cocampo

Report 2023 Cocampo Crops' evolution in Spain

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CROPS IN SPAIN

1. CROPS IN SPAIN

In Spain, 16.8 million hectares of land are allocated for cultivation, accounting for 33.3% of the country's total surface area, as indicated by the 2023 Cocampo Report on the Structure of Rural Soil in Spain.

The country's crops are undergoing a transformation towards more efficient practices, aiming to reduce the consumption of natural resources and optimize processes. Specifically, emphasis has been placed on water utilization due to the prolonged meteorological drought situation since late 2022, along with the adoption of new technologies.

The hydrological year 2022-2023 (from October 1, 2022, to September 30, 2023) has presented significant challenges in the field. This period has been classified by the State Meteorological Agency (AEMET) as the sixth driest of the century, with a 12% reduction in precipitation compared to the normal average. Additionally, it witnessed the warmest spring and the second driest since records began, as well as the third warmest summer, surpassed only by those of 2022 and 2003.

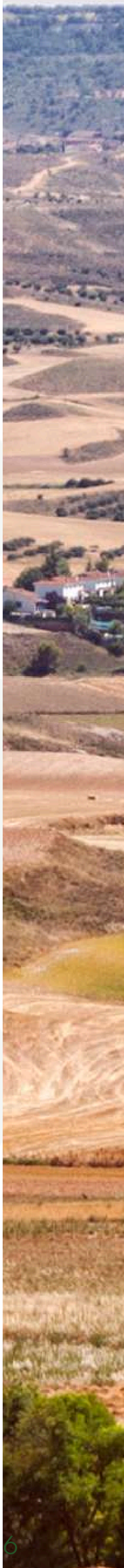
The scarcity of rain and high temperatures have impacted the country's water resources. Reservoirs have decreased by 19.6% below the average of the last decade. As a result, regions such as Catalonia and Andalusia have had to impose restrictions on water use, both for human consumption and irrigation, according to the Coordinator of Farmers and Ranchers Organizations (COAG).

All of the above has particularly affected farmland, with 80% of plantations facing losses and crops like cereal being declared lost in some autonomous communities. In Andalusia, Castilla-La Mancha, the Region of Murcia, Aragon, the Community of Madrid, Catalonia, and Castilla y León, many crops have been lost due to climatic adversities, especially affecting rainfed crops. The cultivated area has experienced variations in the last decade as a result of these challenges. The most significant decrease occurred in 2016, with a loss of 3.37% of the cultivated area compared to the beginning of the decade (2011). From 2011 to 2020, there was a decrease of 0.36%, losing 61,629 hectares.

However, agriculture is crucial for food production, both nationally and internationally. According to the Food and Agriculture Organization of the United Nations (FAO), the projected increase in the world population to 10 billion people by 2050 will result in an increased demand for food and, consequently, crops. Among all, cereals are estimated to be the most demanded, with production potentially reaching 3 billion tons that year.

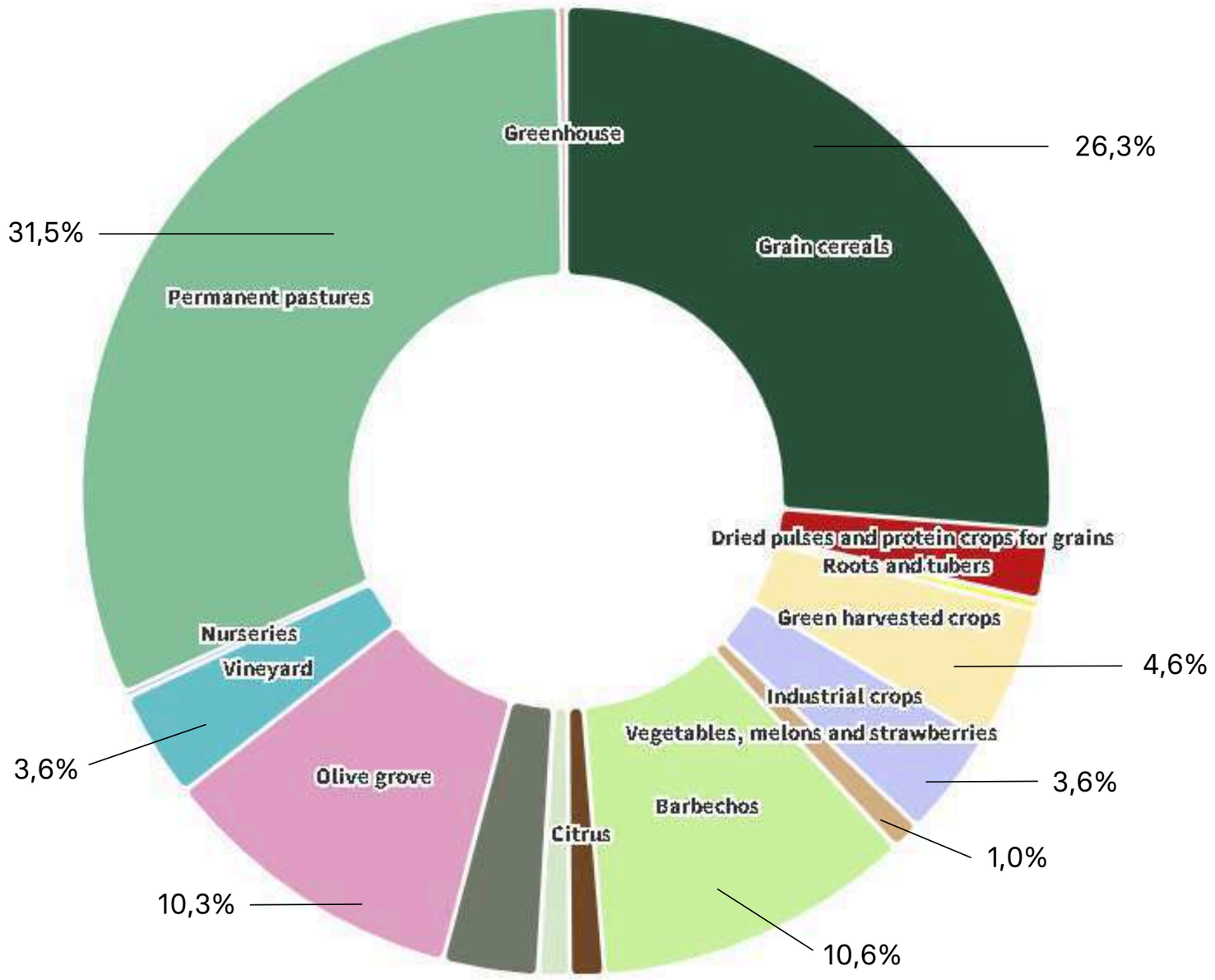
According to the FAO, crops such as cereal, tomato, onion, and potato are essential for human consumption, being the most demanded in markets.

The increase in food production is accompanied by a change in consumer eating habits, showing a greater preference for organic products. In this context, the European Parliament has approved an increase in the production of plant proteins and has called for the introduction of more ecological plans. In 2022, the European Commission approved new regulations reflecting the evolution of organic farming, noting "rapid" growth, with the aim of ensuring fair competition among farmers.



Spain is one of the main organic producers in terms of surface area in the European Union (EU) and the world. It has 2.44 million hectares dedicated to organic production, according to the 2020 Agricultural Census. Thus, 10.8% of the Utilized Agricultural Area (UAA) is allocated to organic production.

Graph 1.1. Distribution of the Agricultural Area Used (UAA)



Source: INE

The most popular crops in Spain include grain cereals, grain legumes, tubers for human consumption, industrial crops, forage crops, olives, fruit trees with a focus on citrus fruits, non-citrus fruit trees, nuts, flowers, vegetables, and vines, with the latter experiencing the highest production and significance in the last decade.

By Autonomous Communities, the most relevant cultivation areas in Spain are led by Andalusia, where olive production is concentrated, as well as vegetables. In 2022, Andalusia had 3.6 million hectares dedicated to cultivation.

Another significant cultivation area is Castilla y León, positioned as a leader in cereal production. Data from the last decade shows an 11.5% increase in the surface area devoted to cultivation. Castilla-La Mancha is the community that allocates the most cultivated fields to vineyards, producing nearly half of Spain's wine production. Regarding fruit trees, the Valencia Community stands out, particularly for citrus fruits.

Agriculture has evolved and adapted to the challenges that have arisen over time. The primary sector is the foundation of people's existence and plays a crucial role in creating a prosperous and sustainable future. Spain is the fourth European power, contributing 11.9% of the community Gross Value Added (GVA) in the sector[1] and ranking seventh globally in the agri-food market.[2] Therefore, it is vital to recognize its importance.

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1 Caja Mar (2023). Observatorio sobre el sector agroalimentario español en el contexto europeo. Informe 2022. https://publicacionescajamar.es/series-tematicas/informes-coyuntura-monografias/observatorio-sobre-el-sector-agroalimentario-espanol-en-el-contexto-europeo-informe-2022/.

2 Invest in Spain. (2023). Industria Agroalimentaria. https://www.investinspain.org/es/sectores/industria-agroalimentaria#:~:text=La%20dinamicidad%20de%20las%20exportaciones,nivel%20mundial%2C%20en%20estos%20productos.

2

EVOLUTION BY TYPES OF CORPS

2.1.

Grain

Cereals

2.1. GRAIN CEREALS

The cultivation of grain crops has been a fundamental part of Spanish agriculture throughout history. In the past, these cereals were essential in the country's diet and economy. Over time, technological changes and agricultural policies have influenced grain production.

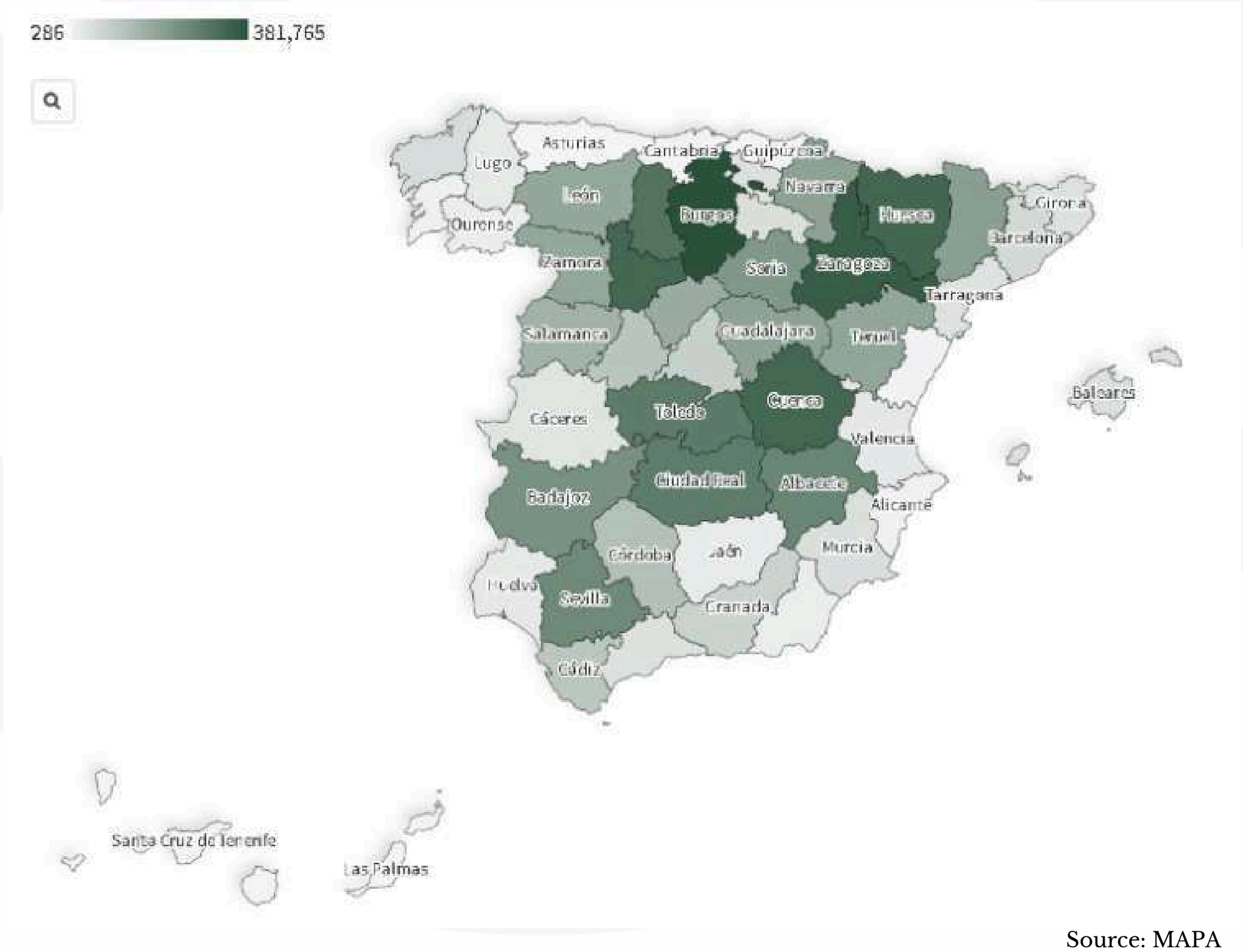
In Spain, there are 272,335 farms dedicated to cereal cultivation, accounting for 28% of the total agricultural farms, with an average size of 24.2 hectares (24.2 ha for rainfed farms and 13.27 ha for irrigated ones).[3]

The cereal sector has the largest territorial base and distribution. The area dedicated to grain crop cultivation is 6,069,237 hectares (35.8% of the total cultivated area). Of this, 81.1% is rainfed (4,922,592 ha), and 18.9% is irrigated (1,146,645 ha).[4]

The most cultivated cereal species with the highest production in the country is barley (2,749,039 ha and 10,955,780 tons), followed by wheat (1,912,599 ha and 817,060 tons) and oats (506,168 ha and 1,323,815 tons).

Castilla y León is the main cereal-producing region, with 2 million hectares, representing 31.1% of the total cereal area. It is followed by Castilla-La Mancha (1.3 million ha), Aragón (873 thousand ha), and Andalusia (664 thousand ha).

Map 2.1.1. Grain cereal cultivation area by province.



Source: MAPA

3 Ministerio de Agricultura, Pesca y Alimentación. (2023d). Cereales. MAPA. https://www.mapa.gob.es/en/agricultura/temas/producciones-agricolas/cultivos-herbaceos/cereales/.
4 Ministerio de Agricultura, Pesca y Alimentación. (2023d). Cereales. MAPA. https://www.mapa.gob.es/en/agricultura/temas/producciones-agricolas/cultivos-herbaceos/cereales/.

In the last five years of available data (2016-2020), the cereal area has decreased by 2.7% (-170,563 hectares), with a 2.9% decline in rainfed plantations (-149,312 ha) and a 1.8% decrease in irrigated ones (-21,251 ha). This reduction in area is attributed to the trend towards diversification and specialization in agriculture, with a decrease in the land devoted to cereals in favor of other crops of higher economic value, such as nuts, vegetables, and industrial crops.

Table 2.1.1. Area and production of grain cereals

YEAR	AREA (THOUSANDS OF HECTARES)	PRODUCTION (THOUSANDS OF TONS)	PRODUCTION VALUES (THOUSANDS OF EUROS)
2010	6.040	19.880	3.268.396
2011	5.985	22.095	4.580.903
2012	6.170	17.544	4.003.467
2013	6.268	25.374	4.888.762
2014	6.317	20.597	3.681.432
2015	6.196	20.141	3.702.937
2016	6.240	24.115	3.964.711
2017	6.015	16.659	2.902.062
2018	6.028	24.491	4.348.687
2019	5.976	19.942	3.64.176
2020	6.069	26.390	4.808.168

Source: MAPA

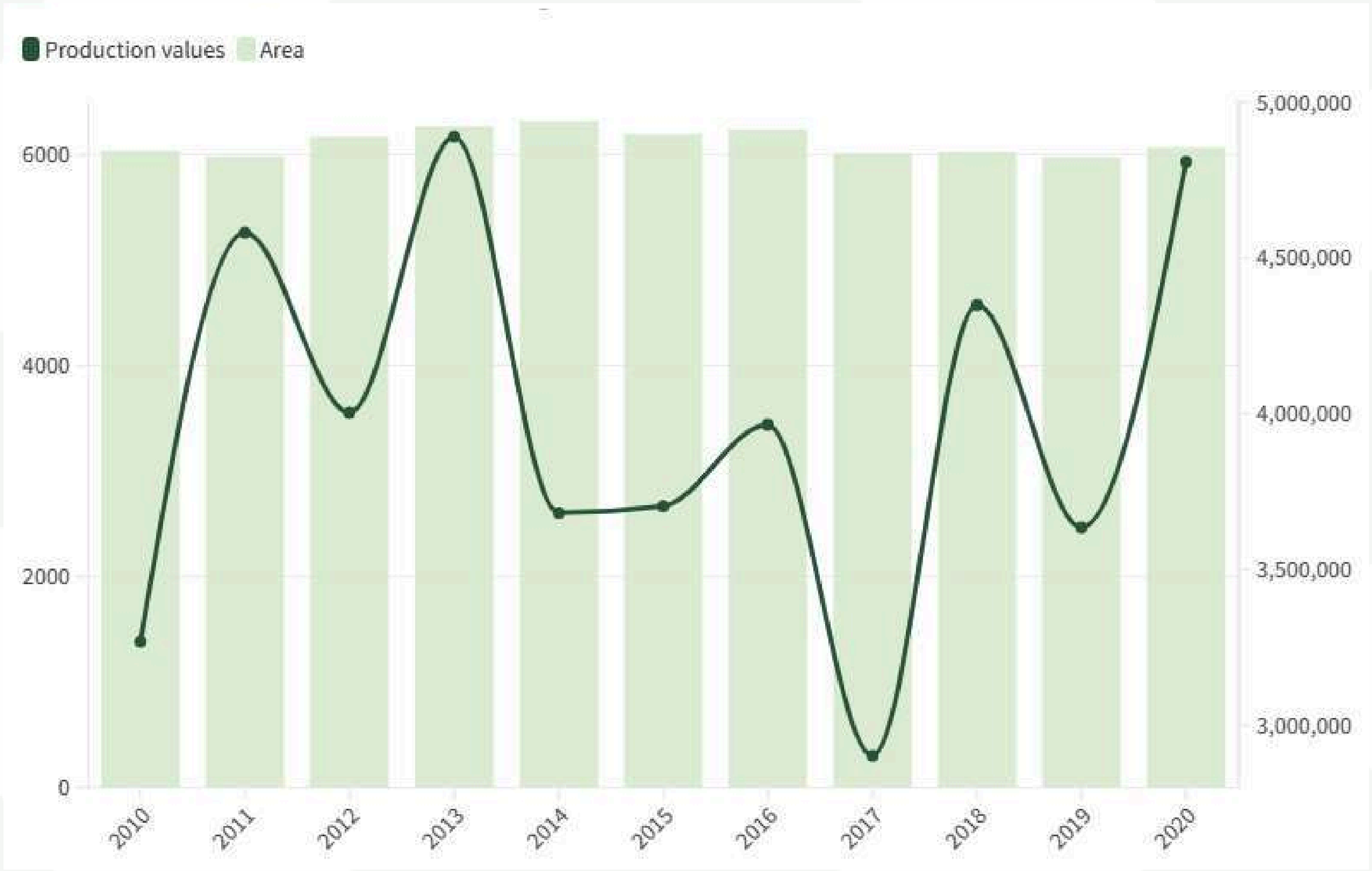
If we observe the evolution by species, triticale (12.9%) and barley (7.3%) are the only ones where the area has increased. In the case of oats (-0.7%) and other minor grain crops (-0.6%), such as millet, birdseed, or emmer, the area has remained practically stable. On the other hand, sorghum (-35.4%), wheat (15.3%), rye (-11.4%), rice (-6.6%), and maize (-4.3%) have lost ground.

