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The state and evolution of organic fruit and vegetables. Production and market at world-scale

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XII International Symposium on Banana: Celebrating Banana Organic Production, August 15, 2022

Contents

- Global survey on organic agriculture and data collection challenges
- Current status of certified organic agriculture worldwide (area, producers, market, retail sales, exports/imports)
- Organic fruit and vegetables:
  - Current status of organic citrus, temperate and tropical fruit, and organic vegetables production and exports
  - Market trends
  - Export opportunities
- Conclusion

FiBL Switzerland with sites in Frick & Lausanne

- Founded in 1973
- 220 employees
- Research, consulting, continuing education and development cooperation
- Research in modern infrastructure at the Frick site and on over 150 Swiss organic farms

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Departments of FiBL Switzerland

- Soil Sciences
- Crop Sciences
- Livestock Sciences
- Socioeconomic Sciences
- International Cooperation
- Extension, Training & Communication
- Suisse Romande
- Finances, Resources & Administration

Department of Crop Sciences

Main areas of work

- Cultivation techniques in fruit growing, viticulture and vegetable growing
- System-related plant protection
- Biodiversity and agroecology
- Organic plant breeding - variety testing
- Farm inputs and OrganicXseeds

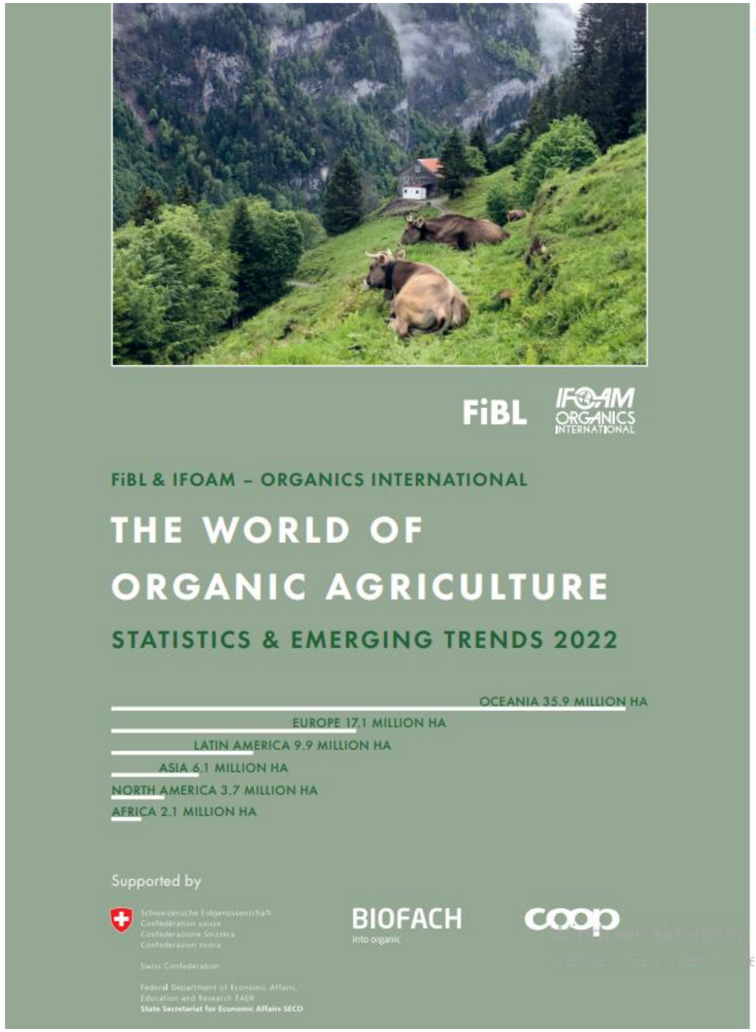




The World of Organic Agriculture 2022

- The 23rd edition of «The World of Organic Agriculture», was published by FiBL and IFOAM – Organics International in February 2022.
- Data tables
- Country and continent reports
- Markets, standards, policy support
- The book can be ordered or downloaded at (item number 1344): https://www.fibl.org/en/shop-en

- www.organic-world.net
- https://statistics.fibl.org



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Swiss Confederation

Federal Departement of Economic Affairs, Education and Research EAER
State Secretariat for Economic Affairs SECO

coop

BIOFACH
into organic

IFOAM ORGANICS INTERNATIONAL

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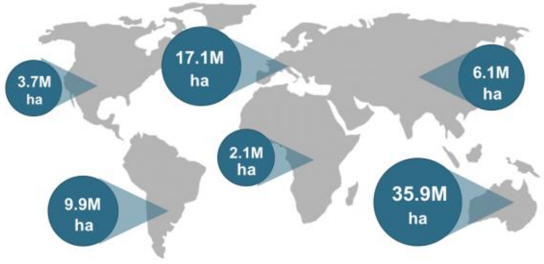
Organic Agriculture Worldwide 2020

Organic Farmland

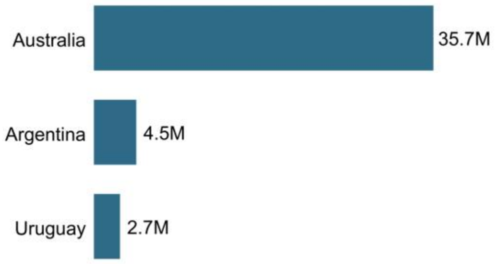


74.9M ha Organic farmland in million (M) hectares (ha)

4.1% Growth 2019/2020

190 Countries with organic farming

Farmland in million (M) hectares
Top 3 countries



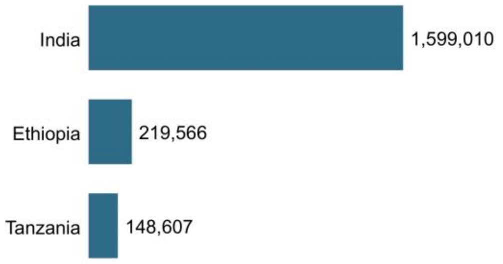
Organic Producers

The number of organic producers is increasing

3.4M Organic farmers (million)

7.6% From 2019

Number of producers
Top 3 countries

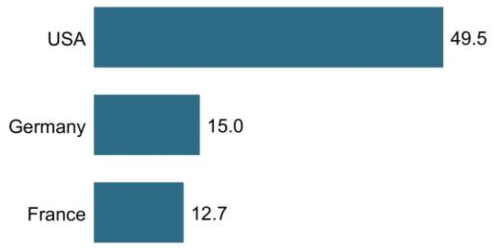


Organic Market

The global market is growing and consumer demand is increasing

Over 120.6 Global organic food market in billion euros

Market in billion euros
Top 3 countries



Market growth in percent
Top 3 countries

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Source: FiBL survey © 2022
More information: www.organic-world.net - statistics.fibl.org

Data collection challenges

Area and production data

- Data gaps both for total area and for crop level (in particular for production data)
- Comparison with FAO data for area shares difficult (certified vs. harvested area)

Domestic market data

- Not many countries have data on organic retail sales, so this data is incomplete.
- Data are based on different methodologies
- Data on food service/catering (e.g. restaurants, canteens) are very scarce.

Export and import data

- Only few countries have data on organic exports and imports.
- New: EU organic import data (since 2018); for the US since 2014 – US data not complete.

WORLD: ORGANIC FARMLAND 2020

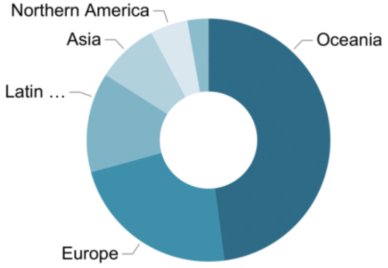
World
74.9M
hectares

Australia
35.69M
hectares

1.6%
of the world´s farmland is organic

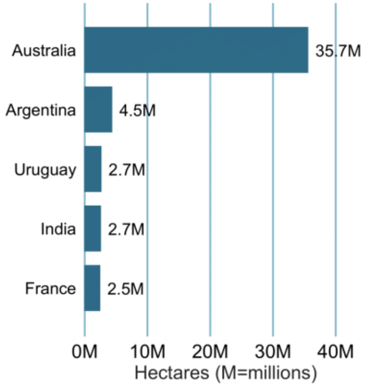
4.1%
growth since 2019

In Oceania there were 35.9 million (M) hectares (ha), in Europe 17.1 million ha and in Latin America 9.9 million ha.



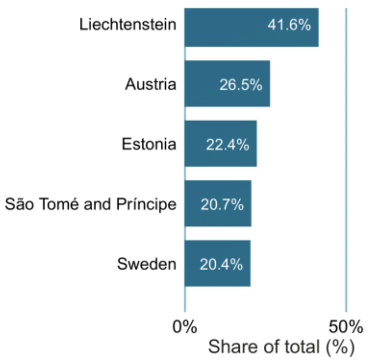
Distribution of organic agricultural land by region 2020.

The ten countries with the largest organic agricultural areas represented 75 % of the world´s organic agricultural land.



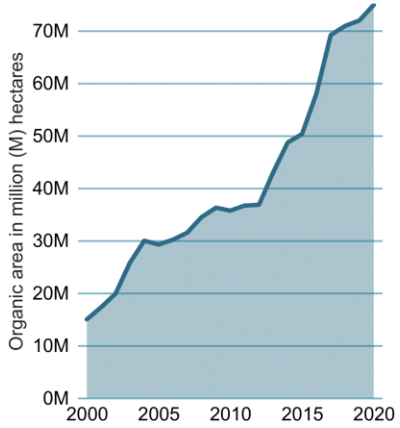
The five countries with the largest areas of organic agricultural land 2020.

18 countries had 10% or more of their agricultural land under organic management.



Top 5 countries with more than 10% of organic agricultural land 2020.

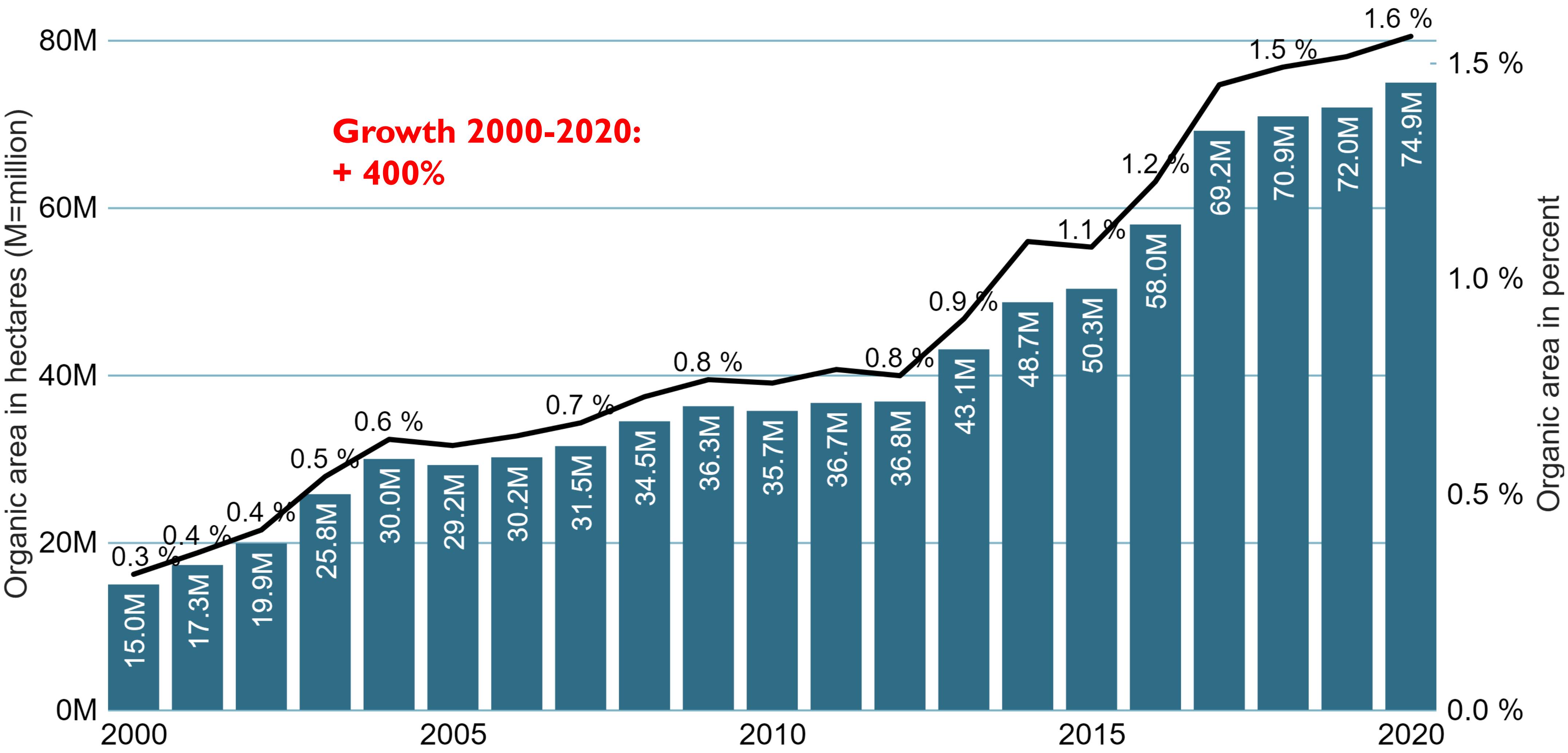
In 2020, nearly 3 million hectares more were reported compared with 2019.



Growth of the organic agricultural land 2000-2020.

World: Growth of organic agricultural land and organic share 2000 - 2020

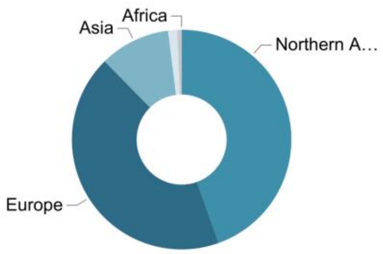
Source: FiBL-IFOAM-SOEL surveys 2001-2022



WORLD: ORGANIC RETAIL SALES 2020

World
almost
121bn €

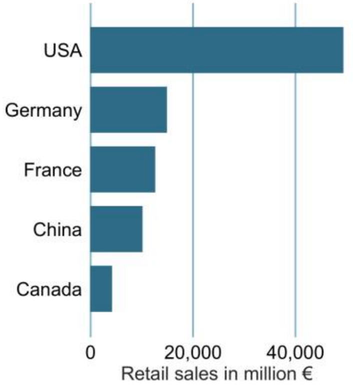
The largest single market was the USA with 49.5 billion (bn) €, followed by the European Union (44.8 bn €). By region, Northern America had the lead (53.7 bn €), followed by Europe (52.0 bn €) and Asia (12.5 bn €).



Distribution of retail sales by region 2020.

Northern America
54bn €

The countries with the largest markets for organic food were the USA with 49.5 billion (bn) €, Germany (15.0 bn €), France (12.9 bn €) and China (10.2 bn €).



The five countries with the largest markets for organic food in 2020.

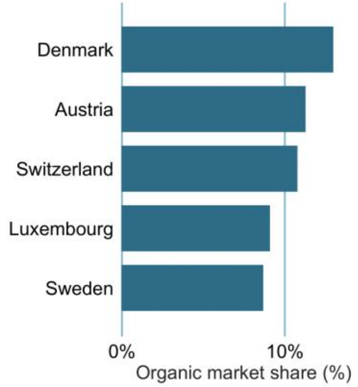
418 €
spent per
person in
Switzerland

Switzerland had the highest per capita consumption worldwide, followed by Denmark, Luxembourg, Austria and Sweden.

