



# Growing Organic

December 8, 2015





**Harbinder Maan,  
Almond Board**

# Speakers

Harbinder Maan, Almond Board (Moderator)

Joanna Clifton, Innova Market Insights

Kelly Damewood, California Certified Organic  
Farmers

Franz Niederholzer, UCCE - Sutter, Yuba, Colusa  
Counties





**Joanna Clifton,  
Innova Market Insights**

# Growing Organic



Joanna Clifton  
**Innova Market Insights**

# The Innova new product database

>70 countries



tracking New Product Launches = NPLs

# The bridge between R&D and Marketing



**R&D:** science, patents, technology, formulation, ingredients, regulation

**Marketing:** products, trends, consumer insights, category monitoring, news, packaging



## Table of contents

- From clean to clear label
- Organic growth for Clear Label
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- Conclusions & insights

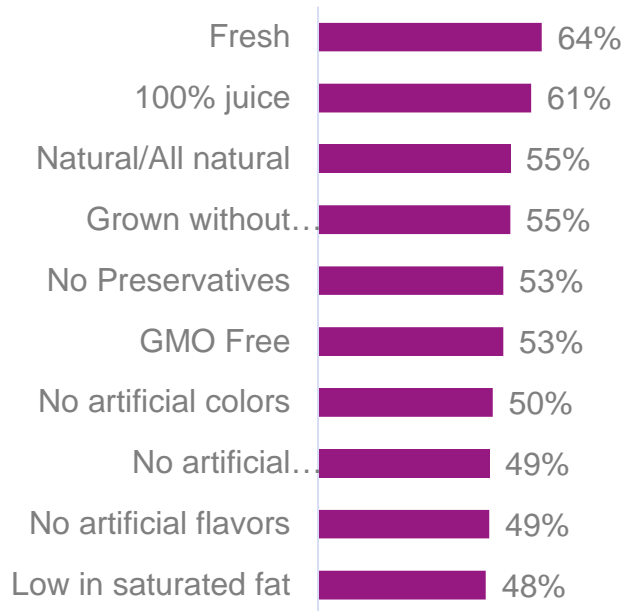


The image features a dark blue, rounded rectangular background. Overlapping the top right corner is a light blue shape, and overlapping the bottom right corner is a purple shape. The text "From clean to clear label" is centered in white.

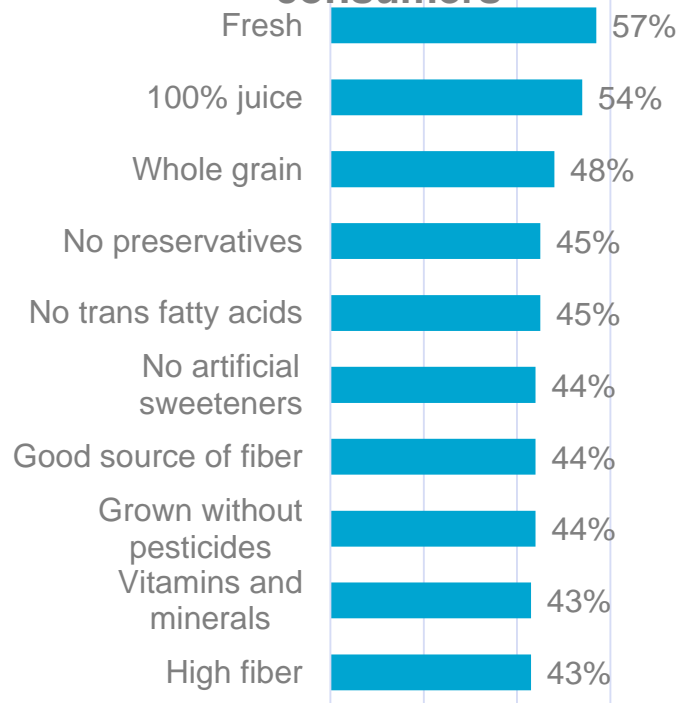
**From clean to clear label**

## Consumers look for fresh and less processed claims

### Top-10 claims for European consumers



### Top-10 claims for American consumers

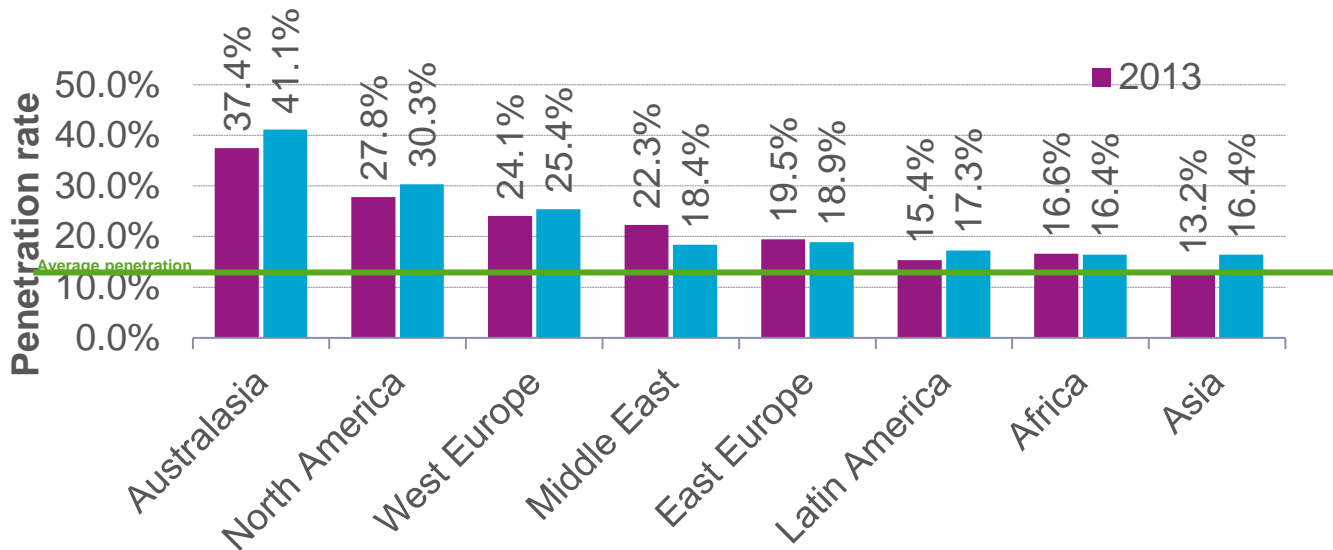


\* When shopping for foods, how important are the following statements on labels? Response: very/extremely

## Market penetration of clean label claims by region

- Clean label related claims show the highest market penetration in Australasia and North America.

Penetration of clean label claims\* in product launches tracked by region



\*Clean label related claims included: Natural, no additives/preservatives, organic

# Clean label has moved past being a trend



## From clean to clear label

### Claims

#### Moving beyond clean label

##### *From claim to information*

“Natural” claims are not defined by regulation and confuse consumers. In response, some manufacturers and retailers have chosen to show lists of what ingredients are (not) in their products.

*“Absolutely nothing artificial. No MSG, artificial flavors or colors. Seasoned with real food ingredients. Made using only sunflower oil.”*



### Ingredient labeling

#### More transparency

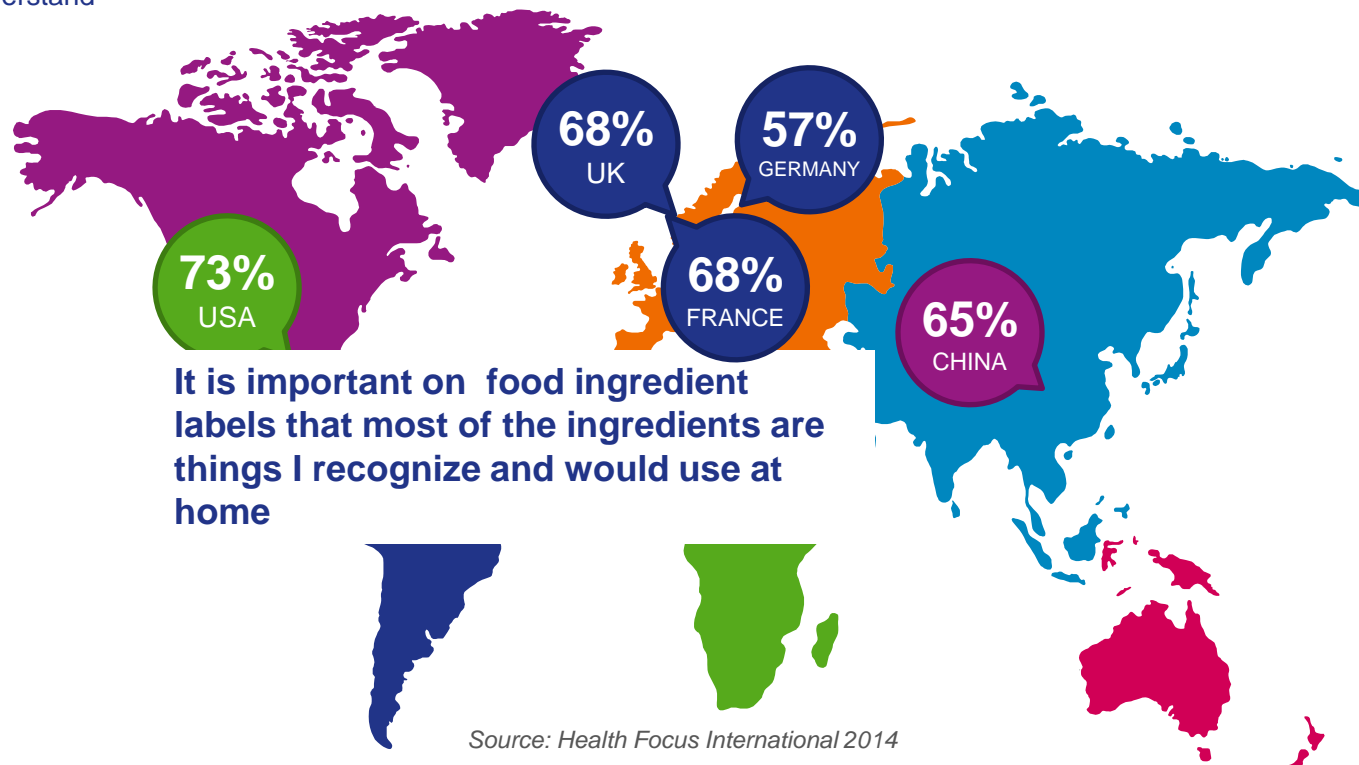
##### *Consumers want to understand*

Consumers want to know where ingredients come from (*source of origin*) and understand what is in the products they eat (*understandability*).