Despite the reduction in cereal cultivation land in Spain, its adaptability to different soils and climatic conditions has led to its use in both developing and developed countries.

In 2020, grain crop production reached a record value of 26.3 million tons, with a production value of 4,808.2 million euros. This represents a 32.3% increase compared to 2019 when production was 19.9 million tons, and an 18.2% increase compared to the average of the last five years (2016-2020).

From January 2020 to the end of the year, the price of maize increased by 15.5%, followed by durum wheat at 8.7%, soft wheat at 4.4%, and barley at 0.9%, while oat prices remained stable.

Graph 2.1.1. Evolution of grain cereal crops.



Source: MAPA

2.2.

Grain legumes

2.2. GRAIN LEGUMES

The cultivation of grain legumes in Spain has played a significant role in agriculture, including species such as chickpeas and lentils. Although production has varied over time, legumes are essential for crop rotation and agricultural sustainability.

The main grain legume species in the country are dry peas, which is the most widespread crop, and dry broad beans. To a lesser extent, sweet lupins also stand out.[5]

The cultivated area for grain legumes is 366,926 hectares. Of these, 87.7% are rainfed (321,588 ha) and 12.3% are irrigated (45,338 ha). In the last ten years of available data (2011-2020), the cultivation area has decreased by 17.9% (-80,055 ha), with a 20.4% decrease in rainfed cultivation (82,521 ha less area) and a 5.8% increase in irrigated cultivation (2,466 ha more area).

Table 2.2.1. Area and productions of grain legumes

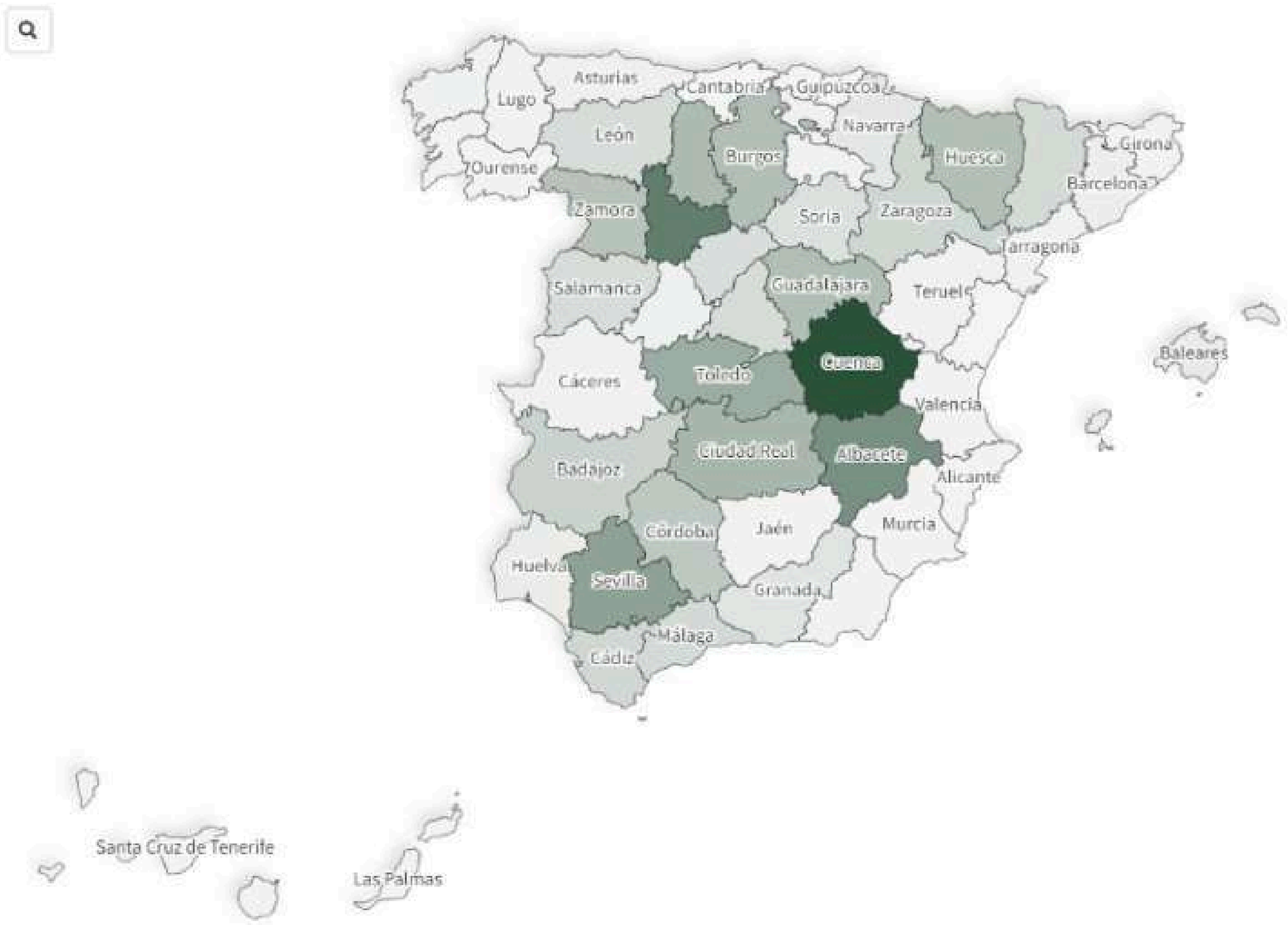
YEAR	AREA (THOUSANDS OF HECTARES)	PRODUCTION (THOUSANDS OF TONS)	PRODUCTION VALUES (THOUSANDS OF EUROS)
2010	447	516	164.853
2011	530	520	176.441
2012	446	324	119.054
2013	378	503	197.283
2014	458	451	163.368
2015	489	503	181.398
2016	460	648	212.487
2017	521	476	182.786
2018	473	671	243.011
2019	420	391	119.897
2020	367	555	157.796

Source: MAPA

The regions with the largest grain legume areas are Castilla-La Mancha (131,176 hectares), with Cuenca standing out with 47,883 ha, Castilla y León (107,961 ha), Andalusia (60,425 ha), and Aragón (24,924 ha).

5 Ministerio de Agricultura, Pesca y Alimentación (2023). Leguminosas y oleaginosas. https://www.mapa.gob.es/es/agricultura/temas/producciones-agricolas/cultivos-herbaceos/leguminosas-y-oleaginosas/informacion_general_sector.aspx.

Map 2.2.1. Grain legume cultivation area by province



Source: MAPA

The downward trend in grain legume cultivation is also observed in the rest of Europe,[6] resulting in increased dependence on both plant protein imports and nitrogen fertilizers. This situation can be reversed by increasing grain legume cultivation, an objective supported by the EU through its agricultural policies

Indeed, in 2023, production has benefited from the new Common Agricultural Policy (CAP), which includes measures to promote this type of cultivation.[7] As a result, an increase in its cultivation area is anticipated.[8]

6 González-Bernal, M.J. y Rubiales, D. (2016). Las leguminosas grano en la agricultura española y europea. Arbor, 192. https://arbor.revistas.csic.es/index.php/arbor/article/view/2115/2768.

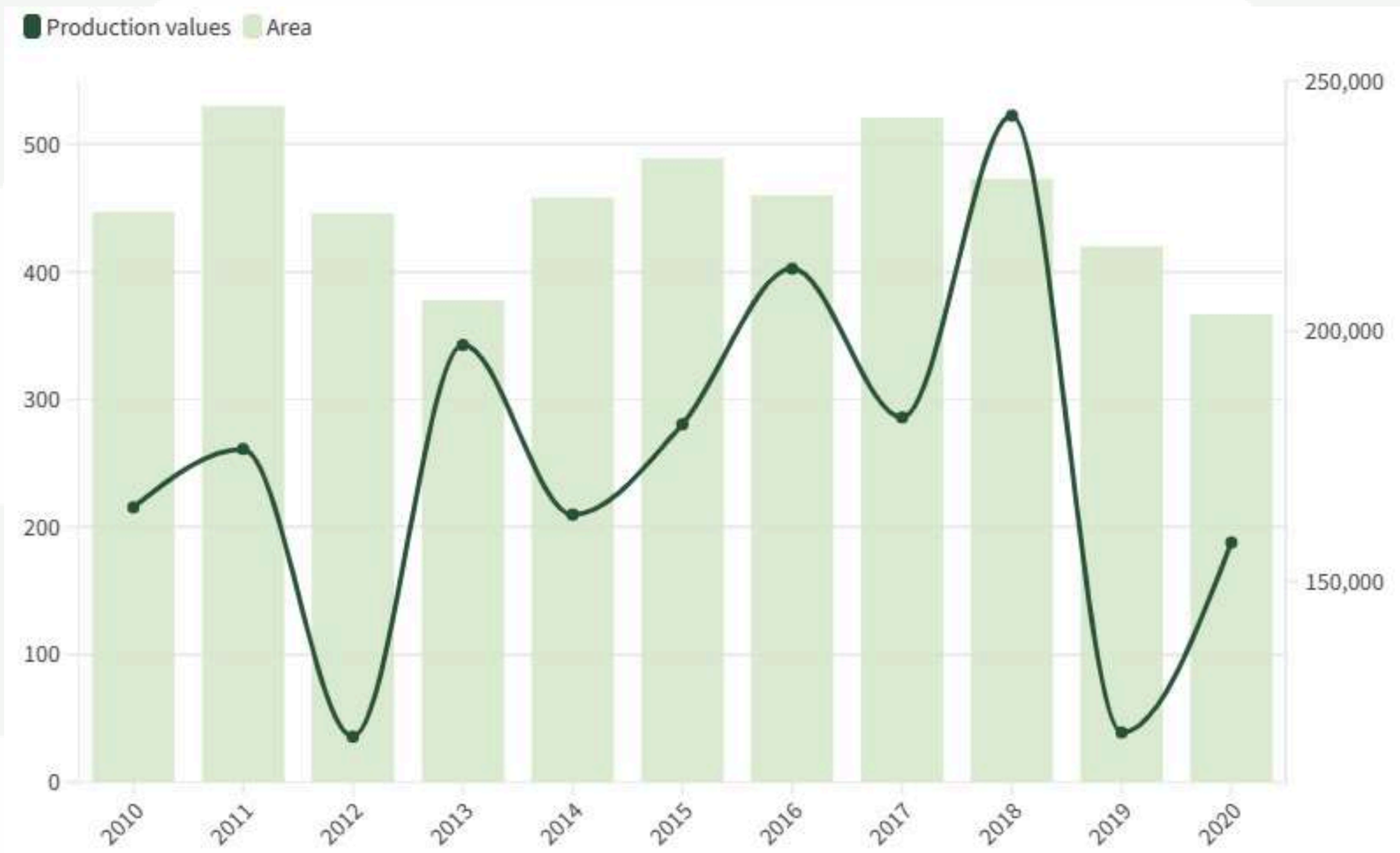
7 Ministerio de Agricultura (2023). PAC 2023-2027 y Plan Estratégico. https://www.mapa.gob.es/es/pac/pac-2023-2027/metodologia-estudio-de-lucros-cesantes-en-practicas-de-eco-regimenes-de-tierras-de-cultivo_tcm30-626886.pdf.

8 Ministerio de Agricultura (2017). Reglamento “ómnibus” y modificaciones de la PAC para 2018 https://www.mapa.gob.es/es/agricultura/temas/producciones-agricolas/181127-proteaginosasyleguminosasgrano-planproteico_tcm30-514448.pdf.

By species, there is a notable increase in other grain legumes (299.8%), dry beans (28.1%), chickpeas (25.0%), and lentils (24.4%). Conversely, there has been a decrease in sweet lupins (60.7%), dry peas (41.9%), vetch (16.6%), dry broad beans (14.3%), and grass peas (1.8%) in 2020 compared to 2011.

Spain ranks second in the production of grain legumes in the EU. In 2020, the production reached 555 thousand tons, valued at 157,796 thousand euros. Thus, it was the third-highest production year of the last decade, surpassed only by the campaigns of 2018 (671 thousand tons) and 2016 (648 thousand tons). This represents a 1.3% increase compared to the average of the last five campaigns (2016-2020) and a 10.1% increase compared to the average of the last ten (2011-2020).

Graph 2.2.1. Evolution of grain legume crops.



Source: MAPA

By regions, Castilla-La Mancha is also a production leader, with 189,316 tons. It is closely followed by Castilla y León (187,472 tons) and Andalusia (80,301 tons).

Of this production, approximately 37% is allocated for human consumption.[9] In recent years, there has been an increase in per capita consumption of grain legumes. In 2020, the average consumption was 3.91 kilograms of legumes per person per year, a 17.1% increase compared to 2019.[10]

However, this consumption is lower than the recommended amount by health and nutritional institutions, which suggest a per-person consumption of about 11 kilograms per year. To achieve this goal, an increase in both the cultivated area and production will be required.

9 Legsapiens (2020). La cadena de valor de las leguminosas de consumo humano. Ministerio de Agricultura (2023). PAC 2023-2027 y Plan Estratégico. https://legsapiens.es/recursos/Diptico5_final.pdf.

10 Ministerio de Agricultura, Pesca y Alimentación (2021). Informe del consumo de Alimentación en España 2020. https://www.mapa.gob.es/es/alimentacion/temas/consumo-tendencias/informe-anual-consumo-2020-v2-nov2021-baja-res_tcm30-562704.pdf.

2.3.

Tubers for human consumption - potato

2.3. TUBERS FOR HUMAN CONSUMPTION - POTATO

The cultivation of tubers for human consumption, such as potatoes, plays a fundamental role in Spanish agriculture.

The dedicated area for this cultivation is 65,404 hectares, predominantly grown under irrigation (76.2%), although rainfed plantations (23.8%) also stand out. Castilla y León (18,406 hectares), Galicia (16,003 ha), and Andalusia (9,859 ha) are the regions with the largest area.

In the last decade of available data (2011-2020), there has been a decline of 18.7% (-14,461 ha), with a 27.8% decrease in rainfed crops (5,986 ha less area) and a 14.5% decrease in irrigated crops (8,475 ha less area).

Table 2.3.1. Area and productions of potato

YEAR	AREA (THOUSANDS OF HECTARES)	PRODUCTION (THOUSANDS OF TONS)	PRODUCTION VALUES (THOUSANDS OF EUROS)
2010	364	13.148	6.931.312
2011	351	12.973	5.220.725
2012	348	13.283	5.654.821
2013	349	13.201	6.025.736
2014	365	14.626	5.945.398
2015	365	14.772	7.705.933
2016	382	15.456	7.225.476
2017	388	15.545	8.079.272
2018	378	14.992	7.753.854
2019	384	15.858	7.940.650
2020	386	15.180	7.953.472

Source: MAPA

The climatic conditions in Spain allow for the availability of domestic potatoes throughout almost the entire year. Depending on the harvesting season, four varieties can be distinguished: extra-early, marketed from mid-January to mid-April; early, available from mid-June to mid-September; mid-season, during the summer; and late, from mid-September.

- Mid-season: Mid-season potatoes occupy 46.9% of the total potato area (30,682 hectares). Galicia leads in both area and production, concentrating 44.3% of the total mid-season potato area, with 13,606 hectares and 245,680 tons in 2020. It is followed by Castilla y León (6,839 ha and 323,104 tons) and Andalusia (2,423 ha and 83,565 tons). This variety has experienced the smallest decrease in area in the last decade, with a 2.0% reduction (641 hectares less).