Top five countries with the highest per capita consumption 2020.

13.0%
of the market
in Denmark
was organic

The highest organic share of the total market was in Denmark, followed by Austria, Switzerland, Luxembourg and Sweden.



The five countries with the highest organic shares of the total market in 2020.

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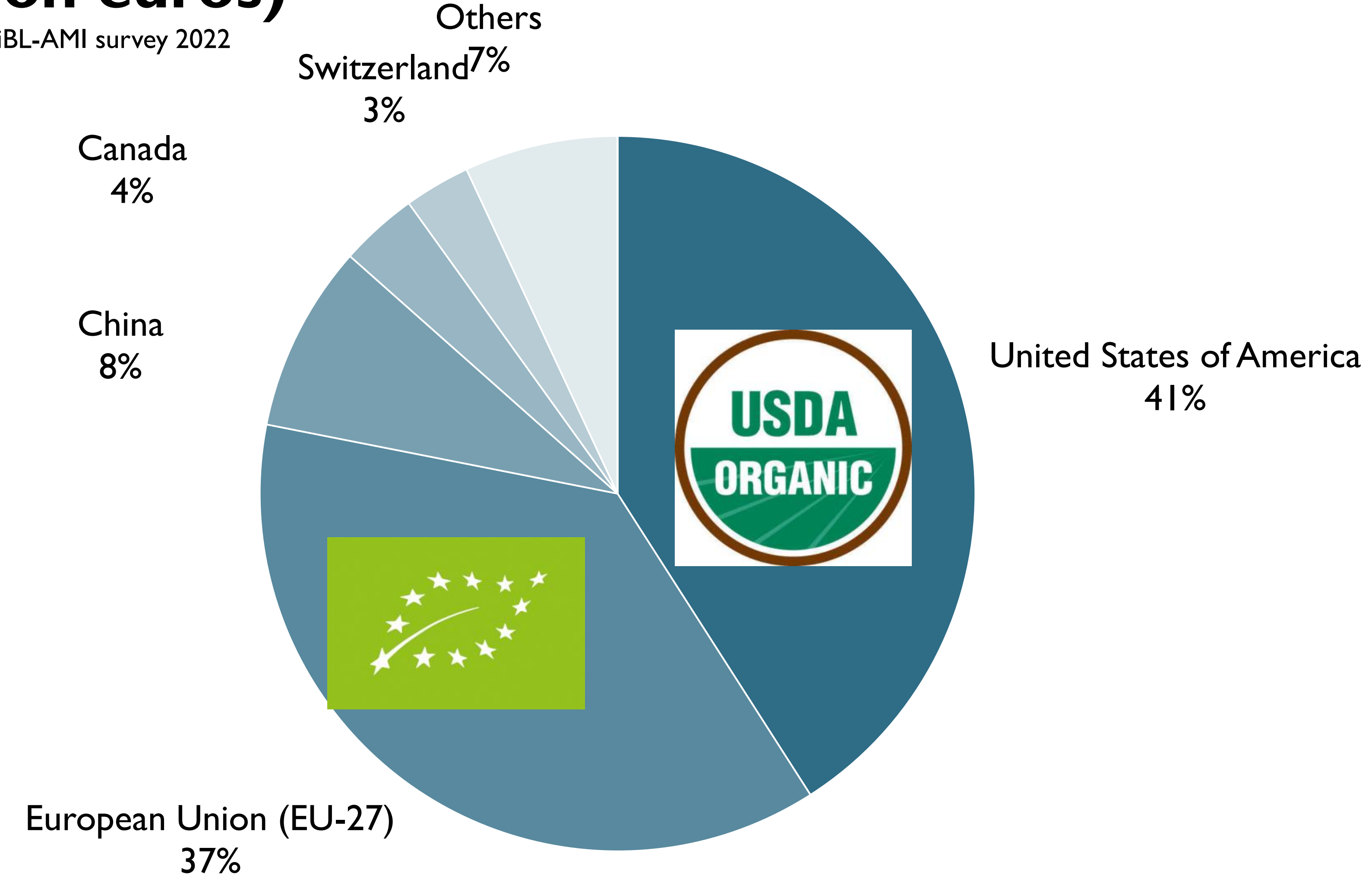
Source: FiBL 2022 www.organic-world.net - statistics.fibl.org

World: Retail sales by single market 2020 (Total: 121 billion euros)

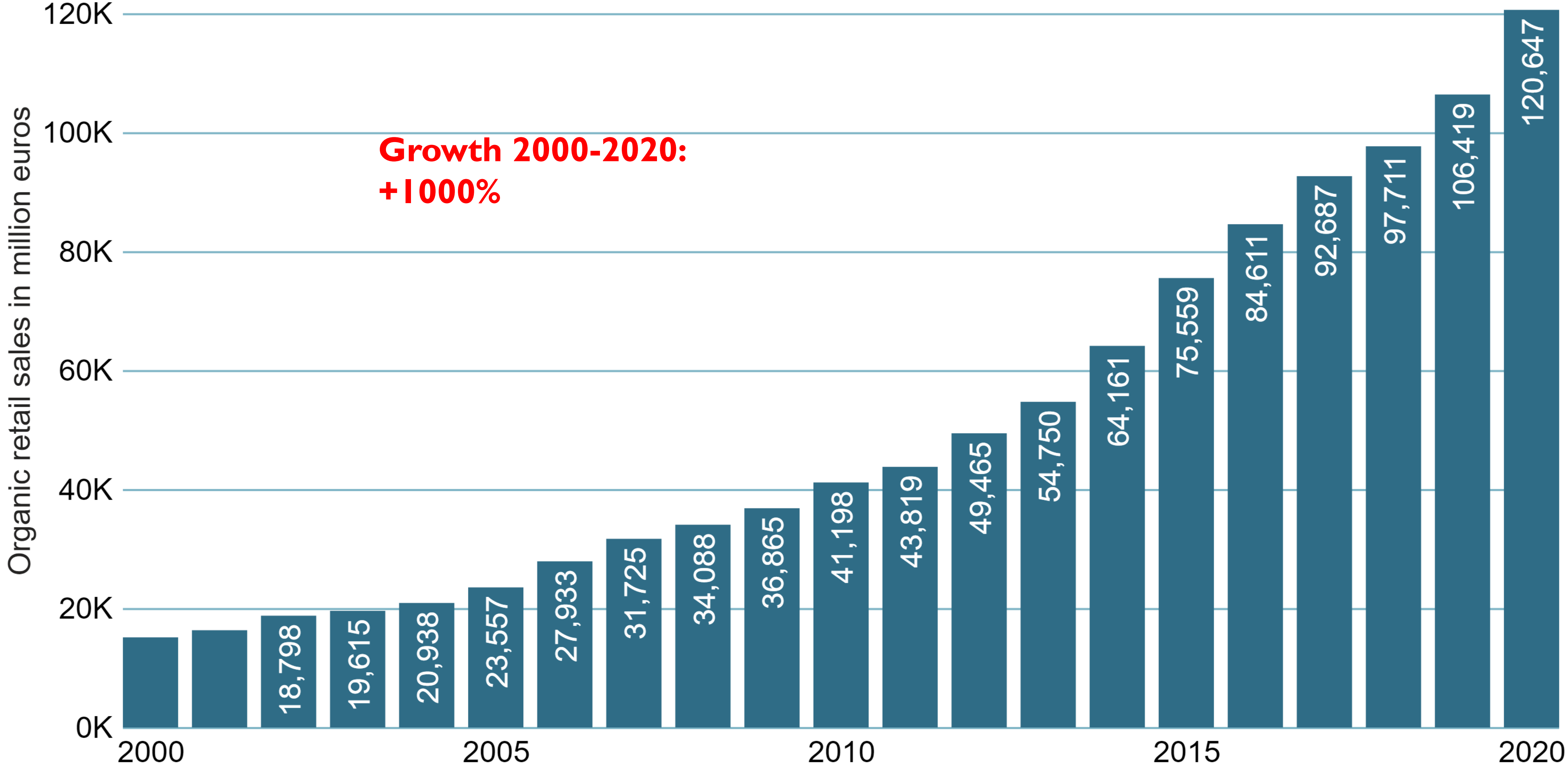
Source: FiBL-AMI survey 2022



Distribution of retail sales

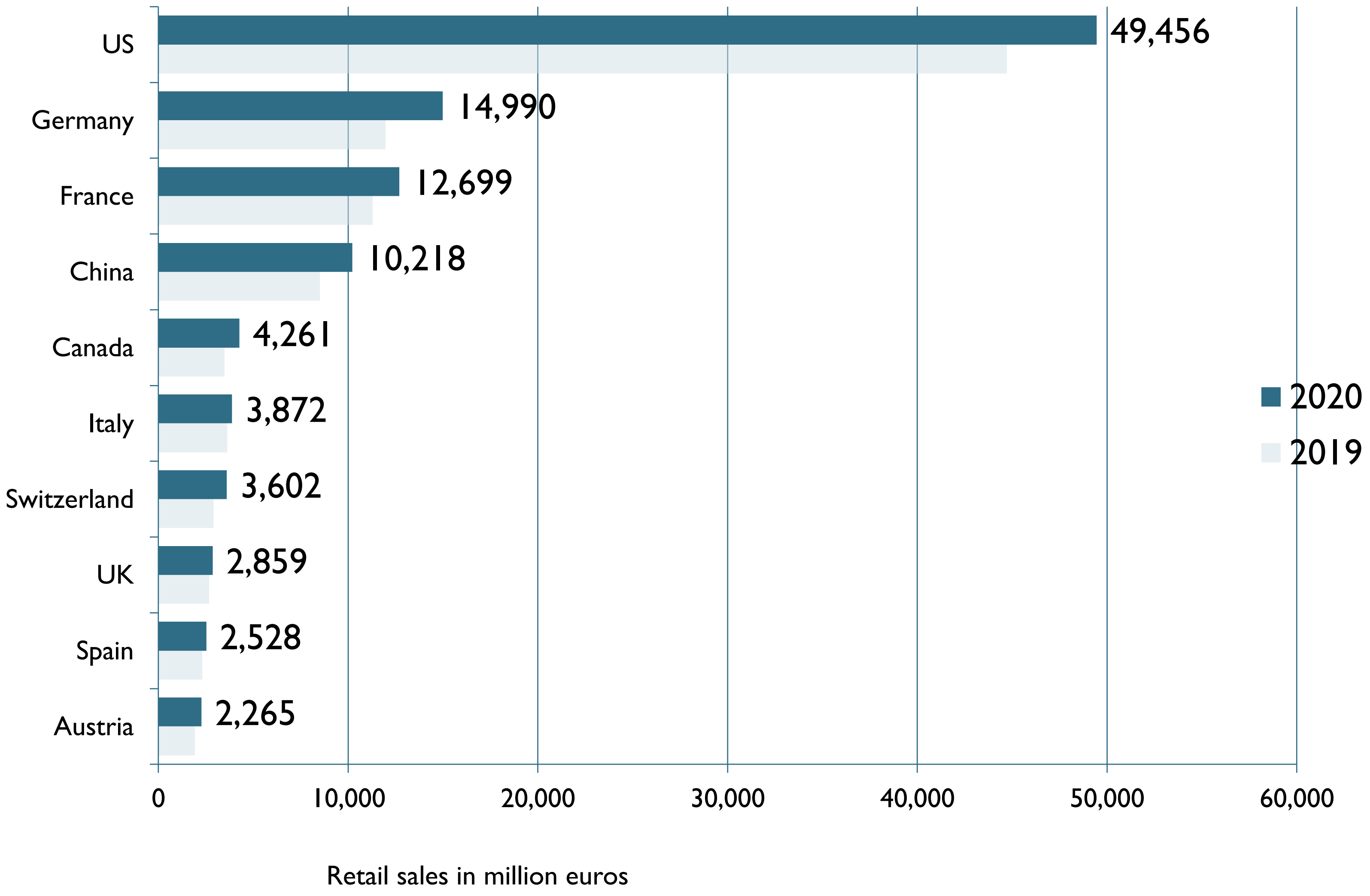
World: Growth of organic retail sales 2000 - 2020

Source: FiBL survey 2001-2022



Top 10 organic markets 2019 and 2020

Source: FiBL AMI survey 2022



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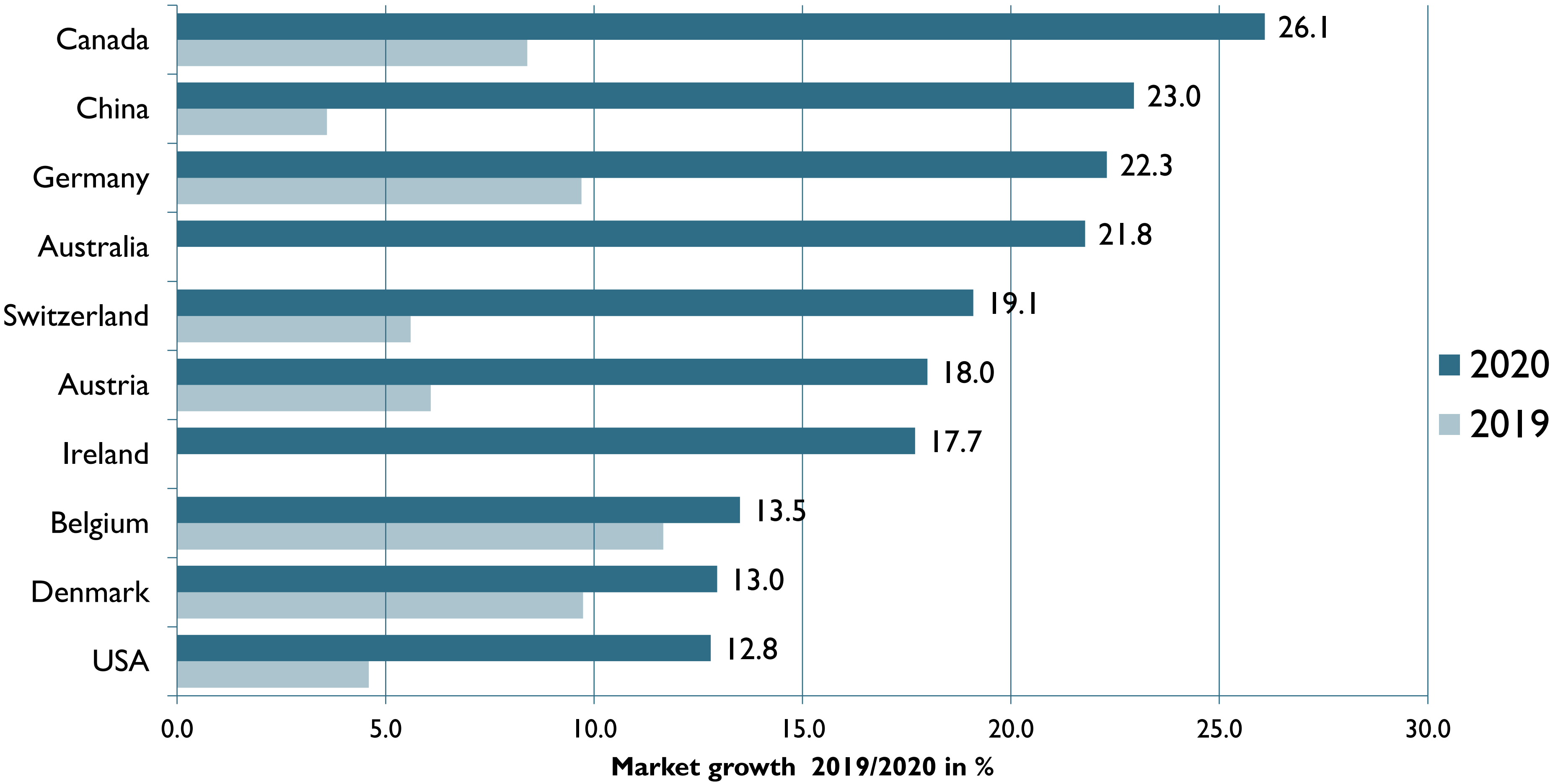
The ten countries with largest organic market growth 2020