*Ingredients: Select vegetables in variable proportion (parsnips, sweet potatoes, beetroot), sunflower oil, sea salt.*

## Consumers look for products they understand

- **37% of European respondents report decreased consumption of processed foods.**
  - 86% of European consumers consider food and beverages processed when they have ingredients they don't recognize or understand



Source: Health Focus International 2014

# Becoming more *transparent* towards consumers

- More and more manufacturers, retailers and QSRs are choosing to be transparent about their sourcing *and* production processes.

## From claim to information

As worries regarding ingredients in certain processed foods spread on social media, manufacturers fight back with transparency.



**Our food. Your questions.**

**Beverages**      **Desserts & Shakes**

Do you add dye to your shakes or frappés?  
Yes. Our shakes and frappés contain food-safe coloring... [more »](#)

Do you use real apples in your apple pie?  
Absolutely - real diced apples. The exact variety... [more »](#)

## HOW OUR PRODUCE RATING SYSTEM STACKS UP

Our ratings for produce and flowers are based on standards you won't find anywhere else. In order to earn a Good rating, a farm must take major steps to protect human health and the environment. A Better rating indicates advanced performance, and a Best rating indicates exceptional, industry-leading performance.



| UNRATED  | GOOD  | BETTER  | BEST  |
|--|---|---|---|
| <ul style="list-style-type: none"> <li>Not yet rated in key areas of sustainability</li> </ul> | <ul style="list-style-type: none"> <li>18 farming practices to protect air, soil, water and human health</li> <li>No Whole Foods Market prohibited pesticides</li> <li>GMO transparency</li> <li>No irradiation</li> <li>No biofuels</li> </ul> | <ul style="list-style-type: none"> <li>18 farming practices to protect air, soil, water and human health</li> <li>No Whole Foods Market prohibited pesticides</li> <li>GMO transparency</li> <li>No irradiation</li> <li>No biofuels</li> <li>Water and energy conservation</li> <li>Advanced soil health</li> <li>Protecting rivers, lakes and oceans</li> <li>Farmworker health and safety</li> </ul> | <ul style="list-style-type: none"> <li>18 farming practices to protect air, soil, water and human health</li> <li>No Whole Foods Market prohibited pesticides</li> <li>GMO transparency</li> <li>No irradiation</li> <li>No biofuels</li> <li>Water and energy conservation</li> <li>Advanced soil health</li> <li>Protecting rivers, lakes and oceans</li> <li>Farmworker health and safety</li> <li>Protecting bees and butterflies</li> <li>Industry leadership on pest management and environmental protection</li> </ul> |

**WHOLE FOODS MARKET**



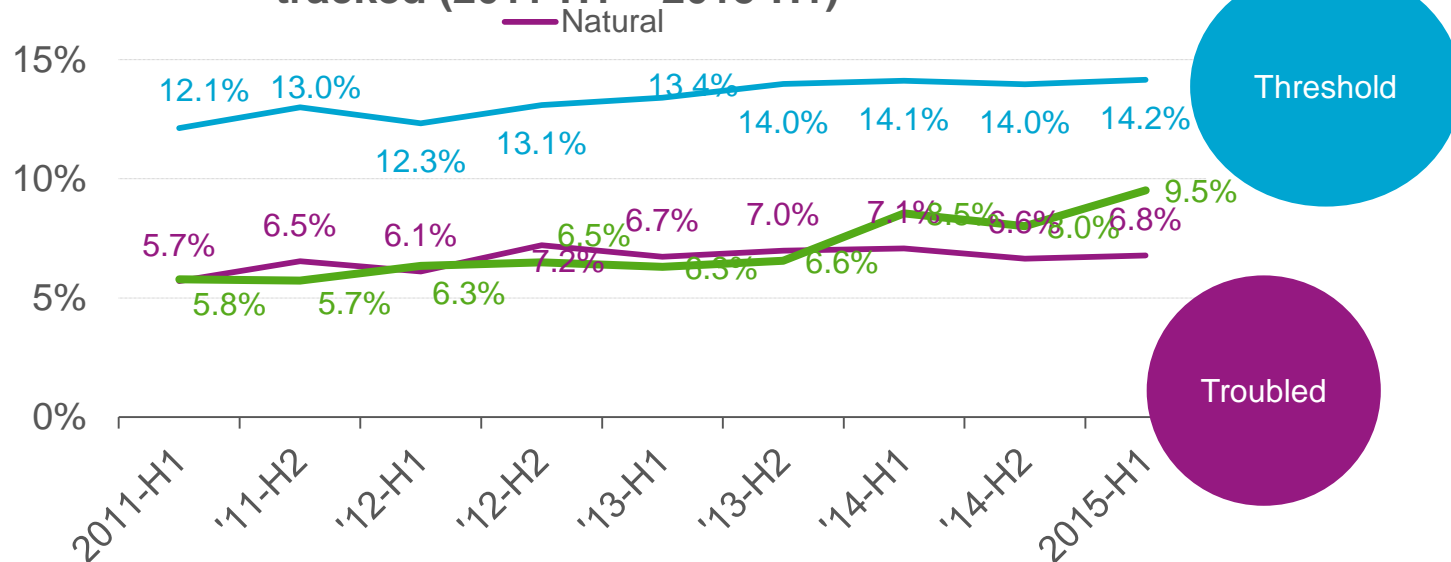
**Organic claims growth for Clear Label**



## Development of clean label related claims over time

- No additives/preservatives and natural claims are stabilizing.
- Organic claims experienced significant growth and surpassed natural claims.

Market penetration of clean label related claims\* in global F&B new product launches tracked (2011-H1 – 2015-H1)





## Food

[Home](#) > [Food](#) > [News & Events](#) > [Constituent Updates](#)

Constituent Updates

# FDA Requests Comments on Use of the Term "Natural" on Food Labeling

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### Constituent Update

November 10, 2015

Because of the changing landscape of food ingredients and production, and in direct response to consumers who have requested that the FDA explore the use of the term "natural," the agency is asking the public to provide information and comments on the use of this term in the labeling of human food products.

The FDA is taking this action in part because it received three Citizen Petitions asking that the agency define the term "natural" for use in food labeling and one Citizen Petition asking that the agency prohibit the term "natural" on food labels. We also note that some Federal courts, as a result of litigation between private parties, have requested administrative determinations from the FDA regarding whether food products containing ingredients produced using genetic engineering or foods containing high fructose corn syrup may be labeled as "natural."

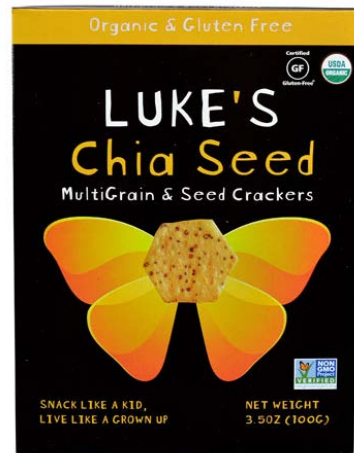
Although the FDA has not engaged in rulemaking to establish a formal definition for the term "natural," we do have a longstanding policy concerning the use of "natural" in human food labeling. The FDA has considered the term "natural" to mean that nothing artificial or synthetic (including all color additives regardless of source) has been included in, or has been added to, a food that would not normally be expected to be in that food. However, this policy was not intended to address food production methods, such as the use of pesticides, nor did it explicitly address food processing or manufacturing methods, such as thermal technologies, pasteurization, or irradiation. The FDA also did not consider whether the term "natural" should describe any nutritional or other health benefit.

Specifically, the FDA asks for information and public comment on questions such as:

- Whether it is appropriate to define the term "natural,"
- If so, how the agency should define "natural," and
- How the agency should determine appropriate use of the term on food labels.

The FDA is accepting public comments beginning on November 12, 2015. To electronically submit comments to the docket, visit <http://www.regulations.gov> and type FDA-2014-N-1207 in the search box.

