



The State of MRL Affairs – an Almond Perspective

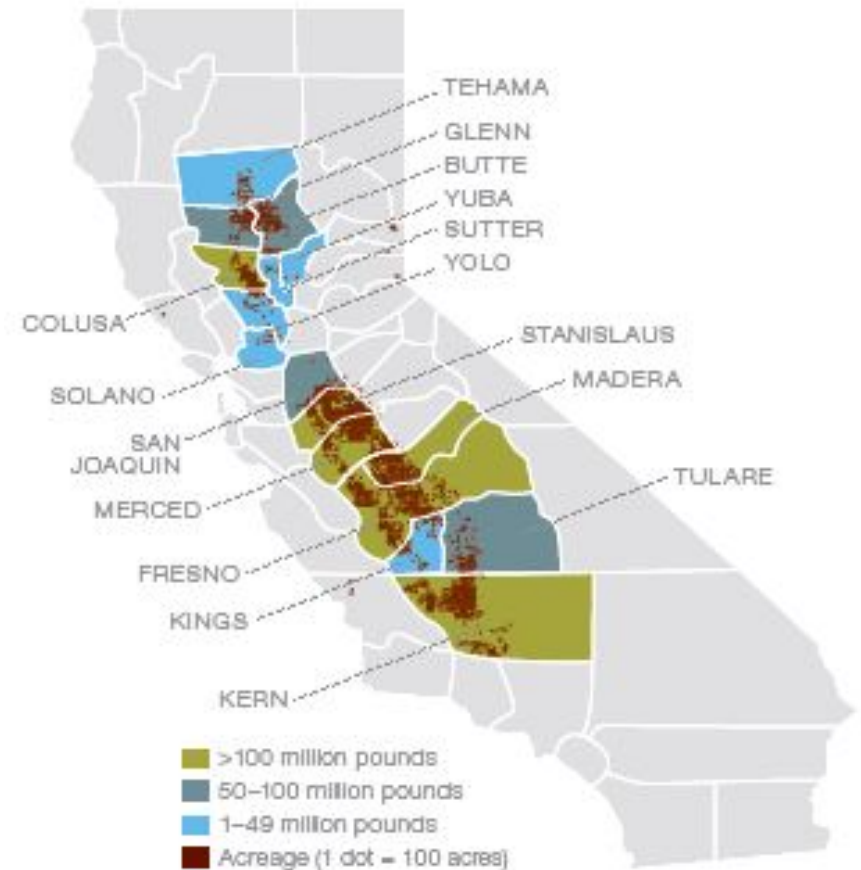
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The Scope of the California Almond Industry

- Spanning 500 miles (800 km) throughout the Central Valley
- 6,800 growers - 105 handlers
- 100% of U.S. production
 - 82% of worldwide production
 - Shipments 66% export; 38% domestic
- \$4.8 billion in farm value*
- \$4.1 billion export value (2013)**
 - California's #1 ag export**
 - Top U.S. specialty export crop
- 97,000 almond industry-related jobs generated in Central Valley, 104,000 statewide****, \$11 billion contributions to State GDP

Almond Production by County 2013/14



Sources:

*USDA Agricultural Statistics Service, Pacific Region (NASS/PR)

