

#### **U.S. Produce Imports from Mexico**

### Linda Calvin and Steven Zahniser U.S. Department of Agriculture Economic Research Service

Presentation to the seminar entitled "Farm Workers in Mexico and the United States"

Mexico Institute, Woodrow Wilson Center

Washington, DC, November 15, 2017

Views expressed are those of the authors and should not be attributed to the Economic Research Service, USDA, or other entities participating in this research.



### U.S.-Mexico fruit and vegetable trade at a glance

- In 2016, U.S. fruit and vegetable imports from Mexico reached about 10 million metric tons—with a total value of about \$12.4 billion.
- This trade accounted for about:
  - 43 percent of total U.S. fruit and vegetable imports (from all countries)
  - 54 percent of U.S. agricultural imports from Mexico
  - 4 percent of U.S. merchandise imports from Mexico
- In this presentation, we will focus on different types of *fresh or frozen* fruit and vegetables, which accounted for about 92 percent of U.S. fruit and vegetable imports from Mexico in 2016.
- The United States also participates in U.S.-Mexico agricultural trade as an exporter:
  - U.S. agricultural exports to Mexico equaled about \$17.8 billion in 2016.
  - Grains, oilseeds, meat, and related products accounted for about three-fourths of this trade.
  - Fruit and vegetables accounted for about 7 percent.

Source: Prepared by USDA, Economic Research Service, using data from U.S. Census Bureau, as cited by USDA, Foreign Agricultural Service.





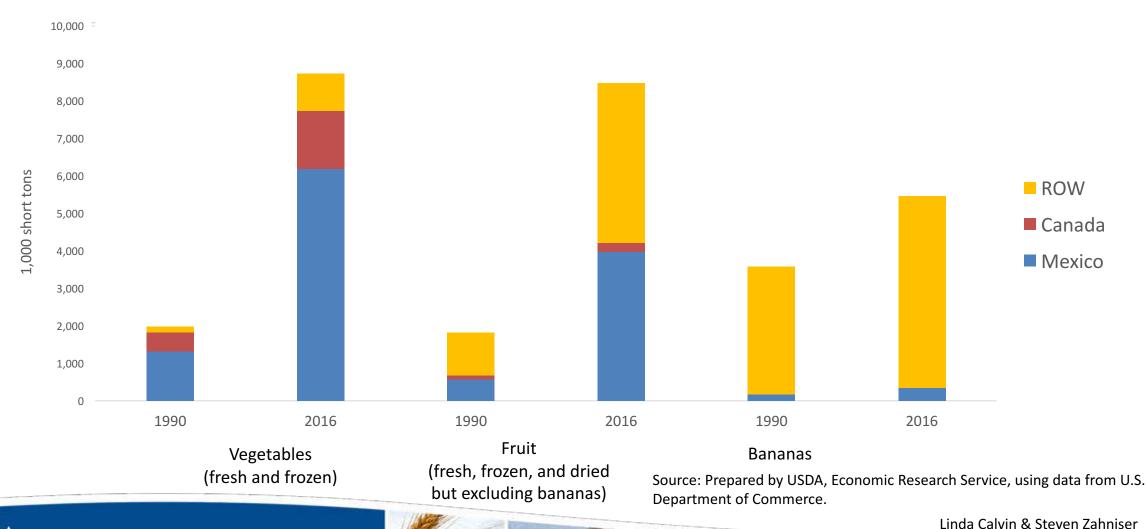








### U.S. produce imports: Mexico is the largest foreign supplier of vegetables and fruit (when bananas are excluded)







#### Availability of farm labor in Mexico is one of many factors driving U.S. produce imports

#### Demand

- Consumer demand for year-round supplies of fresh produce
- A desire for a healthier diet
- Partial shift in consumption from canned and frozen product to fresh produce
- Increased per capita consumption of certain fruit and vegetables
- New interest in tropical fruit (avocados, papayas, mangos)

#### Supply

- Favorable climates in other countries for growing fruit and vegetables, often complementing U.S. growing seasons
- Greater availability of farm labor in Mexico and other countries
- Trade liberalization (NAFTA, CAFTA-DR, Peru, Colombia)
- Regulatory coordination and trade facilitation (changes in phytosanitary rules for avocados form one example)
- New technologies (protected cultures, including greenhouses and shade houses, and new varieties, among other factors)
- New commodities grown in Mexico (berries)
- Food safety challenges (raspberries, cantaloupe)
- New transportation infrastructure reduces transport costs from some areas: Increased use of Laredo and Weslaco Ports of Entry
- Increased participation of U.S. producers, buyers, and investors in produce sectors of Mexico and other countries as a way to reduce weather risks, to obtain product to "fill out" the calendar year, and to lower labor costs



