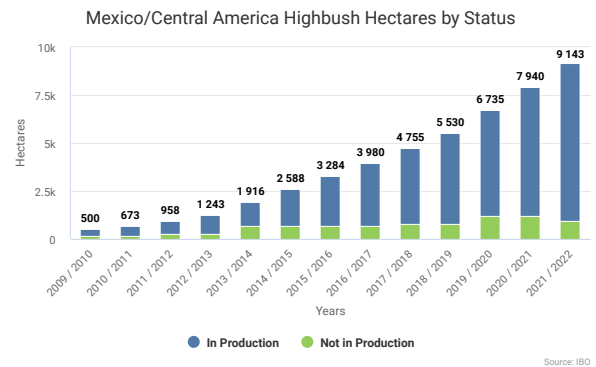
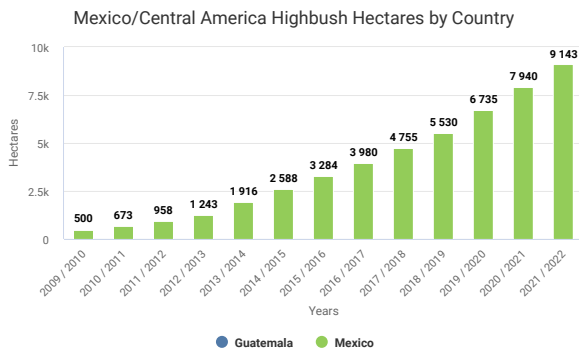


# MEXICO / CENTRAL AMERICA

## Planting and Production Data, Figures & Commentary (Denominated in Hectares and Thousands of Metric Tons)

### Mexico/Central America Highbush Hectares by Country

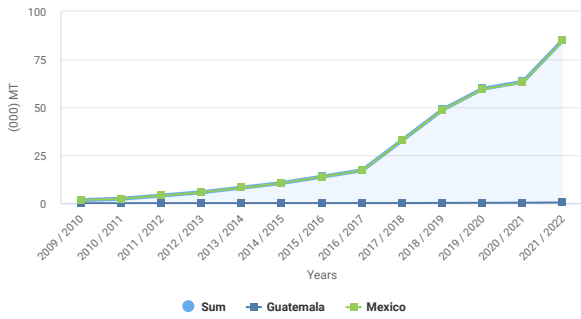
Mexico/Central America	Planting					2021/2022 Production		
	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	Fresh	Process	Total
Mexico	4,732	5,500	6,700	7,900	9,100	83.20	1.50	84.70
Guatemala	22	30	35	40	43	0.40	-	0.40
<b>Mexico / Central America Totals</b>	<b>4,755</b>	<b>5,530</b>	<b>6,735</b>	<b>7,940</b>	<b>9,143</b>	<b>83.60</b>	<b>1.50</b>	<b>85.10</b>



### Mexico/Central America Highbush Production by Country

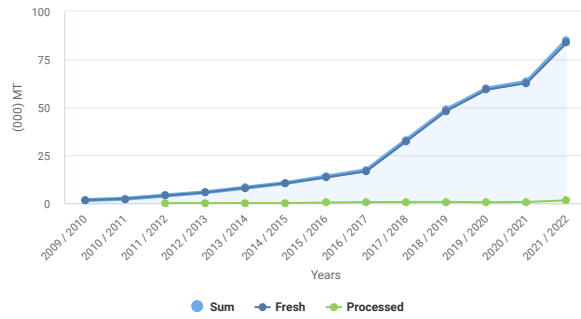
Mexico/Central America	2019/2020			2020/2021			2021/2022		
	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
Mexico	58.93	0.53	59.46	62.38	0.67	63.05	83.20	1.50	84.70
Guatemala	0.22	-	0.22	0.26	-	0.26	0.40	-	0.40
<b>Mexico / Central America Totals</b>	<b>59.15</b>	<b>0.53</b>	<b>59.68</b>	<b>62.64</b>	<b>0.67</b>	<b>63.31</b>	<b>83.60</b>	<b>1.50</b>	<b>85.10</b>