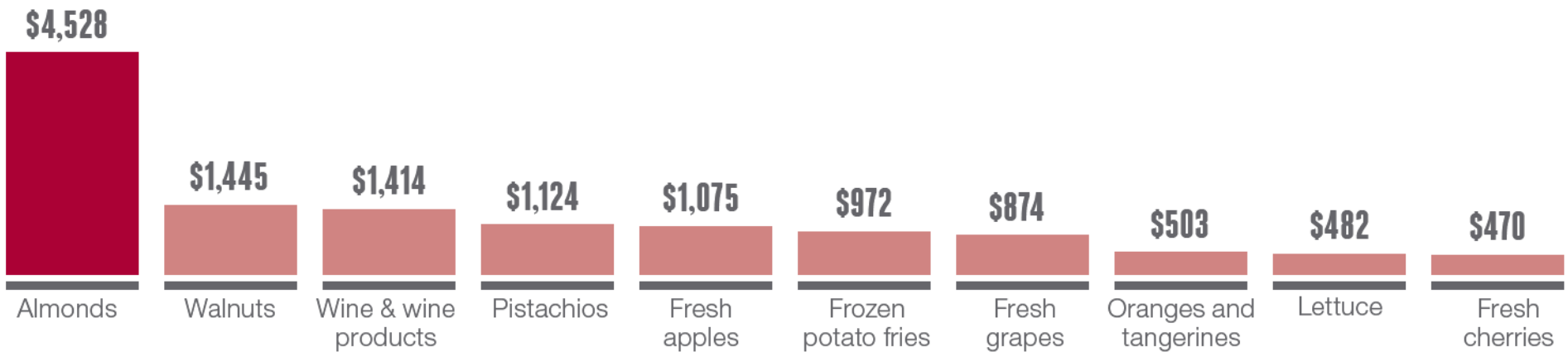
**U.S. Department of Commerce, Foreign Trade Statistics

***Agricultural Issues Center, University of California 2011

**** Source: *Economic Impacts of the California Almond Industry: UC Ag Issues Center*

Top Ten US Specialty Crop Exports by Value

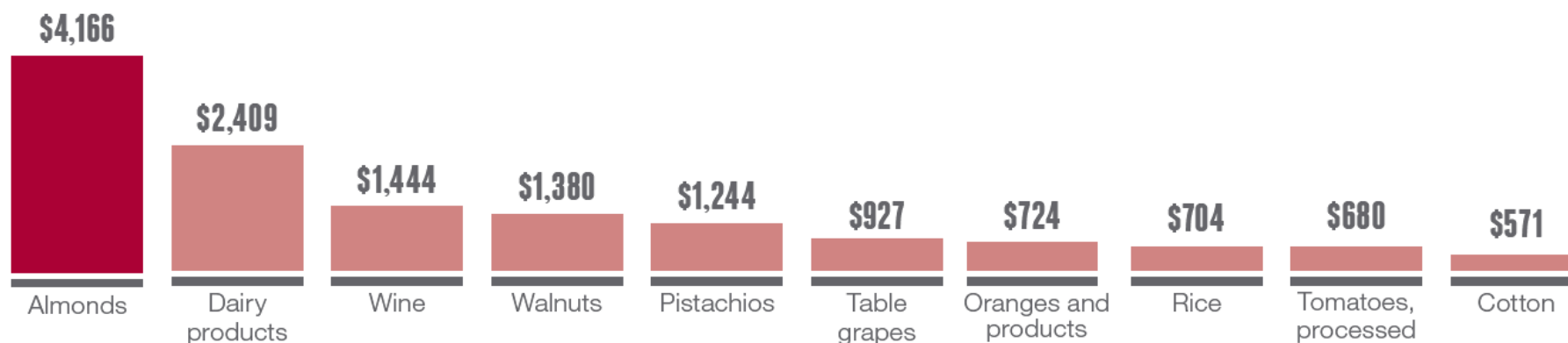
TOP TEN U.S. SPECIALTY CROP EXPORTS BY VALUE 2014,* in millions



