



# MRL Workshop

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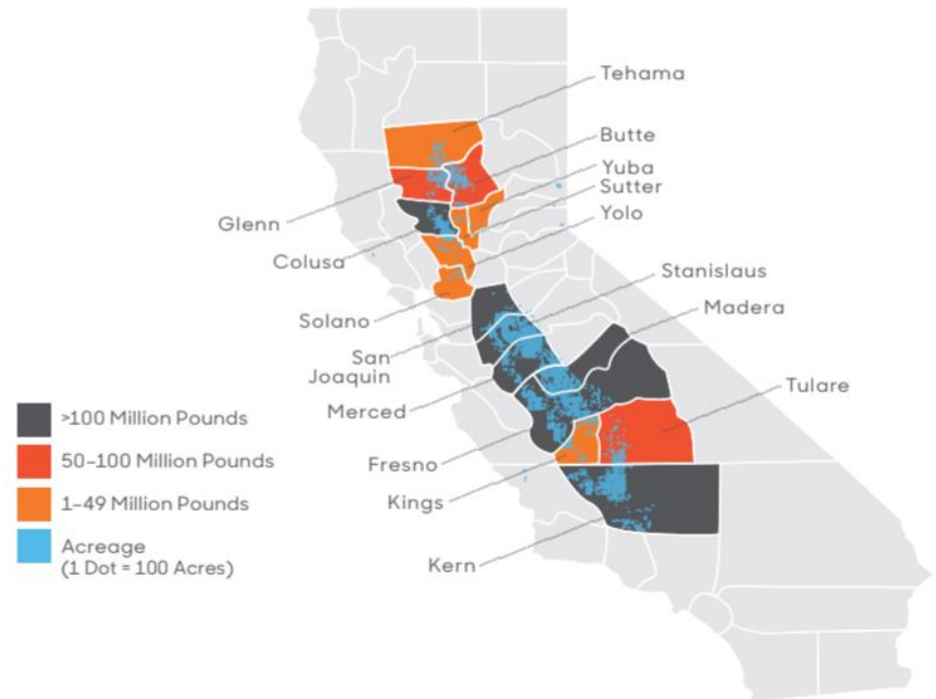
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# The Scope of the California Almond Industry

- **Spanning 500 miles** (800 km) throughout the Central Valley
  - 2018/18: 1,390,000 A total\*
  - 1,090,000 A bearing\*
- **6,800 growers - 101 handlers**
  - 74% of operations are 100A or less\*
  - >90% family-owned\*
- 100% of U.S. production
  - **80% of worldwide production\***
  - Shipments 66% export; 38% domestic
- **\$5.6 billion in farm value 2017/18\***
  - California's #1 ag export\*\*
  - Top U.S. specialty export crop
- **97,000 almond industry-related jobs** generated in Central Valley in 2014
  - 104,000 statewide\*\*\*
  - \$11 billion contributions to State GDP

Where Almonds Are Grown  
production by county | crop year 2017/18



Sources:

\*Almond Board of California, Almond Almanac 2017 Annual Report

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

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

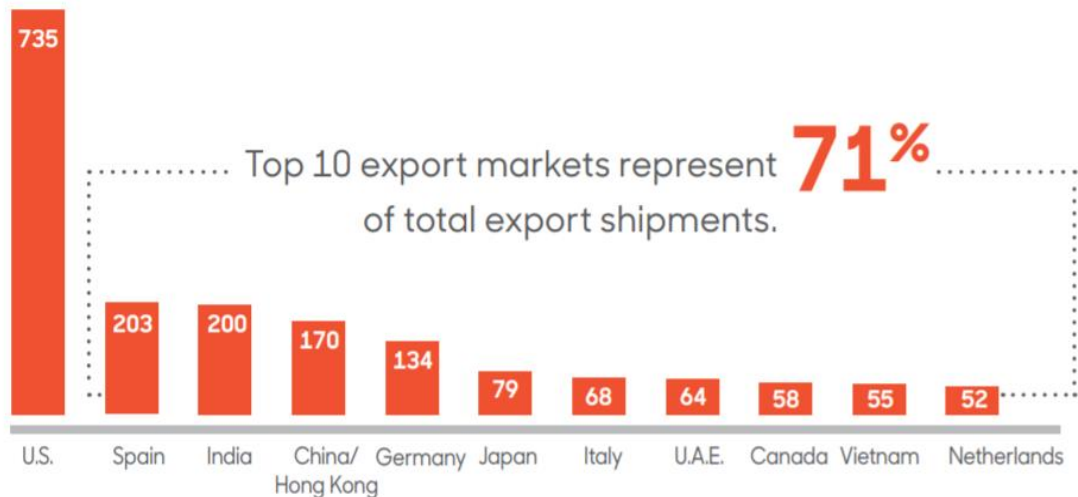
\*\*\* Source: *Economic Impacts of the California Almond Industry*: UC Ag Issues Center