# Organic is *on trend* and is becoming established in the mainstream globally

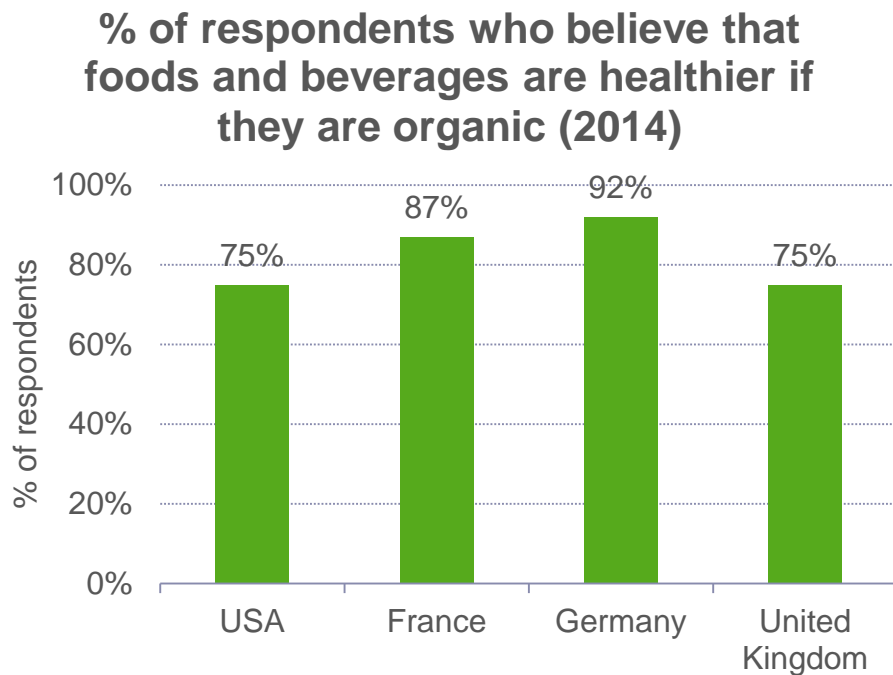


# Kroger proves that organic is more than a clean niche

- Kroger's Simple Truth range generated US\$1.2 billion in sales in 2014.



## Consumers associate organic with healthier products



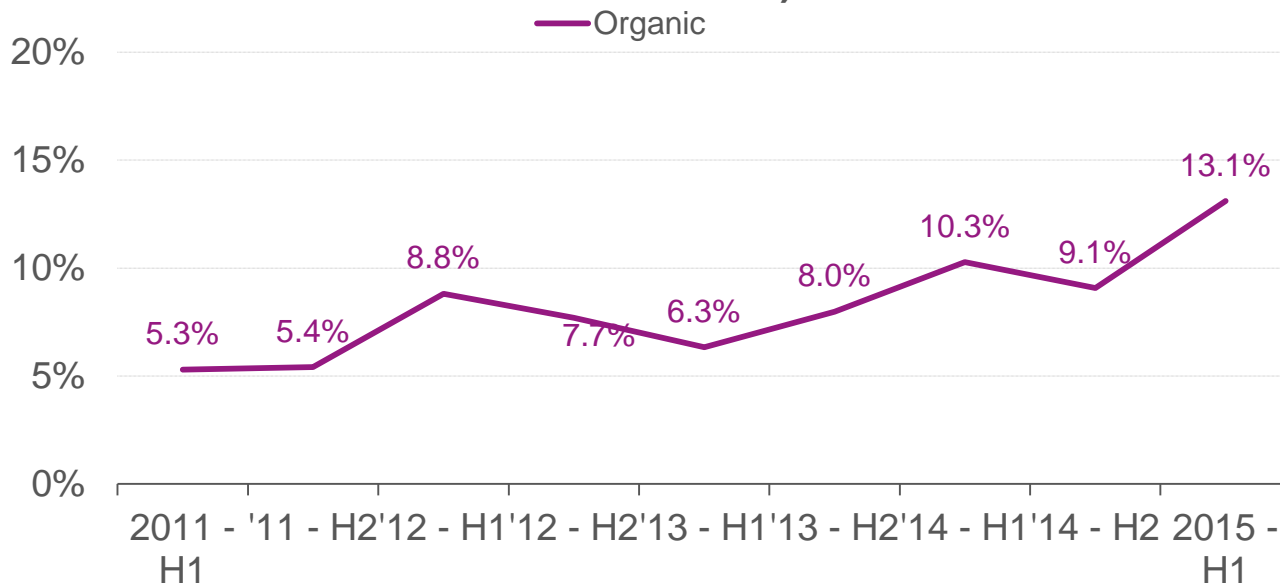


**Organic growth for Almonds**

## Organic shows growth for global NPLs with almonds

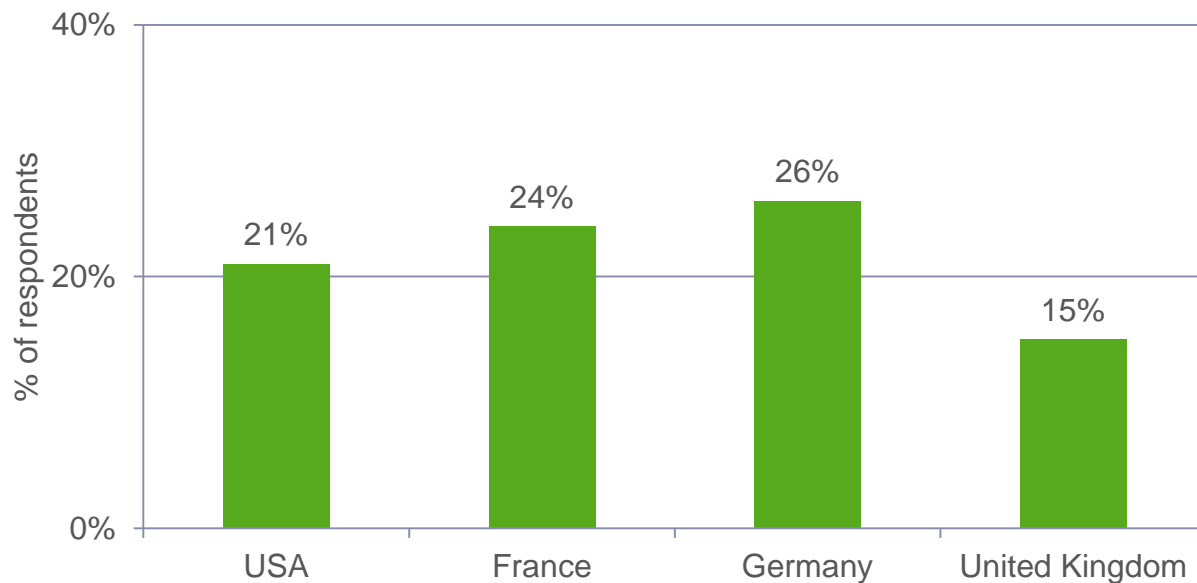
- 13.1% of global product launches with almonds were tracked with an organic claim in 2015-H1 compared to 5.3% in 2011-H1.

Market penetration of organic claims in global new product launches tracked with almond (2011-H1 – 2015-H1)



## Growing interest drives consumption of organic

**% of respondents who state that they have increased their consumption of organic foods and beverages (2014)**



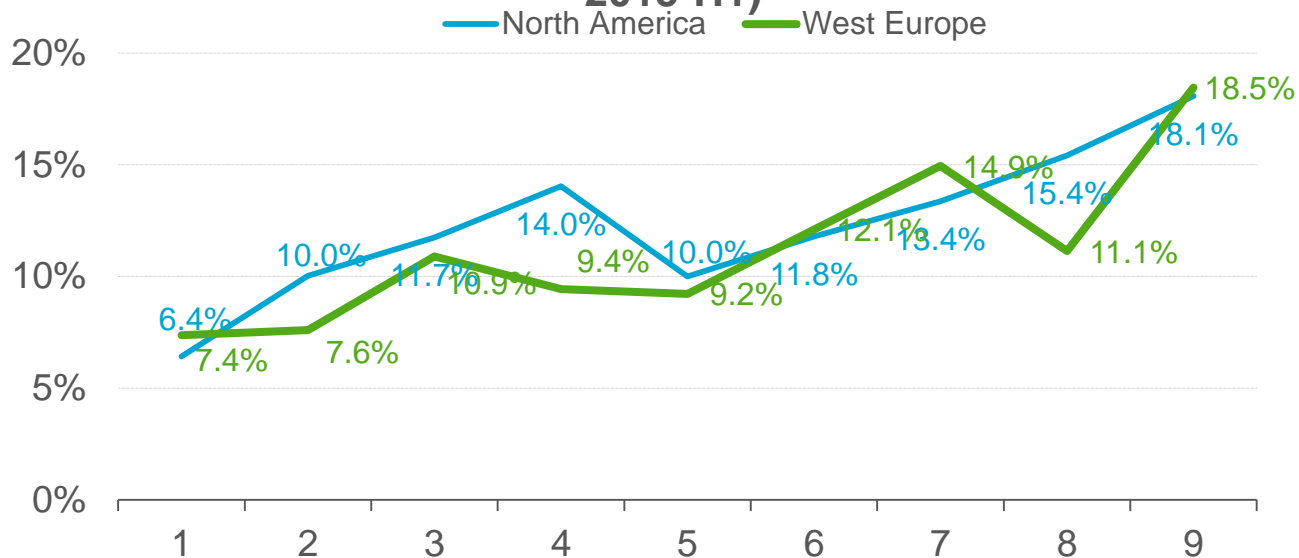
Source: Health Focus International 2014



## North America and Western Europe share leading position

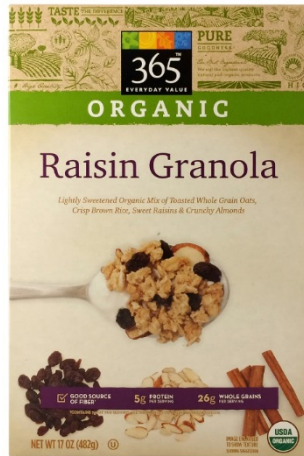
- Western Europe and North America are leading regions for NPL with (organic) almonds, and also in terms of the market penetration of organic claims.