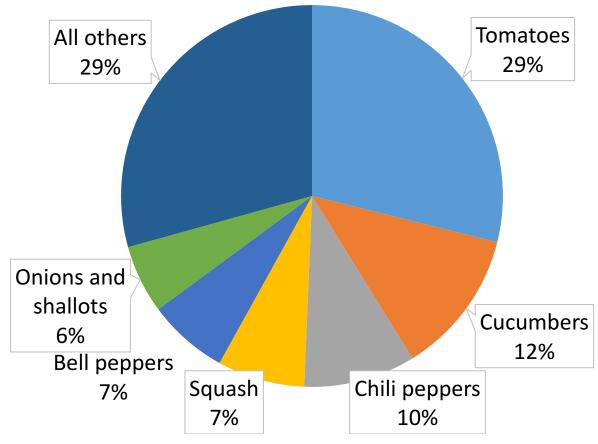








# Tomatoes: The leading U.S. vegetable import from Mexico in 2016 (volume)



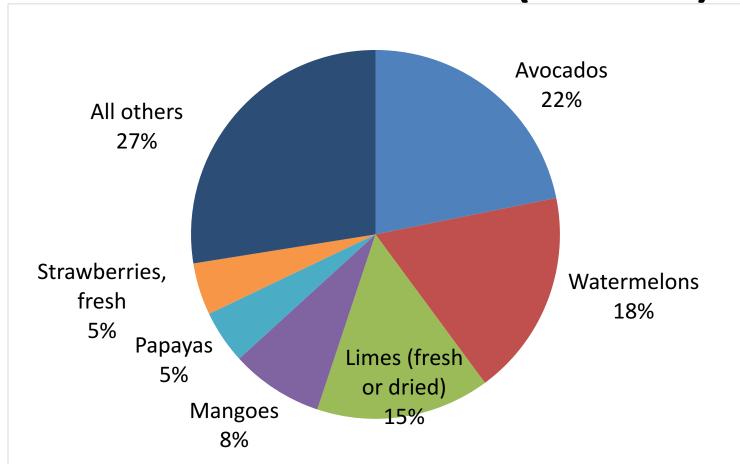
Source: Prepared by USDA, Economic Research Service, using data from U.S. Department of Commerce.







# Avocados: The leading U.S. fruit import from Mexico in 2016 (volume)



Source: Prepared by USDA, Economic Research Service, using data from U.S. Department of Commerce.

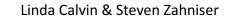








### **Tomatoes**

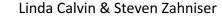






### Protected culture technology has transformed Mexican shipments to the United States

- Protected culture (PC) is a broad term than covers high-tech greenhouses to low-tech shade houses.
- Began in the mid-1990s in Canada
- Applied commercially first in Canada, then in the United States, and finally in Mexico which is now the powerhouse in the industry
- Primary commodities are tomatoes, bell peppers, and cucumbers
- Canadian and U.S. greenhouses are very high-tech and expensive
- Mexican operations are a mix of high-tech greenhouses and lower-tech shade houses
- Analytical challenge: low-quality data on U.S. greenhouse production





# U.S. tomato market: Import share has risen from 17 to 54 percent

	<u>Field</u> production	Imports (field and PC)	Exports (field and PC)	Per capita consumption	Import share of consumption
	<u>N</u>	Million lbs		<u>Lbs.</u>	<u>Percent</u>
1990-92	<u>3,561</u>	<u>675</u>	<u>320</u>	<u>15</u>	<u>17</u>
2014-16	<u>3,286</u>	<u>3,605</u>	<u>217</u>	<u>21</u>	<u>54</u>
Percent change	<u>-8</u>	434	<u>-32</u>	<u>35</u>	<u>212</u>

