

2018

# **Country Profile: Chile**

Producer country profile produced by CIRAD, The Centre De Cooperation International En Recherche Agronomique Pour Le Développement.

# Producer country file The avocado in Chile

by Eric Imbert

Chile is one of the historic players and one of the mainstays of the world avocado trade, with Hass exports of around 150 000 to 160 000 t per season. After facing a serious climate crisis and major outlet problems during the first part of the decade, professionals were able to bounce back, focusing on the EU-28 market and on the local market, in a less tight context in terms of water resources. On the strength of its newly regained balance, the cultivation area has taken a slight upturn, by targeting zones with the best water availability.

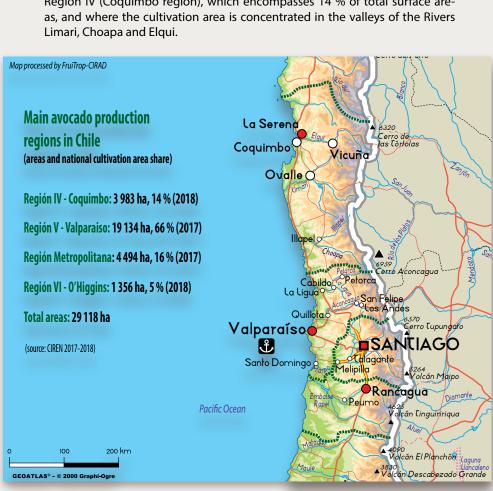


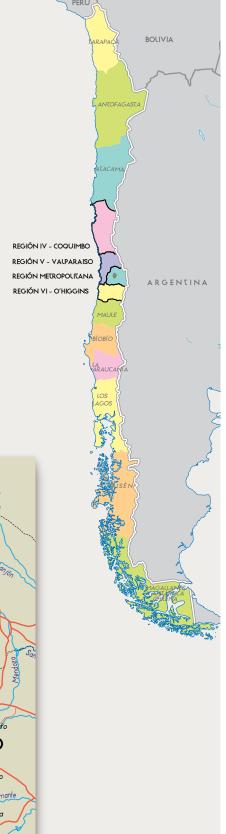
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# Avocado - Chile

# Location

Chile has assets for export fruit production thanks to the natural sanitary protection provided by the sea, the Andes Range and the Atacama Desert. The avocado planted area, which extends over approximately 29 000 ha, is primarily concentrated in the centre of the country with its dry Mediterranean climate, in the valleys of big rivers running down from the Andes and discharging into the Pacific Ocean (La Ligua, Petorca, Maipo, Limari, Elqui and above all Aconcagua). According to the 2017 and 2018 surveys, two-thirds of total surface areas are in Region V (Valparaiso region), divided between three centres. The Aconcagua valley centre is by far the biggest, on its own packing in 25 % of surface areas in the lower valley (the traditional production centre of Quillota province) and 14 % of surface areas in the upper valley (more recent orchards in San Felipe province, developed by farming the foothills of the Range). The valleys of the rivers Petorca and La Ligua, situated further north, are also big production zones with respectively 17 % and 14 % of total surface areas. Nonetheless, this centre, where water resources are limited, has greatly declined. Conversely, the region's third production centre, the lower valley of the River Maipo, is on a growth trend thanks to better water resources (8 % of surface areas). The rest of the cultivation area can be found primarily in the neighbouring regions. Surface areas are on a slightly downward trend in the Metropolitan region (15 % of total surface areas), where the cultivation zones are concentrated in the middle valley of the River Maipo (Melipilla/Talagante zone). There is a steeper fall in Region IV (Coquimbo region), which encompasses 14 % of total surface are-





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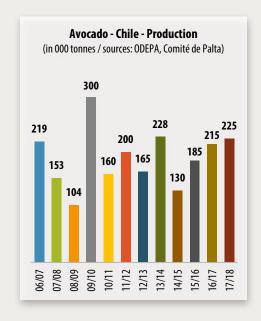
# Avocado – Chile