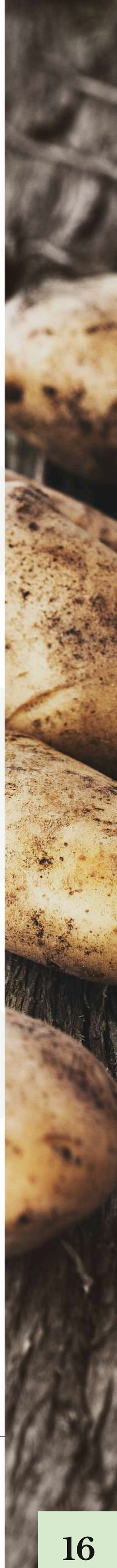
- Late: In Spain, 17,833 hectares are dedicated to late potato cultivation. Castilla y León has the largest area (11,567 ha, 64.9% of the total late potato area) and production (506,977 tons). Galicia (1,117 ha) follows in area, while the Basque Country (32,054 tons) leads in production. From 2011 to 2020, the late variety has suffered the greatest decrease in area, with a 16.4% decline (3,511 hectares less). Also, during the same period, it has experienced a 11.6% decrease in production. This is because some late potato farmers consider potato cultivation "secondary" in their rotation compared to more profitable crops.

- Early: The early variety covers an area of 13,449 hectares. Andalusia (5,320 hectares), Region of Murcia (2,160 ha), Canary Islands (2,053 ha), Valencian Community (1,401 ha), Galicia (1,227 ha), and Balearic Islands (1,005 ha) are the Autonomous Communities that allocate the most area to early potato cultivation. Andalusia, Region of Murcia, and the Canary Islands together account for 70.9% of the national area of this variety and lead in production (Andalusia with 173,162 tons, Region of Murcia with 96,552 tons, and Canary Islands with 39,924 tons). During the last decade (2011-2020), this variety has experienced a 13.6% loss in area. Conversely, it has been the one that has undergone the greatest increase in production, with a rise of 59.4%.

- Extra-early: The area dedicated to extra-early potato cultivation is 3,440 hectares. This variety is mainly grown in the Canary Islands (1,290 ha) and Andalusia (1,011 ha), with both regions accounting for 66.9% of the total extra-early potato area. However, production is led by the Region of Murcia (29,415 tons in 2020), followed by the Canary Islands (25,102 tons) and Andalusia (21,279 tons). Despite experiencing a 12.0% decrease in its area from 2011 to 2020, production has grown by 15.8%.

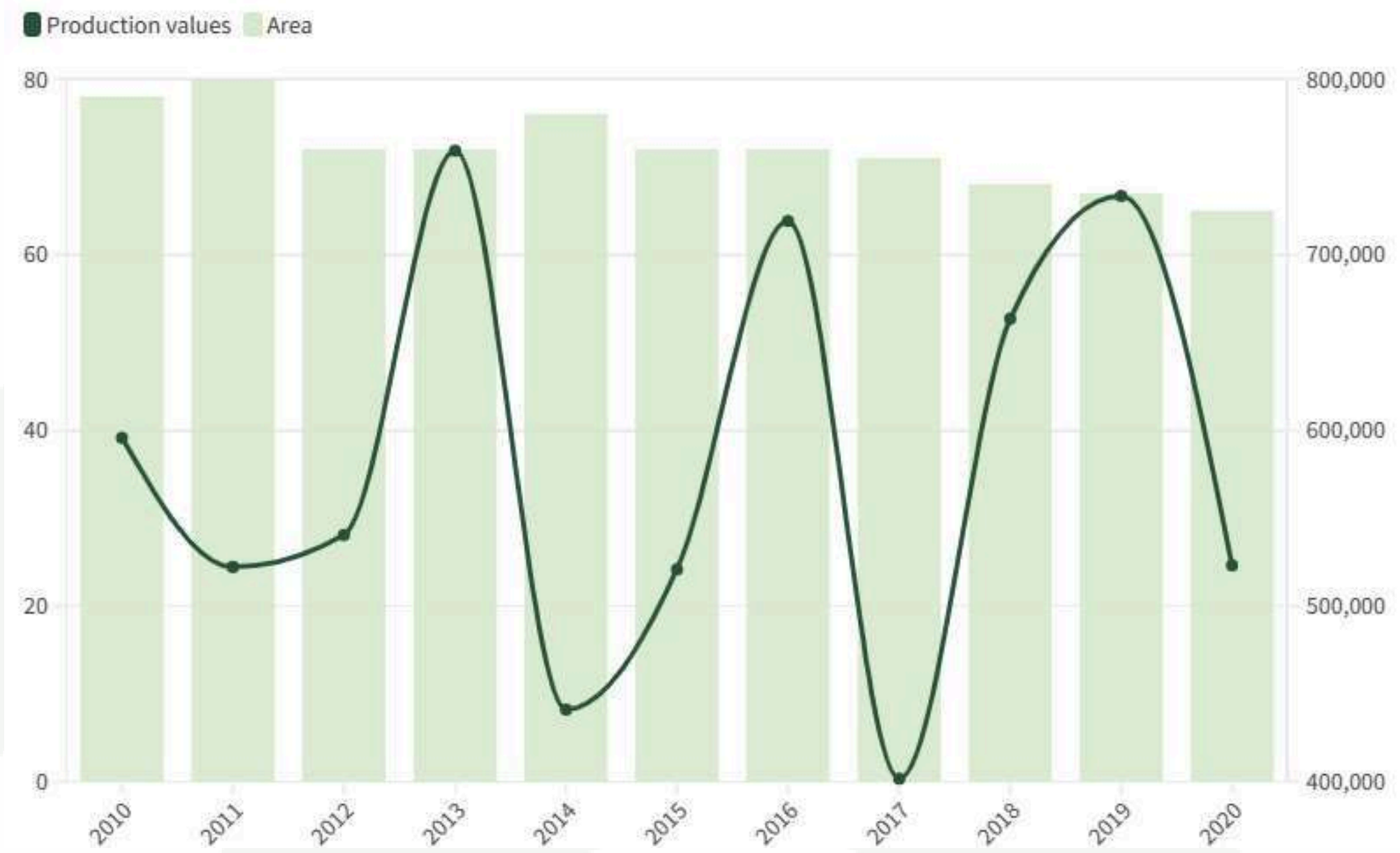
The production of potatoes has undergone variations over time due to factors such as market demand and agricultural technology. Over the past ten years, a "slight" downward trend has been observed, resulting from a greater reduction in cultivation area in contrast to the increases recorded in its yield.[11]

Nevertheless, it remains a relevant and versatile crop in national agriculture, with a production exceeding 2 million tons valued at 523,217 euros. This places it above sweet potatoes, yams, or tiger nuts (112,628 tons). The adaptability of potatoes to climatic conditions and soil types, as well as the diversity of available varieties, contribute to its significance



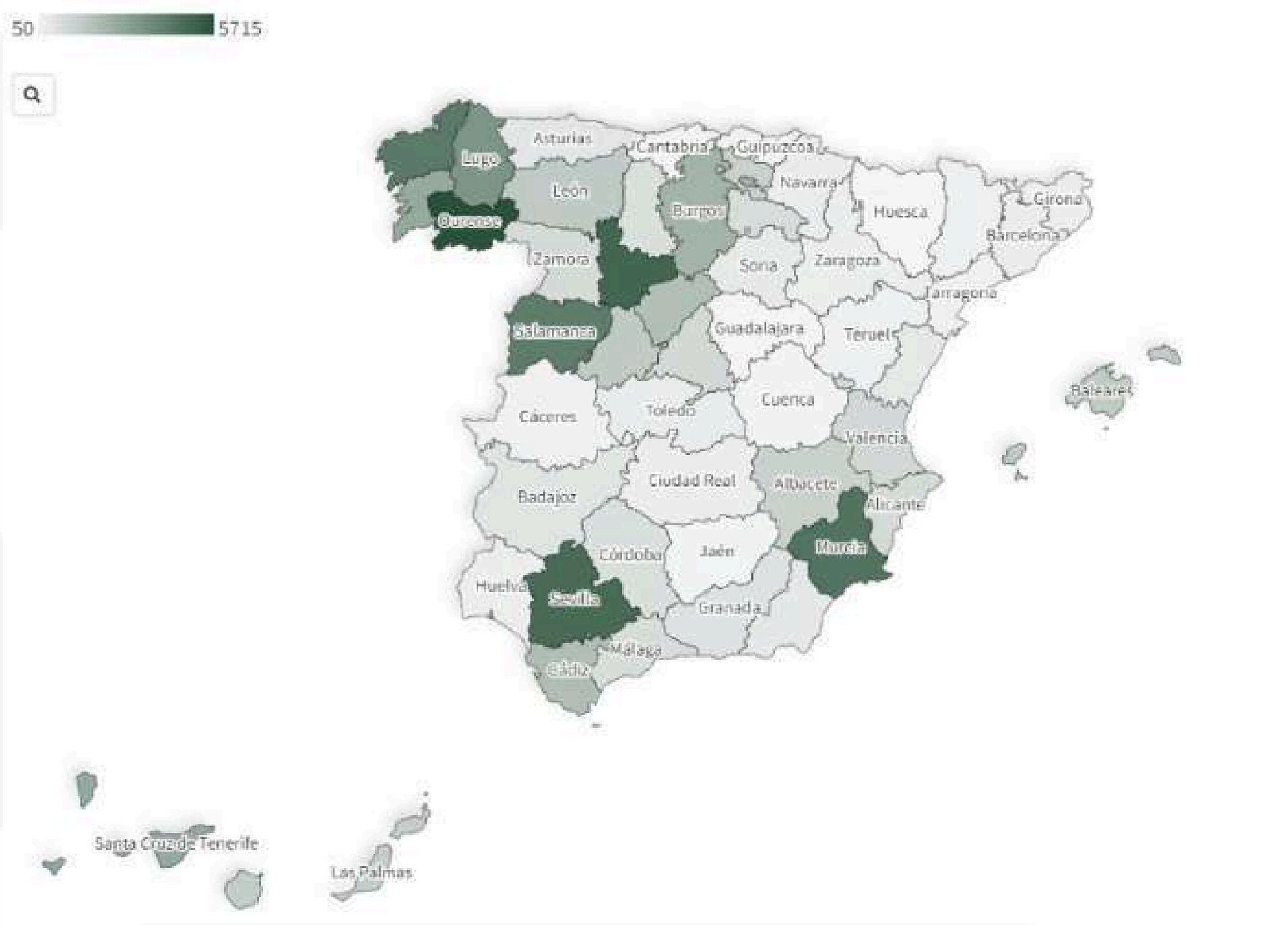
11 Ministerio de Agricultura, Pesca y Alimentación (2023) Patata. https://www.mapa.gob.es/es/agricultura/temas/producciones-agricolas/patata/.

Graph 2.3.1. Evolution of potato crops.



Source: MAPA

Map 2.3.1. Potato cultivation area by province.



Source: MAPA

2.4.

Vegetables

2.4. Vegetables

The cultivation of vegetables in Spain is an essential part of its agriculture, given the favorable climatic conditions that allow for year-round cultivation.

In the country, there are 386,084 hectares dedicated to vegetables, with 95.6% under irrigation (369,205 ha) and 4.4% under rainfed conditions (16,879 ha). Over the last decade of available data (2011-2020), the vegetable cultivation area has increased by 10.0%, remaining virtually stable in the last five years (+1.0%).

Within the irrigated area, 76.2% corresponds to open-air vegetable cultivation (294,285 ha), and 19.4% to greenhouse vegetables (74,920 ha). Between 2011 and 2020, the area dedicated to open-air vegetables has grown by 2.2%, while that of greenhouse vegetables has increased by 1.2%.

Table 2.4.1. Area and productions of vegetables

YEAR	AREA (THOUSANDS OF HECTARES)	PRODUCTION (THOUSANDS OF TONS)	PRODUCTION VALUES (THOUSANDS OF EUROS)
2010	364	13.148	6.931.312
2011	351	12.973	5.220.725
2012	348	13.283	5.654.821
2013	349	13.201	6.025.736
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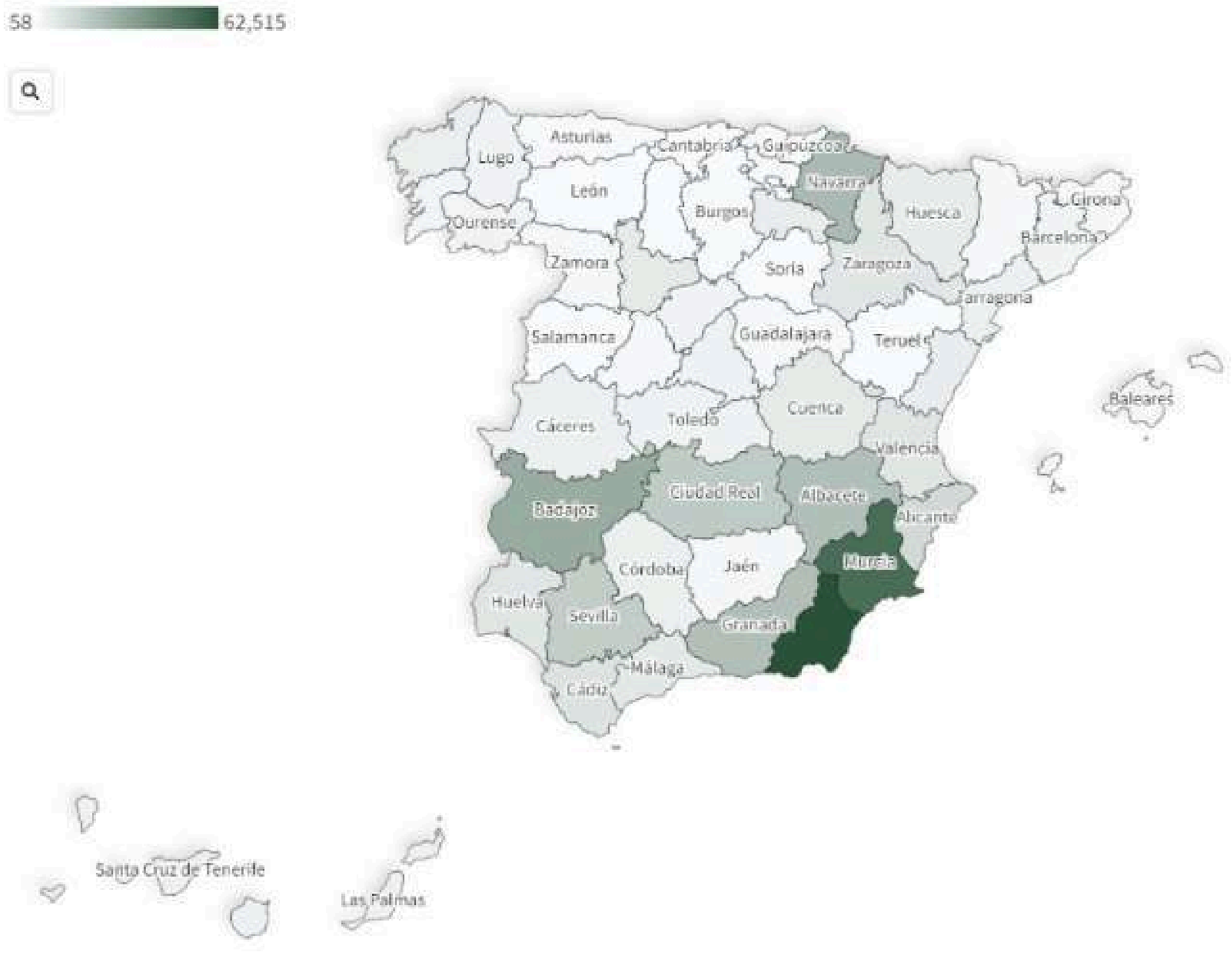
2016	382	15.456	7.225.476
2017	388	15.545	8.079.272
2018	378	14.992	7.753.854
2019	384	15.858	7.940.650
2020	386	15.180	7.953.472

Source: MAPA

In 2020, the average price of open-air vegetables was 36,609 euros/ha, and for greenhouse vegetables, it was 203,843 euros/ha. In the 2017-2020 period, the average price of open-air vegetables has appreciated by 4.6%, while that of greenhouse vegetables has increased by 14.3%.

Vegetable cultivation is particularly prominent in Andalusia (130,523 hectares), the Region of Murcia (53,589 ha), Castilla-La Mancha (49,181 ha), and Extremadura (30,459 ha).

Map 2.4.1. Vegetable cultivation area by province



Source: MAPA

Spain is the main vegetable producer in the EU and ranks seventh globally.[12] The vegetable agriculture sector in the country has modernized and focuses on sustainable practices to ensure the quality and quantity of production while reducing costs. In 2020, production reached 15.1 million tons, a 4.1% increase compared to the ten-year average (2011-2020), although it was 1.5% less than the last five years (2016-2020). Additionally, the sector achieved a production value of 7.9 million euros.

