A large part (34'000 hectares) is for pulses (fresh beans and peas), followed by root tubers and leafy and stalked vegetables (salads).
- The data available for a breakdown of the fully converted and in-conversion area shows that threequarters of the total organic vegetable area is fully converted. If the relative figures are indicative of the proportions of the total area, 25 percent is in-conversion, and will be fully converted in the next few years, implying that there will probably not be a major increase of the organic vegetable area.





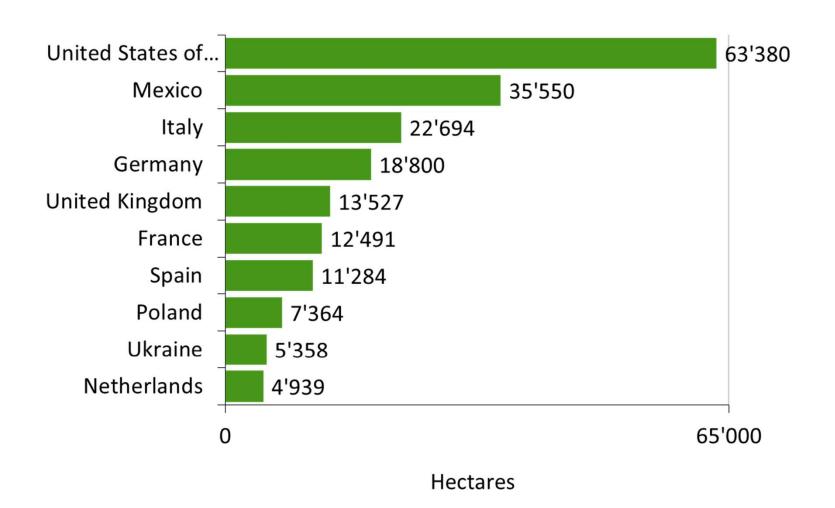
Organic vegetables: Growth of the organically managed land 2004-2011







Organic vegetable area 2011: The ten leading countries







Organic vegetables: The ten countries/areas with the highest shares 2011