Market penetration of organic claims in new product launches tracked with almonds (2011-H1 – 2015-H1)



## Private label drives organic into mainstream

- Key retailers in North America and West Europe are adding organic products or complete organic brands/ranges to their private label portfolio.



365 Everyday Value Organic Raisin Granola (United States, Oct 2015)



Simple Truth Organic Fruit And Nut Granola Clusters (United States, Oct 2015)



O Organics Honey Nut O's Organic Cereal (United States, Jul 2015)

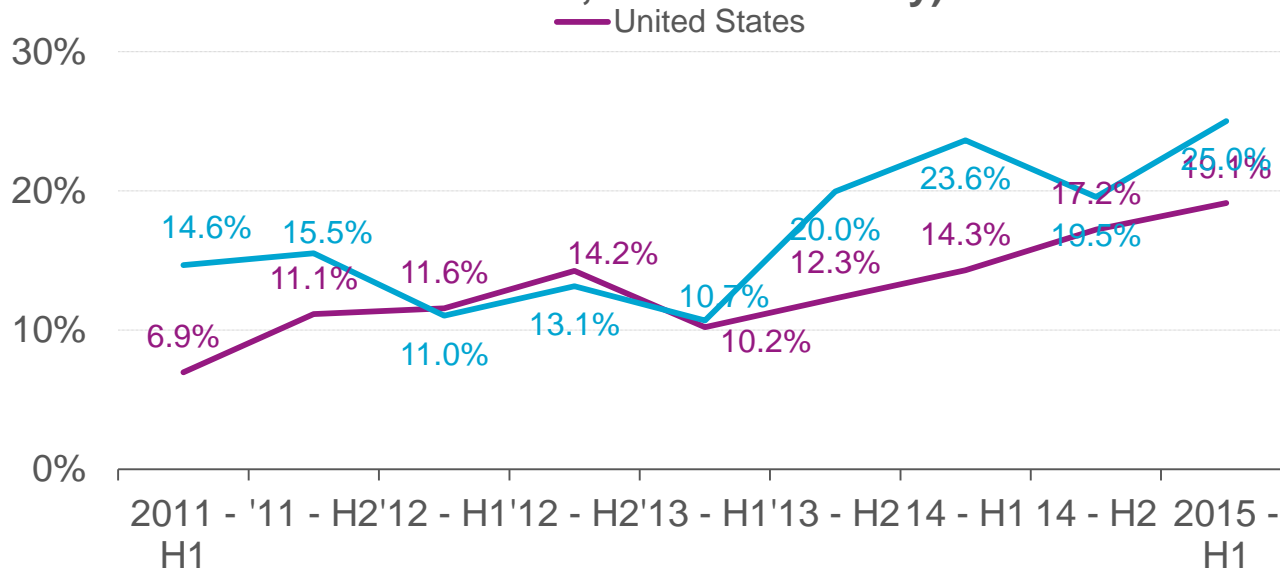


Ah Organic Granola With Cranberry And Almond Baked In Honey (Netherlands, Sep 2015)

## US: 1 out of 5 NPLs tracked with almonds is organic

- US leads NPL with almonds in absolute numbers, followed by Germany.
- Germany shows the highest market penetration of organic claims in NPL with almonds.

### Market penetration of organic claims in new product launches tracked with almonds (2011-H1 – 2015-H1, US vs. Germany)





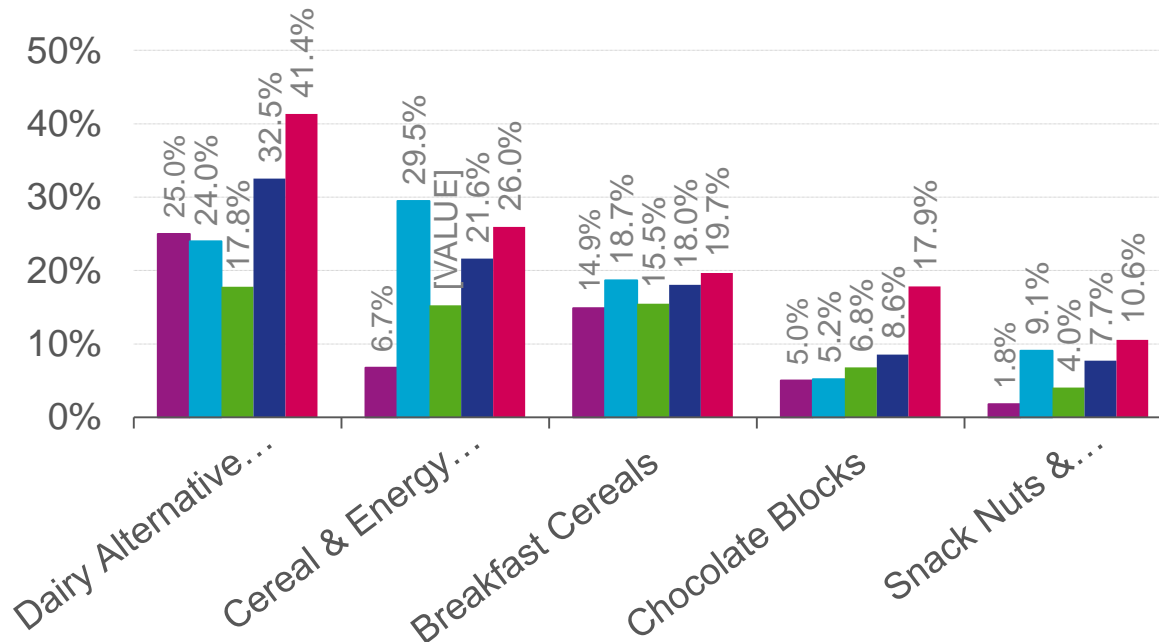
# Organic: Key claim for almond based dairy alternatives

- A growing share of almond based dairy alternative drinks is organic.

## Market penetration of organic claims in top-5 market categories for NPL tracked with almonds

(Global, 2011-H1 – 2015-H1)

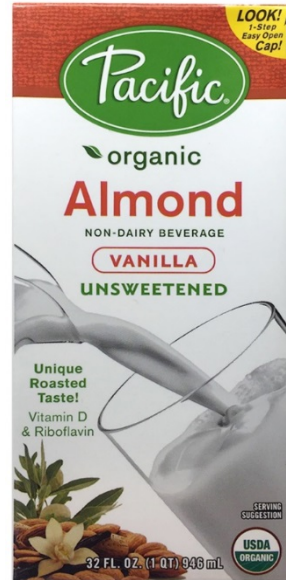
■ 2011 - H1 ■ 2012 - H1 ■ 2013 - H1



# Organic as a marketing platform for almond drinks



Coop Naturaplan  
Mandel Drink:  
Almond Milk Drink  
(Switzerland, Oct  
2015)



Pacific Organic  
Unsweetened Almond  
Non Dairy Beverage  
With Vanilla Flavor  
(United States, Aug  
2015)



Rude Health  
Organic Ultimate  
Almond Drink  
(United Kingdom,  
Oct 2015)





**Conclusions**



## Conclusions & insights

- **From clean to clear label:** Clean label has evolved into the **clear label** platform, with a strong focus on providing more transparency to consumers.
- **Organic growth for clear label:** Products with an “organic” positioning are showing the strongest growth among clean label related claims.
- **Organic considered to be healthy:** Consumers associate organic with health, although the debate about the actual health benefits will continue.
- **Organic growth for almonds:** Organic claims are also growing among new product launches tracked with almonds.
  - ***North America and West Europe share leading position:*** Nearly 1 out of 5 products tracked with almond has an organic claim in the US.
  - ***Significant growth in dairy alternative drinks:*** Organic is leveraged as a marketing platform for almond based dairy alternative drinks.