Vegetables are increasingly in demand due to changes in people's lifestyles, with high national and international consumption. In 2020, each Spaniard consumed 14.49 kilograms of processed vegetables and 63.03 kilograms of fresh vegetables, representing a 13.2% and 12.3% increase compared to 2019, respectively.[13]

The diversity of cultivated vegetables, including tomatoes, peppers, lettuce, onions, etc., allows Spain to supply both the domestic and international markets. The Spanish horticultural sector has significant commercial and export capacity, with around 50% of production allocated for export. This makes Spain the main exporter in the EU and one of the top three global exporters, along with China and the United States.[14]

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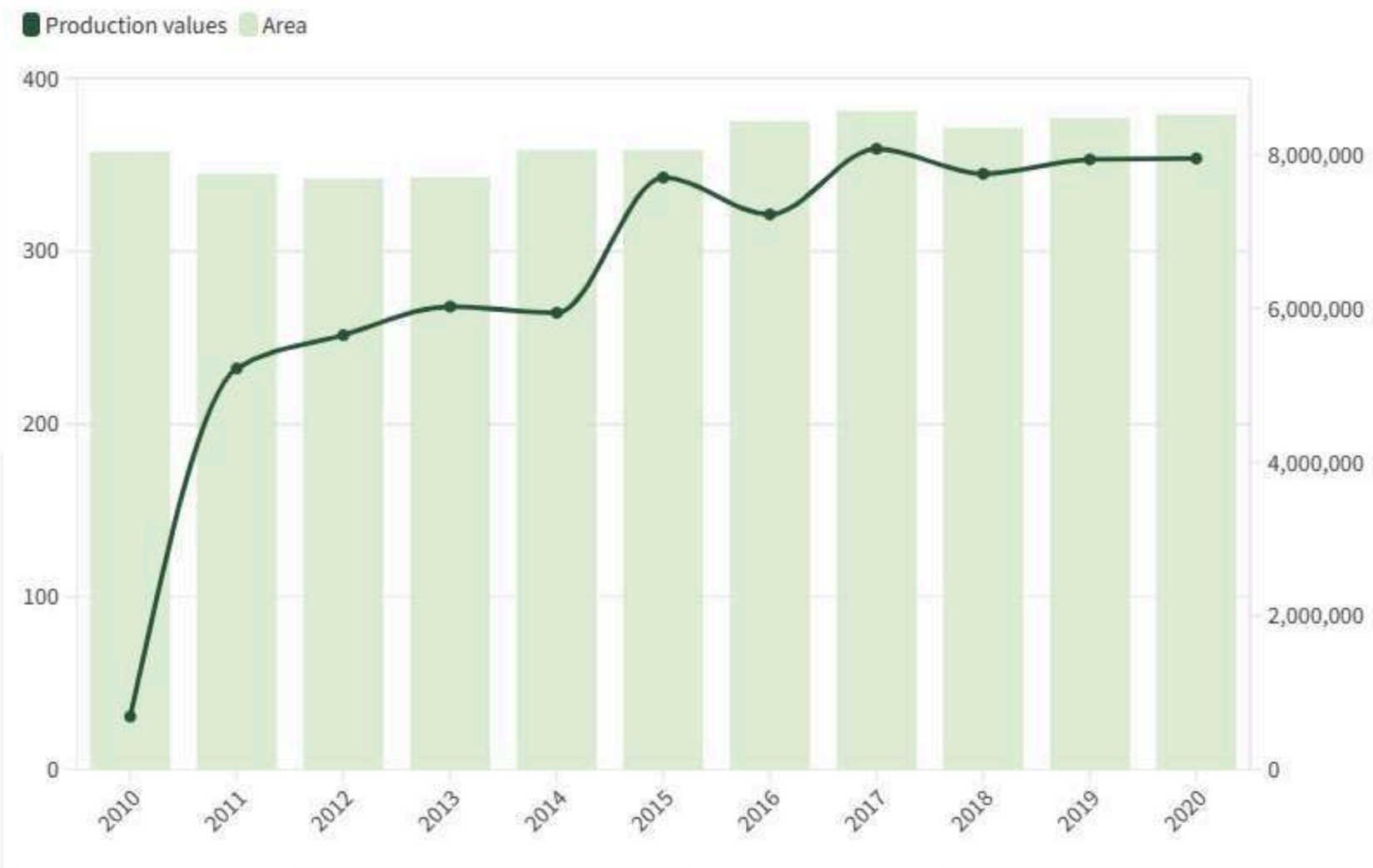
12 Ministerio de Agricultura, Pesca y Alimentación (2023). Frutas y hortalizas. https://www.mapa.gob.es/es/agricultura/temas/producciones-agricolas/frutas-y-hortalizas/informacion_general.aspx#:~:text=Espa%C3%B1a%20es%20el%20primer%20productor,media%20de%20las%20cinco%20anteriores.

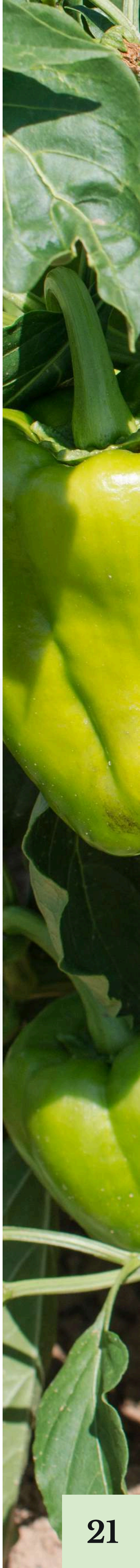
13 Ministerio de Agricultura, Pesca y Alimentación (2021). Informe del consumo de alimentación en España 2020. https://www.mapa.gob.es/es/alimentacion/temas/consumo-tendencias/informe-anual-consumo-2020-v2-nov2021-baja-res_tcm30-562704.pdf.

14 Ministerio de Agricultura, Pesca y Alimentación (2023). Frutas y hortalizas. https://www.mapa.gob.es/es/agricultura/temas/producciones-agricolas/frutas-y-hortalizas/informacion_general.aspx.

Graph 2.4.1. Evolution of vegetables crops



Source: MAPA



2.5.

Citrus

2.5. CITRUS

The cultivation of citrus fruits in Spain is a significant part of its agriculture, covering 297,969 hectares. The country also leads citrus production in Europe and ranks sixth globally, with an annual production of 7,045,519 tons. In this regard, the Valencia region stands out as the main producing region, especially for small citrus fruits, along with Andalusia and Murcia.

Citrus fruits, such as oranges, lemons, and mandarins, are a traditional crop in Spain and hold great economic value, both in the domestic and international markets. In fact, Spain is the world's top exporter of fresh citrus fruits, accounting for 25% of global exports.[15]

Despite the challenges faced by citrus cultivation, such as pests and weather conditions, the industry in Spain has modernized, focusing on the quality and sustainability of production. Therefore, between 2017 and 2020, the land dedicated to irrigated citrus cultivation has increased in value by 5.4%, reaching an average price of 41,822 euros per hectare.

15 Ministerio de Agricultura, Pesca y Alimentación (2023). El Ministerio de Agricultura, Pesca y Alimentación comunica una previsión de producción de 5,75 millones de toneladas de cítricos en la campaña 2023/2024 https://www.mapa.gob.es/es/agricultura/temas/producciones-agricolas/frutas-y-hortalizas/informacion_general.aspx.

2.5.1.

Orange tree

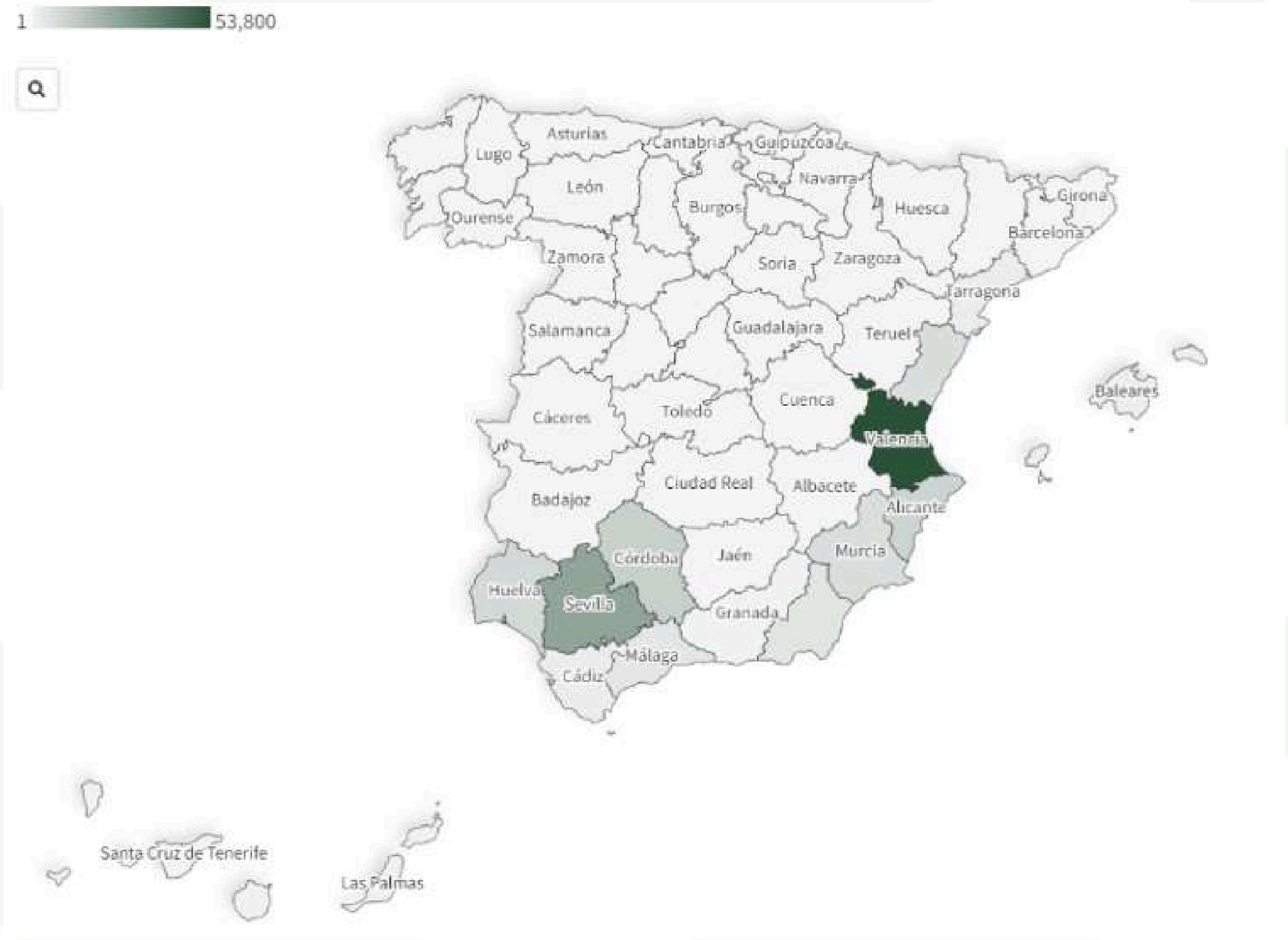
2.5.1. ORANGE TREE

In Spain, the cultivation of oranges was boosted with the introduction of orange trees by Muslims in the 10th century. In Al-Andalus, the orange tree served ornamental purposes, and it wasn't until the 15th century that it began to be valued for its fruit. The first commercial interest in oranges for consumption dates back to the year 1781 when the first cultivation areas were established.

Currently, the orange cultivation area in Spain is 140,786 hectares. The Valencian Community is the region with the largest area in the country, dedicating 70,509 hectares to its cultivation, followed by Andalusia (58,481 ha), concentrating between them 92.5% of the national orange cultivation area. The latter has promoted new orange plantations, fostering a positive outlook for the crop's production in the coming years.

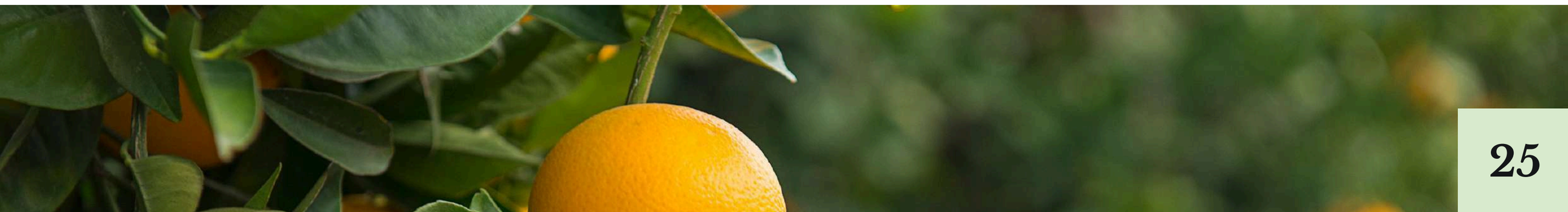
However, its moderate resistance to frost, adaptability to diverse climatic conditions, and the wide variety of available cultivars facilitate its expansion to other regions,[16] such as the Region of Murcia (6,835 ha), Catalonia (2,180 ha), and the Balearic Islands (1,677 ha).

Map 2.5.1. Orange tree cultivation area by province.



Source: MAPA

16 Ministerio de Agricultura, Pesca y Alimentación (s.f.). Material Vegetal. https://www.mapa.gob.es/app/materialvegetal/fichamaterialvegetal.aspx?idficha=12#:~:text=%2D%20Su%20resistencia%20moderada%20a%20las,muy%20adaptable%20a%20muchas%20regiones.



In the last five years of available data (2016-2020), its area has remained practically stable (-0.6%), decreasing by 4.5 thousand hectares. However, in the last decade (2011-2020), there is a decrease of 8.1% in the cultivation area (loss of 12,436 hectares).

Table 2.5.1. Area and productions of orange tree.

YEAR	AREA (THOUSANDS OF HECTARES)	PRODUCTION (THOUSANDS OF TONS)	PRODUCTION VALUES (THOUSANDS OF EUROS)
2010	154	3.115	723.258
2011	153	2.819	533.897
2012	152	2.942	478.709
2013	150	3.537	605.137
2014	147	3.483	543.775
2015	145	3.087	485.218
2016	142	3.663	806.164
2017	140	3.344	733.433
2018	139	3.909	829.437
2019	140	3.342	485.337
2020	141	3.496	824.162

Source: MAPA

Among the different existing varieties of orange trees, four stand out in the Spanish territory: "navel" oranges, also known as navel oranges; late varieties; the "white" group, which includes both select and common varieties, and these are the most used for juice; and the blood orange variety.

- Navel: Navel oranges cover an area of 99,746 hectares, accounting for 70.8% of the total cultivated area of orange trees. The Valencia Community has the largest area and production of this type, with 55,370 hectares and 1.3 million tons annually, followed by Andalusia (35,077 ha and 1,060,123 tons). In the last five years of available data (2016-2020), its area has decreased by 3.4% (3,478 hectares less). Production has also fallen by 6.1%, reaching 2.5 million tons annually.

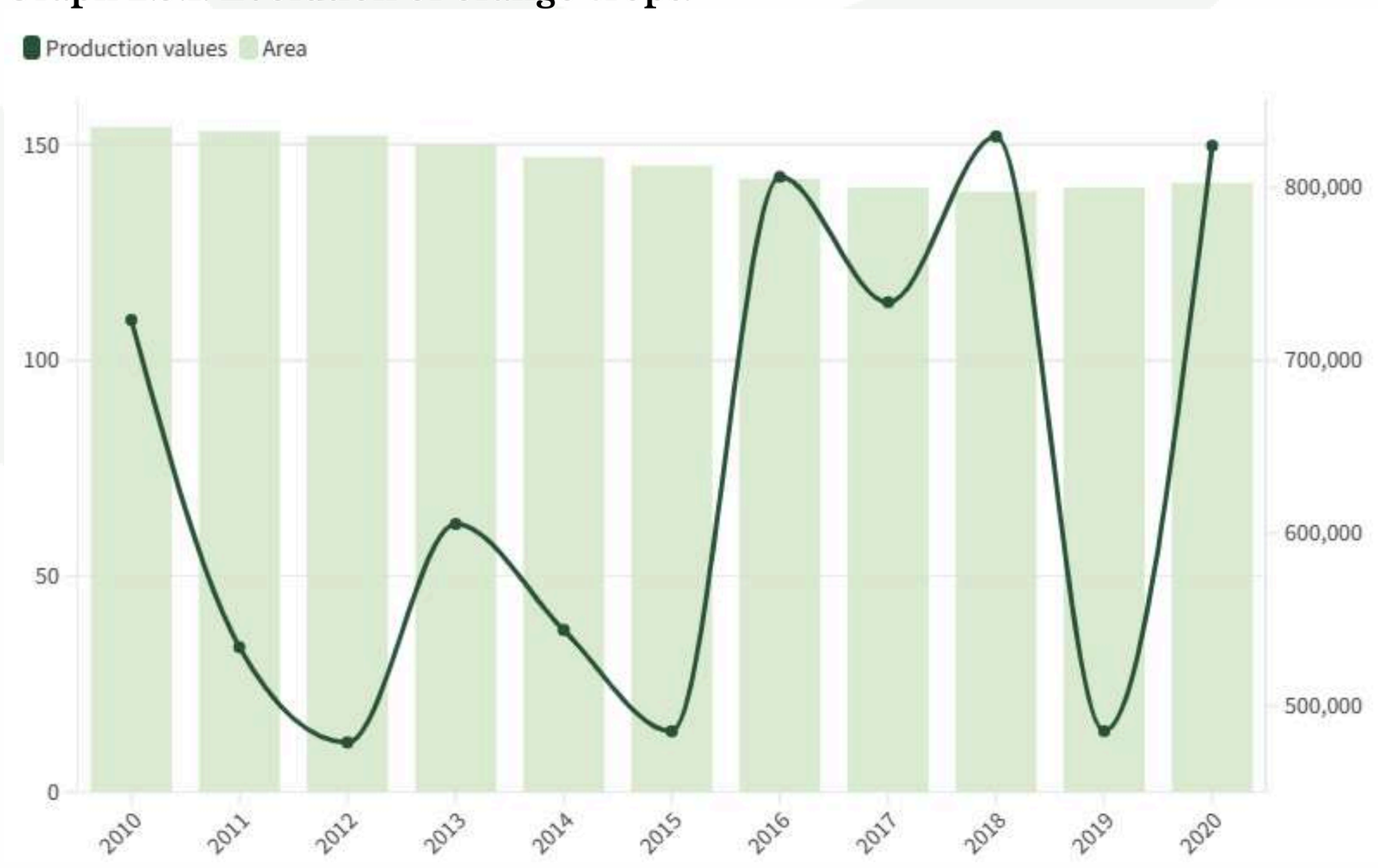
- Late Oranges: The cultivation area of late oranges is 27,191 hectares (19.3% of the total orange tree area). In this case, both the area and production are led by Andalusia, with 13,163 ha and 346,504 tons, respectively. Next is the Valencia Community (12,150 ha and 193,179 tons). Unlike navel oranges, their area has grown by 21.2% (4,747 hectares more), while production has increased by 12.4%, reaching 571,134 tons.