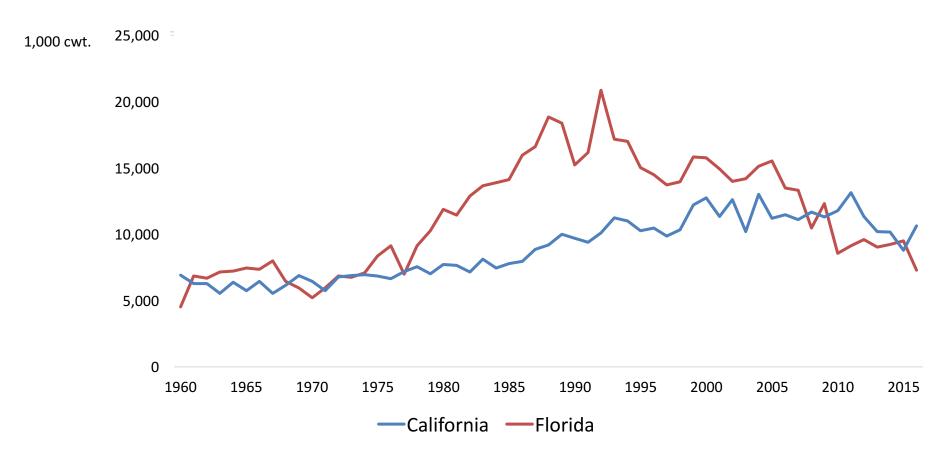
Source: Prepared by USDA, Economic Research Service, using data from ERS and U.S. Department of Commerce.





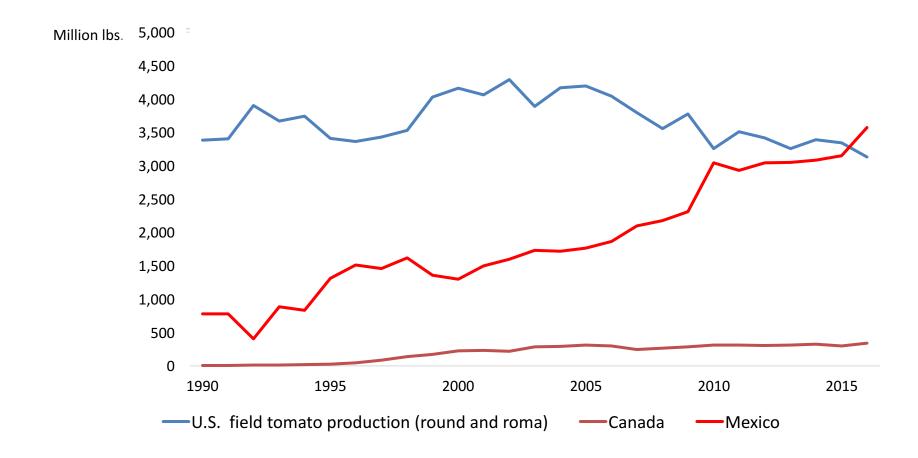


### California and Florida fresh-market tomato production: Florida's production has declined since the early 1990s



Source: Prepared by USDA, Economic Research Service, using data from ERS and USDA, NASS.

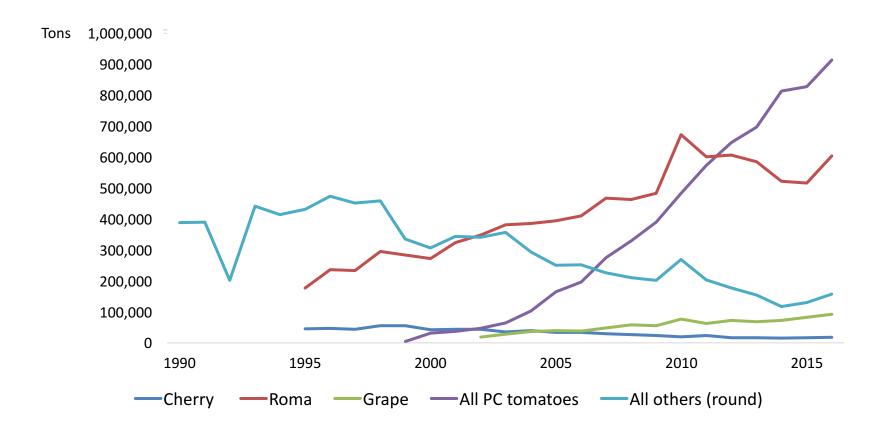
### U.S. field tomato production (round and roma) and field and PC imports, 1990-2016: Imports from Mexico now exceed U.S. production



Source: Prepared by USDA, Economic Research Service, using data from ERS and USDA, NASS.



