

# The USDA National Organic Plan

**Modified from** F.J. (Chip) Sundstrom, California Crop  
Improvement

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# Organic Sales Demographics

- Households with annual incomes over \$75K lead in making organic purchases
- Western US consumers are dominant purchasers of organic products
  - West 50% of consumers
  - North Central States 30%
  - Northeast 29%
  - South 29%

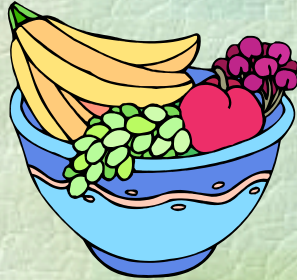


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# Sales Trends (in order)

## Top Fruits

- 🍷 Apples
- 🍷 Peaches
- 🍷 Bananas
- 🍷 Grapes
- 🍷 Strawberries
- 🍷 Cantaloupes
- 🍷 Oranges



## Top Veggies

- 🍷 Tomatoes
- 🍷 Leafy Vegetables
- 🍷 Carrots
- 🍷 Potatoes
- 🍷 Squash
- 🍷 Beans
- 🍷 Celery
- 🍷 Broccoli



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# US Sales Figures and Estimates

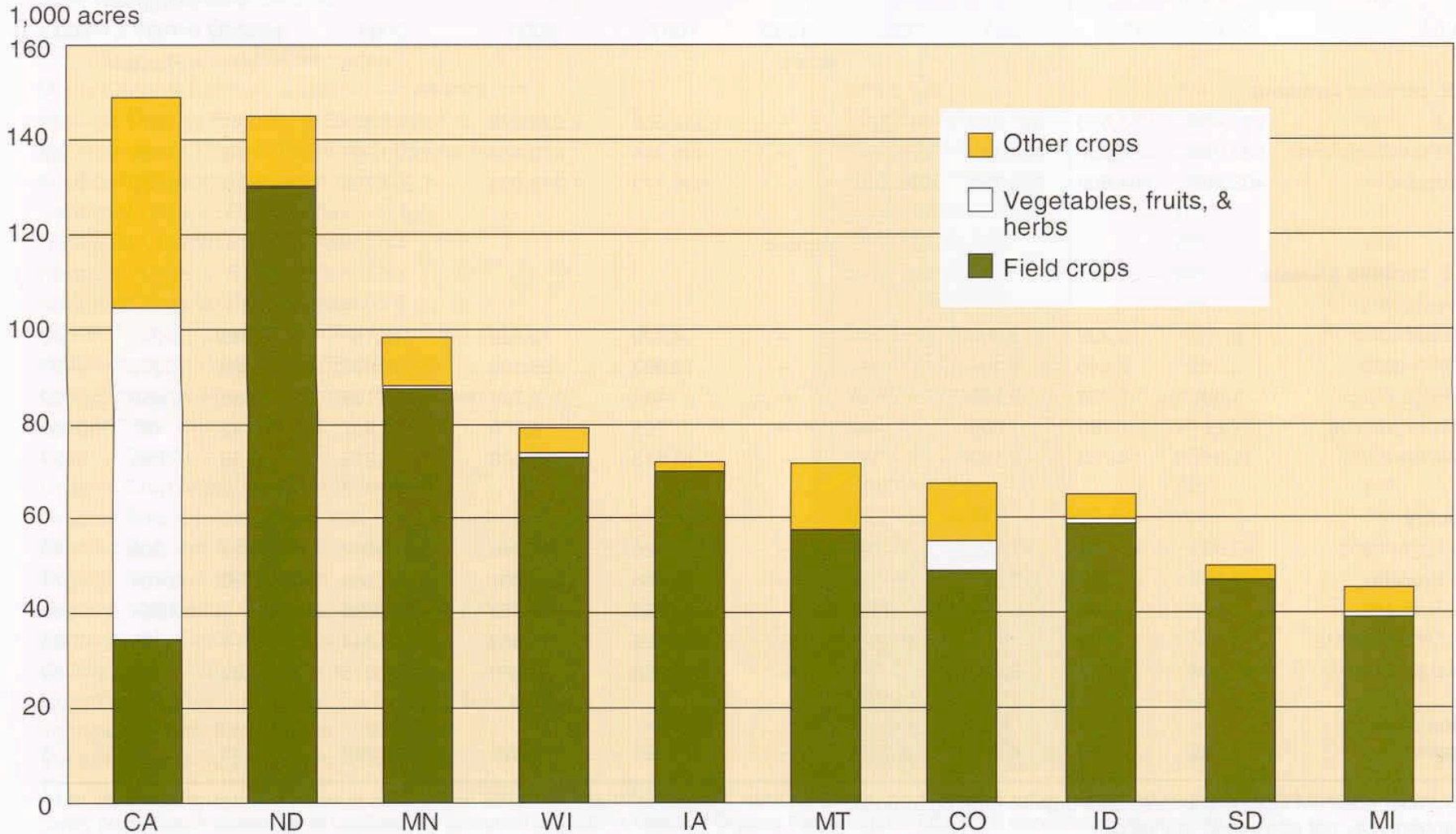
- ☛ 1990 - \$1 billion
- ☛ 1996 - \$3.3 billion
- ☛ 2000 - \$7.8 billion
- ☛ 2005 - \$20 billion (estimated)
- ☛ Organic sales increases have been 20% or more annually since 1990