Source: FiBL-AMI-survey 2022



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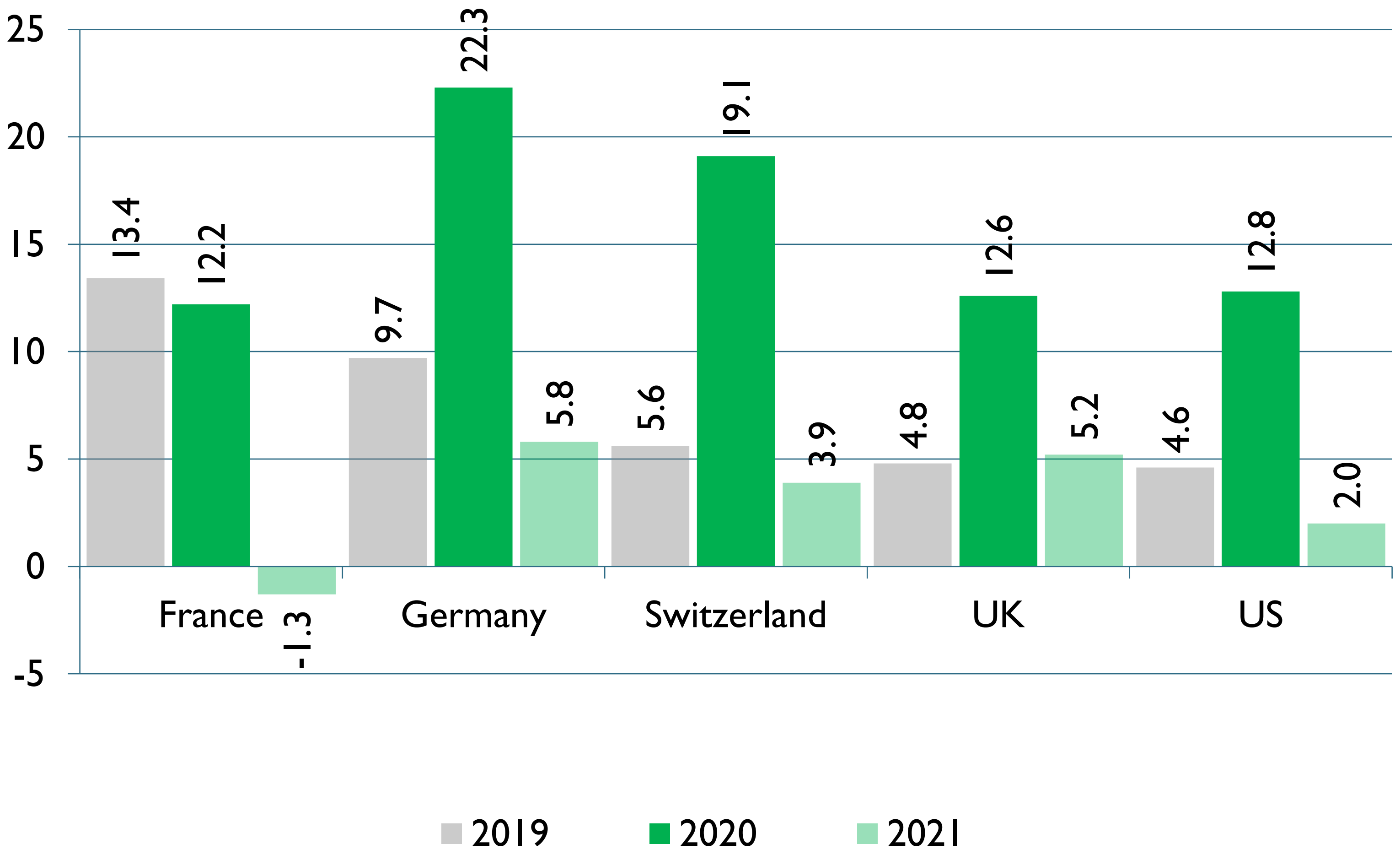
Market growth rates 2019, 2020 and 2021 compared

Source: FiBL-AMI survey 2022



After the lockdown year 2020, growth of the organic market in 2021 was smaller as consumers were eating more again out of home.

Market growth compared

Effect of the war in Ukraine

- The rising inflation and the higher cost of living since the outbreak of the waris also hitting the organic market.
- In Germany, in the first 6 months 2022, a decline in spending on fresh organic food was noted.
- Not all types of business are equally affected (Germany).
  - Organic retailers lost
  - The general retailers and direct marketers were able to maintain their sales level.
  - The winners are discounters, which recorded an increase in sales of organic products.
- "Economically difficult times are therefore boosting the discounters," says AMI, the agricultural market information company.
- Please note: Giant plus in retail sales compared to pre-Corona (2019 vs. 2022)
- *Source: AMI*

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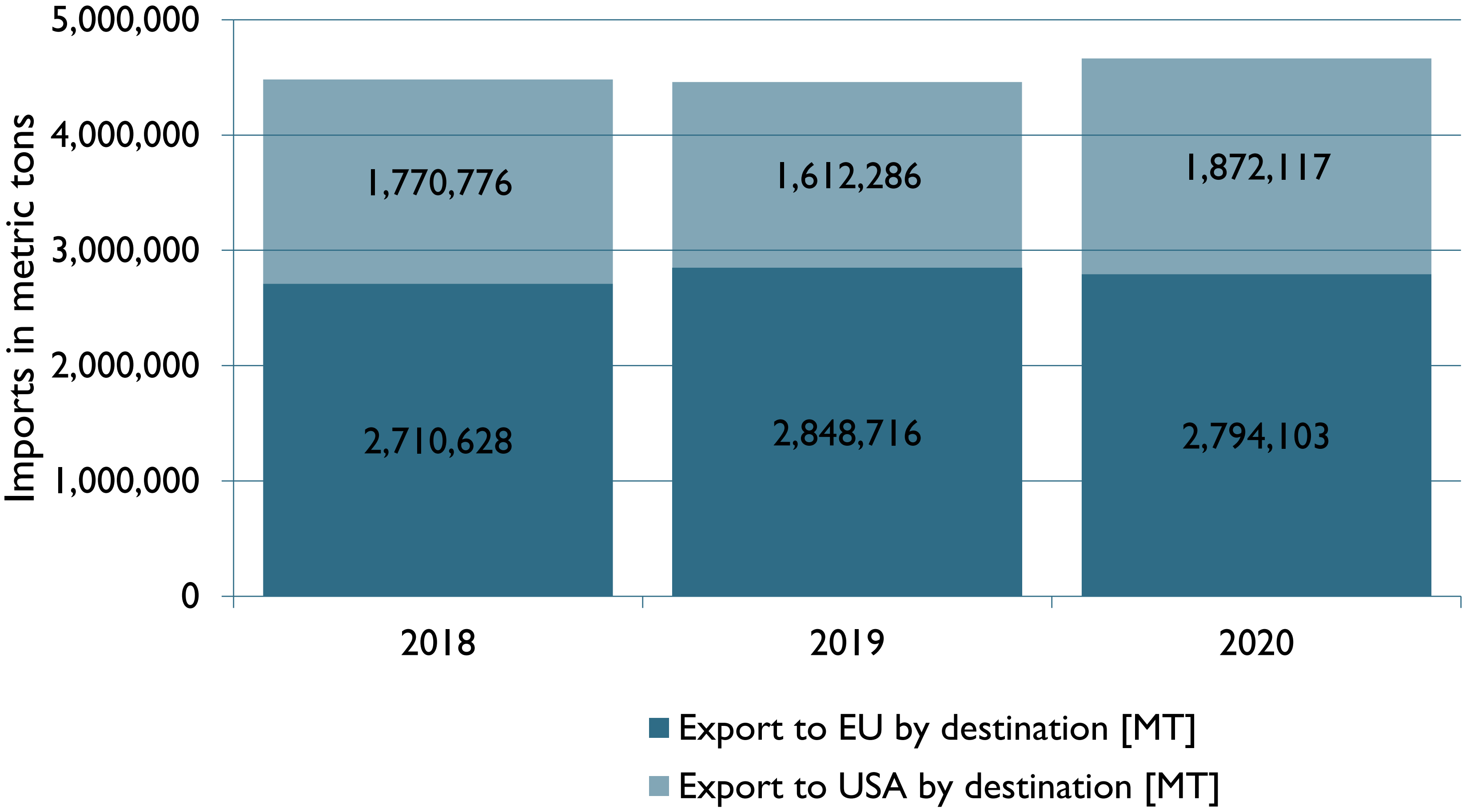
World: Growth of imports to the EU and US 2018/2020

Source: TRACES and USDA 2019-2021

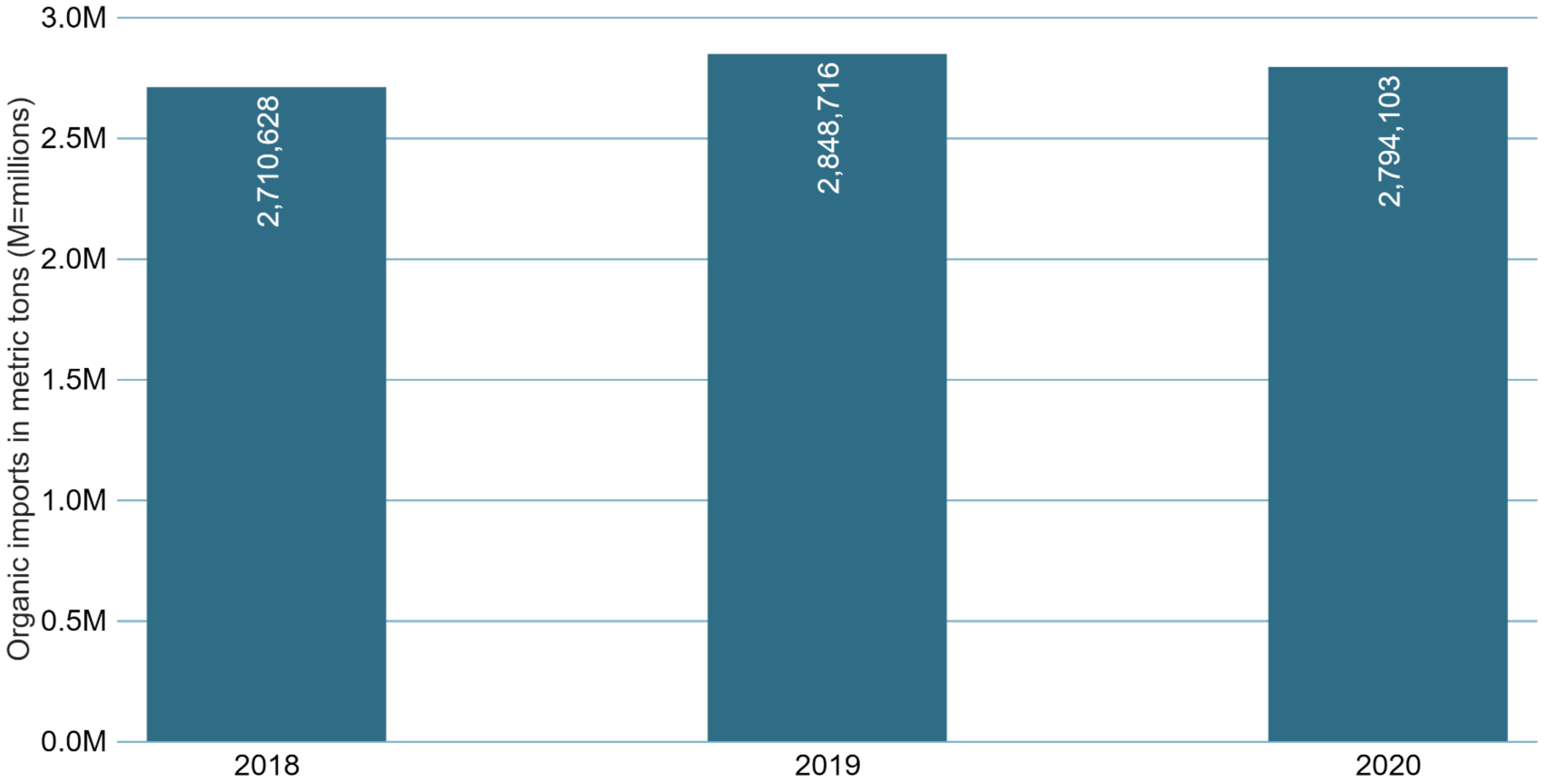
USA: Only selected crops



EU and US organic imports

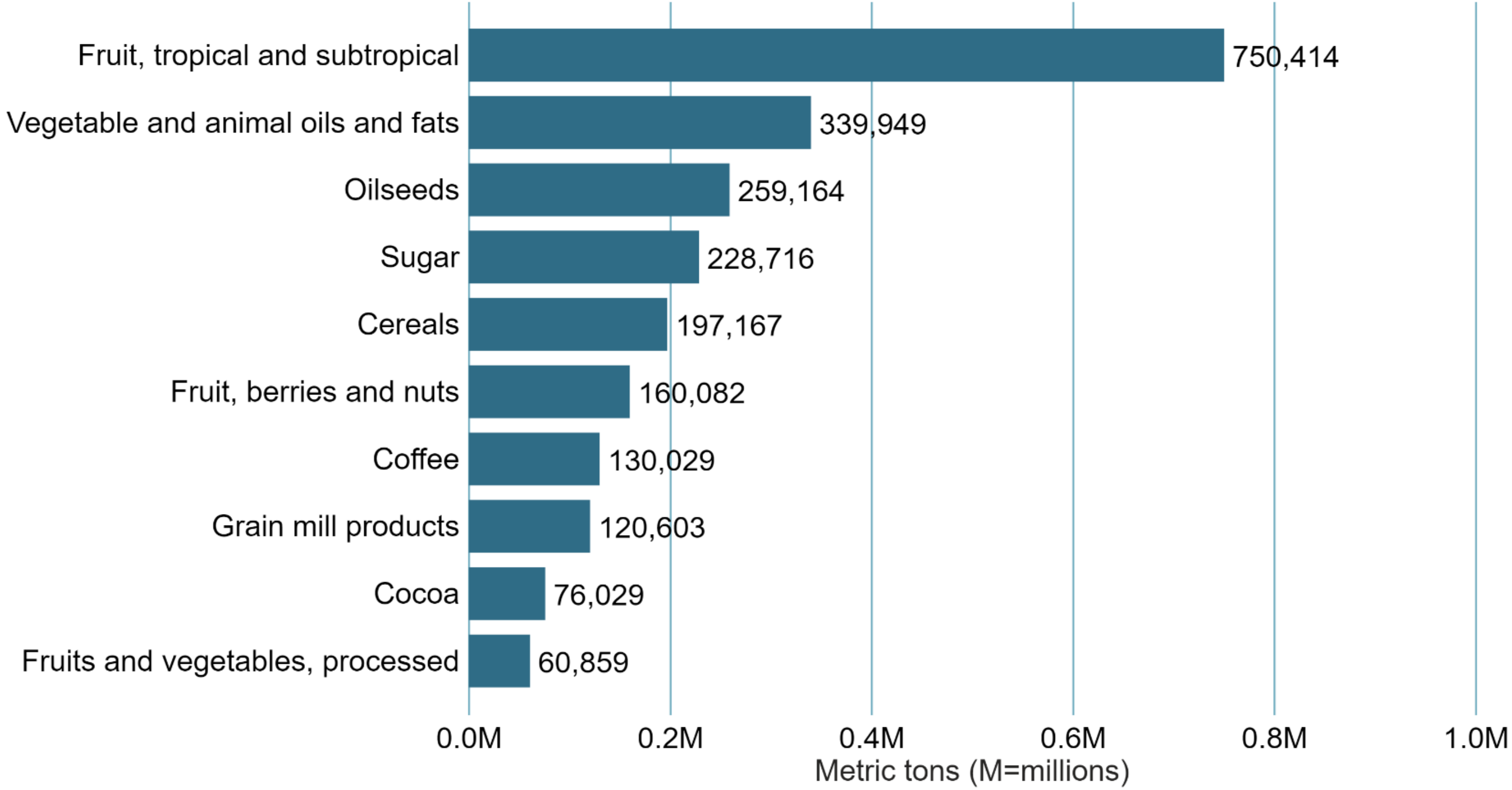
European Union: Organic agri-food imports development 2018 - 2020