### PC and field roma tomatoes now account for the majority of U.S. tomato imports from Mexico



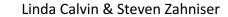
Source: Prepared by USDA, Economic Research Service, using data from U.S. Department of Commerce.

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### Cucumbers





# U.S. cucumber production decreased by 22 percent since 1990-92

Field Imports Exports Per capita Import share production (field and (field and consumption of PC) PC) consumption

	Mill	ion lbs.		Lbs.	Percent
1990-92 average	876	403	82	5	34
2014-16 average	687	1,801	31	8	73
Percent change	-22	347	-63	62	118

Source: Prepared by USDA, Economic Research Service, using data from ERS and U.S. Department of Commerce.

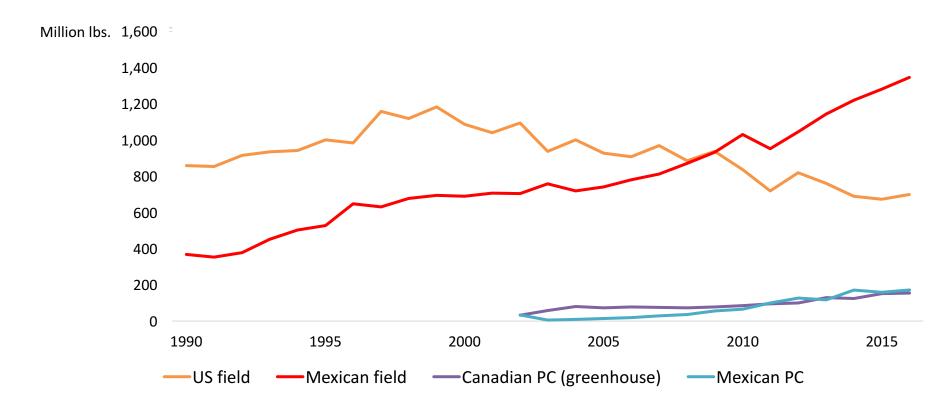






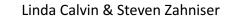


### U.S. imports of field-produced cucumbers from Mexico exceed imports of PC-cucumbers



Source: Prepared by USDA, Economic Research Service, using data from ERS and U.S. Department of Commerce.

### **Bell peppers**









### U.S. bell pepper market: Imports soar 514 percent

	Field production	Imports (field and PC)	Exports (field and PC)	Per capita consumption	Import share of consumption
		Million lbs		Lbs	Percent
1990-92 average 1/	630	211	169	2.8	26
2014-16 average	865	1,294	109	7.2	64
Percent change	37	514	-36	161	146

<sup>1/</sup> Fresh production, per capita consumption, and import share of consumption based on 1990-91 average.

Source: Prepared by USDA, Economic Research Service, using data from ERS, USDA AMS, and USDA, NASS.



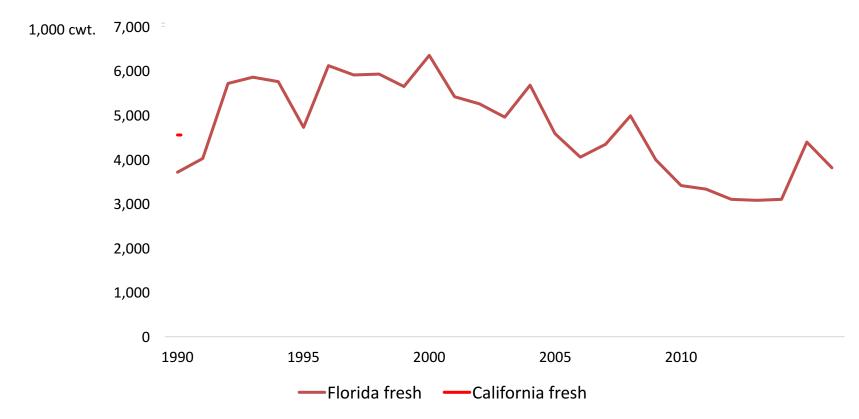








### U.S. bell pepper field production: After initial increases, Florida and California's fresh-market production has declined 1/