# California Almond Shipment Overview 2017/2018

- Almonds are top US specialty crop in export value
- Almonds are top California crop in export value

## Top Global Destinations

crop year 2017/18 | million pounds

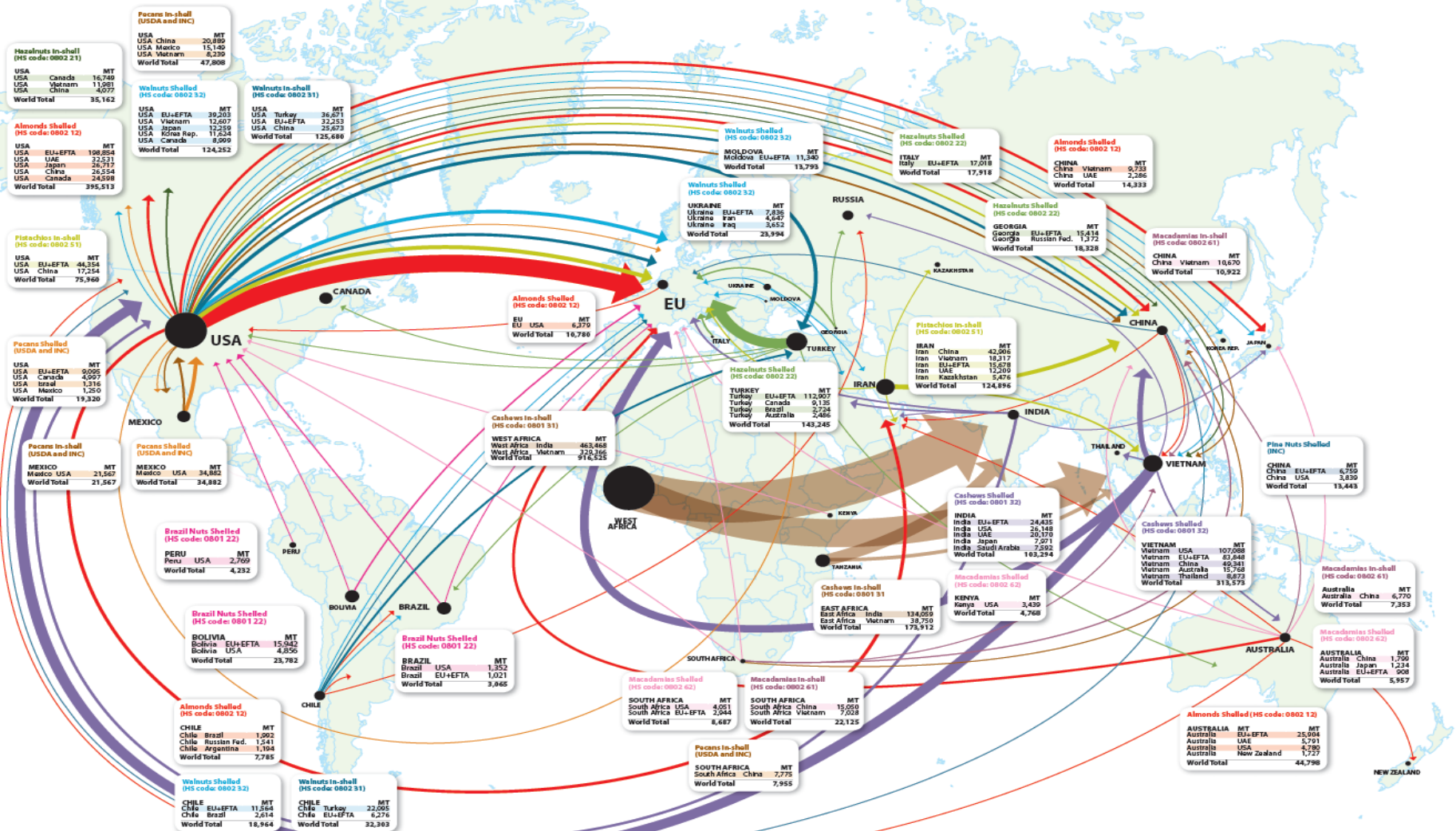


Source: Almond Board of California, July 2018 Position Report.