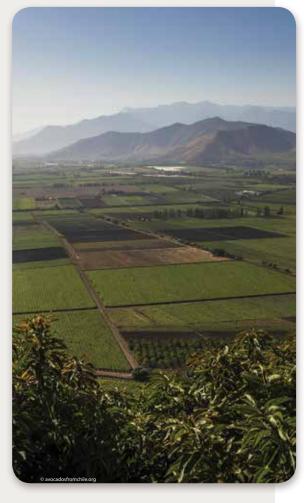
# **Production**

The promotion work conducted jointly in the USA by "Comité de Palta" and the HAB helped the Chilean industry take off in the mid-1990s, by developing an export activity for feeding the growing appetite of North American consumers. The cultivation area of the traditional production centres, mainly situated in the temperate zones close to the coast of the lower valleys of rivers such as La Ligua, Petorca and above all Aconcagua, expanded. Then, from the 2000s, new production zones were established in the colder parts of the upper valleys of these same rivers. This newer planting was often carried out by colonising the slope zones of the lower foothills of the Range, less costly to purchase and less exposed to the risk of frost, though also more difficult to turn a profit and farm (higher production cost, in particular given the higher energy requirements due to the need to pump water up to the terraces). Hence the Chilean industry has progressively upscaled, with production exceeding 250 000 t and surface areas 35 000 ha by the late 2000s.

After this, the outlook was less bright. Firstly, economic returns greatly deteriorated due to the Mexican competition's surge in the USA, in an unfavourable exchange rate context. Secondly, climate conditions became highly unfavourable. Frosts proliferated in the most exposed zones. And above all, the country was hard hit by a long and intense period of drought between 2007 and 2014. The cultivation area collapsed due to the abandonment or mothballing of many plantations through radical pruning, with production falling to between 160 000 and 200 000 t in the early 2010s.

The situation has distinctly improved since 2015-16, with the production potential returning to a level of approximately 250 000 t in a normal year. Profitability regained a good level thanks to refocusing on the European market and on the local market, as well as better technical management (alternate bearing better controlled, yields to reach 10 t/ha on average). Labour availability is also higher, with the arrival of immigrants. Finally, the water constraint has been less severe, with the return of more generous rainfall. Nonetheless, water availability remains a constraint, for lack of a sufficient number of retention infrastructures. Water use for agriculture in certain regions has become a societal problem, widely covered in the national and international media. Hence planting has resumed at only a moderate rate, targeting the zones with good water availability (north of Region VI, southern Maule, coastal zone of the Metropolitan Region, though salinity problems remain limiting there). The industry comprises a large number of producers (2 700, with 70 % farming less than 5 ha), though the cultivation area is primarily in the hands of medium to large-sized facilities (more than 300 farms of more than 20 ha, with 50 of more than 100 ha). Sanitary problems are limited (Phytophthora, red spider mite Oligonychus yothersi, avocado thrips *Heliothrips haemorrhoidalis*).





# Avocado – Chile

# **Production calendar and varieties**

Introduced in 1949, Hass now represents more than 90 % of total surface areas, after explosive development in the 1990s. The production calendar covers a wide period running from early August to early April, thanks to the heterogeneous distribution of plantations in terms of latitude and distance from the sea. The most inland zones are the earliest, while the coastal zones are the latest. Fruit theft, an increasingly big issue, is encouraging certain producers to harvest early. The rest of the stock comprises a wide varietal range. Edranol is the most commonly encoun-

tered (4 % of surface areas), primarily used as a Hass pollinator. The proportion of Fuerte has fallen greatly (2 % of surface areas). The numerous Chilean varieties, predominant in the 1970s, are now very marginal and aimed at the local market. The main one, Negra de La Cruz, reportedly represents no more than 1 % of surface areas.