Mexico/Central America Highbush Production by Country



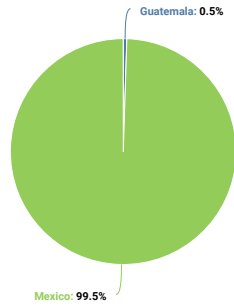
Source: IBO

Mexico/Central America Highbush Production by Use

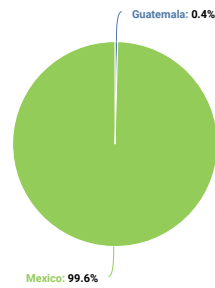


Source: IBO

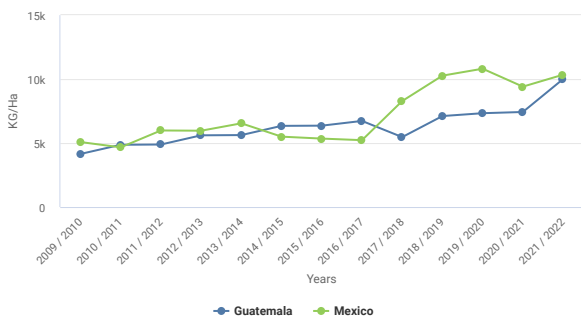
2021/2022 Mexico/Central America Highbush Hectares by Country



2021/2022 Mexico/Central America Highbush Production by Country



Mexico/Central Highbush Yield by Country



Source: IBO

Mexico/Central America 2021 Production Metrics

<b>Hectares Planted:</b>	<b>9,143.0 Ha</b>
<b>Hectares in Production:</b>	<b>8,230.0 Ha</b>
<b>Production:</b>	<b>85.10 (000) MT</b>
Growth in Production <sup>1</sup> :	▲21.8 (000) MT (25.61%)
Growth from Hectares <sup>2</sup> :	▲14.06 (000) MT (64.53%)
Growth from Yield <sup>3</sup> :	▲7.73 (000) MT (35.47%)
<b>Yield:</b>	<b>10,340.22 (Kg/Ha)</b>
<b>Exports:</b>	<b>46.65 (000) MT</b>
<b>Imports:</b>	<b>0.33 (000) MT</b>

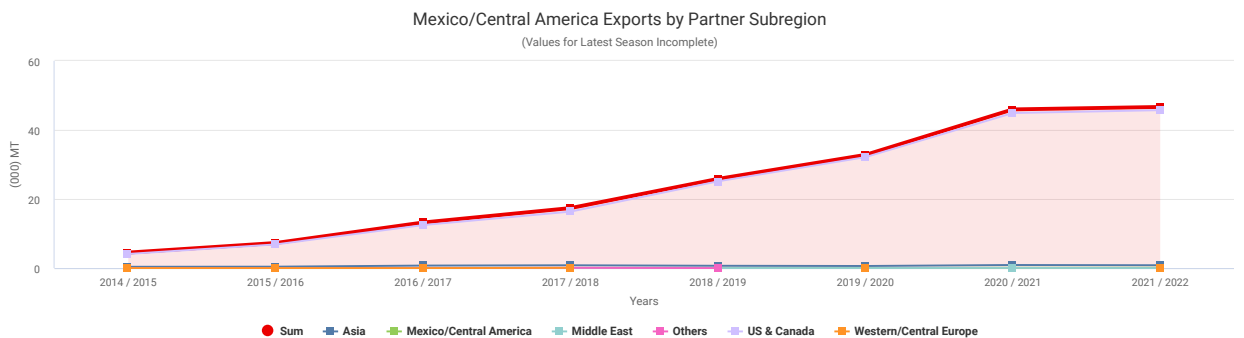
<sup>1</sup> Growth in volume produced compared to previous season