**Kelly Damewood,  
California Certified Organic Farmers**



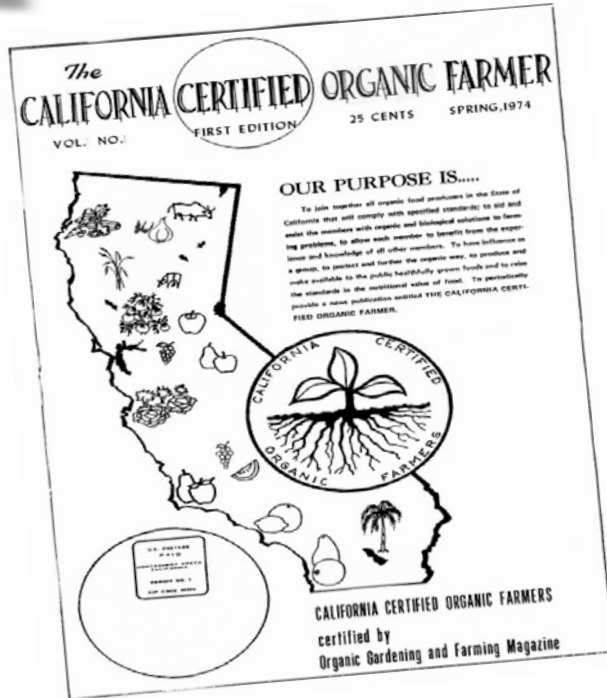
# **CCOF**

## **(California Certified Organic Farmers)**

**Kelly Damewood, Policy Director**



# Who is CCOF?





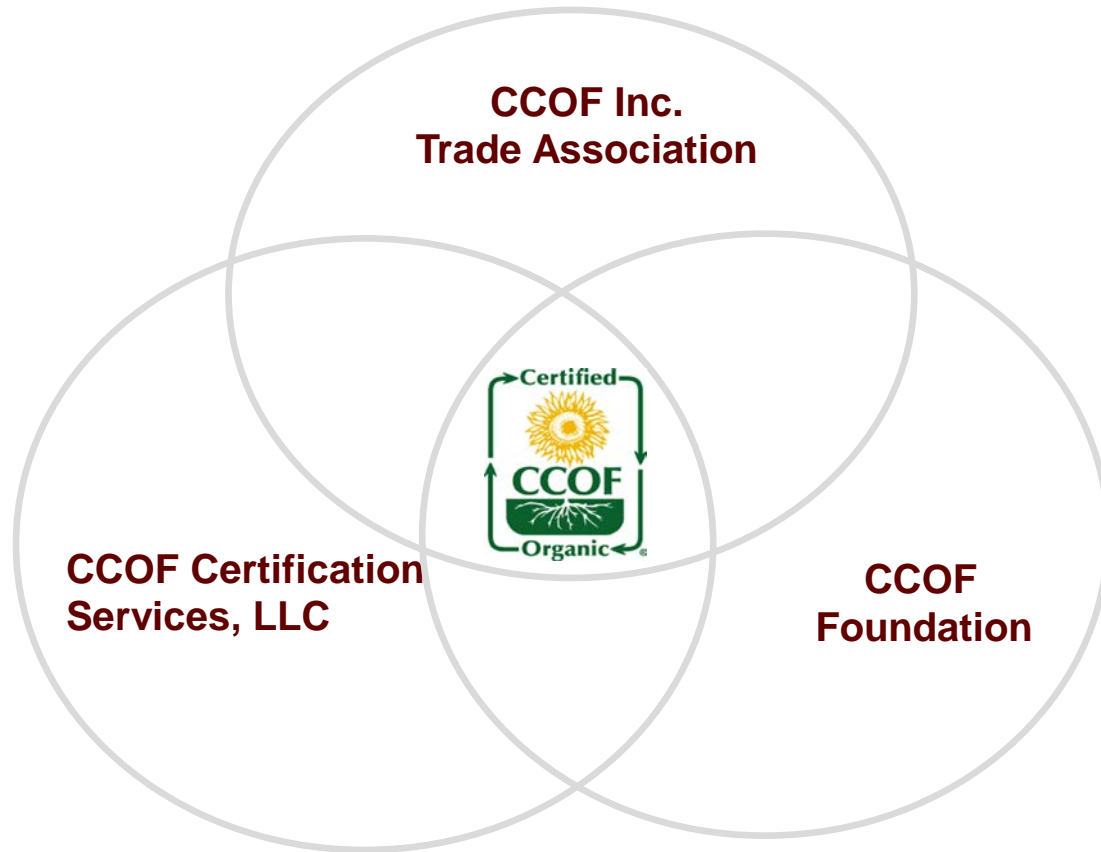
# Mission



To advance organic agriculture for a Healthy World

- Certification
- Education
- Advocacy
- Promotion





# Certification Services, LLC

- Database
- Customer Service
- Transitional program
- Food Safety/ GLOBALG.A.P. certification





# Trade Association

- Organic Standards
- Farm Bill
- State Regulations



# Foundation

1. Organic Training
2. Future Organic Farmer Grant Fund
3. Hardship Assistance
4. Consumer Education



# Who is CCOF?

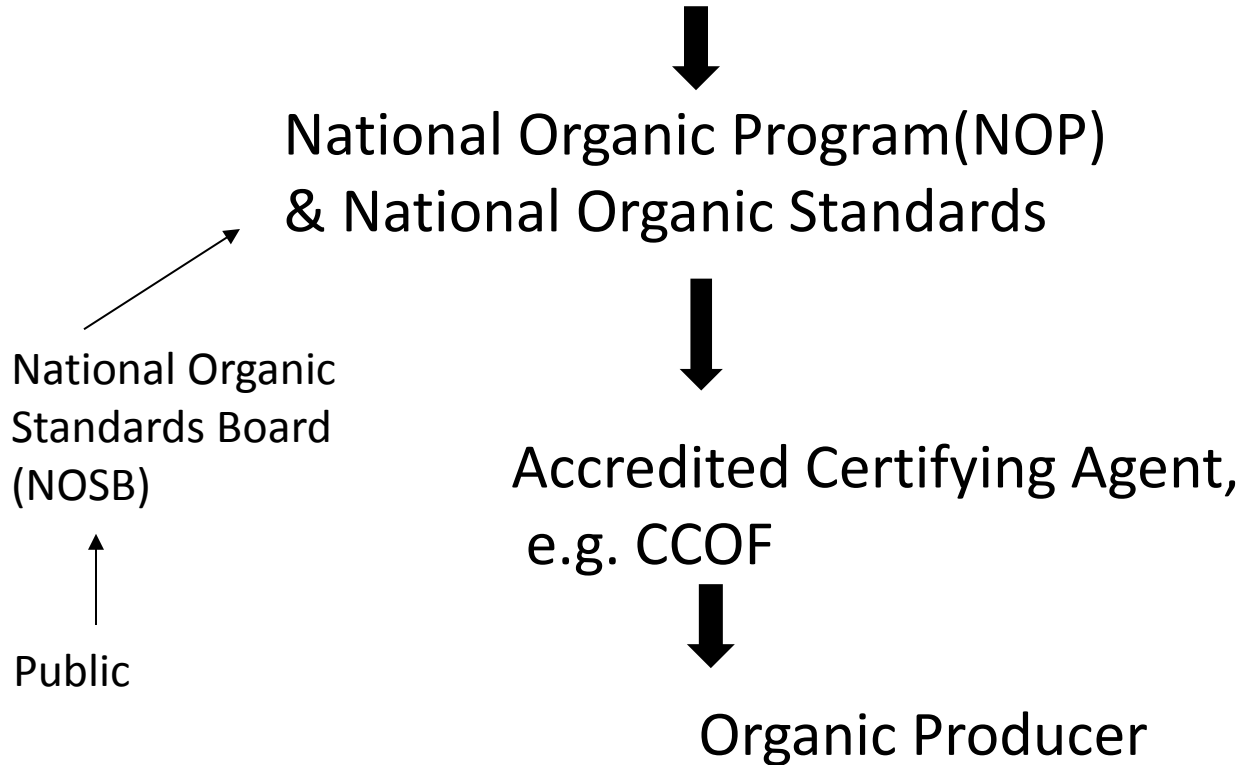


Advancing organic agriculture from all angles



# Organic 101

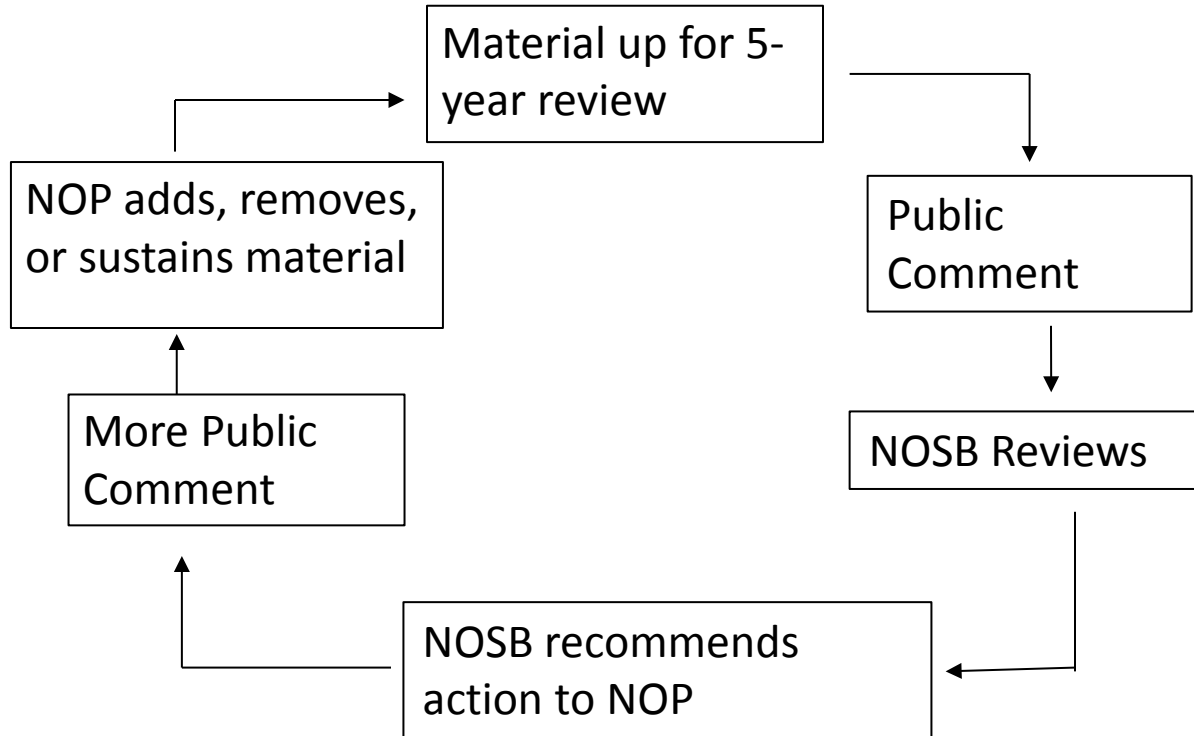
# Organic Food Production Act of 1990



- Healthy Soil
- Biodiversity
- Animal Welfare
- Non toxic Inputs
- No GMOs
- No antibiotics, hormones, steroids