Source: Traces/European Commission



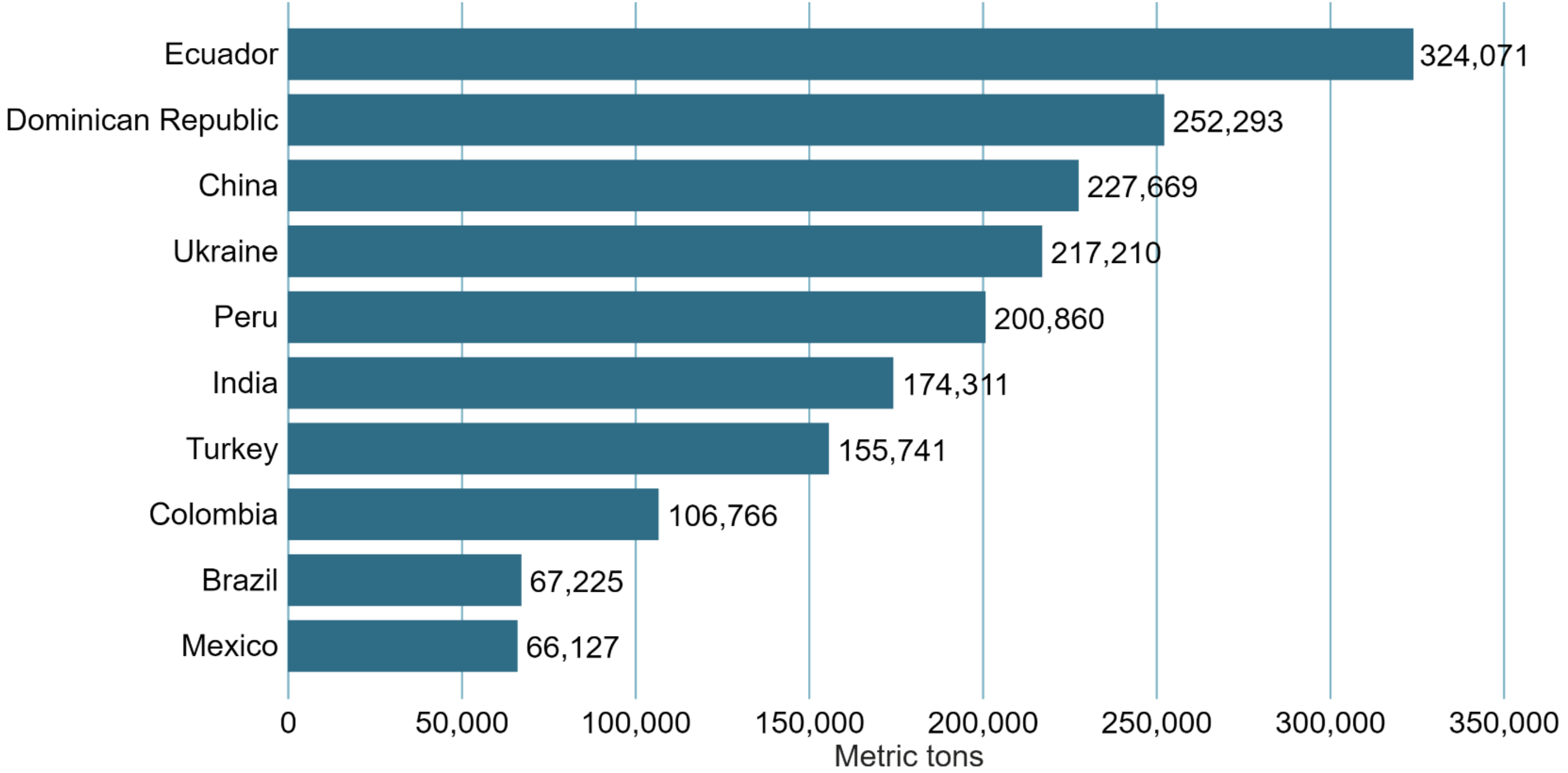
European Union: Main product categories of EU organic agri-food imports 2020

Source: Traces/European Commission 2021



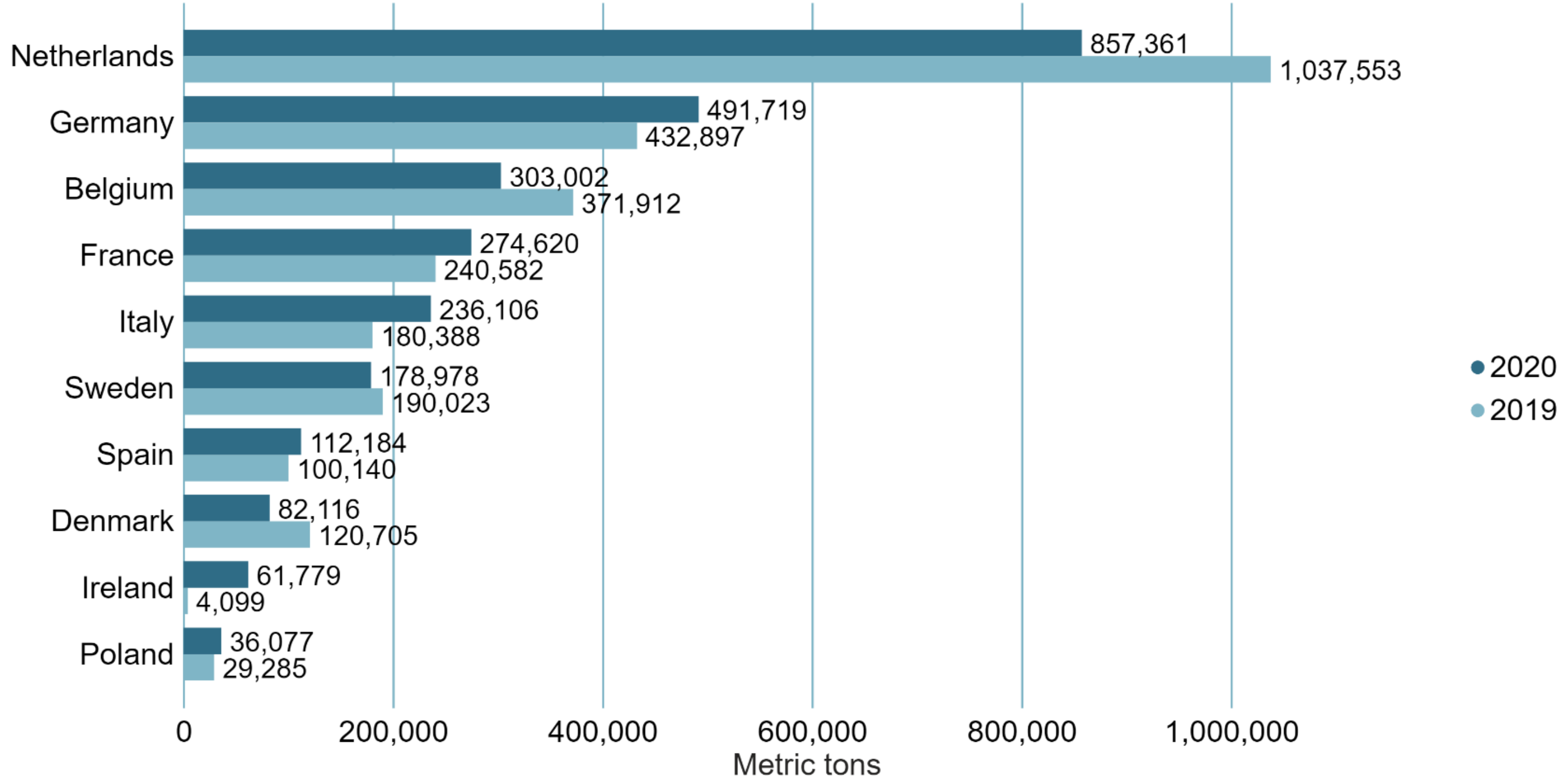
European Union: The ten countries with the largest export volumes to the EU 2020

Source: Traces/European Commission 2021



European Union: Organic agri-food imports by country 2020

Source: Traces/European Commission 2021

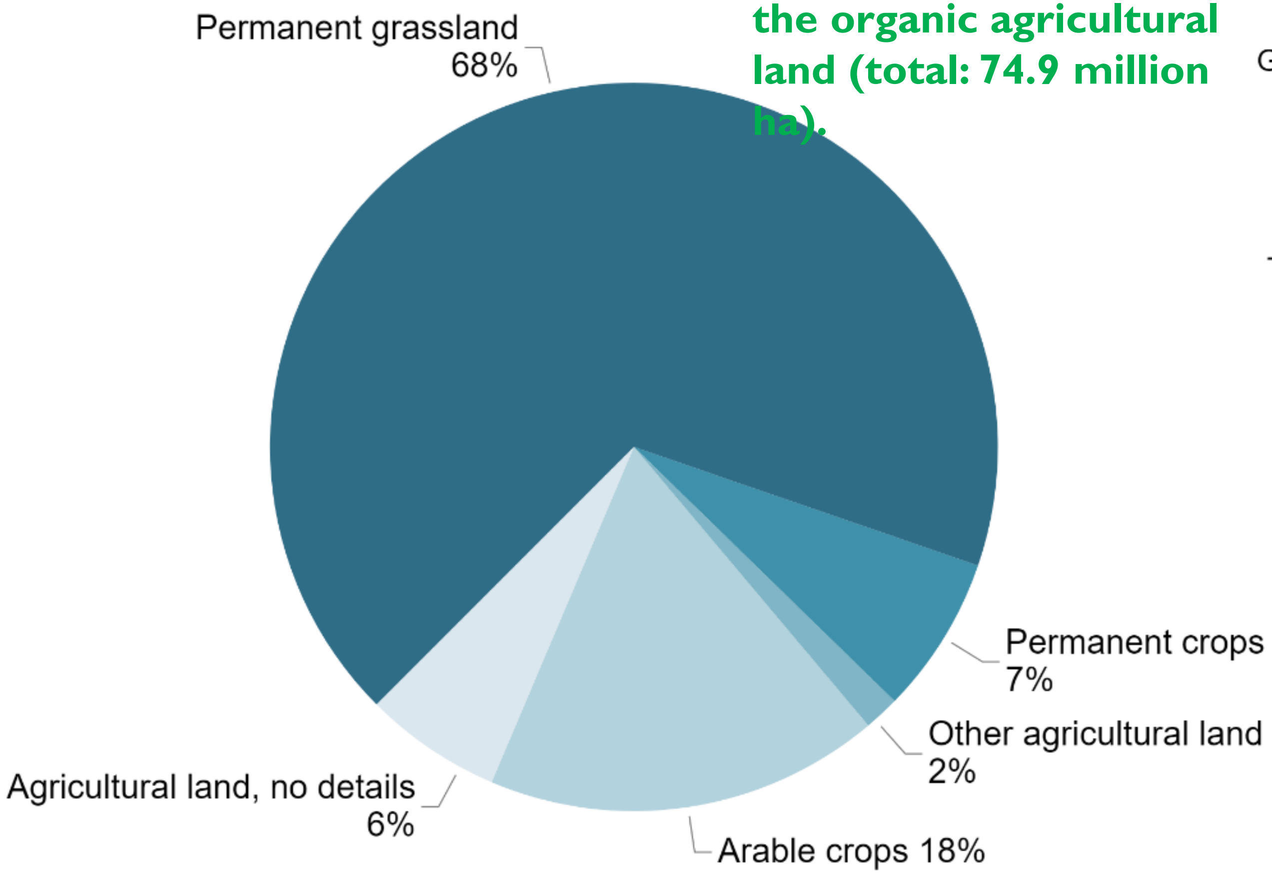


World: Distribution of main land use types and key crop categories 2020

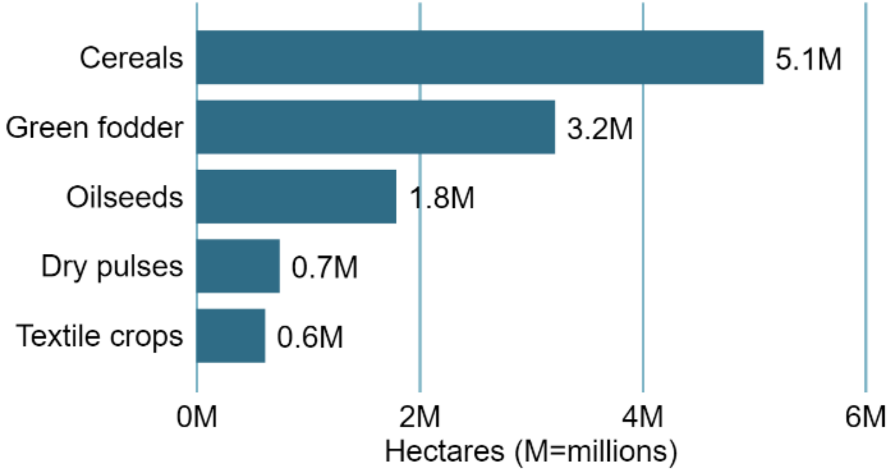
FiBL survey 2022, based on information from the private sector, certifiers, and governments.

Land use types

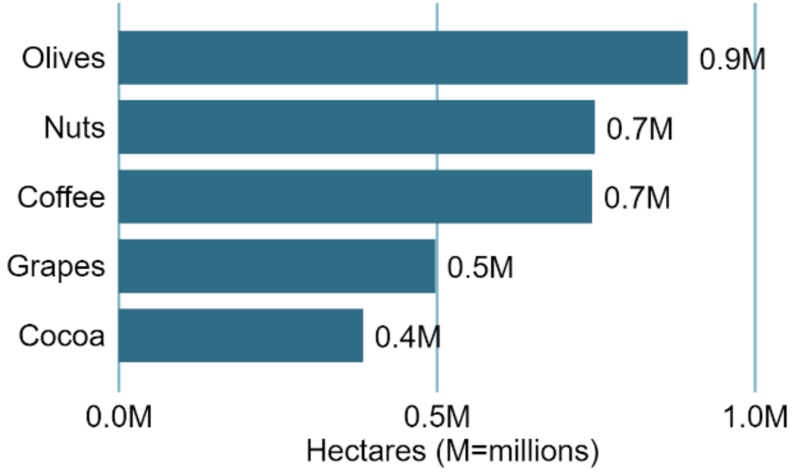
Land use and crop details available for over 90 % of the organic agricultural land (total: 74.9 million ha).