<sup>2</sup> Volume increase from new hectares coming into production

<sup>3</sup> Volume increase from higher yields

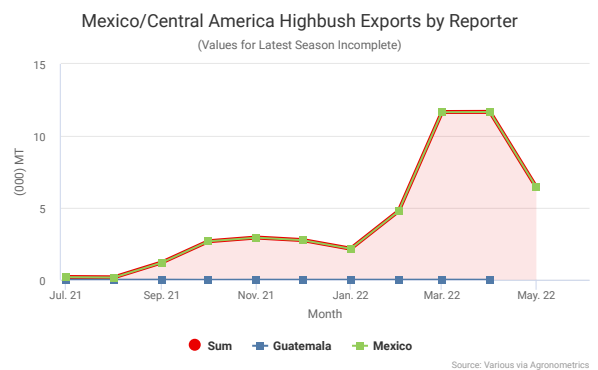
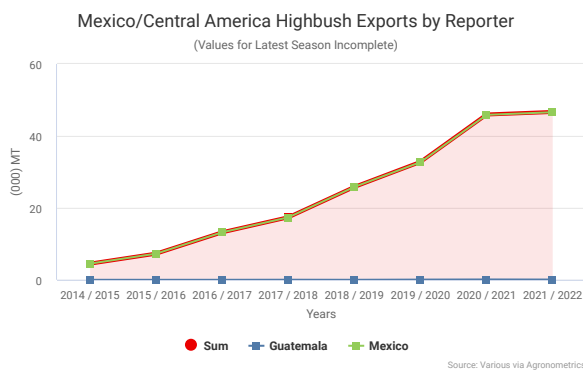
Mexico/Central America Exports by Partner Subregion (Values for Latest Season Incomplete)

Subregion	2018/2019	2019/2020	2020/2021	2021/2022
US & Canada	25.12	32.12	44.89	45.71
Asia	0.67	0.61	0.90	0.83
Mexico/Central America	0.01	0.02	0.09	0.10
Middle East	0.02	0.01	0.06	0.01
Western/Central Europe	-	0.01	-	0.00
Others	0.00	-	-	-
<b>Mexico/Central America Totals</b>	<b>25.82</b>	<b>32.77</b>	<b>45.94</b>	<b>46.65</b>



Mexico/Central America Exports by Reporter (Values for Latest Season Incomplete)

Reporter	2018/2019	2019/2020	2020/2021	2021/2022
Mexico	25.82	32.71	45.85	46.58
Guatemala	0.00	0.06	0.09	0.07
Others	-	-	-	-
<b>Mexico/Central America Totals</b>	<b>25.82</b>	<b>32.77</b>	<b>45.94</b>	<b>46.65</b>



## Mexico/Central America Report Team Narrative

*For an in-depth review of the leading producing countries of Mexico/Central America, please see the individual reports including official country member reports and IBO Report Team narratives for:*

➤ Mexico

Below is a brief review on the other commercial source of supply today in Central America, Guatemala.

### Guatemala

Whilst pre-clearance protocols have been approved by the U.S. Animal and Plant Health Inspection Service (APHIS) for blueberries from Guatemala - the only noteworthy producer of the fruit in Central America – the program has not yet come to fruition due to limited budgets and the need to train inspectors.

To date Guatemala has been limited in its export options, shipping small volumes to neighboring countries such as Honduras and Nicaragua, as well as to the U.S. where shipments need to have undergone treatment such as methyl bromide – a chemical that is difficult for growers to secure outside of programs administered by Guatemalan phytosanitary authorities. Fruit exported to the U.S. must also arrive north of the Mason-Dixon line, prohibiting imports in ports such as McAllen, TX or Miami, FL.

Since its emergence around 2005 and having been built on the variety Biloxi, the Guatemalan sector has been turning to new varieties and production techniques such as growing under tunnels with substrate. Volume is led by a small group of companies, most of which also produce blackberries, sugar snaps, and other produce for export. The growing regions are at a lower latitude but higher altitude than Central Mexico.