# Organic Materials





# The Organic Checklist



□ Learn the rules

☐ Check your materials

## □ Plan for the 3-year Transition

❑ Develop holistic management practices

Create a recordkeeping system

Check postharvest requirements

Label your organic product

Apply for Organic Cost Share



☐ Create an Organic System Plan (OSP)

Complete your application & inspection

# CCOF Tools

- 10 Steps to Certification
- [ccof.org](http://ccof.org)
- Certified Transitional Program
- Call Jane Wade! 831-423-2263

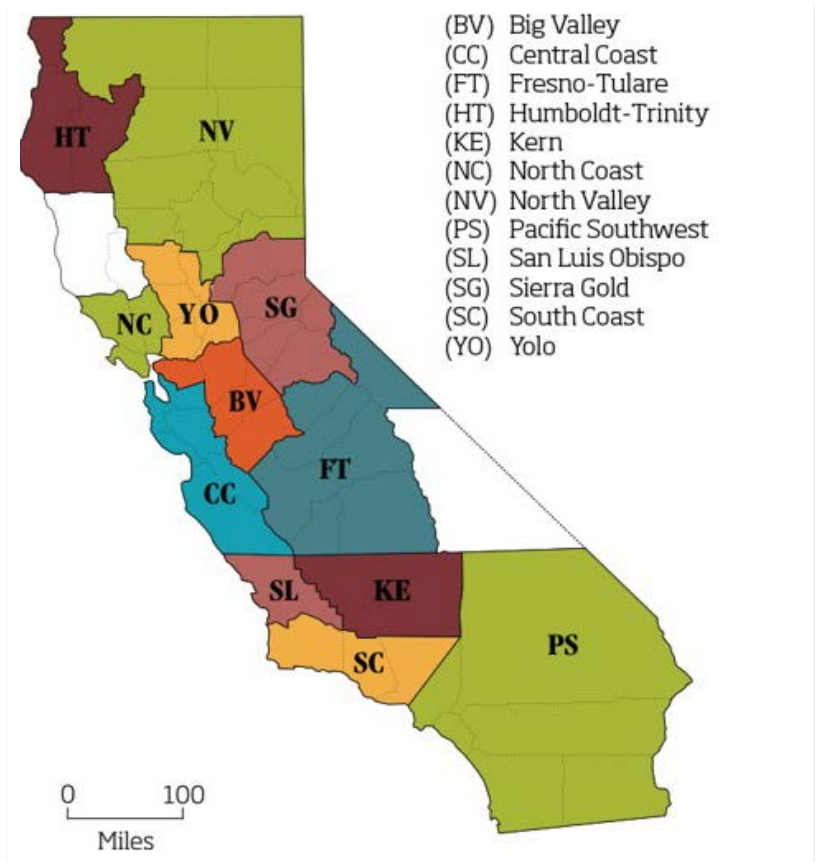
# Other Resources

- USDA Organic Literacy Initiative ([bit.ly/Organic-Literacy](http://bit.ly/Organic-Literacy))
- Organic Materials Review Institute (OMRI, [www.omri.org](http://www.omri.org))
- Washington State Department of Agriculture (WSDA, [bit.ly/WSDA-Materials](http://bit.ly/WSDA-Materials))
- ATTRA – The National Sustainable Agriculture Information Service ([www.attra.ncat.org](http://www.attra.ncat.org))
- Organic Certification Cost Share Programs ([bit.ly/CostShare](http://bit.ly/CostShare))
- Organic Trade Association’s How to Go Organic ([www.howtogoorganic.com](http://www.howtogoorganic.com))
- eOrganic ([bit.ly/eOrganic](http://bit.ly/eOrganic))
- Natural Resources Conservation Service (NRCS, [bit.ly/N-R-C-S](http://bit.ly/N-R-C-S))
- National Association of Conservation Districts ([bit.ly/Conservation-Districts](http://bit.ly/Conservation-Districts))
- Agricultural Cooperative Extension System ([bit.ly/Ag-Coop-Extension](http://bit.ly/Ag-Coop-Extension))



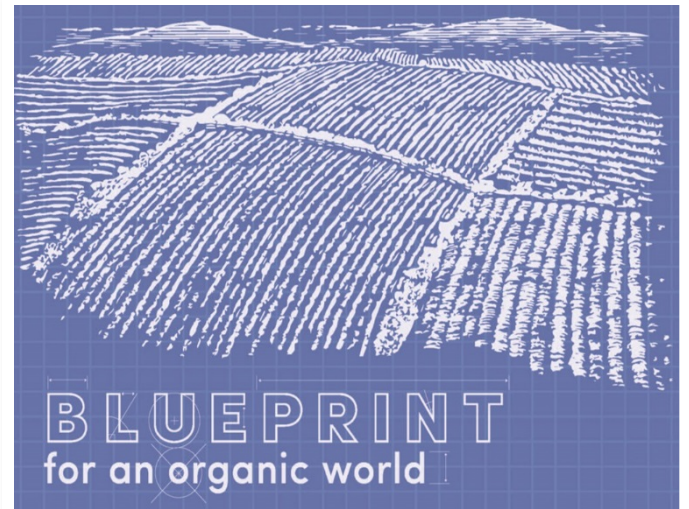
# Connect with Organic Producers

# CCOF Chapters



# 2016 CCOF Annual Conference

Sheraton Grand  
Sacramento Hotel,  
February 29, 2015



<https://www.ccof.org/blog/blueprint-organic-world-2016-annual-meeting-and-conference>

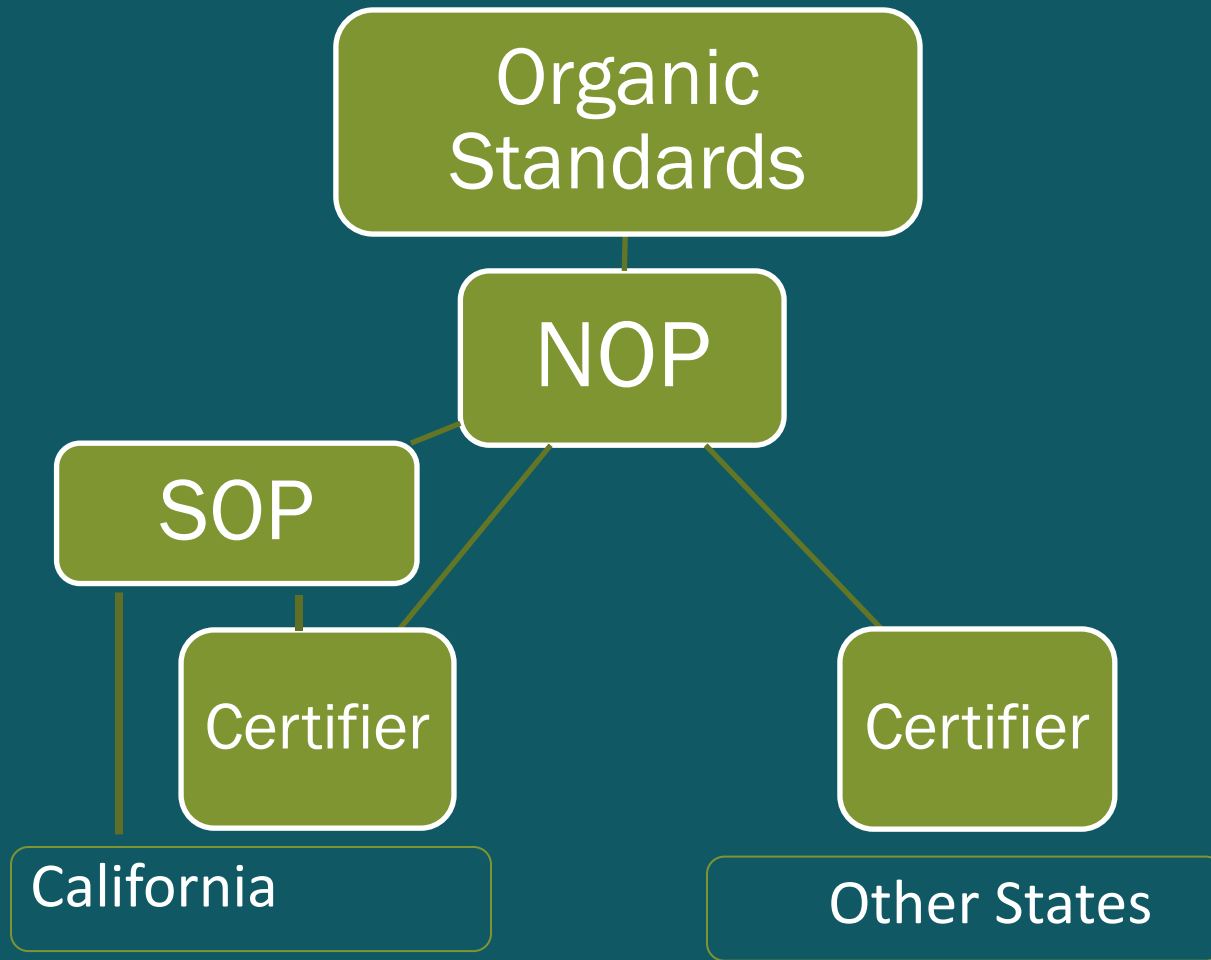
# Support the **Fair Organic Farming Act**



# Update California's State Organic Law

California has the  
*only* State Organic  
Program





# California Organic Producers

1. Pay more fees
2. Complete more paperwork
3. Comply with more regulations

# The Fair Organic Farming Act

Prohibit Fees and  
Registration on Certified  
Organic Producers

Create Opportunities for  
the California Department  
of Food and Agriculture to  
partner with Organic.