- White Oranges: White oranges cover 8.7% of the total orange tree area, with 12,248 hectares. As in the previous case, Andalusia stands out as the autonomous community with the most planted area (9,425 ha) and the highest production (288,694 tons). Next is the Valencia Community, which occupies 2,255 hectares and has an annual production of 57,675 tons. This variety has experienced the greatest decline, both in terms of area (-18.7%) and production (-17.2%), with 354,249 tons.

- Sanguinas. Sanguina orange are the least planted in Spain, with 1,601 hectares. Andalusia is also at the forefront in both area (816 ha) and production (19,761 tons) in this case, followed by the Valencia Community (734 ha and 8,570 tons). This variety has experienced the greatest increase in area (78.1%) and production (37.7%), reaching 29,285 tons annually.

Regarding production, there is an increase of 24.0% compared to 2011. However, in the last five years, it has decreased by 4.5%, reaching 140,786 thousand tons. Despite this decline, Spain is the fourth-largest orange producer globally, after Brazil, the United States, and China. Additionally, the production value has risen by 54.4% since 2011 when it was 533,897 thousand euros, and by 2.2% compared to 2016, when it reached 806,164 thousand euros.

Graph 2.5.1. Evolution of orange crops.



Source: MAPA

2.5.2

Lemon tree

2.5.2. LEMON TREE

The cultivation of lemon trees covers an area of 48,196 hectares, with the Region of Murcia leading (25,721 ha), followed by the Valencian Community (15,108 ha), and Andalusia (6,684 ha). In the last five years of available data (2016-2020), the lemon tree's surface area has increased by 17.1%.

Map 2.5.2. Lemon tree cultivation area by province.

Source: MAPA

The growth of lemon plantations has increased in the last decade (2011-2020) by 20%. Data from 2013 to 2012 stand out with significant growth in plantations, where 31% of the declared surfaces were planted. The Region of Murcia planted 32% of the total declared surfaces, while the Valencian Community and Andalusia each planted 31%.

The area dedicated to organic lemon cultivation has notably increased over the past ten years. In 2020, the area of hectares dedicated to this cultivation was 8,300 hectares, reflecting a 386% increase compared to the area occupied in 2012 (1,708 hectares) according to the latest data.

The production of organic lemons is concentrated in the Region of Murcia, with 4,901 hectares dedicated to lemons, followed by Andalusia (3,593 hectares) and the Valencian Community (2,960 hectares). A decade ago, organic lemon cultivation was almost nonexistent in Spain, but its cultivation was favored by organic trends and the demand for "all-natural" products.

Table 2.5.2. Area and productions of lemon tree

YEAR	AREA (THOUSANDS OF HECTARES)	PRODUCTION (THOUSANDS OF TONS)	PRODUCTION VALUES (THOUSANDS OF EUROS)
2010	41	718	214.654
2011	40	736	121.031
2012	39	684	159.690
2013	38	818	270.511
2014	37	1.089	373.950
2015	36	775	411.737
2016	41	954	626.329
2017	42	923	415.898
2018	46	1.127	568.828
2019	47	938	327.602
2020	48	1.142	461.310

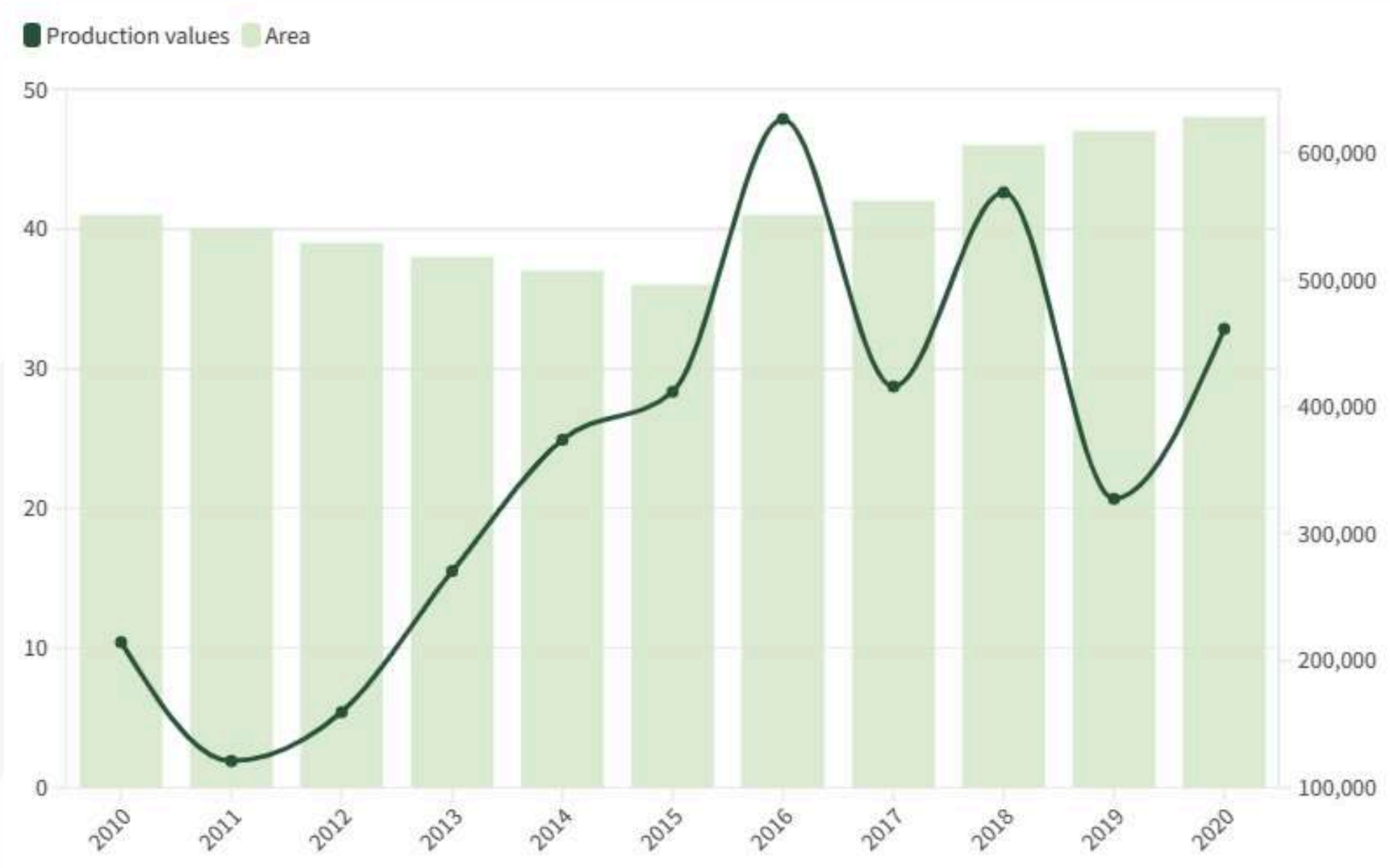
Source: MAPA

In recent years, there has been a growing interest in sustainability, health, and the quality of the foods we consume, as reflected in organic lemons. This environmental awareness regarding food consumption contributes to an increase in the demand for organic foods, such as lemons.

Spain is the world leader in lemon production, reaching its peak value in 2020 at 1.14 million tons, a 21.6% increase from the previous year and a 12.2% increase from the five-year average (2016-2020). Regarding the production value, in 2020, it amounted to 461,310 euros, surpassing the previous year by 133,708 euros. This growth in production value may be linked to the meteorological conditions of the last year.

Among lemon tree varieties, the most cultivated in Spain is the "mesero," a highly productive variety that blooms twice a year, with the summer flowering being less abundant than that of October-February. As the most productive, it represents 60.8% of the total area (29,300 ha). Following that is the "verna," which blooms several times a year, with the last harvest being of more commercial interest, representing 37.8% of the area (18,203 ha). Lastly, there are other lemons, accounting for 1.4% (693 ha).

Graph 2.5.2. Evolution of lemon crops.



Source: MAPA

2.6.

Fresh fruit non-citrus

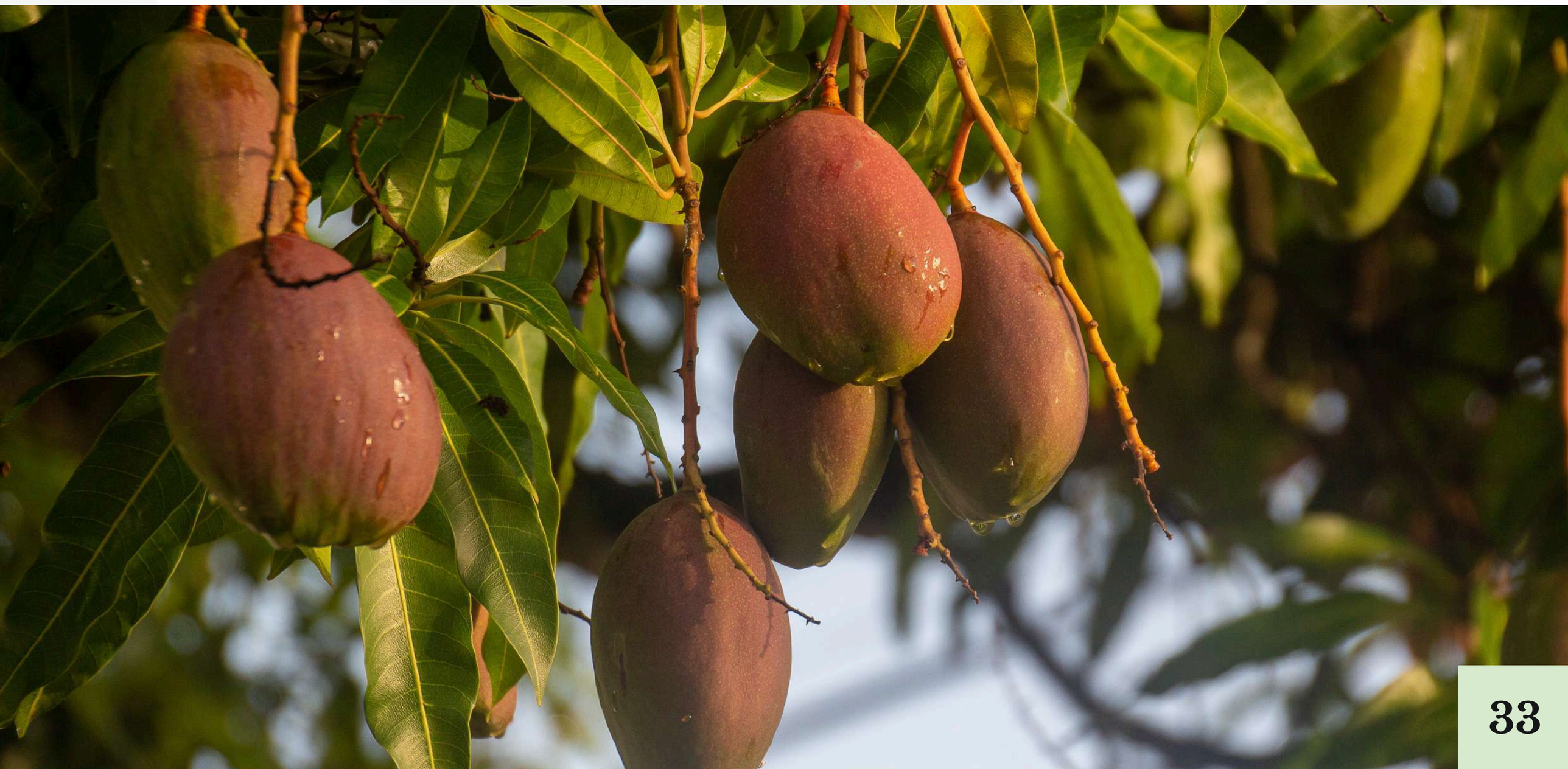
2.6. FRESH FRUIT NON-CITRUS

The cultivation of non-citrus fresh fruits in Spain encompasses a wide range of fruits such as apples, grapes, tomatoes, among others. In total, there are 1,102,380 hectares of this type of cultivation, with 66.1% being rainfed (728,583 ha) and 33.9% under irrigation (373,797 ha).

Over the last decade (2011-2020), non-citrus fruit cultivation has grown by 30.2%, with a greater increase in irrigated land (41.6%) compared to rainfed land (25.0%). If we look at the last five years, this cultivation has experienced a 17.4% increase for that period, with a similar rise in both irrigated and rainfed areas, 18.5% and 16.8% respectively.

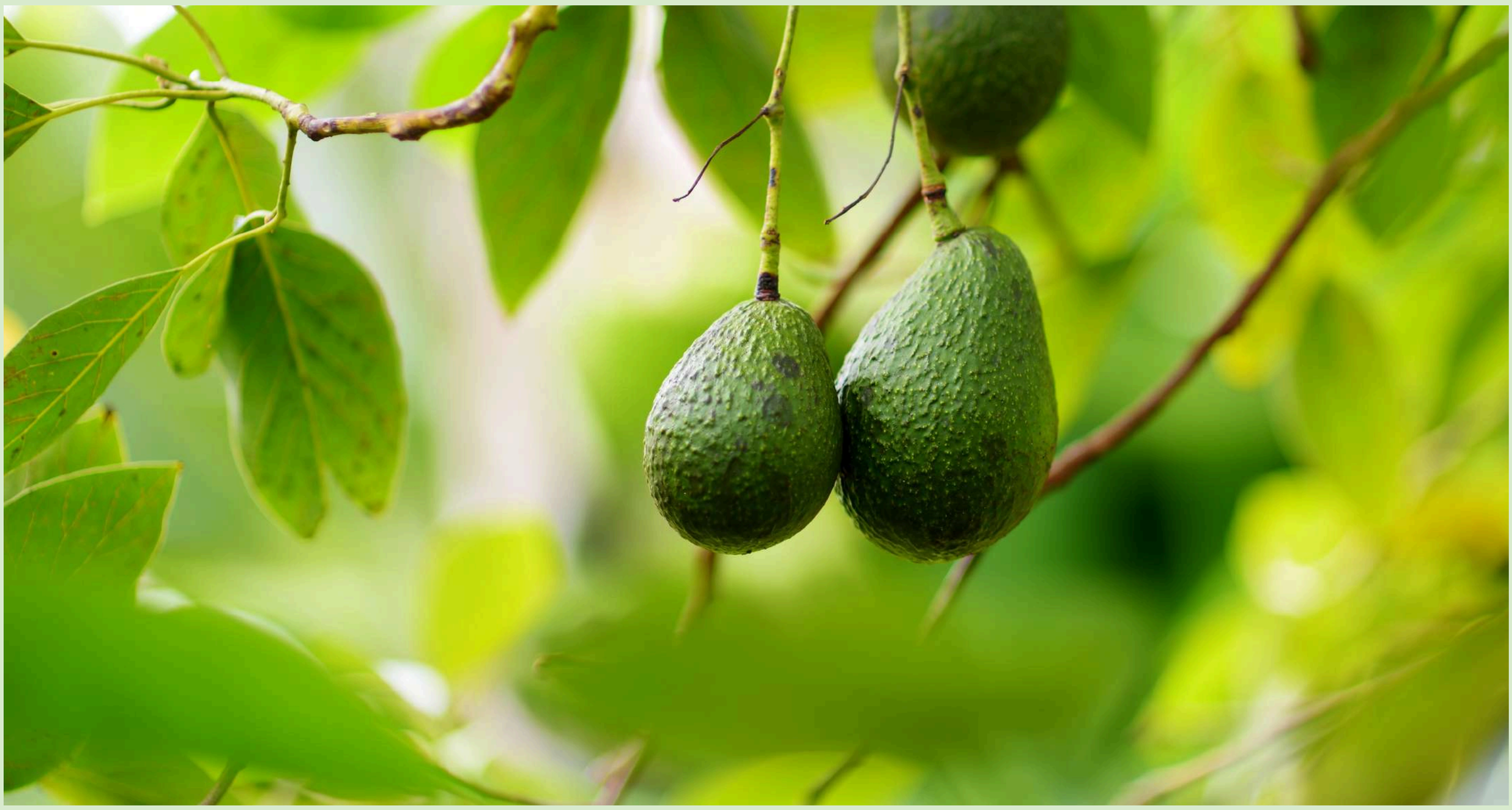
This growth is mainly attributed to the increasing popularity of tropical fruits such as avocado, mango, or pitahaya, which have gained recognition for their nutritional properties.

This has also translated into a 24.4% revaluation of the average price of subtropical climate fruits in rainfed areas, reaching 7,756 euros/ha. Consequently, it is expected that the demand for this type of cultivation will continue to grow in the coming years.



2.6.1.

Avocado



2.6.1. AVOCADO

The tropical fruit market is dominated by avocados. In recent years, avocado cultivation in Spain has experienced significant growth, driven by increasing demand both nationally and internationally.

The national area dedicated to avocado cultivation covers 15,849 hectares, of which 99.4% are under irrigation (15,747 ha) and 0.6% rainfed (102 ha). Due to its sensitivity to both low and high temperatures (it does not tolerate temperatures below freezing or above 30ºC), avocados have historically been cultivated in Málaga, Granada, and Tenerife.

However, over the last decade, it has expanded to other regions of the country that also have optimal climatic conditions for cultivation, such as Cádiz (+968 ha), Huelva (+876 ha), and Valencia (+836 ha). Thus, 78.2% of the total area is in Andalucía, with 12,386 ha, highlighting Málaga (7,449 ha) and Granada (2,720 ha). They are followed by the Valencian Community (1,467 ha) and the Canary Islands (1,966 ha).

Map 2.6.1. Avocado cultivation area by province

Source: MAPA

In the last ten years, the avocado cultivation area has increased by 50.1%, going from 10,470 hectares in 2011 to 15,849 hectares in 2020. Similarly, production has grown by 590 tons in the same period, reaching the highest figure of the decade in 2020, with 99,125 tons and a production value of 220.5 million euros. Thus, Spain holds the title of the main European producer of this non-citrus fresh fruit.