**In 2001 organic acreage (cropland and pastureland) was 0.3% of U.S. agricultural acreage; >2% for some vegetables (most recent figure available at [ers.usda.gov/publications/aib780a.pdf](http://ers.usda.gov/publications/aib780a.pdf)).  
New report due soon from USDA ERS**

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Figure 1--Certified organic crop acreage, top 10 States, 2001



Source: Economic Research Service, USDA.

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# CA organic acreage and production

	<b>Total (2003) Acres<sup>1</sup></b>	<b>Organic Acres (2004)<sup>2</sup></b>	<b>GE Acres (2004 estimates)<sup>3</sup></b>
<b>Alfalfa</b>		5553	0
<b>Field Corn</b>	530,000	383 (~0.07%)	300,000 (~57%)
<b>Upland Cotton</b>	550,000	273 (~0.01%)	260,000 (~54%)
<b>Gross Value (\$)</b>	31.8 billion	752 million (~ 2%)	

<sup>1</sup> <ftp://www.nass.usda.gov/pub/nass/ca/AgStats/2003cas-all.pdf>

<sup>2</sup> <http://www.cdfa.ca.gov/is/i&c/docs/2004CountyReport.pdf>

<sup>3</sup> Martin Lemon, Monsanto, personal communication.

<sup>2</sup> Sonoma County (2004) had no organic alfalfa or cotton acres, and 0.1 acre of organic field corn valued at \$100

# To be Certified, a Farm Plan must be Approved

- with distinct, defined boundaries/buffers
- with tillage & cultivation practices that maintain & improve soil condition
- with crop rotations, cover crops & application of plant & animal materials for soil fertility management
- with inputs as per National List (§205.601 and 205.602 NOP) & 3 yr. field history



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# Genetic Modification (§ 205.2 NOP) What Are Permitted Methods?

☞ “...include the use of traditional breeding, conjugation, fermentation, hybridization, in vitro fertilization, or tissue culture.”



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# Genetic Modification

(§ 205.2 NOP)

## What Are Prohibited Methods?

☞ “A variety of methods...are not considered compatible with organic production. Such methods include cell fusion, micro- and macro- encapsulation, & recombinant DNA technology (including gene deletion, gene doubling, introducing a foreign gene, & changing the positions of genes when achieved by recombinant DNA technology).”



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*Will an organic farmer automatically lose his accreditation if his crop is found contaminated with a GE crop?*

**No.**

*“As long as an organic operation has not used excluded methods and takes reasonable steps to avoid contact with the products of excluded methods, as detailed in their approved organic system plan, the unintentional presence of the products of excluded methods should not affect the status of an organic product or operation.”*

SOURCE: AMS National Organic Program Q&A



# Tolerances for Organics

[NOP Preamble]

🌱 **Organic Production:** Process certification versus product certification - “AP (Adventitious Presence)”

- “As long as an organic operation has not used excluded methods and takes reasonable steps to avoid contact with the products of excluded methods ...the unintentional presence of the products of excluded methods should not affect the status of an organic product or operation.”



🌱 **Pesticides:** “When residue testing detects prohibited substances at levels that are greater than 5% of the EPA’s tolerance for the specific residue detected...the agricultural product must not be sold or labeled, or represented as organically produced.”