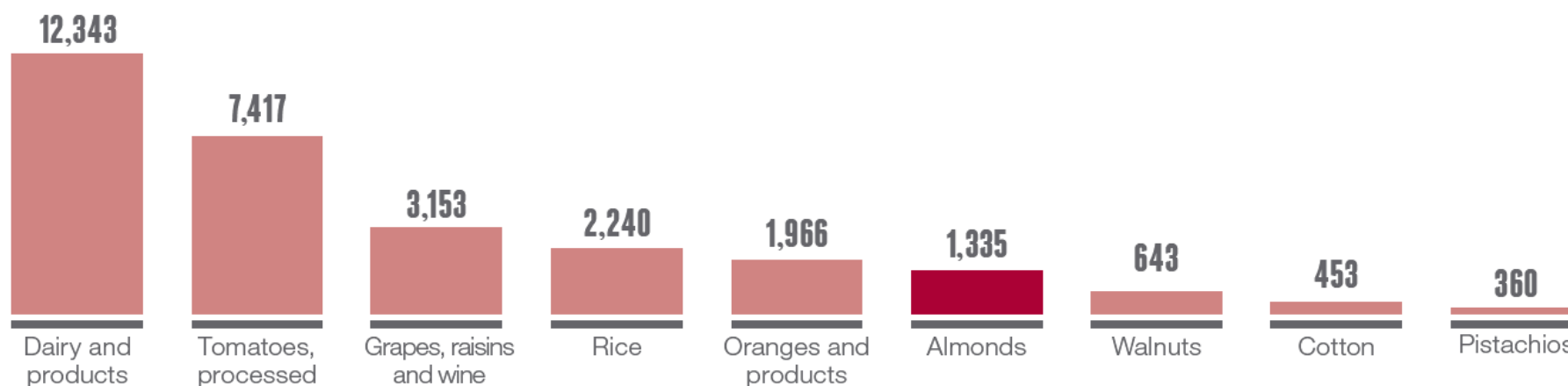
Source: Bureau of the Census, U.S. Department of Commerce, Foreign Trade Statistics. *Calendar year January through December 2014.

TOP CALIFORNIA AGRICULTURAL EXPORTS 2013*

By Value millions USD



By Volume millions of pounds



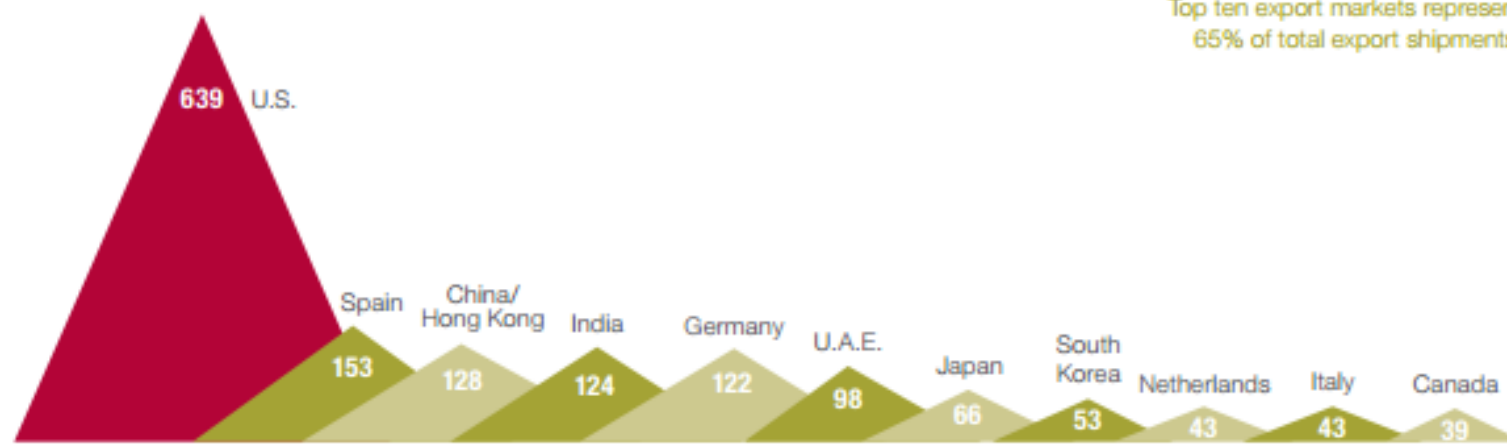
Note: This graph shows export volumes in comparable converted weights, measured in pounds. Volumes include fresh products and fresh equivalent of processed products that were converted to farm-fresh quantities using conversion factors published by USDA ERS.

Source: University of California, Agricultural Issues Center. *Calendar year January through December 2013.