Organic  
Standards

NOP

Certifier

California

Certifier

Other States

# So what next?

1. Reach out to Jane Wade, [jwade@ccof.org](mailto:jwade@ccof.org).
2. Connect with organic producers.
3. Support the Fair Organic Farming Act.



## **Kelly Damewood, Policy Director**

[kdamewood@ccof.org](mailto:kdamewood@ccof.org)

831-346-6254

## **Jane Wade, Applicant Support**

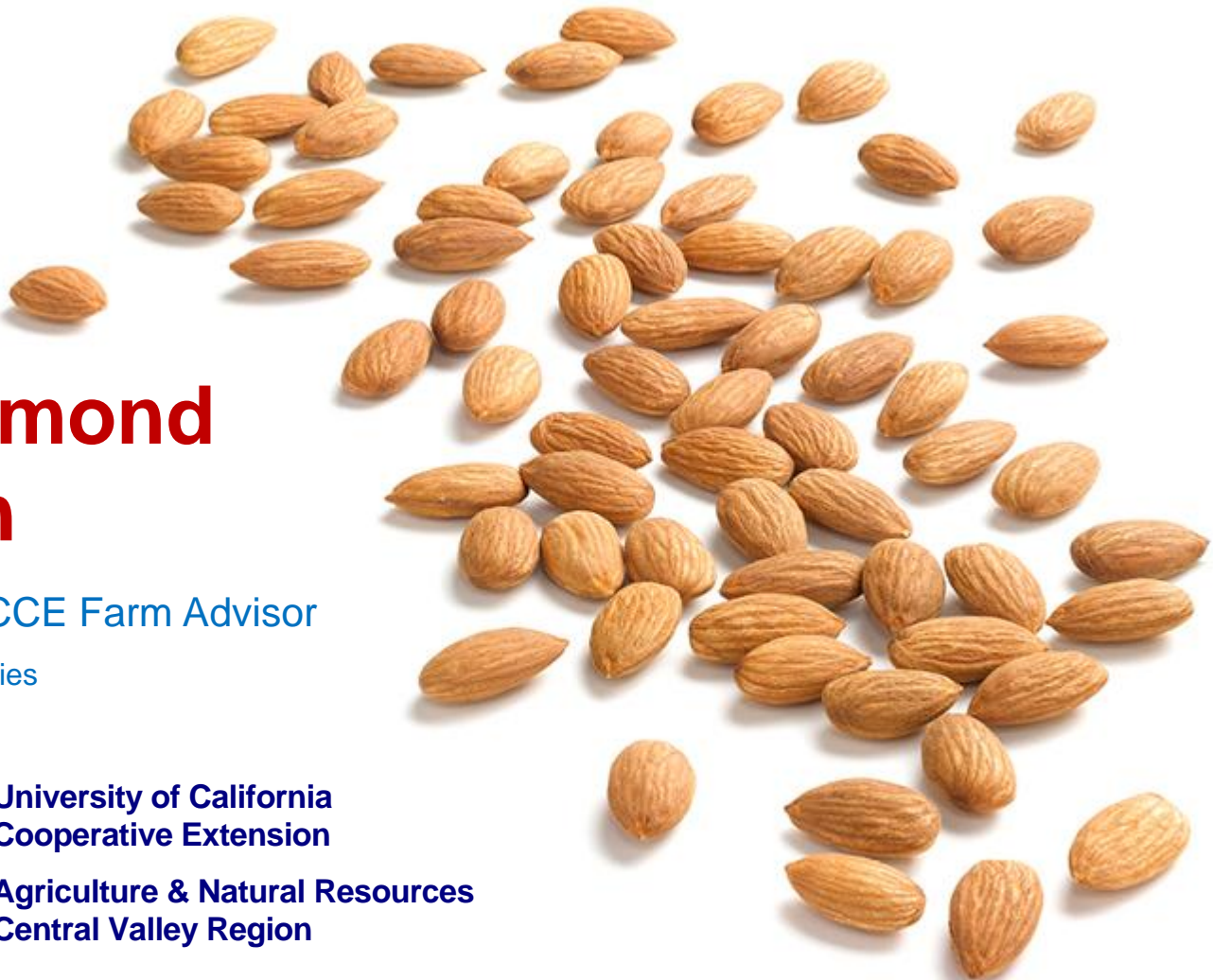
[jwade@ccof.org](mailto:jwade@ccof.org)

831-423-2263





**Franz Niederholzer,  
UCCE - Sutter, Yuba, Colusa Counties**



# Organic Almond Production

Franz Niederholzer, UCCE Farm Advisor

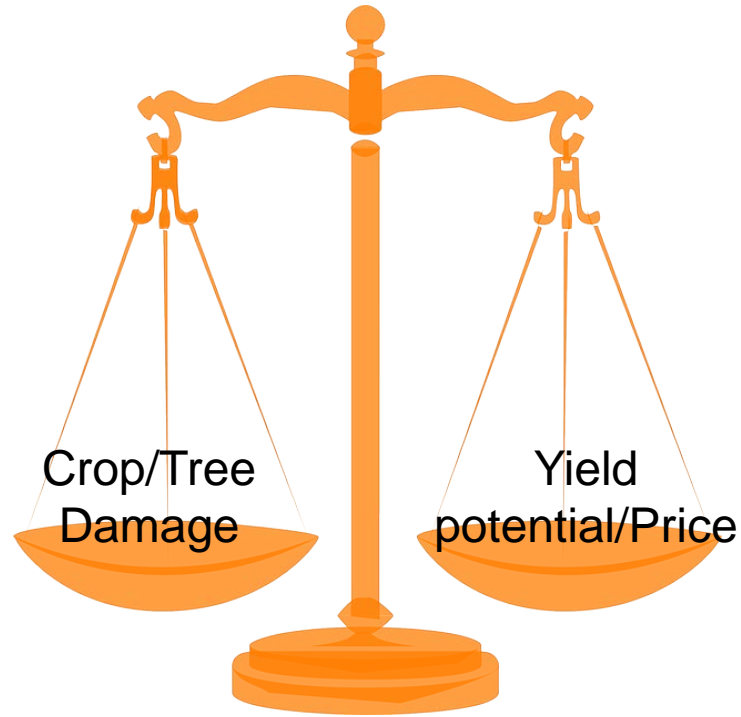
Colusa and Sutter/Yuba Counties



University of California  
Cooperative Extension

Agriculture & Natural Resources  
Central Valley Region

# Getting into organic almond production...





# Getting into organic almond production...



[www.nytimes.com](http://www.nytimes.com)



# Organic farmers have a limited toolbox.





## Getting into organic almond production...

Start from scratch (plant new orchard)?

Or

**Transition an existing orchard from conventional to organic?**

## **Transition decision: Key points to consider**

- **Are you ready for a challenge?**
- **Is your operation/staff/PCA ready for a challenge?**
- **Do you have disease sensitive varieties?**
- **Do you have late harvesting varieties?**
- **What's your rootstock?**
- **How isolated is your orchard from other pest sources?**



# Transition decision: Key points to consider

| Disease              | Butte | Carmel | Fritz | Mission | Monterey | Non-Pareil | Padre | Sonora | Ruby |
|----------------------|-------|--------|-------|---------|----------|------------|-------|--------|------|
| Brown Rot            | VS    | VS     | S     | SR      | S        | SR         | S     | VS     | VS   |
| Anthracoese          | S     | S      | VS    | S       | VS       | SR         | S     | --     | --   |
| Shot hole            | S     | S      | S     | S       | --       | VS         | S     | S      | S    |
| Alternaria leaf spot | VS    | VS     | VS    | S       | SR       | VS         | SR    | VS     | S    |
| Scab                 | S     | VS     | S     | S       | S        | S          | --    | VS     | VS   |

VS= very susceptible S= susceptible SR = somewhat resistant -- = no information





# Transition decision: Key points to consider



# **Organic almond production is not conventional**

- **Going from conventional, micro-irrigated almonds to organic is challenging.**
- **Fertigating with organic fertilizers can be challenging**
- **Get ready for fertilizer sticker shock**
- **No effective controls for summer disease (except rust)**
- **No fumigation options**
- **No cost-effective organic herbicides.**

# Case study: Organic almond production from the ground up at Nickels Soil Lab. Arbuckle, CA



# **Organic demo block planted at Nickels in 2008.**

- **Site: Class 2-3 soil on rolling terrain, west of I-5 near Arbuckle, CA**
- **Planted by John Edstrom, Bill Krueger and Stan Cutter.**
- **Lovell rootstock; 75% NP & 25% Fritz. 16' X 22' planting.**
- **Every 4<sup>th</sup> tree in every row is a Fritz. Every NP has 2 Fritz adjacent.**
- **Double-line buried drip irrigation. No Treflan in organic hose.**
- **Not certified organic, but all practices/materials are certified organic.**
- **Half of the organic demo trees were started conventional and transitioned to organic, half were started as organic.**

# Program to date...



## Program to date...

- **Weed control by propane burner and mowing. Weed cloth tested, but abandoned in 2011.**
- **Nutrition via unincorporated compost until 2012, then switched to injected 4-0-2. Plugging has been an issue.**
- **Summer disease control improved starting in 2012 with summer sulfur sprays – also helped control mites. [2011 -2015 were dry years.]**