Avocado – Chile – Production calendar																						
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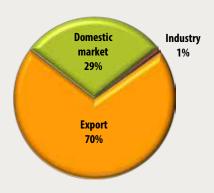


### Avocado - Chile - Calendar by zone

Zones	Regions	Beginning of the harvest					
Very early zones	Region IV: Vicuna Region V: Pétorca, San Felipe, Los Andes	June/July					
Early zones	Region IV: Ovalle Region V: Cabildo	mid-July/August					
Season/late zones	Region IV: Illapel Region V: La Ligua, Quillota Metropolitan Region: Melipilla Region VI: Peumo	end of August					
Very late zones	Region IV: La Séréna Region V: Santo Domingo	end of October					

Source: after Gardiazabal 2005

Avocado - Chile - Outlets (professional sources, Comité de Palta)



## **Outlets**

Exports, the original outlet for Chilean production, remains predominant with a market share of approximately 70 % in a normal production year. However, the local market has expanded significantly since the beginning of the decade thanks to the big promotion effort undertaken by "Comité de Palta". It now takes in approximately 65 000 to 70 000 t per year of Chilean fruits in a normal production year, and 5 000 to 10 000 t of counter-season avocados imported mainly from Peru and Mexico, taking the annual consumption per capita to more than 4 kg. Furthermore, the local market presents the advantage of being easy to work and secure in terms of payment for producers. Volumes aimed at the processing sector are marginal.

# Avocado – Chile

# **Exports**

The export sector was built with a view to feeding the US market, which at a very early stage was worked jointly by "Comité de Palta" and the California Avocado Growers' Association in terms of marketing. Volumes took off in exemplary fashion in the late 1990s, going from less than 20 000 t in 1997-98 to nearly 200 000 t in 2009-10. However, the dizzying rise of the Mexican competition in the USA and very harsh weather changed the hand. Volumes were in freefall throughout the first part of the 2010s (from 70 000 to 130 000 t per season), before climbing to between 150 000 and 160 000 t in recent seasons. The EU, initially a diversification market since it was more difficult to operate on (controlled atmosphere mandatory to extend the life to 45 days), has become the number one destination for the Chilean avocado since the 2012-13 campaign (approximately 60 % of shipments). Chile is now the number one supplier to the EC market during the winter season, with volumes of around 90 000 t in recent seasons. Exports to neighbouring markets have also progressed considerably (16 000 to 17 000 t per season, primarily aimed at Argentina). Market diversification efforts are ongoing, in particular targeting Asia (volumes up by 15 000 t in 2017-18, above all aimed at the Chinese market which opened in 2014). The quality of Chilean fruits is re-

> Avocado - Chile **Main operators**

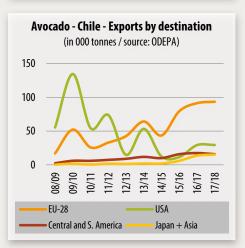
mann operators						
Operators	Market shares					
PROPAL	34 %					
Agricom	15 %					
Exp. Santa Cruz	8 %					
El Parque Itd	8 %					
Cabilfrut	5 %					
Baika	5 %					
Jorge Schmidt	5 %					
Exp. Subsole	5 %					
Others	15 %					

Source: ASOEX 2017-18

nowned on the international markets. The export sector is concentrated, with the top four operators alone accounting for three-quarters of volumes. Propal is by far the country's leading operator, followed by Agricom, with El Parque and Santa Cruz further back.



# Avocado - Chile - Exports (in 000 tonnes / source: ODEPA) 194 152 157 116 86 75 12/13 13/14



### Avocado – Chile – Sea freight

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Markets	Port of departure	Main lines  Port of arrival	Transit time	Lines					
<b>USA</b> Valparaiso		West Coast: Los Angeles, Long Beach, San Diego	20 days	APL					
		East Coast: New York, Philadelphia	19 days	CMA-CGM, Hapag Lloyd					
China	Valparaiso	Shanghai	32-35 days	Maersk, Hapag Lloyd					
EU	Valparaiso	Northern: Rotterdam Southern: Algeciras	24-25 days 23 days	CMA-CGM, Maersk Hapag Lloyd					

# Logistics

Most merchandise transported by road to the port of Valparaiso, which offers the advantage of being situated close to the production zones and which has a USDA inspection station. Controlled atmosphere transport is systematically used for shipments to Japan, and for approximately two-thirds of shipments to the EU.