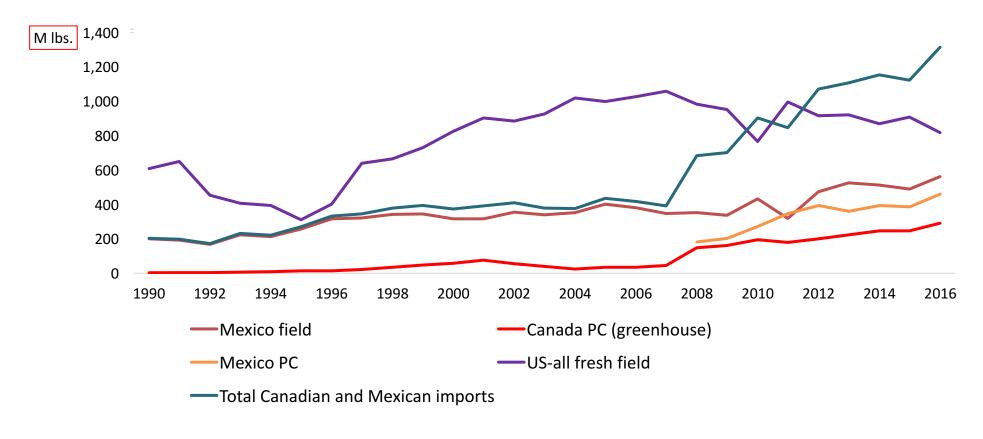


1/ There are data problems for California bell peppers in the mid 1990s and those numbers are not shown.

Source: Prepared by USDA, Economic Research Service, using data from ERS, USDA/AMS, and USDA/NASS.



# U.S. bell pepper imports from Mexico: About evenly balanced between field and PC product

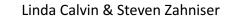


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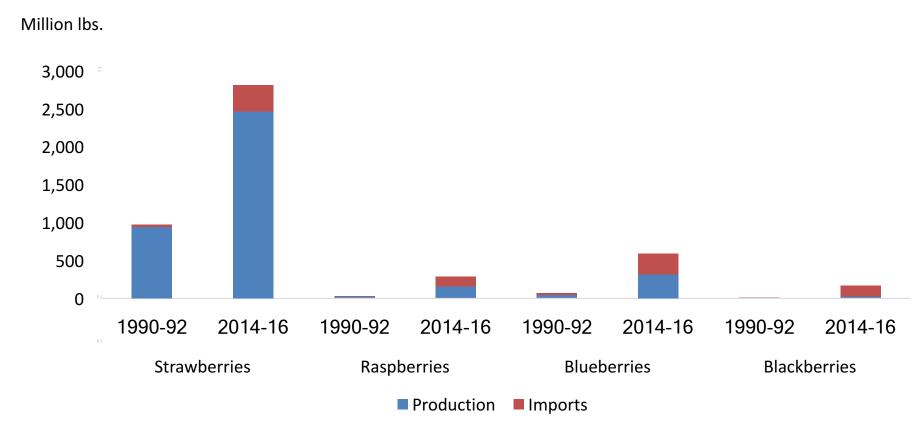


### Berries





### U.S. berry supply: Strawberries still the leading berry consumed in the United States



Source: Prepared by USDA, Economic Research Service, using data from ERS and U.S. Department of Commerce.

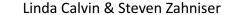


# U.S. berry market overview: Mexico supplies almost all imports, except blueberries

	StrawB	RaspB	BlueB	BlackB 1/	
	Percent change (1990-92 to 2014-16)				
U.S. production	161	516	544	74	
Per-capita consumption	128	1,164	931	NA	
Imports	1,084	4,792	1,334	2,687	
	Percent (2014-16)				
Import share of consumption	14	55	53	NA	
MX share of imports	100	98	9	95	

<sup>1/</sup> Growth in blackberry production is based on data from 2008 and 2016 only.

Source: Prepared by USDA, Economic Research Service, using data from ERS, USDA/AMS, and U.S. Department of Commerce.









### U.S. strawberry shipments: Imports of Mexican strawberries for the winter season increased between 1990 and 2016

3,000 2016 1990 2,500 2,000 1,500 1,000 500 Mar May Jul Sep Mar May Sep Jan Nov Jan Jul Nov Florida Other imports California Mexico

Source: Prepared by USDA, Economic Research Service, using data from USDA/AMS.