With a production window traditionally between November and February, Guatemalan growers have felt increased competitive pressure from Peru and Mexico, while their logistical channels to reach the Americas' largest market - the USA - are more challenging. There are also limitations around the availability of large extensions of land suitable for the crop, so whilst plantings have grown somewhat in recent years it has been at a very slow rate.



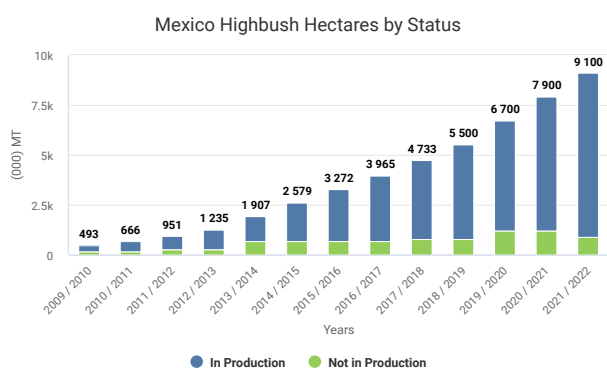
[BERRYFRESH.COM](http://BERRYFRESH.COM)

Dominguez Hills, CA 90220, USA / +1 (310) 637-2401

# MEXICO



## Planting and Production Data, Figures & Commentary (Denominated in Hectares and Thousands of Metric Tons)



### Mexico 2021/2022 Production Metrics

<b>Hectares Planted:</b>	<b>9,100.0 Ha</b>
Organic:	15.0%
Under Structure:	75.0%
Hydroponics:	60.0%
New Genetics:	10.0%
<b>Hectares in Production:</b>	<b>8,190.0 Ha</b>
<b>Production:</b>	<b>84.70 (000) MT</b>
Growth in Production <sup>1</sup> :	▲21.6 (000) MT (25.56%)
Growth from Hectares <sup>2</sup> :	▲14.02 (000) MT (64.76%)
Growth from Yield <sup>3</sup> :	▲7.63 (000) MT (35.24%)
<b>Yield:</b>	<b>10,341.88 (Kg/Ha)</b>
<b>Exports:</b>	<b>46.58 (000) MT</b>
<b>Imports:</b>	<b>0.10 (000) MT</b>

<sup>1</sup> Growth in volume produced compared to previous season

<sup>2</sup> Volume increase from new hectares coming into production

<sup>3</sup> Volume increase from higher yields

### Mexico Exports by Partner (Values for Latest Season Incomplete)

Reporter	2018/2019	2019/2020	2020/2021	2021/2022
United States	25.08	31.67	44.61	45.50
Japan	0.67	0.61	0.82	0.79
Canada	0.04	0.42	0.27	0.22
Hong Kong	-	-	0.05	-
UAE	0.01	0.00	0.05	-
Others	0.01	0.01	0.06	0.07
<b>Mexico Totals</b>	<b>25.82</b>	<b>32.71</b>	<b>45.85</b>	<b>46.58</b>



## Mexico Country Member Summary

Adapted from the report by the National Association of Berry Exporters (Aneberries)

Of the four berries produced in Mexico, blueberries are the youngest crop and have shown the greatest promise in recent years with the highest growth rates. This has allowed the Mexican blueberry industry to utilize cutting-edge agricultural technologies.

For the 2021/2022 season Mexico had 9,000 production hectares of blueberries, and its main production regions are: Jalisco (3,200ha), Michoacán (3,000ha), and Sinaloa (2,000ha), with the latter being the region that has witnessed the highest growth in recent years. It is important to mention that even while Jalisco and Michoacán have almost the same planted hectareage, the yield is higher in Jalisco because of the use of technology, thus making Jalisco the leading state in terms of volume in the country accounting for around 50% of production.