Key arable crops

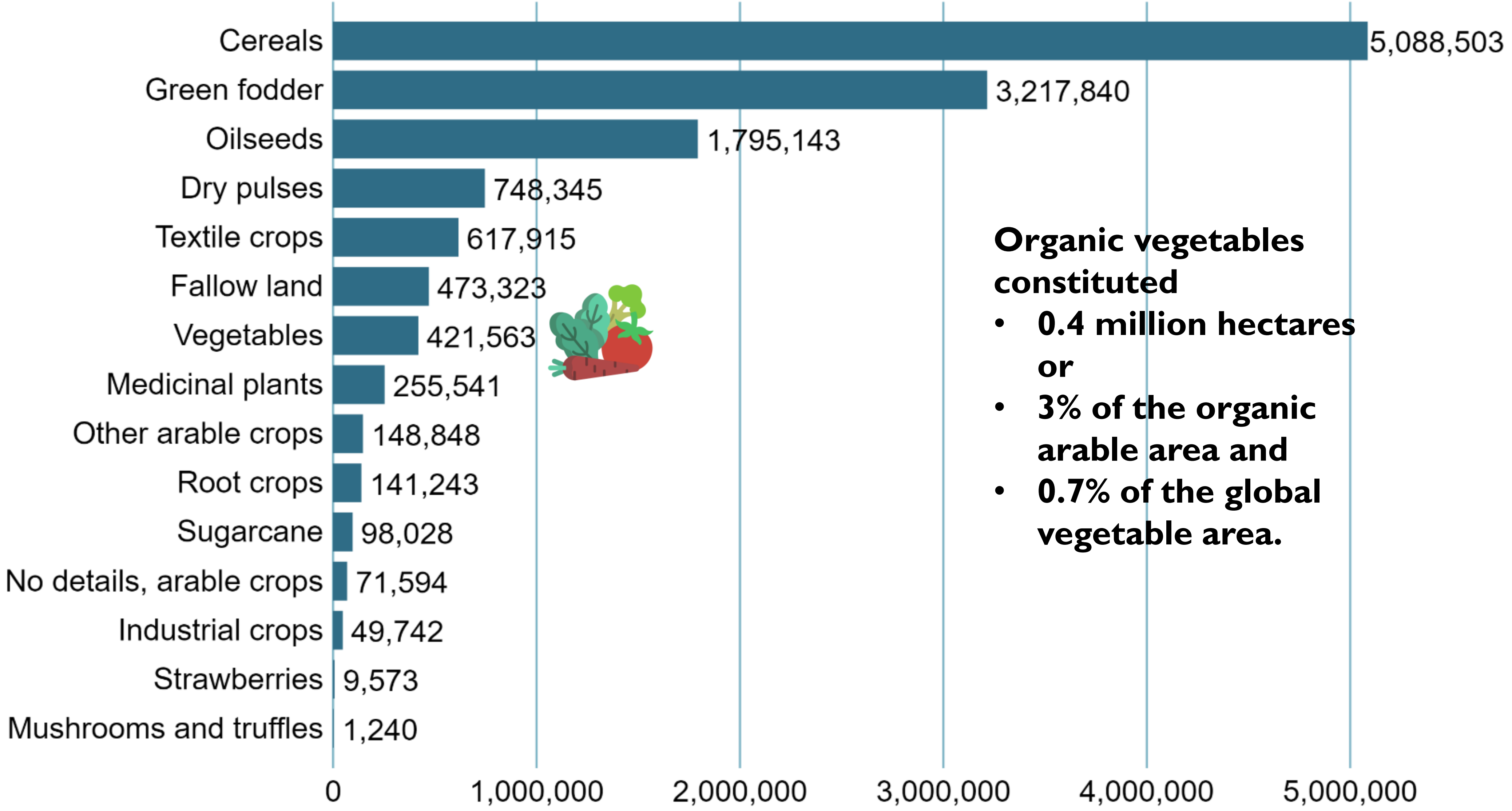


Key permanent crops



World: Distribution of organic arable cropland by crop group 2020

Source: FiBL survey 2022

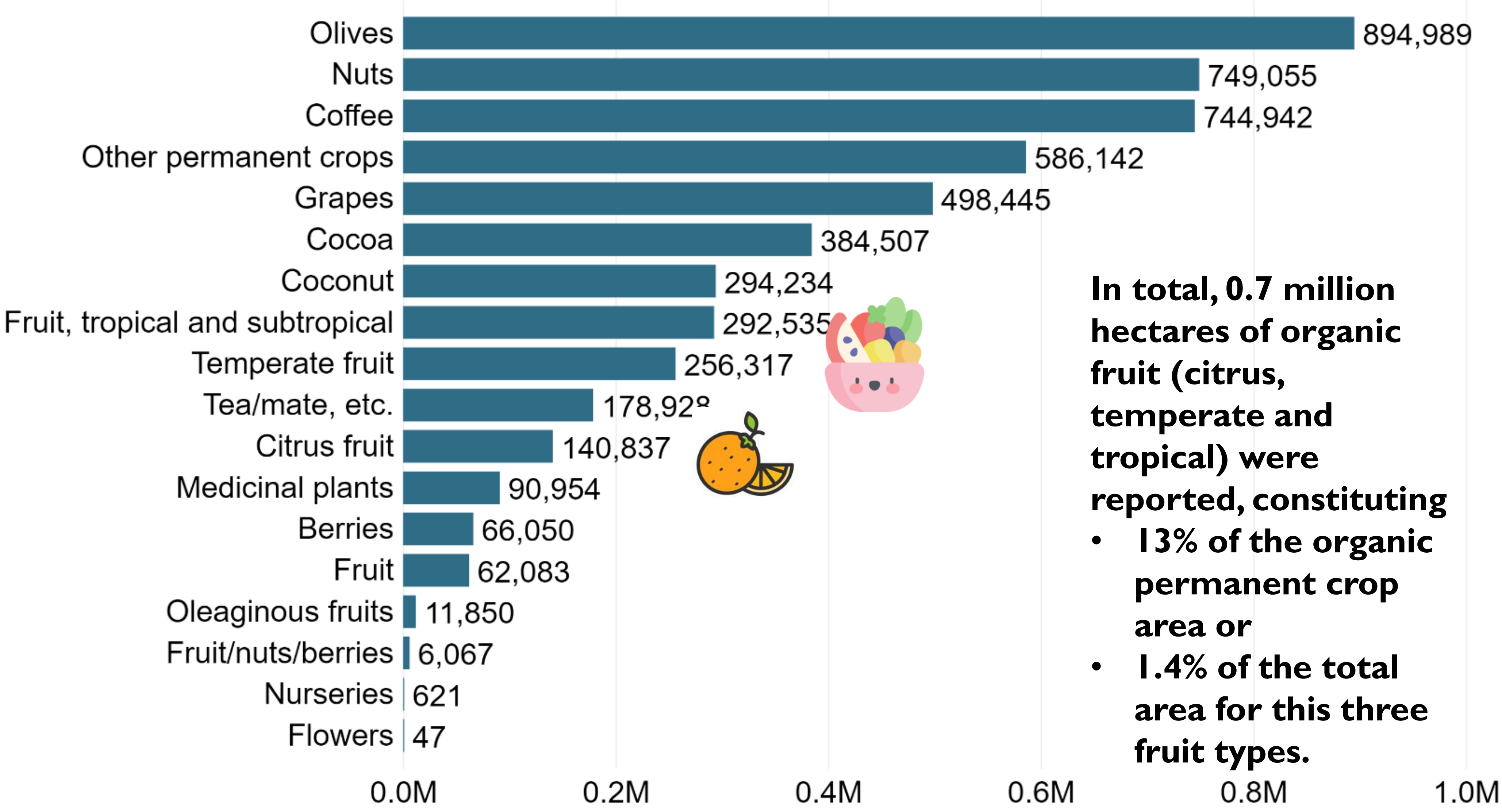


Organic vegetables constituted

- **0.4 million hectares or**
- **3% of the organic arable area and**
- **0.7% of the global vegetable area.**

World: Distribution of organic permanent cropland by crop group 2020

Source: FiBL survey 2022

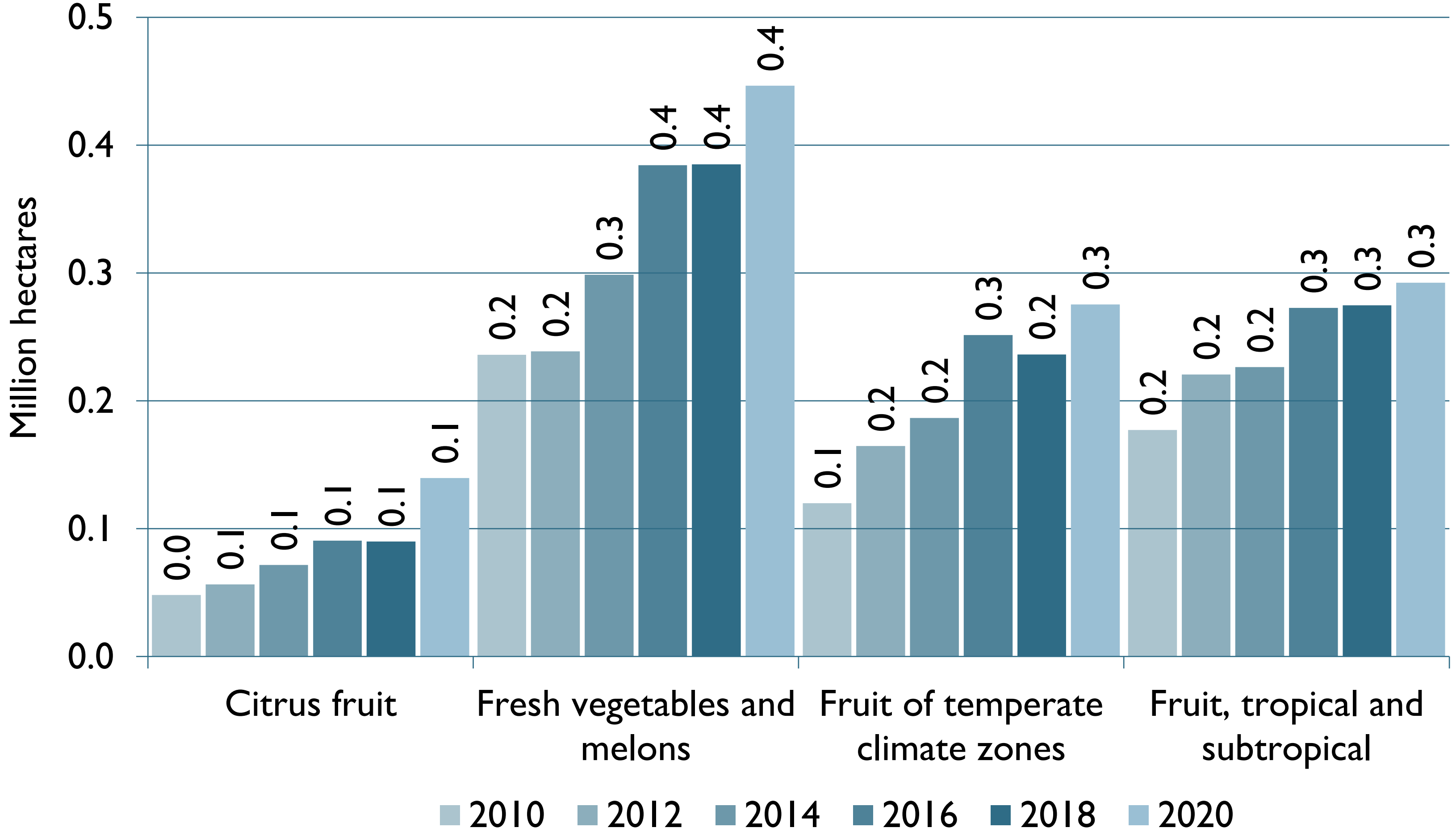


In total, 0.7 million hectares of organic fruit (citrus, temperate and tropical) were reported, constituting

- **13% of the organic permanent crop area or**
- **1.4% of the total area for this three fruit types.**

Growth of the organic fruit and vegetable area 2010/2020

Source: FiBL-IFOAM survey 2012-2022



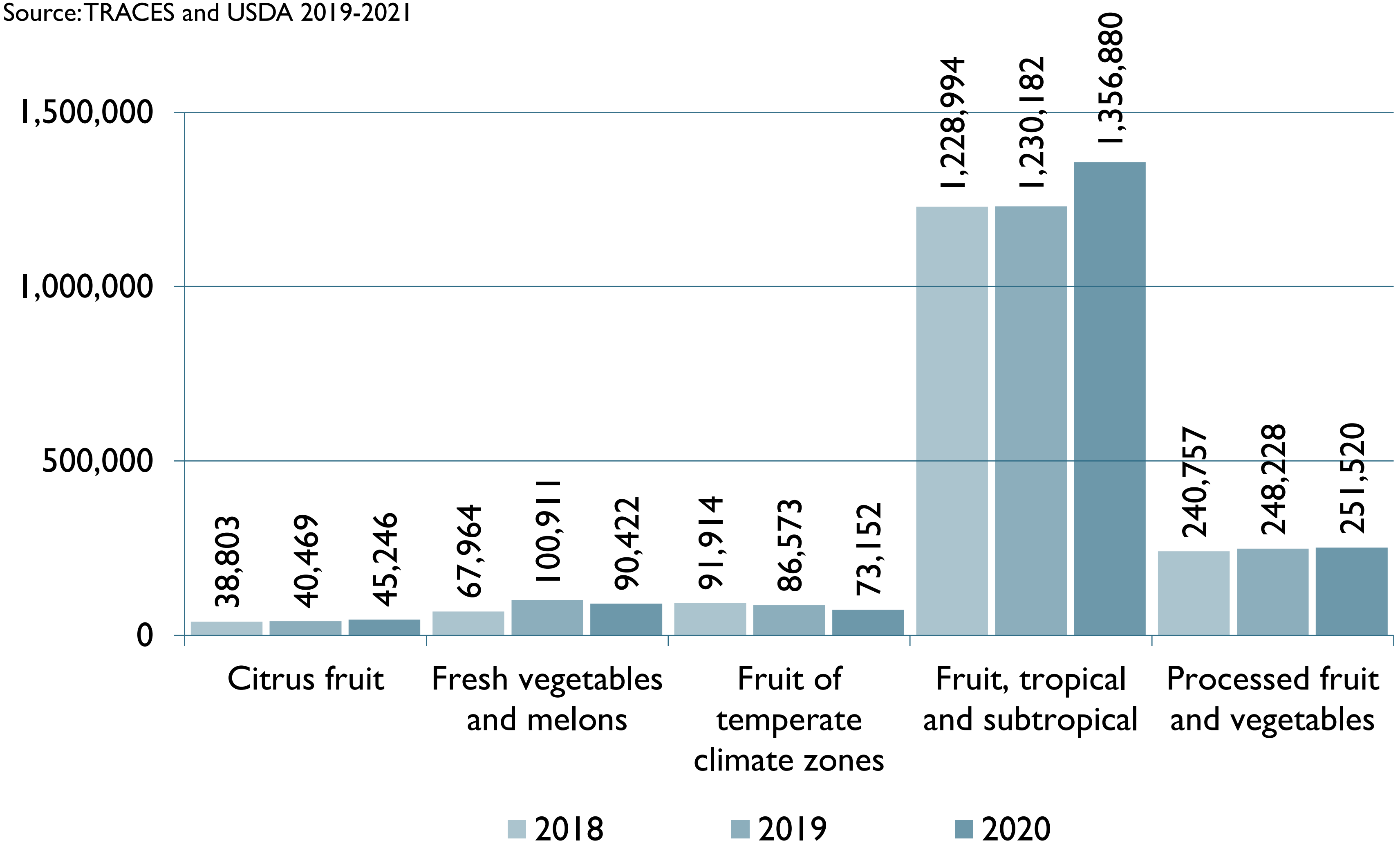
Key area data

- Total 1.15 million hectares
- Increase 2011-2020: **81%**
- Largest relative increase: citrus fruit
- Largest area by crop group: Fresh vegetables
- Largest area by country; USA, Italy, China
- Top crops: Apples, fresh pulses and bananas