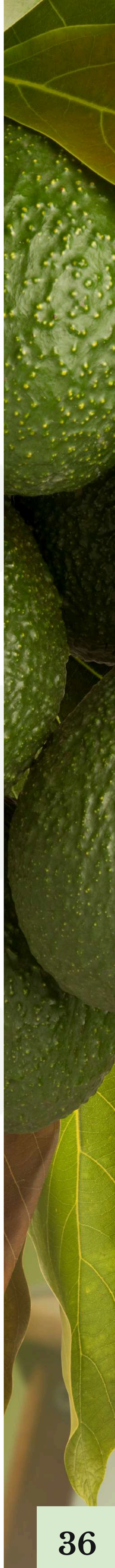
Table 2.6.1. Area and production of avocado.

YEAR	AREA (THOUSANDS OF HECTARES)	PRODUCTION (THOUSANDS OF TONS)	PRODUCTION VALUES (THOUSANDS OF EUROS)
2010	10.470	75.655	99.524
2011	10.558	98.535	129.298
2012	10.645	76.337	96.001
2013	10.845	69.427	99.614
2014	10.943	79.886	117.384
2015	11.329	86.636	136.798
2016	11.455	91.530	193.742
2017	11.812	92.936	199.459
2018	12.161	89.592	172.742
2019	14.104	97.727	164.992
2020	15.849	99.125	220.494

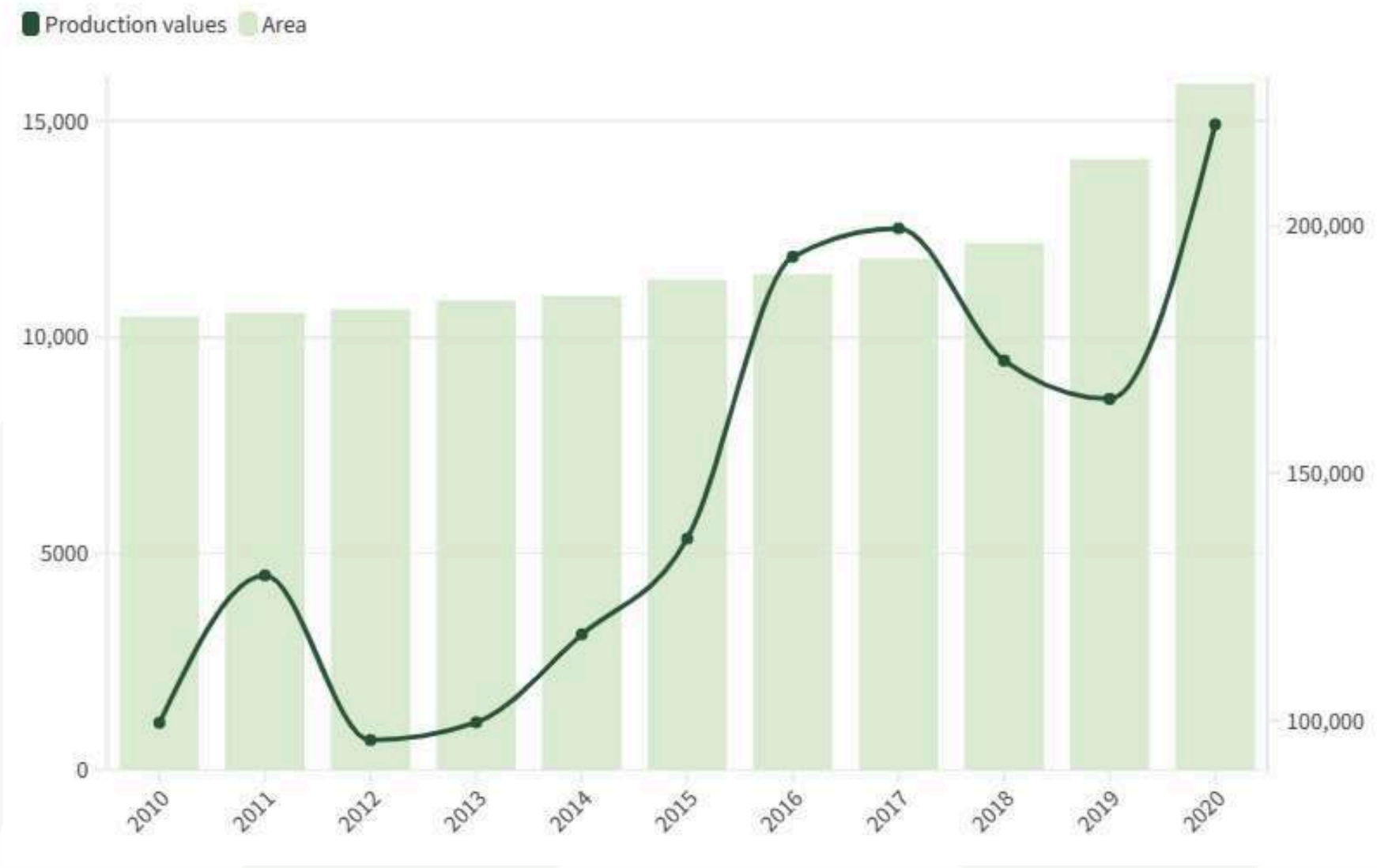
Source: MAPA

At the end of the last century, avocado was considered an exotic crop in Spain. However, its consumption has grown by more than 1,000% in the last decade, with an average of 1.5 kg per person per year. This increase in demand has occurred as a result of changes in consumer habits, as they seek healthier products due to increased awareness of health and well-being. Thus, avocado is becoming increasingly integrated into culinary culture.

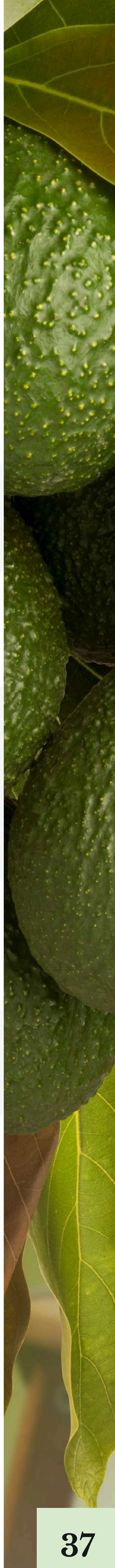
Given the upward trend in consumption, domestic farmers have chosen to cultivate avocados instead of other traditional subtropical crops such as cherimoya and loquat. Despite the increasing number of hectares and countries where this fruit is grown, the World Avocado Organization (WAO) warns that current production will not be able to meet all demand.



Graph 2.6.1. Evolution of avocado crops



Source: MAPA



2.7.

Dried fruit trees

2.7. DRIED FRUIT TRESS

The cultivation of nut fruit trees in Spain, such as almond and walnut trees, has experienced a significant increase in recent decades. The cultivated area covers 831,210 hectares, with 81.8% of them in dryland and 18.2% in irrigated land. Among the nut fruits, the almond tree is the most widespread, covering 718,540 hectares. It is followed by pistachio (49,534 ha), chestnut (37,779 ha), hazelnut (13,067 ha), and walnut (12,290 ha).

During the period from 2011 to 2020, the area has increased by 41.6%, with an additional 244,077 hectares under cultivation. The evolution has been driven by both domestic and international demand, as well as investments in technology and sustainable practices.

The Spanish nut fruit production is dominated by almonds, with an annual output of 421,610 tons, and chestnuts, with 188,687 tons. However, crops like pistachio (14,337 tons) and walnut (17,114 tons) are expanding and have not fully utilized all their cultivation hectares, indicating an expected increase.

These crops have proven to be economically profitable and contribute to the Spanish agricultural sector, reflected in the appreciation of dryland areas dedicated to nut fruit trees by 2.3% from 2017 to 2020, reaching 8,921 euros/ha. Conversely, the average price of irrigated nut fruit trees has decreased by 6.3%, reaching 22,524 euros/ha.

2.7.1.

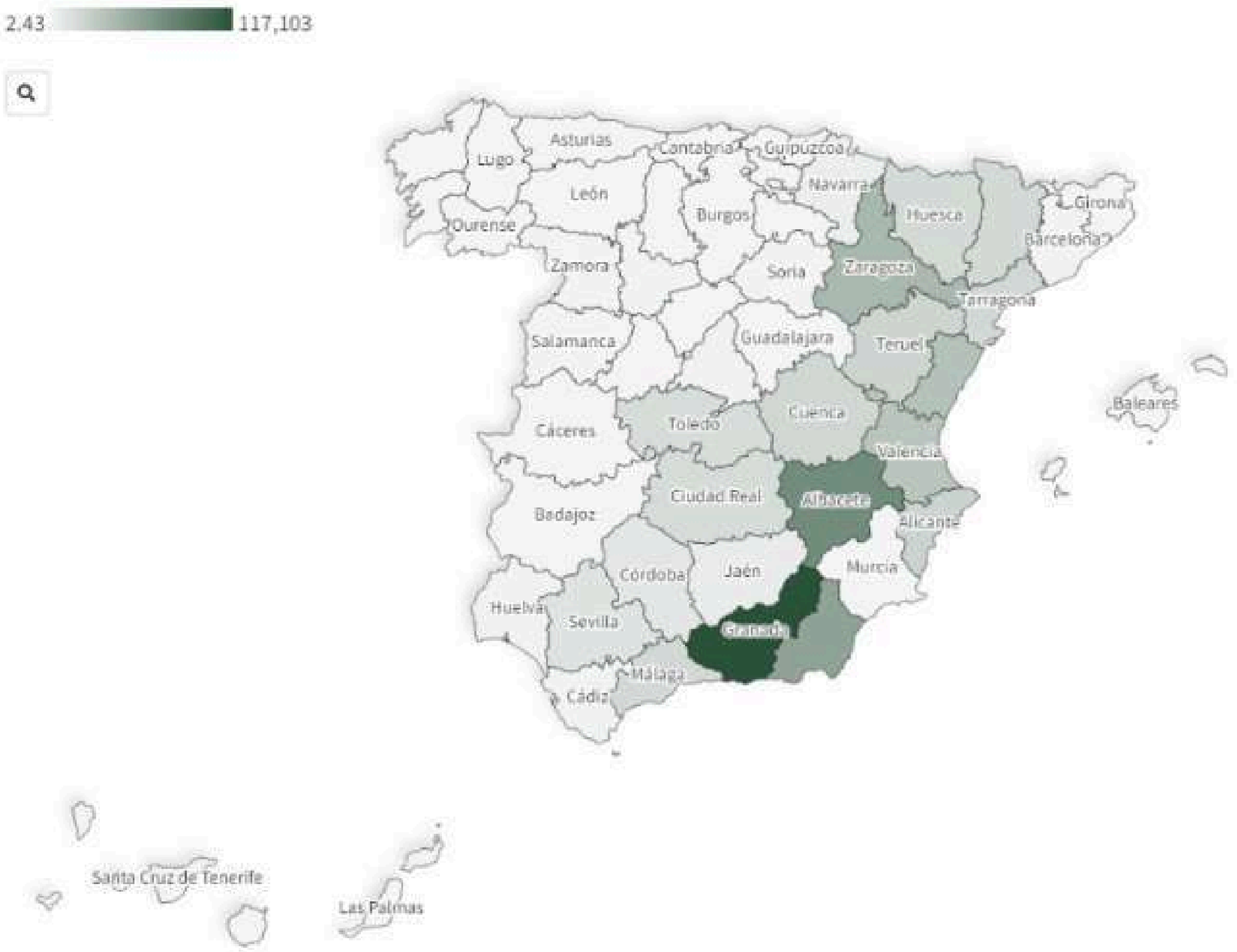
Almond tree

2.7.1. ALMOND TREE

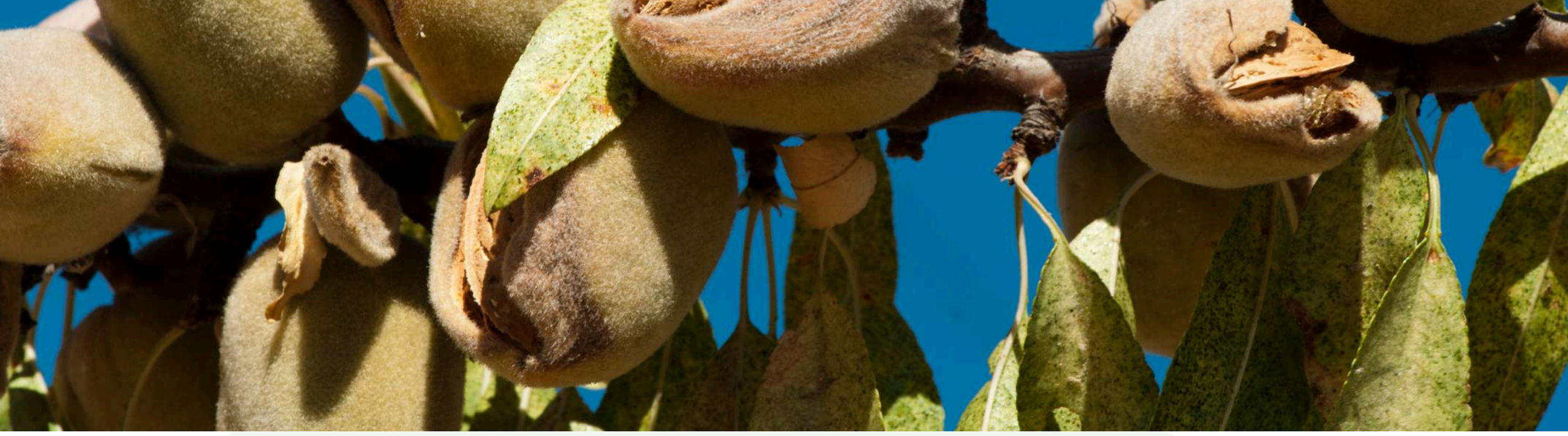
In the country, a total of 718,540 hectares are allocated to almond cultivation, with 83.4% in dryland (600,338 ha) and 16.6% in irrigated land (118,202 ha). However, not all of these hectares are in production; 599,627 ha are currently in use.

The leading regions in terms of almond cultivation area are Andalusia (224,142 ha), Castilla-La Mancha (141,003 ha), Valencia (93,441 ha), Aragon (83,800 ha), and the Region of Murcia (81,160 ha)

Map 2.7.1. Area of almond crops by provinces.



Source: MAPA



During the last decade of available data (2011-2020), the cultivated area of almond trees increased by 31.2% (170,718 hectares more). The most significant increase in hectares occurred between 2016 and 2020, with an additional 134,867 hectares.

In terms of production, Spain is the third-largest almond producer globally, trailing only the United States and Australia. In 2020, production reached its highest figure, with 422,000 tons, a 23.8% increase compared to the previous campaign and a 36.6% increase compared to the average of the previous five campaigns (2016-2020). Regions such as Andalusia (161,546 tons), Aragon (74,688 tons), and Castilla-La Mancha (74,452 tons) lead in this aspect.

The production value has also maintained steady growth in recent decades. In the last five years, the production value increased by 101,079 thousand euros, and in the last decade, it increased by 283,103 thousand euros.

Table 2.7.1. Arean and productions of almonds.

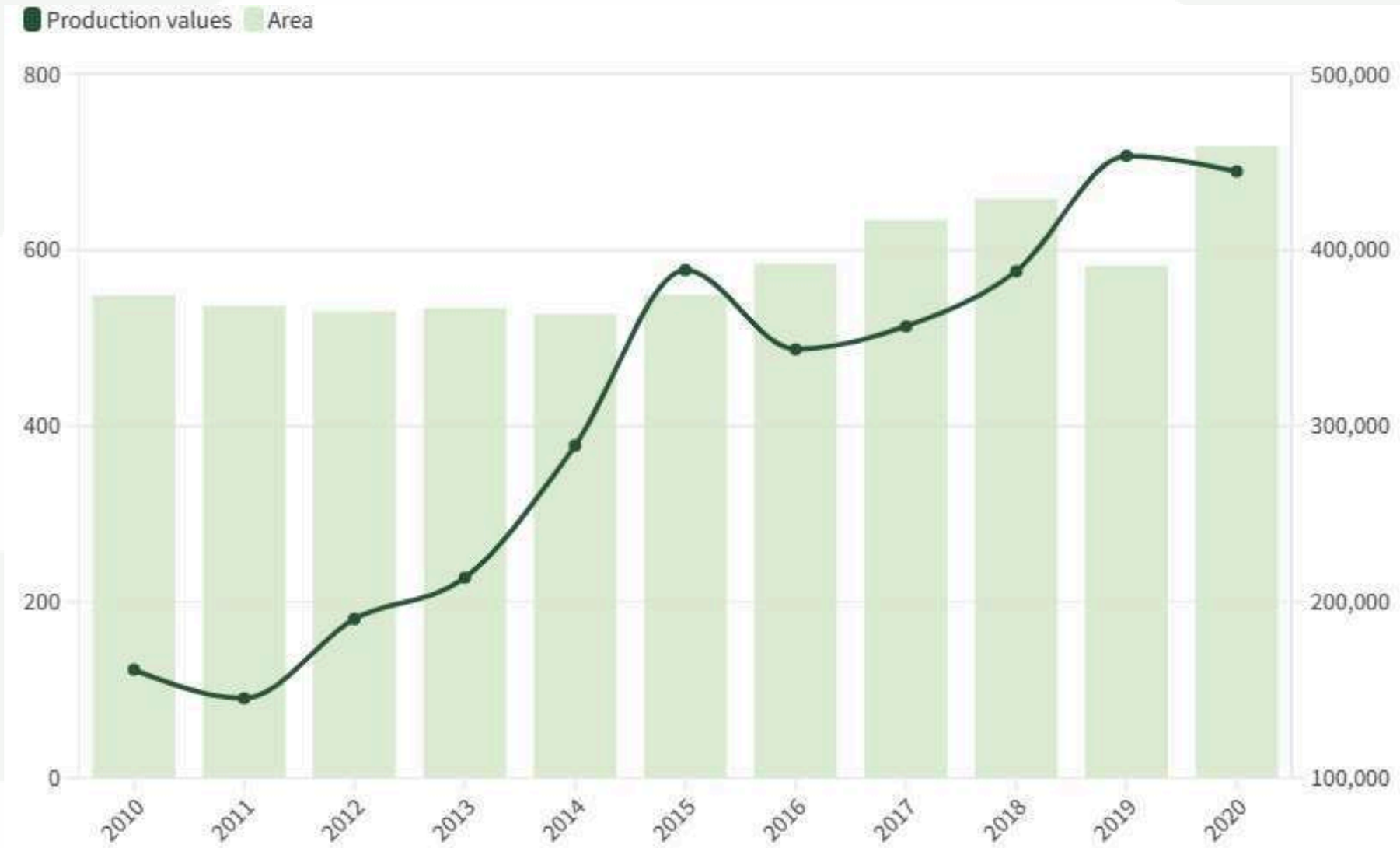
YEAR	AREA (THOUSANDS OF HECTARES)	PRODUCTION (THOUSANDS OF TONS)	PRODUCTION VALUES (THOUSANDS OF EUROS)
2010	548	222	161.485
2011	536	211	145.270
2012	530	212	190.305
2013	534	143	213.792
2014	527	196	288.832
2015	549	209	388.475
2016	584	199	343.509
2017	634	244	356.620
2018	658	339	387.786
2019	582	340	453.305
2020	718	422	444.588

Source: MAPA

This increase in both cultivated area and production is attributed to the rising trend among consumers toward a healthy lifestyle. The per capita consumption of almonds in Spain is 0.28 kilograms, a 13.6% increase compared to 2019. Almonds contain vitamins, healthy fats, and proteins, making them a healthy snack and aligning with the trend of consuming organic dried fruit.