Official estimates state that around of 95% of the production is exported at close to 68,300 metric tons (MT), generating \$589 million in foreign exchange for the country, with Mexican blueberries sold in more than 35 countries and four continents.

With the growth of the industry more than 72,000 jobs have been created each season, and the economic income that has been brought to the communities where our crops are established has become invaluable, contributing directly to the welfare of farmworkers and their families, giving them above average salaries and social benefits such as housing, health and decent living conditions. This income reaches local business, including the hotel and restaurant industry, providers of supplies and services, and the transport industry, among many others.

The Mexican blueberry industry is constantly implementing environmental and social responsibility campaigns making it a priority to be a benchmark in Mexico in terms of green industries. This labor includes implementation

of technologies that seek to optimize and reduce the use of natural resources and campaigns that prioritize the farm worker.

Another important aspect to consider is the growing acceptance of blueberries in the domestic market. The National Association of Berry Exporters (Aneberries), alongside its 37 members, has over the last few years implemented marketing campaigns focus on Mexican buyers aimed at lifting consumption in Mexico.

The next challenges for the Mexican industry will be workforce availability and social responsibility, as well as continuing to satisfy global demand and diversify our market presence.

We estimate Aneberries membership represents near than 75-80% of the total production in Mexico, which allows us to be a benchmark and take the lead in statistics, trade and government regulations. We keep making changes in the industry and invite all producers and exporters who are not yet members to join us and work together as an industry to protect and keep developing our beloved Mexican blueberry industry.

## Mexico Report Team Narrative

On the doorstep of the world's largest market, the USA, and with ideal climatic conditions that have proven less volatile than other leading global production regions, Mexico's blueberry industry has a comparative advantage that has only been amplified by the logistical problems that have plagued international supply chains. Whilst there is some increased cost and scarcity in trucking options, it is minimal compared to the challenges associated with sea-freight shipping and air cargo, which explains why Mexico has doubled-down on its historically US-centric export focus in 2021 and 2022.

The industry maintains the intention to further diversify its markets but the incentives closer to home have just been sufficient to maintain the focus on the core market, especially this year when competitors in the Southeastern U.S. were affected by freezes. This also makes sense from a cost perspective, as Mexican blueberry growers – like most producers worldwide - have been affected by labor challenges and rampant input inflation in everything from materials to fertilizers to chemicals. In mid-2022 the Mexican Government also announced a ban on subcontracting day laborers in berry and avocado fields, as part of compliance with the USMCA.

Another issue identified in Mexico this year is heat stress, which may partly explain a doubling of the processed blueberry volume – historically a very minor part of the sector. Another segment that has almost doubled in size in 2022 is fresh organic Mexican blueberries, as the product of converted fields and new plantings coming to maturity.

The Mexican blueberry sector has grown from non-existence at the turn of the Millennium to one of the top focal points of blueberry development worldwide, hosting almost all major blueberry genetics companies of note that specialise in southern highbush varieties. From around 2005, pioneering nurseries, marketers, growers and breeders from Chile and the U.S. teamed up with Mexican producers and agronomists to 'tropicalize' southern highbush blueberries in the state of Jalisco and Michoacan, fine tuning practices around pruning, varietal selection, chemistry, soil management and protective systems such as tunnels. It was a practice that proved successful over time, culminating in dual harvests in both the fall and spring – the former generating the most lucrative returns for several years before Peru too was able to develop an industry and tap that same window.

Since then the primary window has been late winter and spring with peak harvests taking place between February and April, although the season technically runs from September to June. Off-cycle production from late September through early December is also feasible in Central Mexico by leveraging genetics, nutrition, and pruning techniques but the yields to date are somewhat less competitive and the overlap with Peru has generally pushed the focus to the more 'natural' window. In 2022, Mexico's weekly blueberry shipments to the U.S. were consistently higher from the last week of January onwards, and substantially higher year-on-year from late March to mid-April. Export volume is now edging closer to the 70,000-metric-ton mark following annual growth rates of around 40% in recent years, with the lion's share going to its northern neighbour.