Domestic and Export Shipments

2014/15
Shipments by Region

Top Ten Export Destinations in million pounds 2014/15



Source: Almond Board of California, July 2015 Position Report.

Top Ten Export Destinations 2014/15

Top ten export markets represent 65% of total export shipments.

North America

38%

Western Europe

26%

Asia-Pacific

24%

Middle East/Africa

10%

Latin America

1%

Central/Eastern Europe

1%

Source: Almond Board of California.

MRLs: Where we were – Where we are

Past:

- Most growers didn't know what a MRL was
- Most registrants had no idea of trade flows
- Codex process slow
- Little effort to harmonize data requirements/risk assessment processes
- Little testing for pesticide residues at import
- Group Grouping use limited
- More countries used Codex MRLs

Now:

- Registrants understand importance of trade flows for specialty crops
 - Much more proactive in submitting dossiers to critical markets
- Codex process more efficient with Step 5/8 and concern form.
 - Issue is JMPR capacity to review Als
- EPA and PMRA (and DPR) work more closely together
- EU adopts Codex MRLs that meet their risk assessment standards
- More countries (Asia, S.Am.) moving to their own positive list systems
- Better definitions of group groupings
- Much more frequent testing of products at import

Number of MLRs for Almonds has Generally Increased

EU



2007: 22 out of 75 US MRLs

2008: 108 out of 111 US MRLs/

Exemption,

- 54 MRLs lower than US MRLs or have an MRL where US has exemption from tolerance

2016: 103 out of 115 US MRLs/

Exemptions

- 48 are lower than the US MRLs or where US has an exemption from a tolerance

Canada



2006: 9 out of 79 US MRLs

- 51 US MRLs \leq 0.1 ppm default MRL in Canada

2016: 51 out of 115 US MRLs

- 43 US MRLs \leq 0.1 ppm default MRL in Canada
- 3 CAN MRLs < US MRLs

* Info from historical spreadsheets developed for internal purposes – thus different base numbers at times.

Asian Markets

Taiwan



2008: 2 MRLs out of 111 US MRLs
- 8 provisional MRLs

2016: 62 MRLs out of 115 US MRLs/
exemptions

Japan



2007 pre-positive list: 62 out of 75

2009: 78 out of 90

2016: 95 out of 115

Better since no longer waiting for
registration elsewhere for starting
review of MRL packages

South Korea



2013: 22 MRLs set for almonds.

+ 23 MRLs from derivation system

*January 2017 start of positive list system
for tree nuts and oil seeds in S. Korea*

As of 3/30/16:

31 MRLs established or 0.01 ppm
default covers MRL.

+ 32 MRLs data packages submitted
or promised to be submitted

16 MRLs where submission status
not guaranteed

- 6 of which registrants didn't plan to
submit

➔ Most critical MRLs are covered

Asian Markets: Emerging Issues

Hong Kong moved to positive list system in 2014.

- Will use Codex MRLs if meet their risk standards
- A number of compounds hung up in political wrangling

2016: 79 out of 115

China

2016: 23 out of 115



China doesn't have an import MRL process so difficult for items that are primarily imported

India

2016: 57 out of 115

However, ALL are based on Codex MRLs

- India's courts decided not legal to rely on Codex MRLs

➔ Now working on developing a system to set their own MRLs



Codex

2007: 22 out of 75 MRLs

2016: 57 out of 115 MRLs

Almonds/tree nuts now being included with new A.I.s from the start.

Tree Nut Crop Grouping has been defined

Note: Almonds Hulls may now go into international trade



Where to next...

- China –officially use Codex and/or have import MRL process
- India – develop timely and rational process for MRL/import MRL setting
- Codex – ways/funds to expand JMPR capacity
- EU – worry about impact of cut-off criteria/ divergent risk assessment process
- US – process for reviewing and adopting Codex MRLs
- Better harmonization of Exempt from tolerances/ Biopesticides
- Wider use of crop groupings and representative crop data from different parts of the world.





Thank You!

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