# Good production under organic management has been achieved after rust controlled in 7<sup>th</sup> leaf.

| Leaf                  | Year | Conventional (lbs./acre) | Organic (lbs./acre) |
|-----------------------|------|--------------------------|---------------------|
| 4 <sup>th</sup> leaf  | 2009 | 1076                     | 926                 |
| 5 <sup>th</sup> leaf  | 2010 | 1725                     | 859                 |
| 6 <sup>th</sup> leaf  | 2011 | 2358                     | 894                 |
| 7 <sup>th</sup> leaf  | 2012 | 2438                     | 957                 |
| 8 <sup>th</sup> leaf  | 2013 | 2971                     | 2113                |
| 9 <sup>th</sup> leaf  | 2014 | 2450                     | 1528                |
| 10 <sup>th</sup> leaf | 2015 | 2630                     | 2079                |



# Similar NP reject levels possible with good management/location.

| Variety                       | Pickup date   | How many NOW generations | % Worms    |
|-------------------------------|---------------|--------------------------|------------|
| <b>Organic Nonpareil</b>      | <b>Aug 26</b> | <b>3</b>                 | <b>1.5</b> |
| <b>Conventional Nonpareil</b> | <b>Aug 26</b> | <b>3</b>                 | <b>1.6</b> |



# Late harvesting varieties are more vulnerable than earlier harvesting varieties.

| Variety           | Pickup date | How many NOW generations? | % Worms |
|-------------------|-------------|---------------------------|---------|
| Organic Nonpareil | Aug 26      | 3                         | 1.5     |
| Organic Fritz     | Oct 6       | 4                         | 4.2     |

# Success and challenges of organic production (at this good organic location)

| Management   | Success | Challenge |
|--------------|---------|-----------|
| Disease      | X       |           |
| Insect/mite  | X       |           |
| Weed         |         | X (?)     |
| Nutrient (N) |         | X         |

What will El Nino do  
to this "Success"?



# Weed management in organic production is challenging.

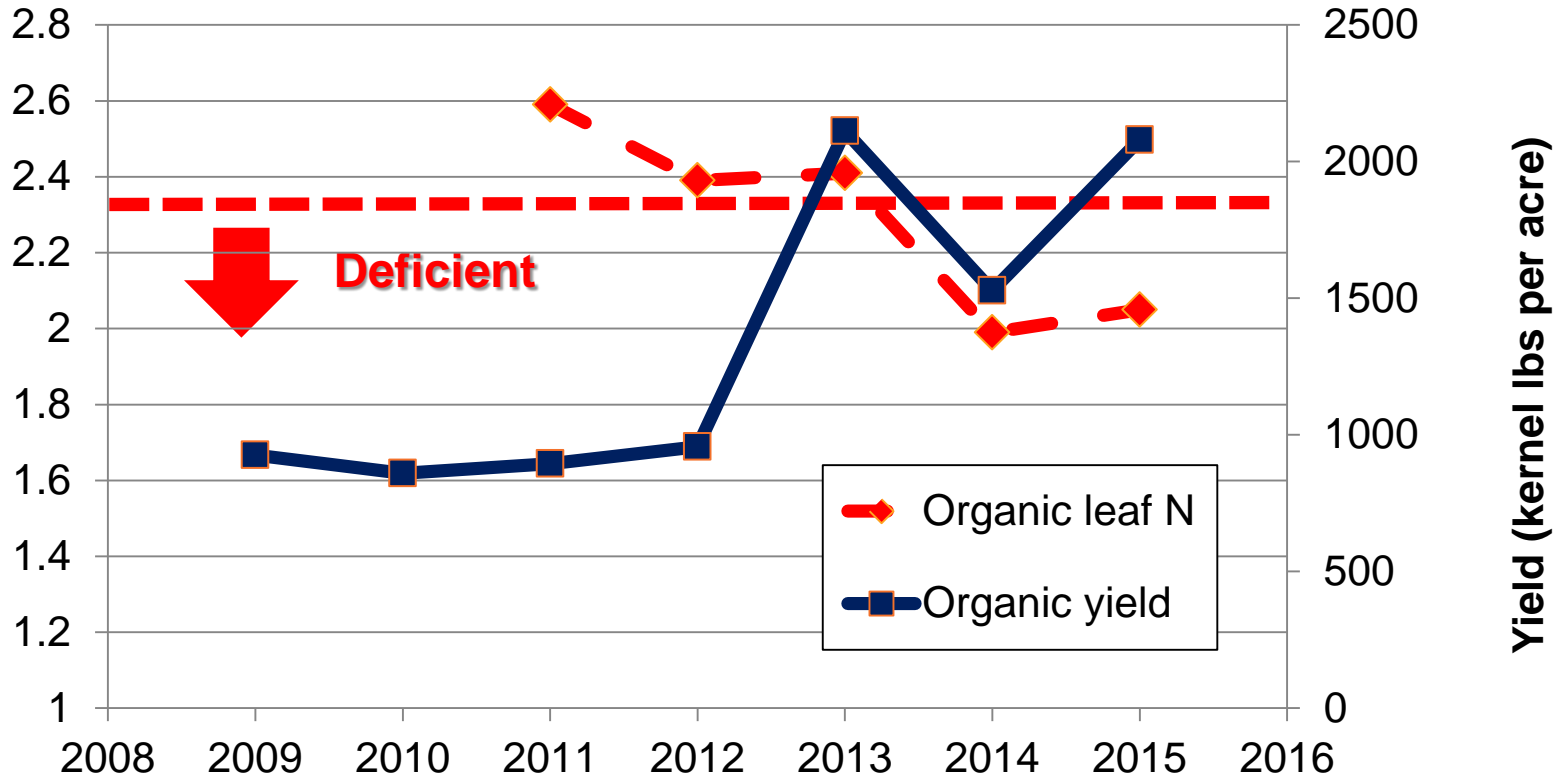




# Propane burners help control weeds in the tree row.



# Increased yield can challenge fertility program(s)



# Getting into organic almond production...

**Start from scratch (plant new orchard)?**

Or

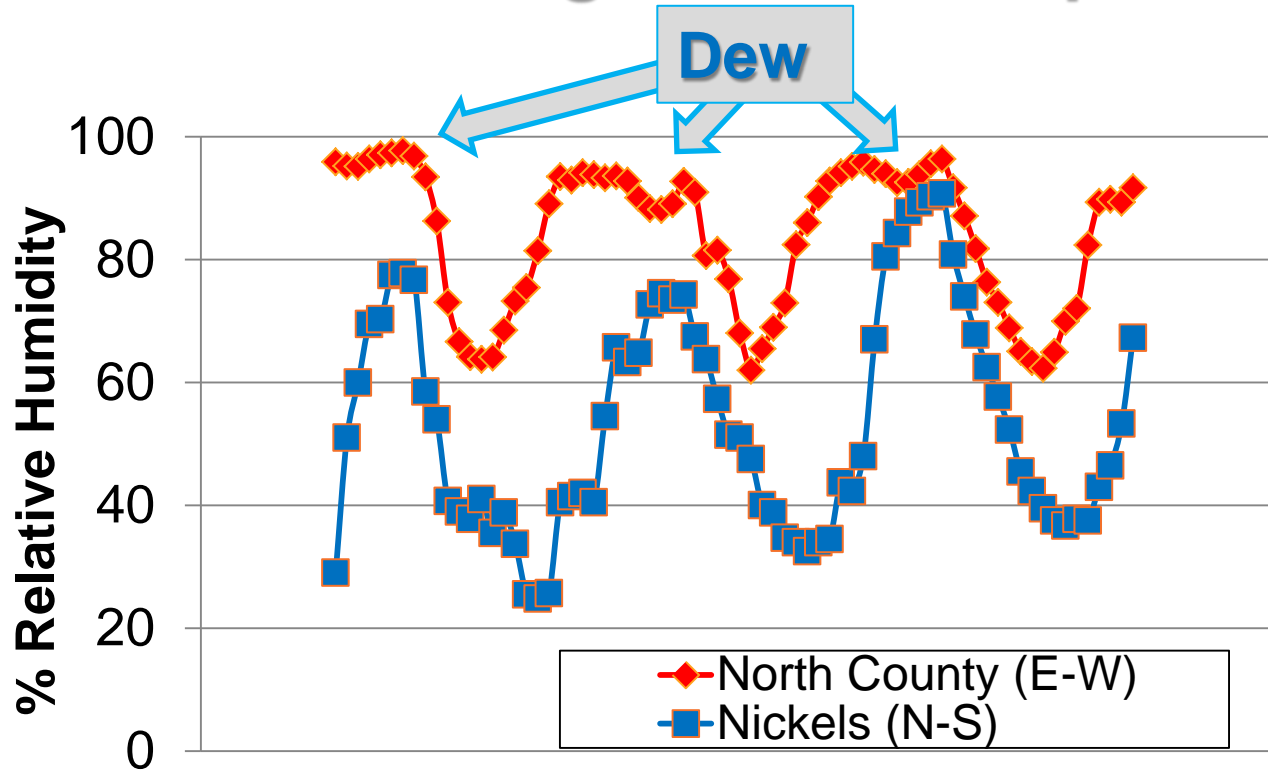
Transition an existing orchard from  
conventional to organic?



## **Location, varieties and orchard system are key to successful organic almond production.**

- **Not all good locations for almond production are good locations for organic almond production.**
- **Plant trees in the direction of prevailing winds**
- **Avoid late harvesting and/or disease sensitive varieties**
- **Shelter organic blocks within conventional blocks?**
- **Consider organic almond farming a different crop from conventional production.**
- **Weather can be the wild card.**

# Not all good locations for almond production are good locations for organic almond production.





**Know the risks, know your operation. Don't make long term decisions based on short term information.**

**Thank you.**