A proliferation of young plantings indicates volume growth trends will continue, and that could be accentuated by the introduction of new varieties, although most industry insiders expect the growth rate to decline to a level more in the range of 20% in the near future. It is important to note that replanting due to compelling new cultivars will also disrupt some of this growth rate. Even a reduced growth rate would result in volume increases, hence Aneberries' priority to develop markets in Asia, Europe and the Middle East to complement the current focus on US and Canadian markets. Mexico continues to be a key supplier of fresh blueberries to the Japanese market, and there are certain exporters that ship a much larger percentage – some even reaching approximately 20% - of their volume to ex-US markets in order to build demand or take advantage of niche market windows in certain geographic locations for premium varieties.

The leading blueberry variety in Mexico continues to be Biloxi, which achieves high yields but is increasingly inefficient to harvest and is largely unable to reach the kind of jumbo sizing that attracts premium prices. From a flavor profile variability perspective it is also garnering less audience from retailers and marketers that will no longer accept this cultivar in the United States. In the more demanding markets of Asia it would also not be conducive over the longer term to building a successful Mexican blueberry export program.

Biloxi however represents a miniscule proportion of new plantings in Mexico, which are increasingly centred around the next generation of genetics from countries as far afield as Australia, Spain, and the United States, as well as Mexico-based breeding programs operated by international companies. Labor scarcity, combined with the harvest efficiency issues of Biloxi, is adding pressure for growers to transition out the variety in coming years.

More than two-thirds (6,200ha) of the planted area of blueberries in Mexico is in the central states of Jalisco, by far the industry leader, and Michoacan. In this part of the country there is a prevalence of farms under tunnels with a mix of both substrate and in-ground farms. Meanwhile, some of the world's leading blueberry companies have invested heavily in the northern state of Sinaloa (2,000ha) in recent years, where newer farms tend to be substrate-based in open fields, often under netting. This rapid growth in Sinaloa is reflected in a large reduction in the percentage of Mexico's blueberry farms grown in controlled environments or tunnels, dropping from 92% to 75%. It is also important to note that the growth of Sinaloa will be in a more concentrated time window due to the climate.

Mexico has a wide spectrum of grower sophistication in terms of genetics and growing methods, and there are other smaller blueberry industries that have emerged in states such as Baja California (400ha), Guanajuato (250ha), and to a lesser extent Colima, mostly around the base of the Colima Volcano because the state itself is known for very high temperatures that are ideal for crops such as bananas.

The Colima-based Port of Manzanillo accounts for most of the country's sea-freight exports of blueberries, although estimates are this number is less than 100 containers annually. Since the previous instalment of this report, it was deemed an initiative for 14-day shipping journeys to Rotterdam from a port in the state of Veracruz would be unviable for blueberries as the target window in question is in June-July; a period when harvests tend to be cut short in Central Mexico due to rain and pruning cycles. Nonetheless, if the initiative goes ahead for other Mexican products there are hopes it could be extended to other times of the year.

It is not just Mexican growers that are hopeful the country will be able to diversify its export options. U.S. producers – particularly in California the U.S. Southeast – would welcome the volume being sent elsewhere. Since the previous report there have been no further advancements in market access negotiations with South Korea, Indonesia, India and Malaysia, while China – where Mexico does have access – has high tariffs and remains a challenge.

Aneberries is also attempting to raise domestic consumption amongst Mexico's population of more than 120 million people. The hope is that this could pave the way for a year-round program in Mexican supermarkets, encouraging more counter-seasonal imports which last year were only worth half a million dollars in the fresh market. Mexico also imported more than 9,000MT of frozen blueberries from the U.S. in 2021, with a value of \$28 million.



ASIA / PACIFIC