Concerning the trend of organic almonds, numerous farmers have embraced it in the last decade, opting for their cultivation driven by their high market price and reduced environmental impact.

Graph 2.7.1. Evolution of almond tree crops



Source: MAPA

2.7.2.

Pistachio

2.7.2. PISTACHIO

The cultivation of pistachios in Spain has experienced significant growth in recent decades. According to the latest available data (2020), there are 49,534 cultivated hectares, with 68.3% in rainfed (33,835 ha) and 31.7% in irrigated land (15,699 ha). In 2011, the pistachio cultivation area was 4,279 hectares, indicating a growth of 45,255 hectares in ten years.

However, of the planted area, only 15,427 hectares are in production, accounting for 31.1% of the cultivated pistachio area. This is why it is expected that, in the next five years, Spain will become the fourth-largest pistachio producer globally, behind California, Iran, and Turkey.

Regarding the geographical distribution of pistachio cultivation in Spain, Castilla-La Mancha stands out, concentrating 76.6% of the national area (37,941 ha), followed by Andalusia (4,244 ha), Castilla y León (2,234 ha), and Extremadura (1,587 ha).

Map 2.7.2. Area of pistacho cultivation by provinces.

Source: MAPA

Since 2011, Castilla-La Mancha has seen an increase of 34,532 hectares in pistachio cultivation, Andalusia has added 4,279 hectares, Castilla y León has expanded its area by 2,118 hectares, and Extremadura has added 1,448 hectares. Additionally, plantations have expanded to other geographical areas, such as Aragón, with 888 hectares, or the Valencian Community, with 195 hectares.

The increase in pistachio cultivation is due to the growing trends in healthy eating internationally, especially in Europe. In the EU, pistachio consumption has risen by 17% in recent years, leading to an increase in demand and, consequently, prices. In this regard, pistachios have become one of the crops experiencing significant expansion in recent years.

2.8.

Industrial crops

2.8. INDUSTRIAL CROPS

Industrial crops are agricultural products whose output is not consumed directly but undergoes industrial processing. In Spain, industrial crops cover an area of 871,130 hectares, with 77.3% in rainfed (674,085 hectares) and 22.7% in irrigated land (198,045 hectares). These crops include a variety of crops primarily intended for raw material production for industries, such as cotton, sunflower, and sugar beet.

In the last decade of available data (2011-2020), industrial crops have lost 17.1% of their area (180,196 hectares less), with a decrease of 19.5% in rainfed land (-163,180 hectares) and 7.9% in irrigated land (17,016 hectares less).

These types of crops predominate in three regions. Castilla y León, with 324,063 hectares of cultivated land, stands out, with Burgos (74,282 hectares) and Valladolid (58,111 hectares). In Andalusia, the region where the area reaches 279,680 hectares, Sevilla (149,696 hectares) and Cádiz (68,889 hectares) are the most relevant provinces. Lastly, Castilla-La Mancha has 183,229 hectares dedicated to industrial crops.

2.8.1.

Soya

2.8.1. SOYA

Although soy is not a traditional crop in Spain, it has gained importance in recent years due to its use in the animal feed industry and oil production.

This crop covers an area of 1,450 hectares, with 98.2% under irrigation (1,424 hectares) and 1.8% under rainfed conditions (26 hectares). Over the last decade of available data (2011-2020), the area dedicated to soy cultivation has surged, experiencing a 107.4% increase, adding 751 hectares. In the last five years, there has been a 45.7% growth (+455 hectares), with an increase in irrigated land (47.4%) at the expense of rainfed areas (-10.3%).

Table 2.8.1. Area and productions of soya

YEAR	AREA (THOUSANDS OF HECTARES)	PRODUCTION (THOUSANDS OF TONS)	PRODUCTION VALUES (THOUSANDS OF EUROS)
2010	766	1.812	592
2011	699	1.740	585
2012	481	1.333	588
2013	498	1.390	617
2014	805	2.650	1.308
2015	1.317	4.106	1.956
2016	995	2.869	1.317
2017	1.692	4.599	2.093
2018	1.481	4.249	2.037
2019	1.571	5.053	2.402
2020	1.450	4.515	2.187

Source: MAPA

Aragon is the region with the largest soybean cultivation area, covering 540 hectares spread across Huesca (427 ha) and Zaragoza (113 ha). It is closely followed by Extremadura (516 ha), Castilla y León (196 ha), and Catalonia (144 ha). These four regions account for 96.3% of the national soybean cultivation due to their favorable climatic conditions. However, soy cultivation also takes place in other areas, such as Navarra.

Map 2.8.1. Area of soya crops by provinces

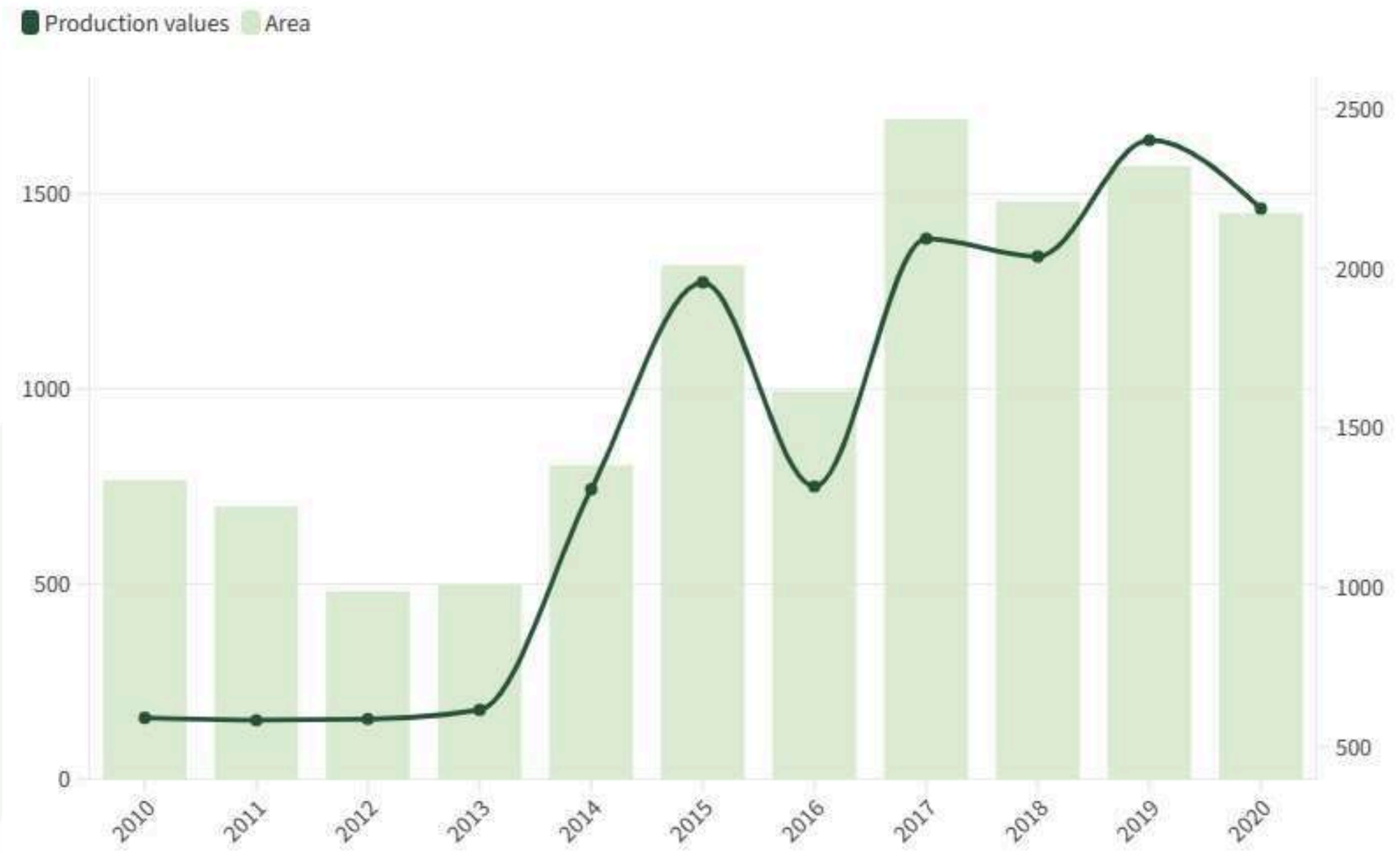
Source: MAPA

The annual production is 4,515 tons, representing a 22.6% increase compared to the average of the last five campaigns (2016-2020), with a production value of 2.2 million euros. Extremadura (1,871 tons) and Aragon (1,550 tons) stand out as the main producing regions, contributing 75.8% of the national production.

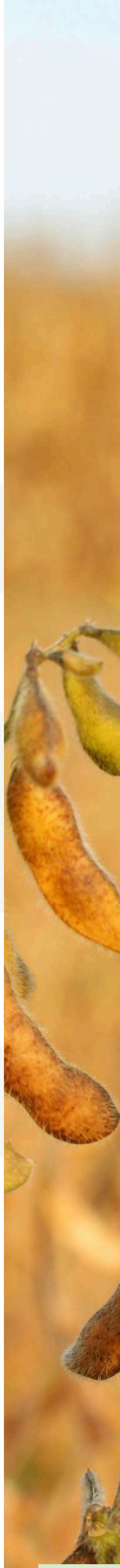
The increase in soybean production in Spain is driven by the growing demand for plant-based proteins for animal feed and other industrial products, such as plant-based milks or sauces for human consumption. Additionally, soy has become a substitute for animal-derived foods for those looking to reduce meat consumption.

Given the various benefits it offers, soy is considered an alternative crop for farmers. This crop requires less water compared to beets or potatoes. In addition, soy has environmental sustainability advantages. It uses fewer fertilizers as a self-fertilizing plant, contributes to reducing soil erosion, and facilitates crop rotation.

Graph 2.8.1. Evolution of soya crops.

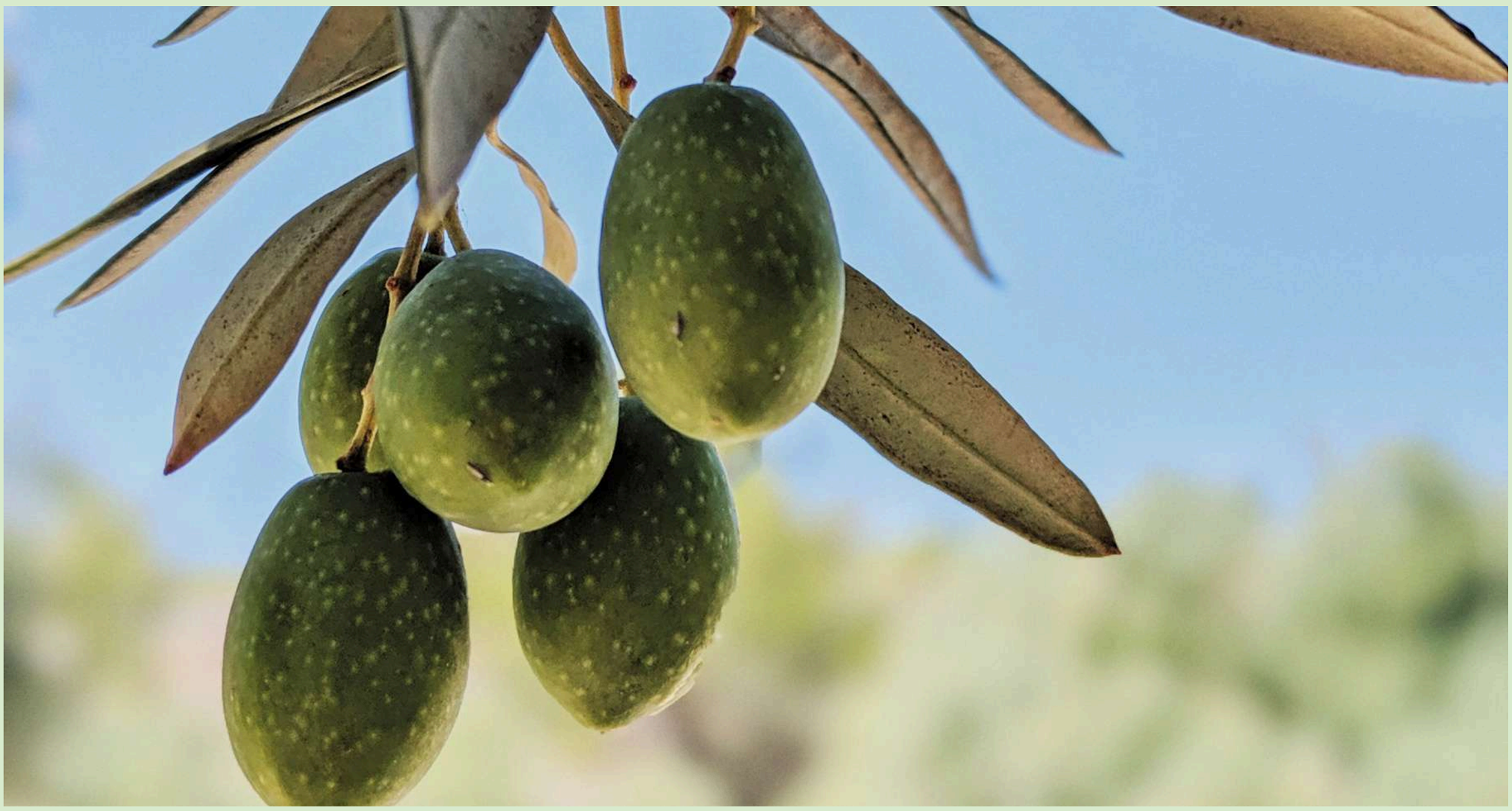


Source: MAPA



2.9.

Olive grove



2.9. OLIVE GROVE

Spain stands as the world leader in olive grove surface area, foreign trade, and production, with its most prominent products being olive oil and table olives. Olive oil is the most exported agri-food product from the country.

In Spain, there are 2,623,721 hectares of olive groves, with 77.8% being rainfed (2,041,340 ha) and 22.2% under irrigation (582,381 ha). In the period from 2011 to 2020, the olive grove surface area has grown by 4.8% (+120,046 hectares), with a decrease of 1.3% in rainfed cultivation (a loss of 26,524 ha) and an increase of 33.6% in irrigated cultivation (a gain of 146,570 ha).

Out of the total olive grove area, 93.5% is olives destined for milling (2,452,569 ha), and 6.5% corresponds to table olives (171,152 ha). Regarding the former, the surface area has increased by 3.3% in the last decade. The latter has also seen a 4.1% increase.

Concerning olives destined for milling, production shows strong alternation between campaigns. Spain represents 62% of the EU's production and 17% of global production. Over 65% of the total production is exported to more than 160 countries.

The annual production of olives for milling was 2.3 million tons in 2020, a 1.8% increase from the previous year and a 2.6% increase from the five-year average of available data (2016-2020).

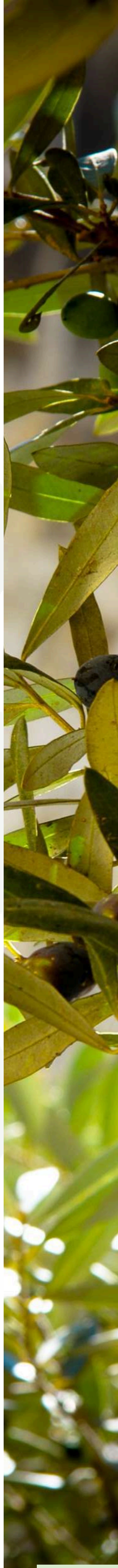
At the regional level, Andalusia is the largest producer of olive oil with 1.09 million tons (80.7% of total production), particularly concentrated in Jaén (504,408 tons, 37.2%). Other notable provinces include Córdoba (272,077 tons), Granada (116,659 tons), and Seville (112,311 tons). This is followed by Castilla-La Mancha (117,475 tons) and Extremadura (50,374 tons).

Within olive groves, three main types can be distinguished: traditional, intensive, and super-intensive.