Development of the organic fruit and vegetable area

Growth of the organic fruit and vegetable imports to the EU and US 2018/2020

Source: TRACES and USDA 2019-2021

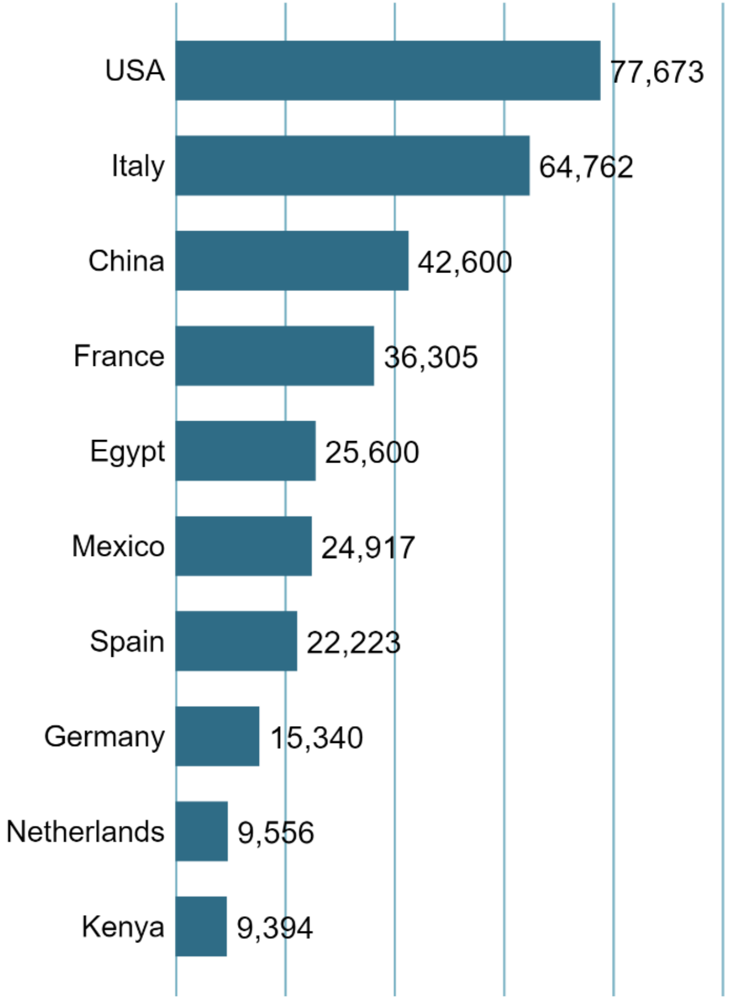


Key data: Exports to EU and US 2020 (MT)

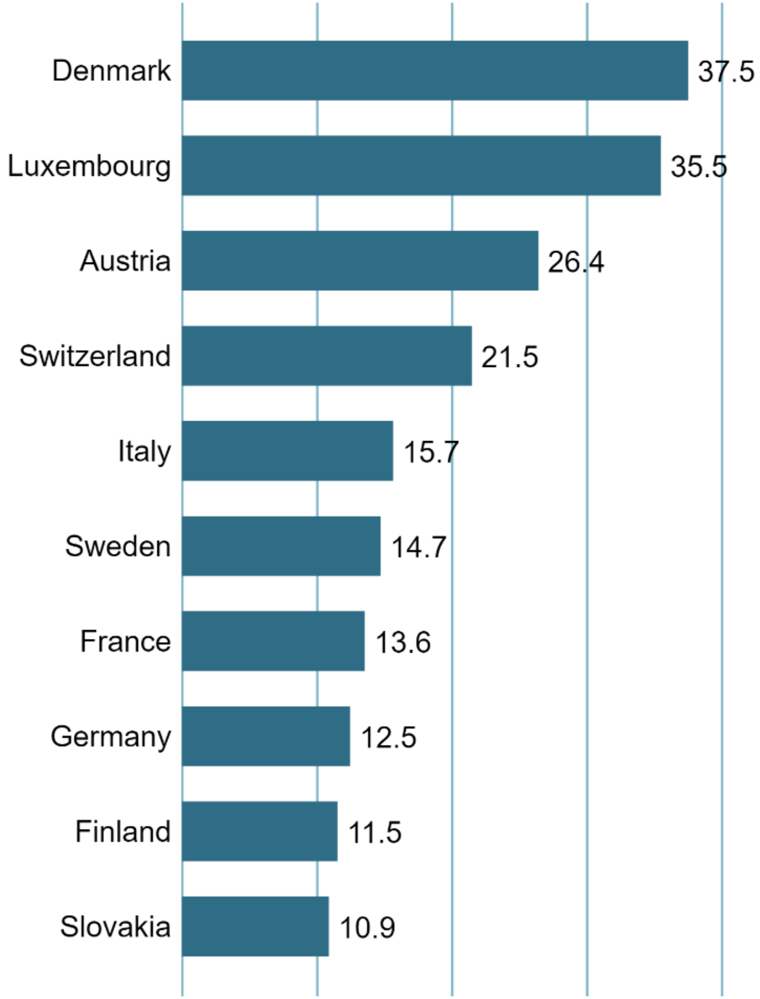
- 4.7 million MT were imported; of these, approx. 40% were fruit and vegetables, including processed fruit and vegetables (1.8 million tons)
- Increase 2018-2020: **8.8%**
- (bigger than overall organic imports)
- Largest relative increase: vegetables (Mainly to the US)
- Largest volume by commodity: group: Tropical fruit
- Largest volume by country: Ecuador, Mexico, Dominican Republic
- Top crops: Bananas, processed fruit, avocados

EU and US organic imports

The countries wih the largest organic area in hectares



The countries with the highest organic area share in %



Key data 2020
Area

- Area: 0.45 million ha
- Share of total: 0.7%
- Increase 2011-2020: **+97%**

Exports to EU and US

- Exports: 70’422 MT
- Export increase 2018 – 2020: **+33%**
- Top exporters: Mexico (>50%), Egypt, Argentina
- Top importers: US, the Netherlands, Belgim

Organic vegetables : Top countries (area) and key data

Organic vegetables: challenges

Water supply, irrigation

Plastic mulches (=> MINAGRIS)

Contentious inputs: e.g. copper use against fungal diseases (=> RELACS)

Energy use in greenhouses (=> Greenresilient)

Seed availablity (=>LIVESEED)

Breeding for organic/resistant varieties

Peat alternatives

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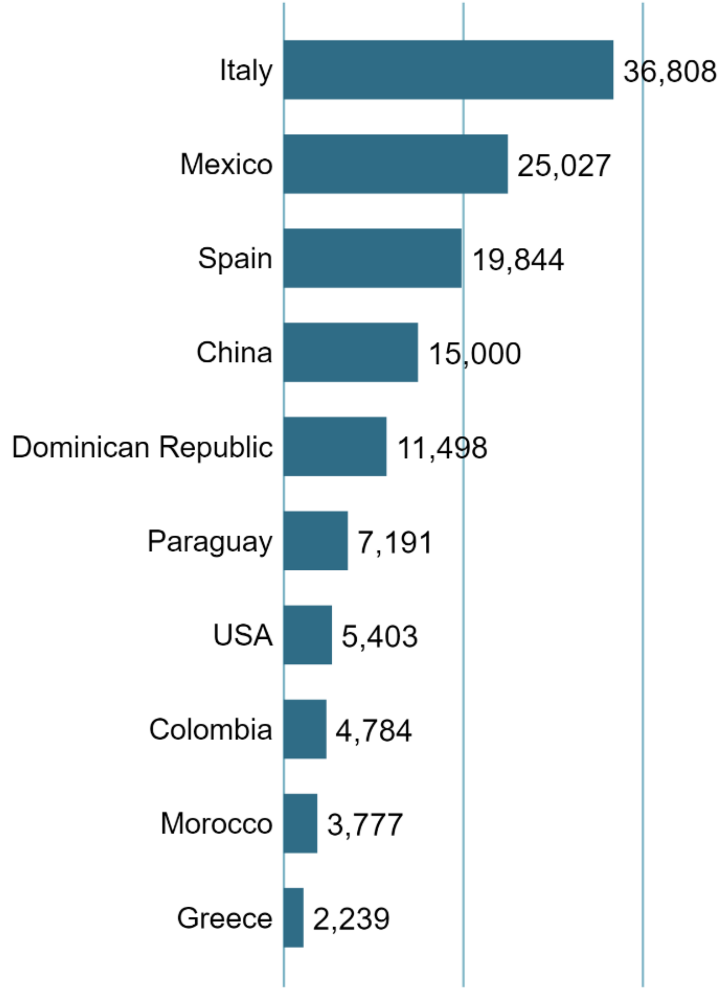
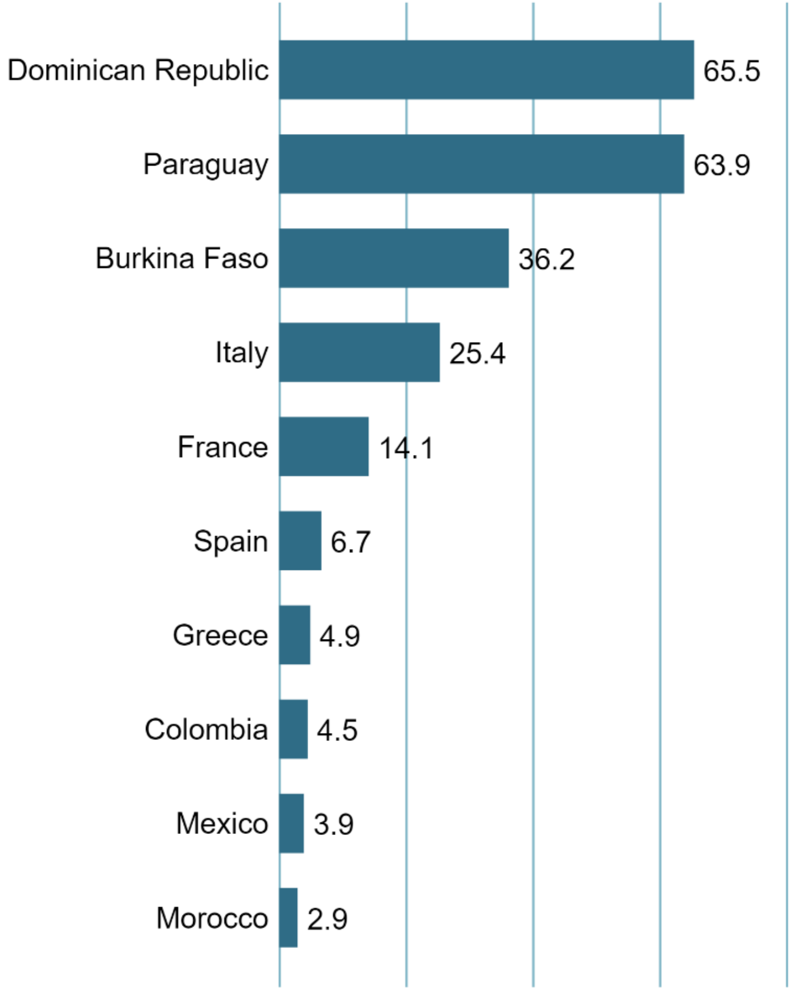
Organic citrus fruit: Top countries and key data

The countries wih the largest organic area in hectares



The countries with the highest organic area share in %



Key data 2020
Area

- Area: 0.14 million ha
- Share of total: 1.4%
- Increase 2011-2020: **+ 140%**
- Top crops: Citrus, no details; lemons; oranges

Exports to EU and US

- Exports: 42’264 MT
- Export increase 2018 – 2020: **+16%**
- Top exporters: South Africa, Mexico, Colombia
- Top importers: the Netherlands, US, Germany
- Top commodities: Lemons, oranges, grapefruit

Organic citrus fruit: challenges

- Nutrient availability
- Lack of organic matter, organic fertilizers
- Spread of citrus greening disease: search for organic solutions: reduce disease pressure, control/reduce the diesease vector with ecofunctional biodiversity measures, use of biochar
- Water stress

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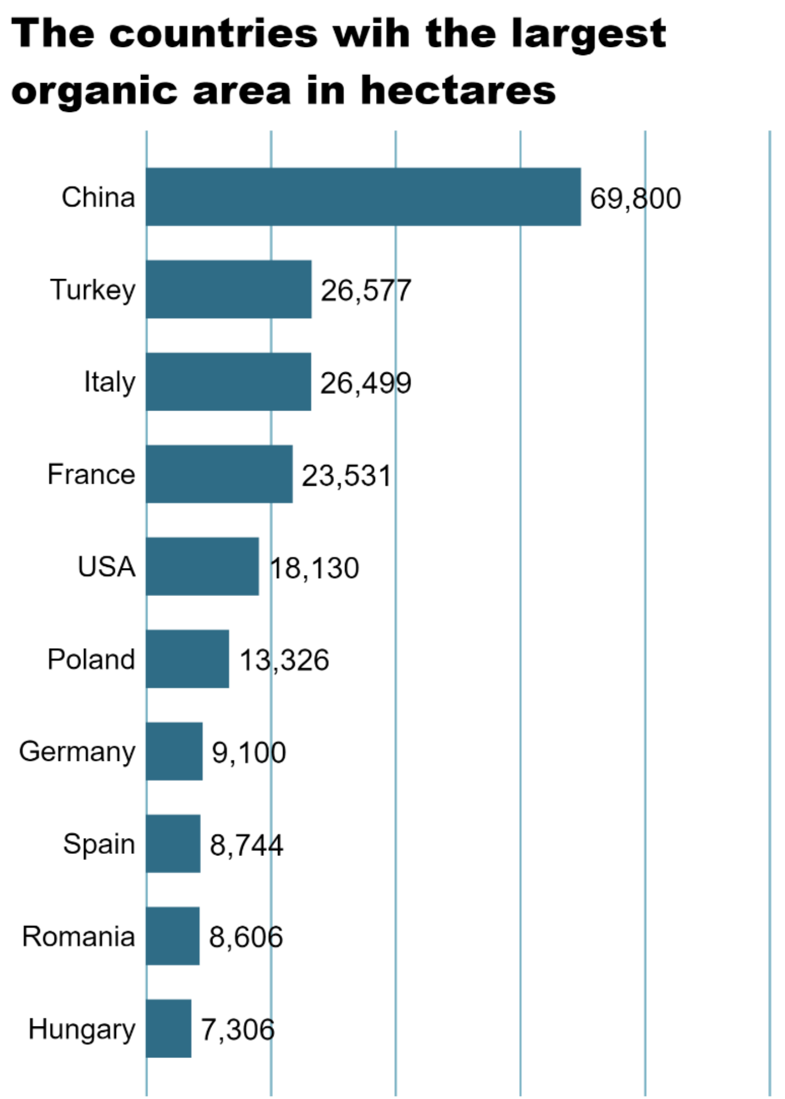
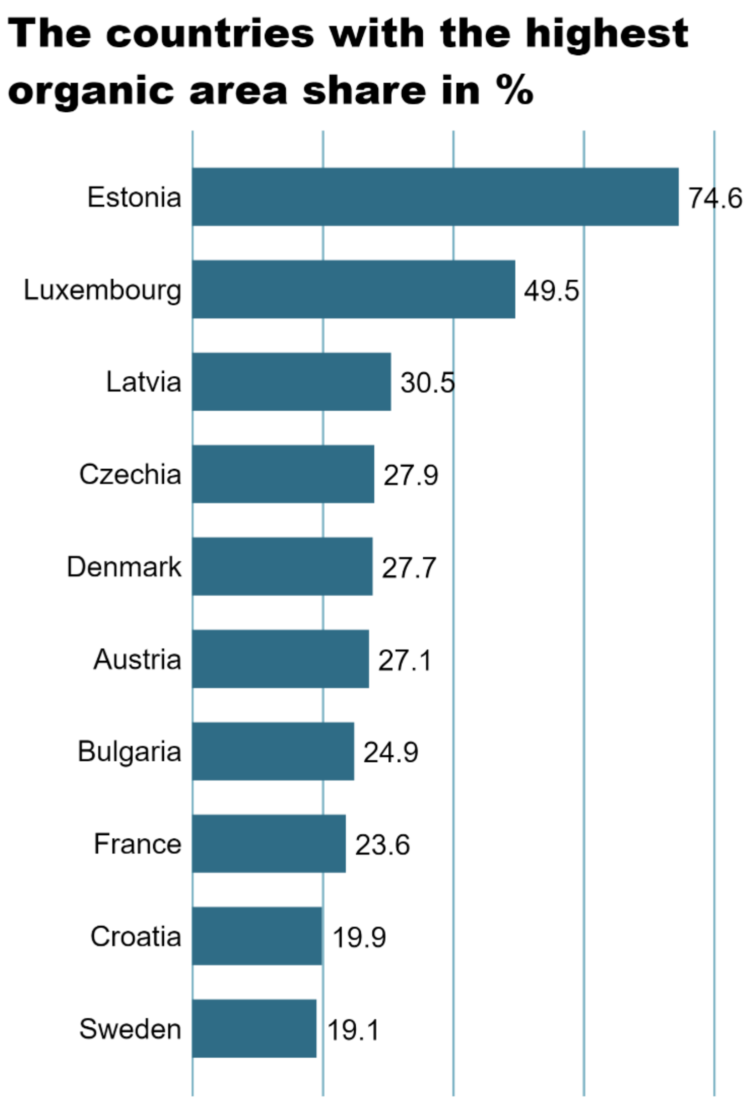
Organic temperate fruit: Top countries and key data