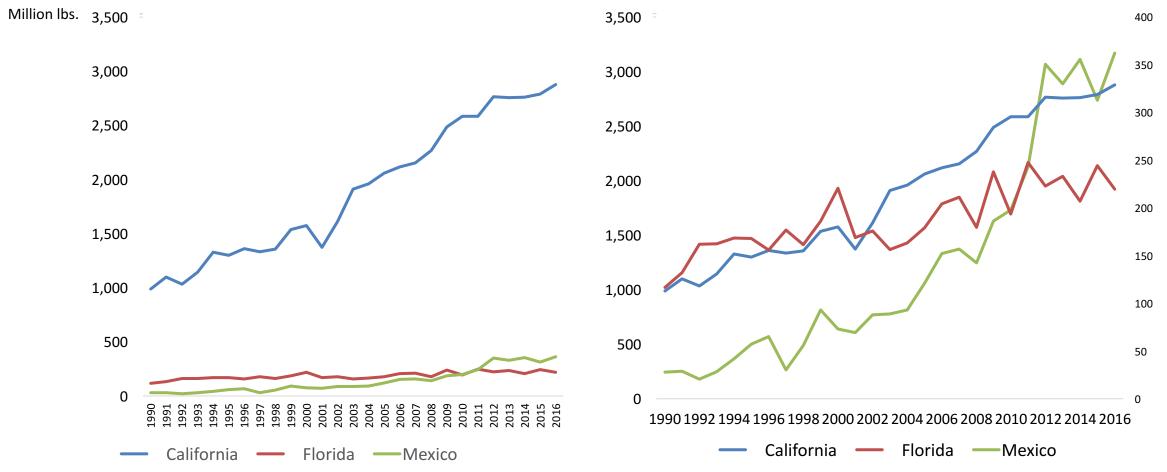
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100,000 lbs.



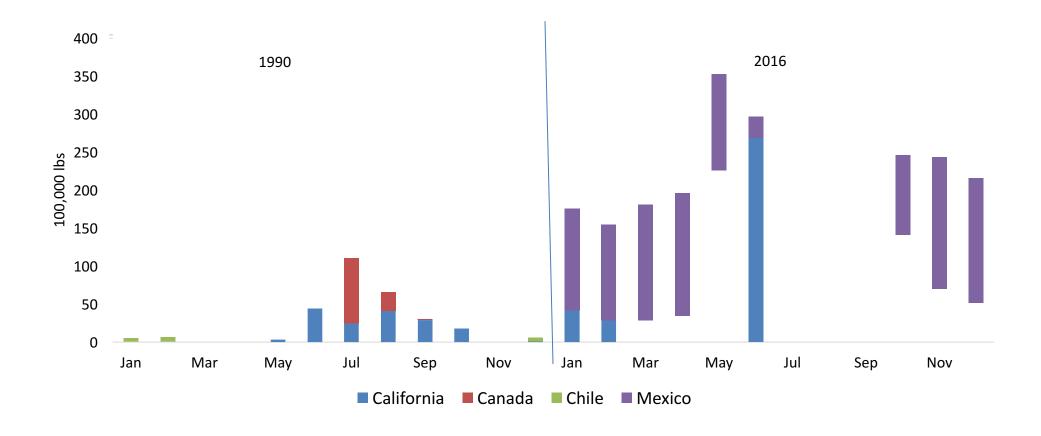
# Growth in U.S. strawberry supplies: Florida production is leveling off

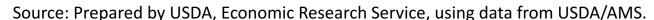


Source: Prepared by USDA, Economic Research Service, using data from USDA/AMS.



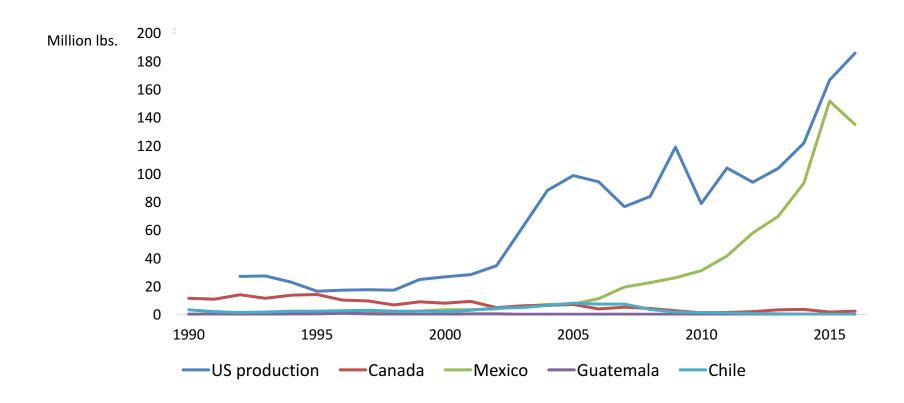
#### Mexican raspberries expand the U.S. consumption calendar