- Traditional olive grove: This refers to the oldest or most traditional olive grove. It can vary depending on climate, terrain, or care. The number of olive trees per hectare is usually quite low, resulting in limited production. Additionally, traditional groves require a significant amount of manual labor for maintenance. Olive harvesting in these groves is typically done manually.

- Intensive olive grove: Characterized by high production, with an average annual yield of 5,000 kilograms per hectare in rainfed conditions. Intensive olive groves are cared for and harvested using machinery due to their planting arrangement, which consists of wider rows for machinery passage. The trees in these groves do not overlap, allowing for better exposure to sunlight and promoting higher production. Common varieties include arbequina, hojiblanco, picual, and manzanillo cacereño.

- Superintensive olive grove: Planted in rows with wide spaces between them for machinery access during maintenance and harvesting. While the production per tree is lower than in traditional and intensive groves because the trees are closely spaced and don't achieve full growth, the overall production per hectare is higher due to the greater number of trees. Additionally, superintensive cultivation is entirely mechanized, reducing labor costs.



Regarding table olives, out of the total olive grove area (2.6 million ha), 171,152 hectares correspond to table olive orchards. Regionally, production is also concentrated in Andalusia, representing 80% of the total, where Sevilla stands out as the main producing province, accounting for 58% of the total national production. Extremadura follows with 13% of the total.

In 2020, the production of table olives amounted to 385.6 thousand tons, a 19.4% increase compared to 2019 but 15.4% below the average of the last five campaigns (2016-2020). In terms of table olive varieties, the hojiblanca variety stands out in production, representing 46% of the total national production, followed by the manzanilla variety at 36%. In smaller production quantities, there are the gordal sevillana (7%), manzanilla cacereña (4%), and carrasqueña (3%).

Table 2.9.1.1. Area and productions of table olive

YEAR	AREA (THOUSANDS OF HECTARES)	PRODUCTION (THOUSANDS OF TONS)
2010	166	516
2011	166	467
2012	167	401
2013	164	484
2014	164	442
2015	163	540
2016	165	511
2017	167	505
2018	166	555
2019	167	323
2020	171	386

Source: MAPA

- Hojiblanca. This variety is named for the white color of the leaves on its olive tree. It is characterized by a late ripening and its resistance to drought, making it tolerant to winters and calcareous soils. It has a medium to large size and a rounded shape.

- Manzanilla. The leaf of this olive tree has an elliptical shape. It is distinguished from other varieties by its large size and early ripening.

- Gordal. Its leaf is characterized by being large. The gordal exhibits resistance to both humidity and winter cold and has an oval and elongated shape.

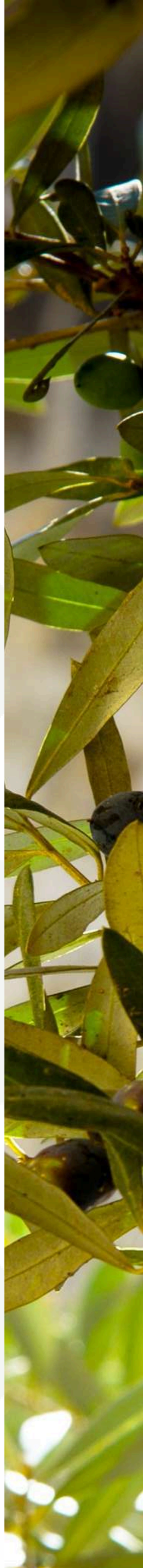
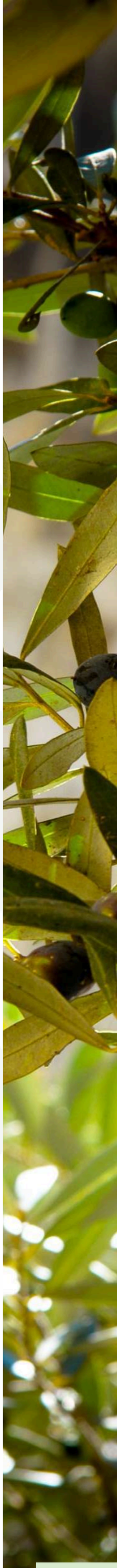


Table 2.9.1.2. Area and productions of almazara olive.

YEAR	AREA (THOUSANDS OF HECTARES)	PRODUCTION (THOUSANDS OF TONS)
2010	2.309	6.682
2011	2.338	7.353
2012	2.338	3.449
2013	2.343	8.767
2014	2.351	4.137
2015	2.363	6.812
2016	2.356	6.571
2017	2.388	6.044
2018	2.413	9.264
2019	2.435	5.642
2020	2.453	7.684

Source: MAPA

The average price of land dedicated to olive cultivation has decreased by 5.6% between 2017 and 2020, reaching 23,542 euros/ha. The most significant decrease has been observed in irrigated table olives, with an 8.0% decline, dropping from 29,698 euros/ha to 27,332 euros/ha. In contrast, rain-fed table olives have experienced the smallest decrease (-1.2%), going from 15,114 euros/ha to 14,936 euros/ha.



2.10.

Vineyard

2.10. VINEYARD

Spain has the largest vineyard cultivation area globally, covering 933,092 hectares, with 646,001 ha rain-fed (69.2%) and 287,091 ha irrigated (30.8%). Moreover, 96% of the vineyard area falls under some quality designation (2020 data).

Out of the total vineyard area, 98.1% corresponds to vineyards for wine production (915,010 ha), 1.6% for table grape vineyards (14,920 ha), 0.18% for vineyards for drying (1,698 ha), and another 0.16% for vine nurseries (1,464 ha).

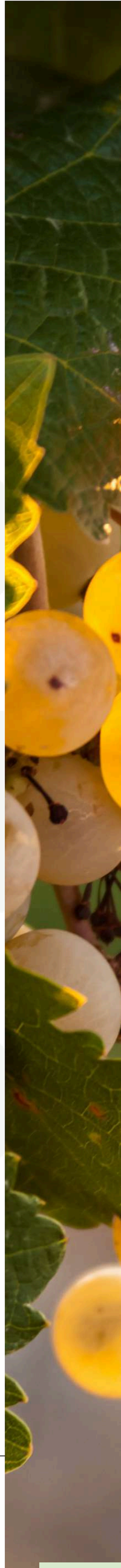
In the last decade (2011-2020), the vineyard area has remained stable, but production has increased by 44 thousand tons. This growth is attributed to improved crop yield and productivity or new planting systems allowing higher yields per hectare.

Vineyards are highly demanded in Spain due to their various uses in food. Regarding wine, Spanish households allocate 1.6% of the food budget to wine purchases, accounting for 1.3% of household spending.[17]

The viticulture sector plays a significant role in Spanish foreign trade. In 2020, Spain, along with Portugal, maintained its sales, and the country even increased its wine production by over 16 thousand liters.

When differentiating vineyard products, one can distinguish between table grapes and wine grapes. Table grapes are characterized by larger and sweeter clusters, while wine grapes have smaller and more acidic clusters to aid fermentation.

The vineyard area for wine production covers 915,010 ha, of which 642,815 ha are rain-fed (70.3%) and 272,195 ha are irrigated (29.7%). The total area has decreased by 3.3% over the last decade (2011-2020), and in the last five years (2016-2020), there has been a decrease of 5,471 hectares. However, this decrease in area has not affected production, which has increased by 17.0% in the last decade.



17 Ministerio de Agricultura, Pesca y Alimentación (2020). Informe del consumo de alimentación en España. https://www.mapa.gob.es/es/alimentacion/temas/consumo-tendencias/informe-anual-consumo-2020-v2-nov2021-alta-res_tcm30-562985.pdf.

Table 2.10.1.2. Area and productions of grape for processing.

YEAR	AREA (THOUSANDS OF HECTARES)	PRODUCTION (THOUSANDS OF TONS)
2010	986	5.870
2011	947	5.566
2012	932	5.091
2013	932	7.228
2014	933	5.980
2015	927	5.528
2016	921	5.821
2017	922	5.119
2018	924	6.673
2019	920	5.431
2020	915	6.529

Source: MAPA

Distinguishing between red and white grapes, grapes contain numerous health-beneficial minerals when consumed as part of a balanced diet. They also possess excellent detoxifying properties for the body. Therefore, the World Health Organization (WHO) recommends consuming 400 grams of fruits and vegetables daily, equivalent to 3-5 servings per day,[18] with grapes accounting for 100 grams per day within this recommendation.

Concerning table grapes, the surface area has remained stable over the last decade (2011-2020), while production has increased by 21%. In this regard, the Region of Murcia stands out with 162 thousand tons produced, making it the leading producer of table grapes.

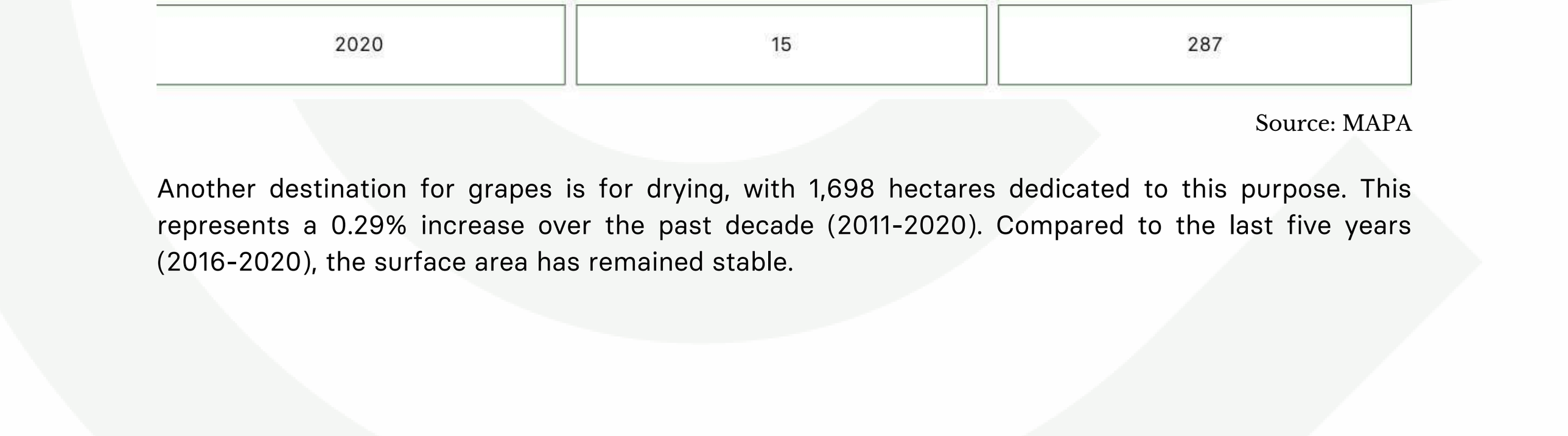
18 Organización Mundial de la Salud (2018). Alimentación sana. https://www.who.int/es/news-room/fact-sheets/detail/healthy-diet.

Table 2.10.1.1. Area and productions of table grape

YEAR	AREA (THOUSANDS OF HECTARES)	PRODUCTION (THOUSANDS OF TONS)
2010	16	237
2011	15	243
2012	14	241
2013	14	254
2014	14	242
2015	14	271
2016	14	282
2017	14	267
2018	14	308
2019	15	314
2020	15	287

Source: MAPA

Another destination for grapes is for drying, with 1,698 hectares dedicated to this purpose. This represents a 0.29% increase over the past decade (2011-2020). Compared to the last five years (2016-2020), the surface area has remained stable.



Andalusia takes the lead among the regions in the production of dried grapes, with the province of Malaga being the major producer, accounting for almost 100% of the production in the region.

The land dedicated to vine cultivation has appreciated by 5.7% from 2017 to 2020, reaching 16,465 euros/ha. The average value of grapes for drying and table use in dry farming is the only one that has decreased by 3.7%, going from 13,653 euros/ha to 13,152 euros/ha. In contrast, the price of grapes for drying and table use in irrigated farming has shown the highest increase (9.7%), rising from 36,180 euros/ha to 39,681 euros/ha.

3. CONCLUSIONS.

3. CONCLUSIOES

Grain cereals

The cultivation of grain cereals occupies 35.8% of the total agricultural area. In the last year of available data (2020), this cultivation reached a record value in its production with 26.3 million tons, representing an increase of 18.2% compared to the last five years. Consequently, from January 2020 to the end of the year, the prices of corn, wheat, and barley increased.

Grain legumes

Spain ranks second in grain legumes production in the EU. In 2020, grain legumes yielded 555 thousand tons in production, marking the third-highest production year of the decade. While there is a decrease in the surface area dedicated to grain legumes, the Common Agricultural Policy (CAP) has introduced subsidies to promote this cultivation.

Tubers for human consumption - potato

The potato has suffered a decrease in surface area (-18.1%), as well as in production value, although it continues to be an important crop for Spanish agriculture. It has a production exceeding 2 million, valued at 523,217 euros, which is higher than that of other tubers for human consumption. Potato harvesting occurs throughout the year due to its different varieties and Spain's climatic conditions.

Vegetables

The cultivation of vegetables is increasingly favored due to consumer demand. In the last four years (2017-2020), the average price of outdoor vegetables has increased by 4.6%, and greenhouse vegetables have seen a 14.3% appreciation. The production value of the sector is 7.9 million euros, with an annual production of 15.1 million tons.

Oranges trees

The cultivation area of orange trees has decreased in the last decade, although there is an increase of 24% in production. The production value of oranges has also risen by 54.4% since 2011.

Lemon tree

The lemon tree cultivation area has increased by 20% in the last decade, and the organic lemon area has surged by 386%. The maximum production was reached in 2020 with 1.14 million tons, surpassing the previous year by 21.6%. The production value in 2020 was 461,310 euros.

Avocado

The cultivation of avocados in the national territory has been favored in recent years due to new dietary trends. Although considered an exotic crop, Spain is currently the main European producer of avocados. In the last decade, its area has increased by 50.1%, reaching 15,849 hectares in 2020. Consequently, its production has benefited, reaching 99,125 tons with a production value of 220.5 million euros..

Almond tree

Healthy consumer trends contribute to an increase in almond demand. In the last decade, the almond cultivation area has grown by 31.2%, with the last five years seeing a significant increase of 134,867 hectares. Production has risen by 36.6% compared to the average of the previous five campaigns, positioning Spain as the world's third-largest almond producer. The production value has increased by 283,103 thousand euros in the last decade.

Pistacho

Pistachio cultivation has become one of the fastest-growing crops in recent years, with a 17% increase in consumer consumption. The cultivated area of pistachios in the national territory has experienced growth of 45,255 hectares in the last decade. It is anticipated that Spain will become the fourth-largest global pistachio producer in the next five years as the hectares not yet cultivated come into production.

Soya

Soya cultivation has gained importance in Spain in recent years due to its use in the animal food industry. According to the latest available data (2020), the cultivated area is 1,430 hectares, representing a 107.4% increase compared to 2011. There has been a 22.6% increase in production compared to the average of the previous five campaigns, with a production value of 2.2 million euros.

Olive grove

Olive oil and table olives are among the most exported crops in Spain. The cultivated area has grown by 4.8% in the last decade and is currently 2,623,721 hectares. Of the total area, olive oil olives represent 93.5%, and table olives represent 6.5%. In 2020, table olive production increased by 19.4% compared to 2019, while the price of olive grove land decreased by 5.6%, with a specific 8% decrease in irrigated table olive land.

Vineyard

Spain has 933,092 hectares of vineyards, of which 98.1% is dedicated to wine grape cultivation, 1.6% to table grape vineyards, and 0.18% to grapes for drying. The vineyard area has remained stable over the last decade, but production has increased by 44,000 tons. The vineyard land has appreciated by 5.7% from 2017 to 2020, and the price of irrigated grapes for drying and table grapes has increased by 9.7%.

4

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4.1. Graphic references

4.1.1. Tables

4.1.2. Graphs

Graph 2.2.1. Evolution of grain legumes crops

https://public.flourish.studio/visualisation/15725270/

<script src="https://public.flourish.studio/resources/embed.js"></script>

Graph 2.3.1. Evolution of potato crops

https://public.flourish.studio/visualisation/15725838/

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Graph 2.4.1. Evolution of vegetables crops

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Graph 2.5.1. Evolution of orange tree crops

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Graph 2.5.2. Evolution of lemon tree crops

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<script src="https://public.flourish.studio/resources/embed.js"></script>

Graph 2.6.1. Evolution of avocado crops

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Graph 2.7.1. Evolution of almond tree crops

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Graph 2.8.1. Evolution of soya crops

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4.1.3. Maps

Map 2.1.1. Grain cereal cultivation area by province

https://public.flourish.studio/visualisation/15729409/

<script src="https://public.flourish.studio/resources/embed.js"></script>

Map 2.2.1.Grain legumes cultivation area by province

https://public.flourish.studio/visualisation/15561507/

<script src="https://public.flourish.studio/resources/embed.js"></script>

Map 2.3.1. Potato cultivation area by province

https://public.flourish.studio/visualisation/15561579/

<script src="https://public.flourish.studio/resources/embed.js"></script>

Map 2.4.1. Vegetables cultivation area by province

https://public.flourish.studio/visualisation/15560748/

<script src="https://public.flourish.studio/resources/embed.js"></script>

Map 2.5.1. Orange tree cultivation area by province

https://public.flourish.studio/visualisation/15561959/

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Map 2.5.2. Lemon tree cultivation area by province

https://public.flourish.studio/visualisation/15561336/

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Map 2.6.1. Avocadocultivation area by province

https://public.flourish.studio/visualisation/15561673/

<script src="https://public.flourish.studio/resources/embed.js"></script>

Map 2.7.1. Almond cultivation area by province

https://public.flourish.studio/visualisation/15561788/

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Map 2.7.2. Pistachio cultivation area by province

https://public.flourish.studio/visualisation/15565124/

<script src="https://public.flourish.studio/resources/embed.js"></script>

Map 2.8.1. Soya cultivation area by province

https://public.flourish.studio/visualisation/15562148/

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cocampo

Compren tierra, que no se fabrica más.