Key data 2020

Area

- Area: 0.28 million ha
- Share of total: 2.3%
- Increase 2011-2020: **+78%**
- Top crops: Apples, Apricots, temp fruit no detail

Exports to EU and US

- Exports: 73’157 MT
- Export increase 2018 – 2020: **-20%**
- Top exporters: Argentina, Chile, New Zealand
- Top importers: US, the Netherlands, Germany
- Top commodities: Apples, pears, cherries

Organic temperate fruit: Challenges

- High pest and disease presssure
- Invasive pests (drosophia suzukii, brown marmorated stinking bug)
- Protected cropping in polytunnels – plastic
- Sunburn
- Supply of seedlings/young plants (requirement according to EU regulation from 2035)
- Variety testing needs to be developed
- Breeding of organic-adapted varieties
- Storage diseases

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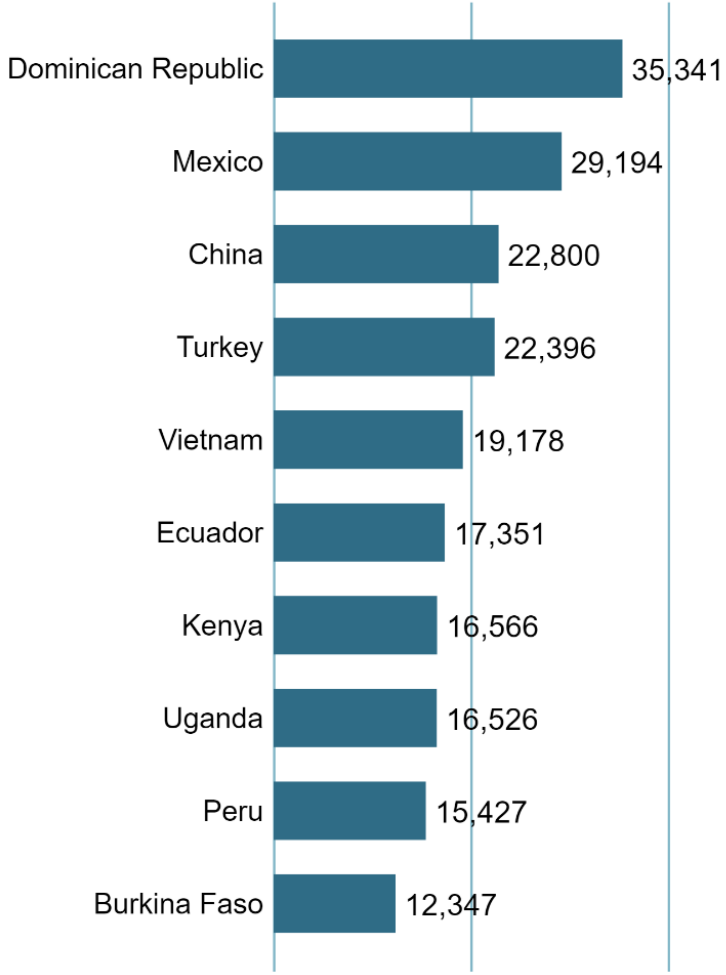
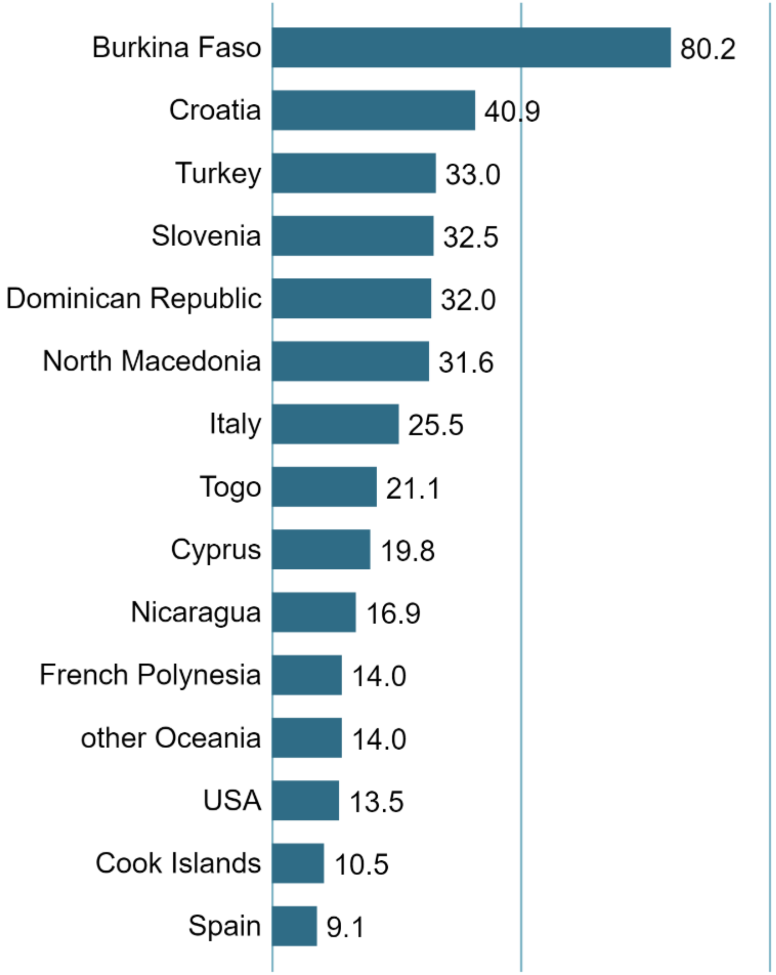
The countries wih the largest organic area in hectares



The countries with the highest organic area share in %



Key data 2020

Area

- Area: 0.29 million ha
- Share of total: 1.0%
- Increase 2011-2020: +41%
- Top crops: Bananas, trop. fruit no detail, dates

Exports to EU and US

- Exports: 1.4 million MT
- Export increase 2018 – 2020: **+10%**
- Top exporters: Ecuador, Domincan Republic, Mexico
- Top importers: US, the Netherlands, Belgim
- Top commodities: Bananas, avocados, mangoes

Organic tropical and subtropical fruit: Top countries and key data

Organic tropical fruit: hallenges

- Nutrient availability
- Lack of organic matter, organic fertilizers
- Water stress
- Breeding for resistance

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Bananas

- Organic bananas are gaining share in total banana imports.
- Main markets: Europe, the US and Asia
- Organic imports have been increasing in the two largest markets the US and Europe, while imports of conventional bananas have been stable
- Growthalso driven by increasing demand for sustainable production labels, which are in most cases combined with the organic certification of bananas.
- Central and South America dominate exports.
- EU Organic imports 2018-2020: 531,445 tonnes in 2018 to over 678,000 tonnes in 2020.
- Organic import share of total banana imports 2018 vs. 2020: 10.5% vs **13.1%**.

Source: COLEACP

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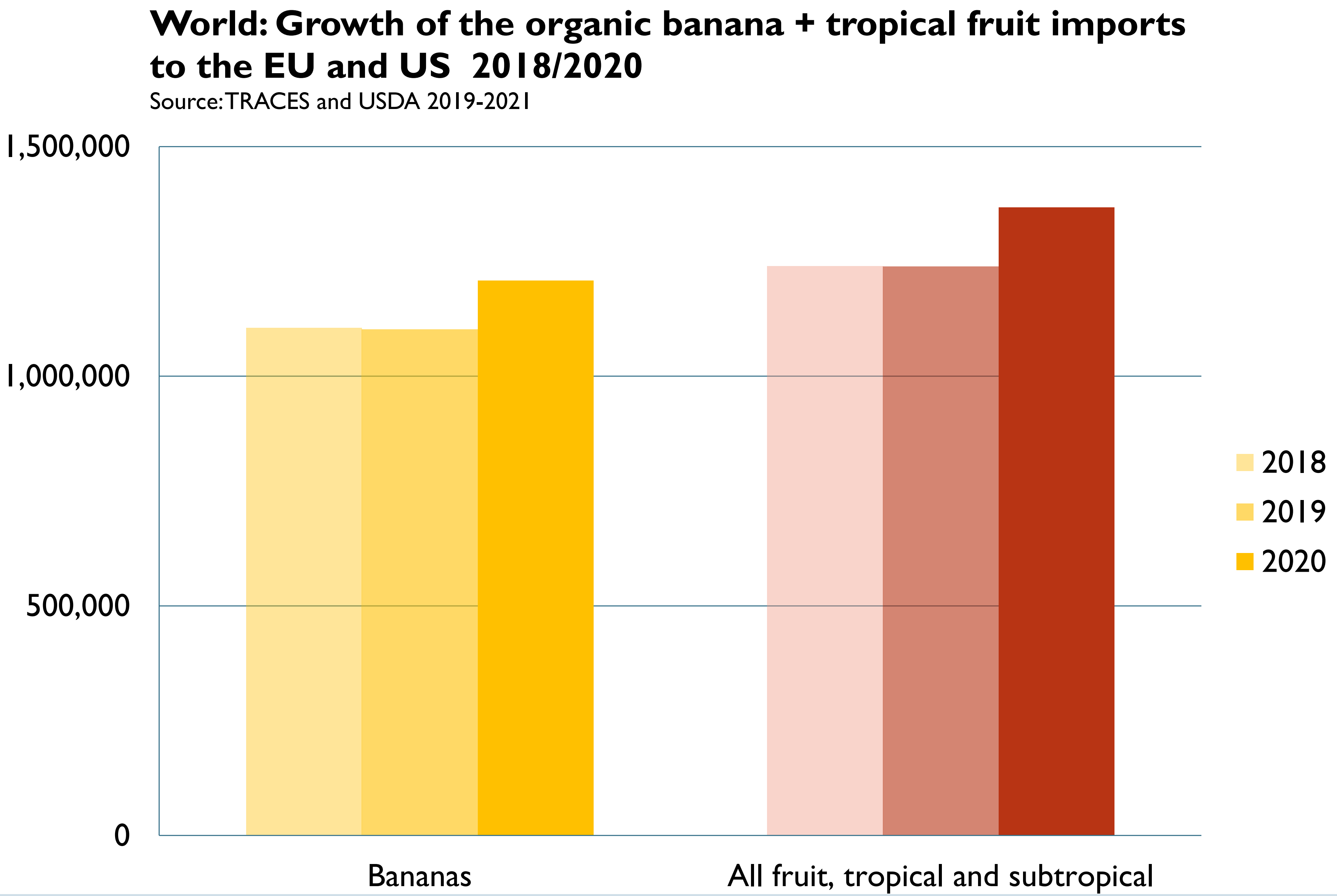
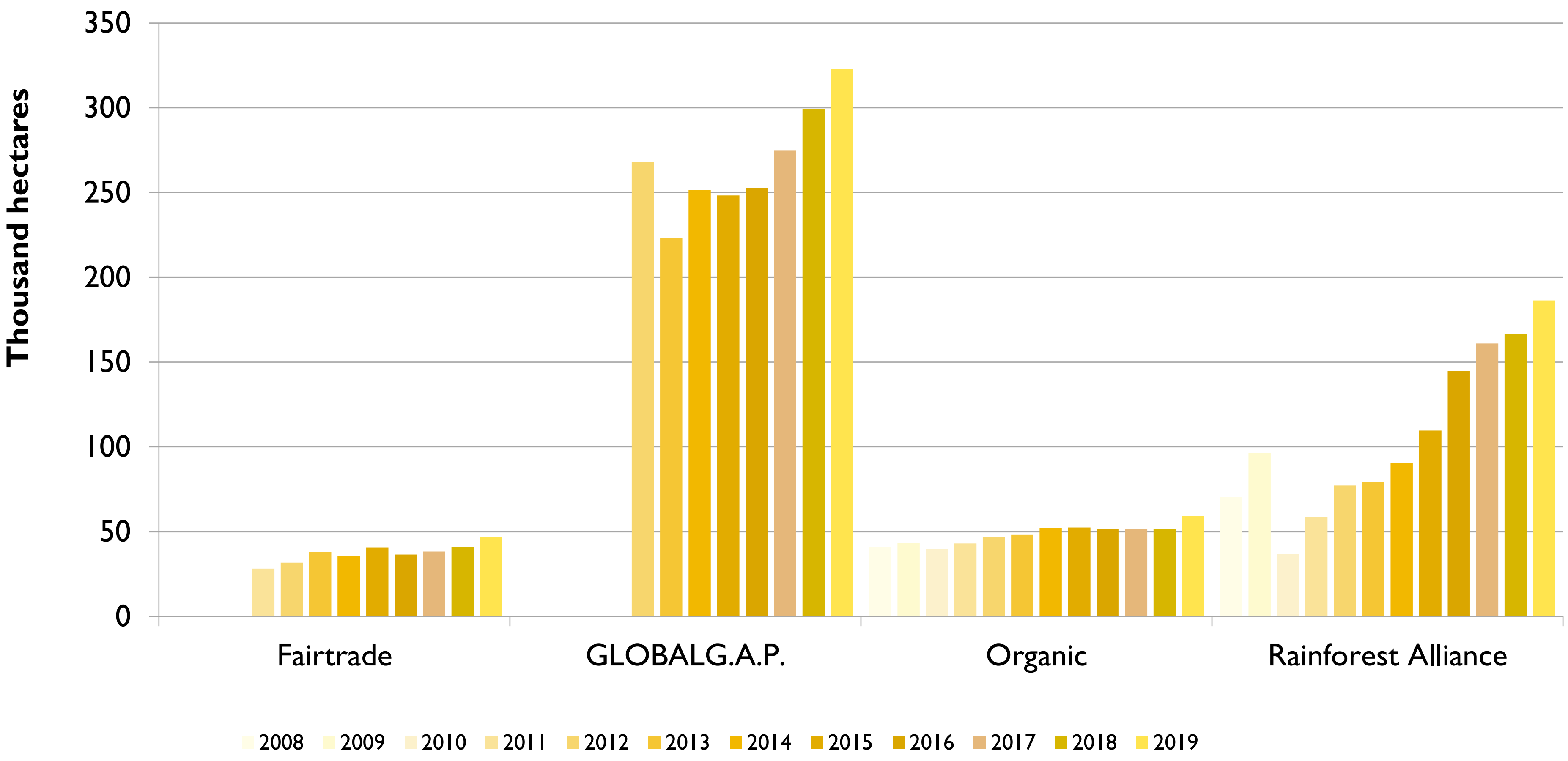