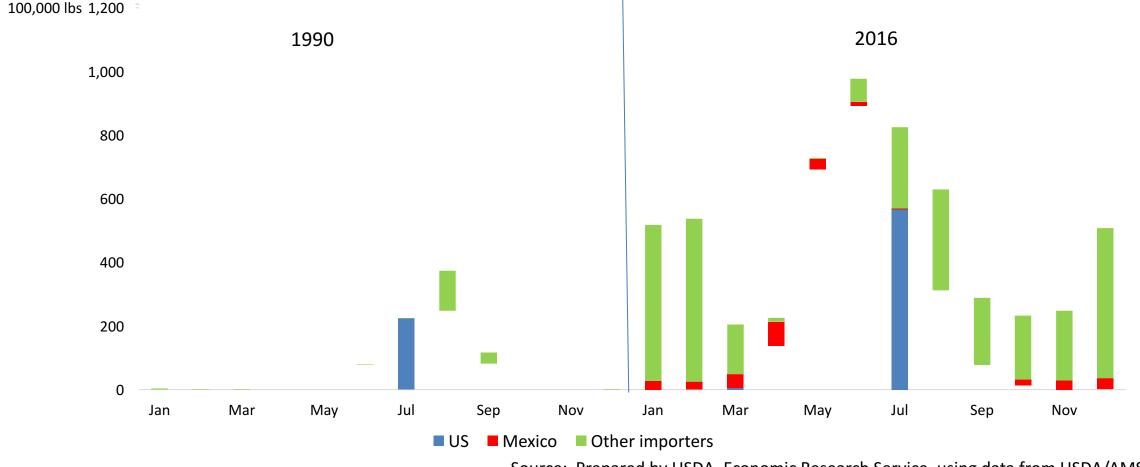
# Raspberry imports from Mexico approach U.S. production level



Source: Prepared by USDA, Economic Research Service, using data from ERS and U.S. Department of Commerce.



# U.S. per capita blueberry consumption increased 931 percent between 1990-92 and 2014-16

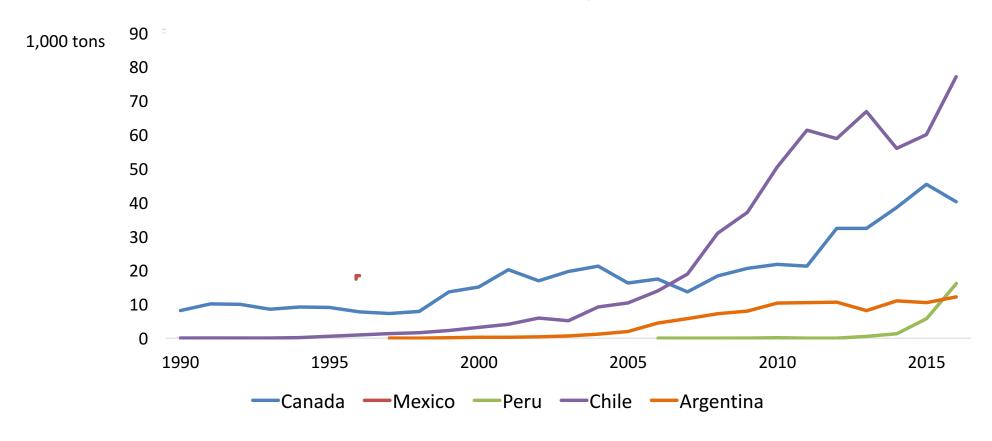


Source: Prepared by USDA, Economic Research Service, using data from USDA/AMS.