# Tree Nut Export Flows



# Anybody can see what pesticides are used on California crop: PUR

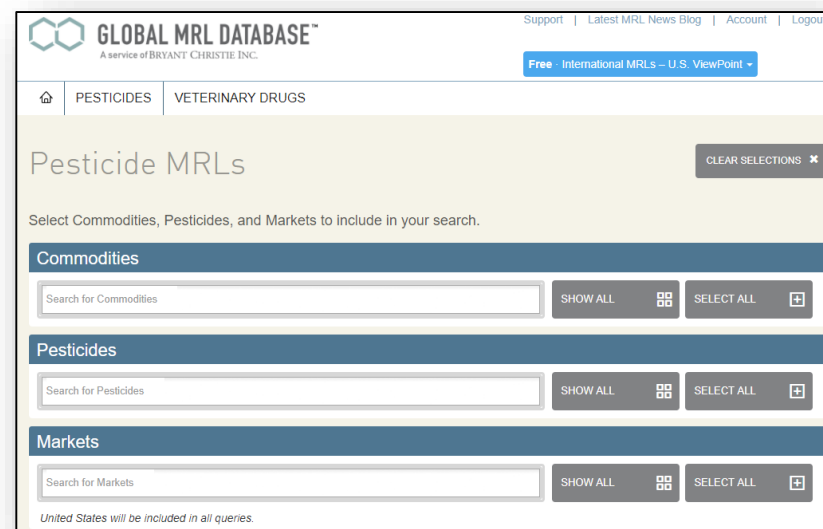
## Pesticide use in California

- Mandatory reporting
- Data is open to the public via Pesticide Use Reporting (PUR) database:
  - [www.cdpr.ca.gov/main.cfm](http://www.cdpr.ca.gov/main.cfm)



## Pesticide Maximum Residue Levels

- [www.globalmrl.com](http://www.globalmrl.com)
- Free to users in the United States
- Dozens of commodities paired with registered compounds and global markets
- Doesn't include US exempt compounds....



## Examples of Biopesticides/ Exempt from Tolerances Als currently used in Almonds:

	2016 Acres treated	US Status	EU Status
Polyoxin D	141,487 A	Exempt	Not approved, default MRL 0.01 ppm, but doesn't show up in EU MLR list.
Copper, various	280,000 A	Exempt	30 ppm
Sulfur	81,431 A	Exempt	Exempt
Phosphite		Exempt	Use fosetyl-AI MRLs (500 ppm)
Methoprene	74,803A	Exempt	0.05 ppm
Azadirachtin	6,981 A	Exempt	1 ppm
Limonene	18,885 A	Exempt	Can't find any record in EU
<i>B. thuringiensis</i> (various)	20,600 A	Exempt	Exempt
<i>Aspergillus flavus</i> 36	Just got CA reg. (260 A)	Exempt	nothing
NOW pheromones		Exempt	Exempt
Indian Meal Moth pheromone		Exempt	Exempt

## What happens if exemptions are not exempt everywhere: Phosphite (phosphonate)

- In US potassium phosphite is sold as both a fertilizer and as a pesticide. Also have calcium-, zinc-, etc. phosphites
  - Used in many crops for fertilizer/fungicidal/resistance stimulation reasons.
  - Exempt from a tolerance in the US
- In late 2013, the EU changed the designation of phosphite from both a fertilizer and pesticide, to only a pesticide
- Instead of establishing a separate Maximum Residue Limit (MRL) for phosphite-containing products, these residues were included under the MRLs for fosetyl-AI
  - Default fosetyl-AI MRL for tree nuts is 2 ppm
- German state government lab tested some walnuts from a major retailer
  - Voluntary recall of walnuts from large German retailer due to exceedance of fosetyl-AI MRL (Dec 2014)
  - EU buyers worried about supply.





## Took a lot of team work for workable solution....

- For 2015 growing season, notified growers not to use!
  - The California tree nut industries along with the EU trade and U.S. government raised these concerns with the EU, which led to the EU setting a temporary MRL of 75 ppm for tree nuts and several other crops in 2014
  - TASC grant from USDA-FAS for residue trials
    - IR-4 conducted the trials
  - Trade in EU lobbied for tree nut MRL extension
    - Granted until March 2019
  - Dossier with a proposed tree nut MRL submitted Sept 2016
  - EU set a new MRL at 500 ppm as fosetyl-AI in early 2018.
- ➔ Other crops been caught in the same situation





## Considerations for exempt/ no residue situations

- For growers/processors better to have some evidence that it has been reviewed, than not.
  - A lot of new players who are assuming they don't need to worry about international regulatory frameworks
- ➔ Disharmony can cause significant trade disruption!!!

Actions to consider:

- Understand opportunities for international harmonization
  - Be engaged now before different definitions of biopesticides, exemption from tolerances, data requirements become entrenched.
  - Currently no place for something that doesn't leave a residue within the Codex Process, no exemption from tolerance, or something similar
  - Global database of status of exempt compounds – currently most don't show up in the MRL databases because don't have residues/don't need MRL.
- ➔ No good way to show a buyer something is OK.

# Thank you!

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