Organic banana and all tropical fruit exports

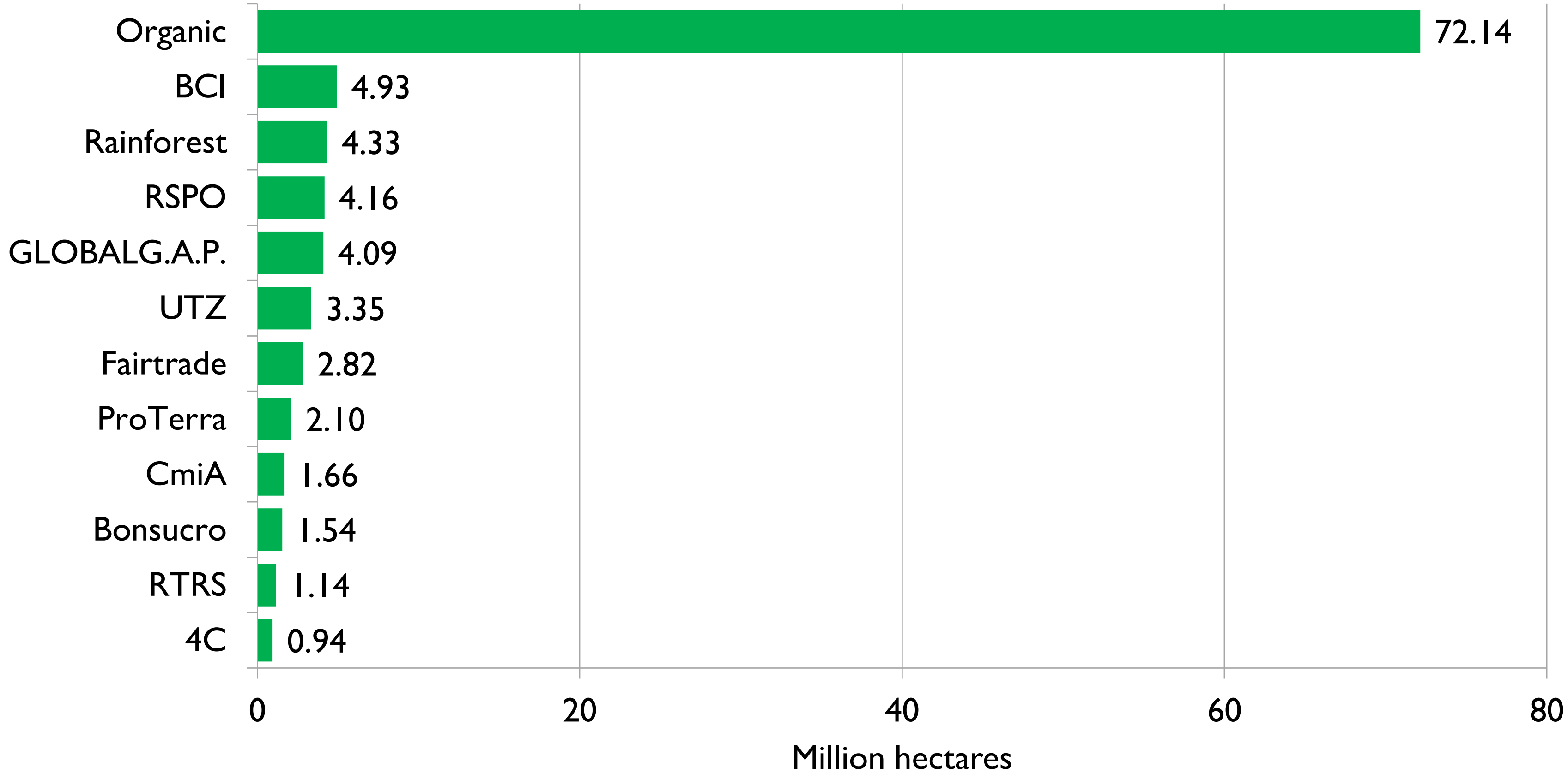
Certified banana area by standard



Source: FiBL-IISD-ITC survey 2021 based on VSS information

Total certified area per VSS 2019

Source: FiBL-IISD-ITC survey 2021



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Source: FiBL-ITC-SSI survey 2019: 4C 2019; Better Cotton Initiative 2019; Bonsucro 2019; Cotton Made in Africa 2019; Fairtrade International 2019; GLOBALG.A.P. 2019; FiBL survey 2019; ProTerra Foundation 2019; Rainforest Alliance/SAN 2019; Roundtable of Sustainable Palm Oil 2019; Round Table for Responsible Soy 2019; UTZ 2019

Organic market shares 2020 (based on value in euros)

	Austria	Belgium	France	Germany	Nether-lands	Switzer-land	UK	USA
Fresh vegetables	17.6%	8.4%	7.5%	13.8%		26.9%	4.8%	
Fruit	11.7%	6.3%	8.8%	9.9%		18.4%	3.0%	
Vegetables and fruit			8.1%		4.5%	21.2%		15.0%
Meat and meat products	4.2% (meat)		3.2%	3.2%	3.3 %	6.2% (incl. fish)	1.6%	
Organic share of the total market	11.3%	3.2%	6.5%	6.4%	3.3%	10.8%	1.8%	6.0%

Sources: FiBL-AMI survey 2022 (Willer et al., 2022), based on data from Austria: RollAMA based on GfK, Belgium: Biowallonie, France: Agence Bio, Germany: Agricultural Market Information Company AMI based on GfK; Netherlands: Bionext; Switzerland: Bio Suisse based on Nielsen; UK: Soil Association; USA: Organic Trade Association.

Note: Due to classifications and nomenclatures differing from country to country, it is not possible to supply data for all product groups, even if data for individual products may be available. Not all countries have data on the market shares of organic products.

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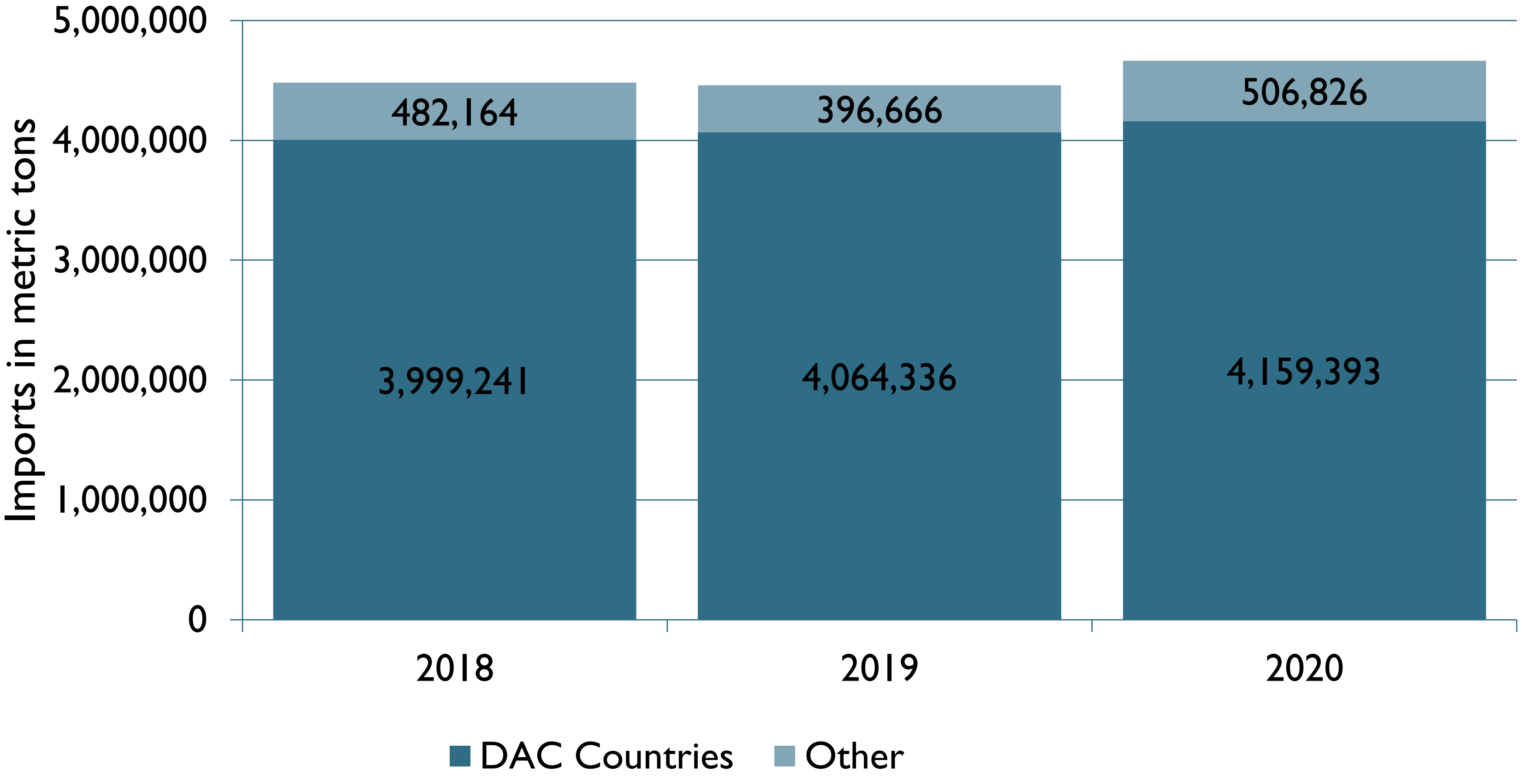
Europe-Africa-Caribbean-Pacific Liaison Committee (COLEACP) Study (2022)


FIT FOR MARKET+

MARKET RESEARCH ON THE ORGANIC FRUIT AND VEGETABLE TRADE

- Presentation of Sustainable and Organic Farming
- Status of the Organic Production
- Demand of Organic Fruits and Vegetables
- Key products for export into main markets
- SWOT Analysis
- Conclusion and Recommendations

World: Growth of imports to the EU and US 2018/2020
Source: TRACES and USDA 2019-2021



EU and US organic imports

Strengths and weaknesses for organic fruit and vegetable exporters

Strengths

- Tropical products are not produced in target markets
- «Exotic» fruit and vegetables are much required
- Higher prices particularly for superfoods (e.g. avocados)
- Lower labour costs than in the target market

Weaknesses

› Lack of knowledge about target markets ad buyer requirements
› Lack of know-how on how to produce crops organically
› Insufficient logistics
› Limited demand in local markets as fresh fruits and vegetables are often not daily consumed in producing countries

Source: COLEACP

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Opportunities and threats for organic fruit and vegetable exporters

Opportunities

- EU and US have a demand for year-round supply
- Potential in developing local and regional markets for organic products as a stepping stone
- Increasing consumer interest in fair and sustainable products
- Local fruits and vegetables requested by the tourist sector

Threats

› Limited availability of organic seeds

› Growing urbanisation leads to a lack of farm workers

› Requirements of buyers are not always easy to meet

› Dependency on foreign energy supply

Source: COLEACP

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Conclusion

- The area, the market and exports/imports for organic have continued to grow over the past decades.
- Higher growth rates were noted for organic fruit and vegetable area and exports compared to organic in general.
- Bananas constitute a large part of EU organic imports (about a quarter) and total EU banana imports (13%).
- Organic fruit and vegetables are very popular among consumers. Their organic retail sales share can reach more than 10 % of total retail sales in some countries.
- With the increasing importance of catering/food service, organic fruit and vegetable production and international trade with these products are expected to be boosted.
- Organic export opportunities, but also challenges exist for many countries in the South..
- Current and future drivers: Increasing consumer demand and policy support (Farm to Fork).
- Future barriers: geopolitical situation, energy crisis?
- Data collection: Many needs for better data!

Presentations on www.organic-world.net

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Register now: Launch of "The World of Organic Agriculture 2022

On the 15th of February, 12 pm CET, the 2022 edition of the yearbook "The World of Organic Agriculture" with the latest data on organic farming in Europe and worldwide will be launched at a virtual event.

The event is organized by BIOFACH, IFOAM - Organics International and the Research Institute of Organic Agriculture FiBL.

Registration is available here: ***https://www.biofach.de/en/sneak***

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FiBL Statistics - European and global organic farming statistics

On Statistics.FiBL.org, the Research Institute of Organic Agriculture FiBL provides access to the data collected in the framework of its annual survey on organic agriculture worldwide. This website is a supplement to FiBL's ↗ *Organic-World.net* website, which hosts the statistical yearbook ↗ *The World of Organic Agriculture* and contains country and background information on organic farming worldwide.

Announcements

February 09, 2022: The 2022 edition of "The World of Organic Agriculture" will be launched on February 15, 2022 at a virtual event. Please register here: *https://www.biofach.de/en/sneak*. More information: *https://www.organic-world.net/yearbook/yearbook-2022.html*

February 25, 2021: ↗ *Now available: Slides from the statistics session at the BIOFACH eSPECIAL*

February 17, 2021: Now updated: *Interactive online graphics* and *interactive tables*

February 17, 2021: ↗ *The World of Organic Agriculture, 2021 edition published*

More news on ↗ *Organic-World.net*

The World of Organic Agriculture 2021

↗ *The World of Organic Agriculture 2021*

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Work in progress

Please note that work on this website is in progress. If you have any questions and suggestions, please let us know and send an e-mail to *helga.willer(at)fibl.org*.

www.twitter.com/fiblstatistics

FiBL Statistics @FiBLStatistics · Feb 3

Save the Date:
On the 15th of February the latest statistical data on organic farming in Europe and Worldwide will be launched at a virtual event. We will communicated the date and online venue in the next couple of days.

organic-world.net/index/news-org...

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IFOAM Organics Europe @OrganicsEurope · Feb 2

#PressRelease - The 1st trialogue on the regulation on Statistics on Agricultural Inputs and Outputs (#SAIO) will take place tomorrow, 3 Feb. We, as the 🇪🇺 #OrganicMovement, call on MS to provide reliable data on #organic & other #EUFarm2Fork targets 👉 ow.ly/5ytR50HKbQh

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Thank you very much for your attention!

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Acknowledgements

- Pictures
  Claudia Frick, Bio Suisse (apples); Flavia Müller, Bio Suisse, Switzerland (onions); Paolo van den Berge, FiBL (papayas), FiBL (oranges)
- Background information
  Michael Friedli, FiBL; Salvador Garibay, FiBL; Anja Vieweger, FiBL

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