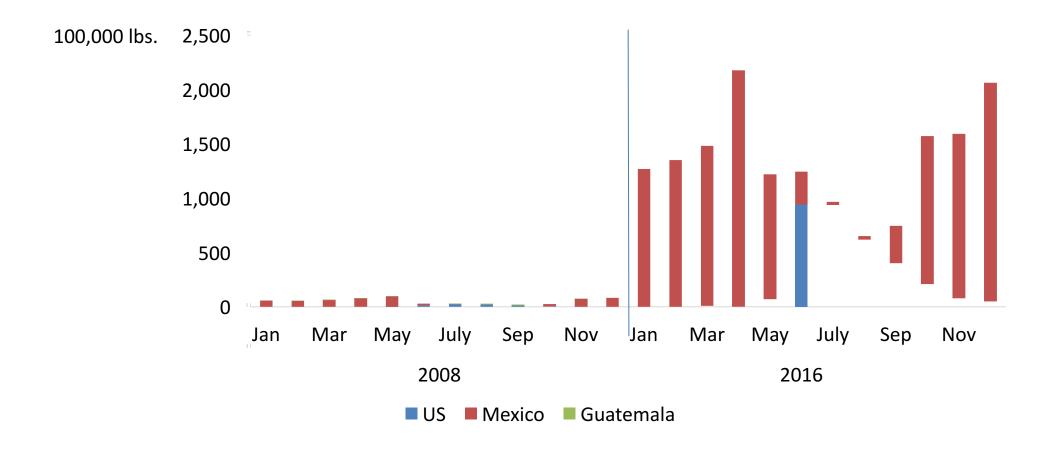
# Mexico's share of U.S. blueberry imports increased to 9 percent

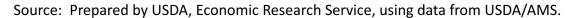


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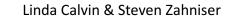


### Mexico is the leading source—foreign or domestic—of blackberries in the United States



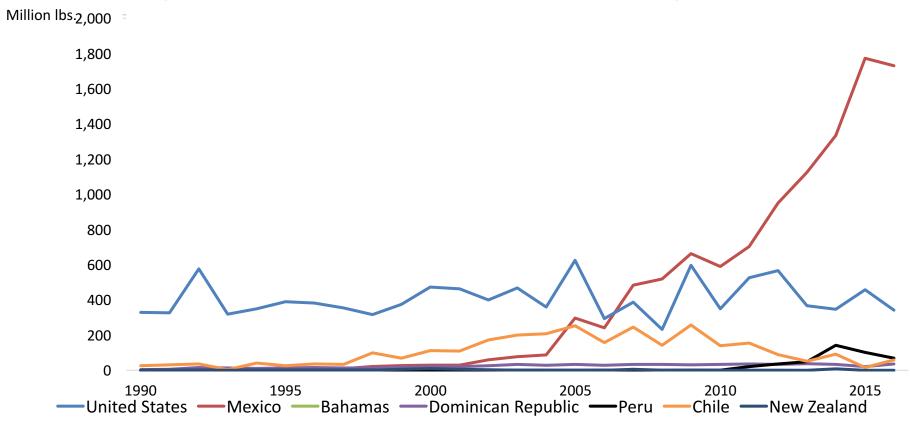


### **Avocados**





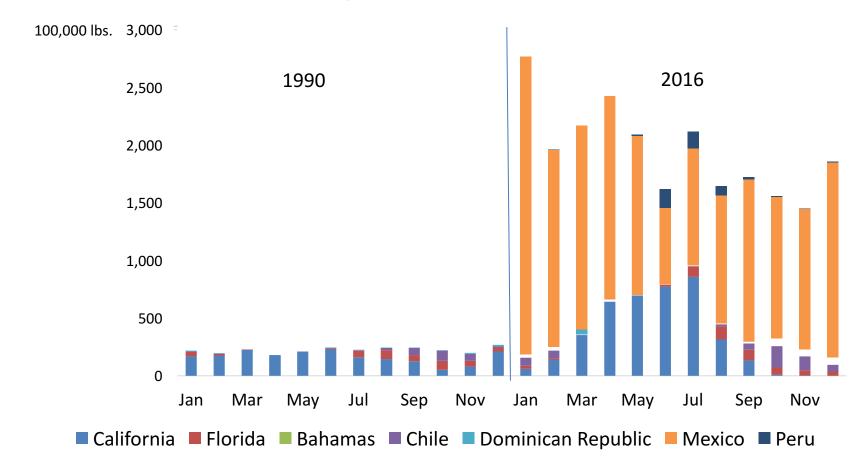
# Avocados: Mexican production supplied 91 percent of U.S. consumption in 2016



Source: Prepared by USDA, Economic Research Service, using data from ERS and U.S. Department of Commerce.



### U.S. avocado production is higher during the summer, when imports from Mexico are lower



Source: Prepared by USDA, Economic Research Service, using data from USDA/AMS.



### Questions and discussion

Thank you!

Linda Calvin, <a href="mailto:lcalvin@ers.usda.gov">lcalvin@ers.usda.gov</a>

Steven Zahniser, <a href="mailto:zahniser@ers.usda.gov">zahniser@ers.usda.gov</a>

ERS website: www.ers.usda.gov