Capital Press, September 16, 2005

# Communicate to avoid pesticide drift, winemaker says

By MATEUSZ PERKOWSKI  
Freelance Writer

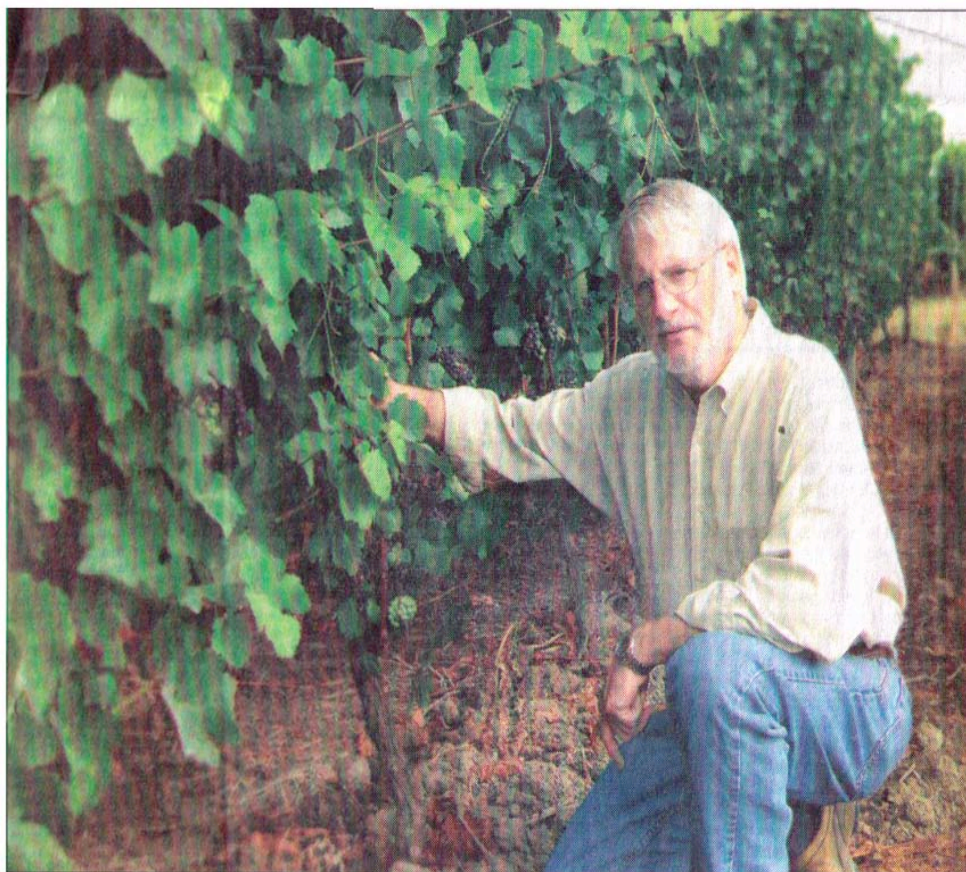
Fifteen years ago, David Adelsheim received some bad news. His vineyard manager had noticed that a section of his vineyard, located near Newberg, Ore., was producing vines with badly distorted leaves.

"Instead of being a full leaf shape, they might have been only half-a-leaf shape, or they were smaller and fanned together," said Adelsheim. All the symptoms pointed to one thing: the plants had been damaged by an herbicide.

As it turned out, a neighbor had sprayed half an acre of his land that was overgrown with blackberry bushes with a growth regulator herbicide containing 2,4-D. Aside from killing the blackberries, some of the herbicide had drifted onto the rows of grapevines growing only 15 feet away.

Roughly five acres were affected by the drift, which was about a third of Adelsheim Vineyards at the time. The first several rows were the most badly damaged, but even grapevines 30 rows down were showing some deformation. Because the neighbor had sprayed in mid-spring – after the grape bud break but prior to bloom – much of the year's crop had been aborted, and the remaining vines were too damaged to ripen any grapes.

In the decade and a half since then, Adelsheim Vineyards has managed to overcome the injury caused by the incident – the company has expanded to 180 acres, and the five acres ravaged by the herbicide have largely recovered. Nonetheless, Adelsheim said the effects of the



MATEUSZ PERKOWSKI/For the Capital Press

David Adelsheim examines some grapes at his vineyards near Newberg, Ore. Fifteen years ago, herbicide drift damaged several acres of his grapevines, and Adelsheim said the affected plants have never fully recovered.



**One of the most divisive issues regarding genetic engineering is the suggestion that a choice must be made between EITHER “organic agriculture” OR “GMOs”.**

***As long as these issues are polarized into “all is permitted” or “nothing is permitted”, rational social discussion is impossible. Dualism (right versus wrong) is the enemy of compromise.***

## **Co-existence**

***development of best management practices used to minimize adventitious presence of unwanted material and effectively enable different production systems to co-exist to ensure sustainability and viability of all production systems. General concept of co-existence is well established in California with conventional, organic and IPM systems working together.***

## **Can Organic and Biotech Crops Co-exist – An Experiment in Boulder Colorado?**


**In 2000 public officials received many calls with concerns about pollen from GE crops “contaminating” organic crops.**

**Appointed panel to draw up “good neighbor” policy to allow organic and GM growers to peacefully co-exist on county lands. Colorado State University scientists determined buffer zone to assure <1% adventitious presence of GM in corn crop**

**To date no disputes over buffer zones or “GM tainted corn” in organic crops**

**“Co-existence is possible. We’re doing it!”, Robert Alexander, official with Boulder Parks and Open Space**





*EU Directive 2001/18 makes biotech production and co-existence rules compulsory – to be debated in early 2006 in France*

*500-1000 hectares of GE corn and GE grape rootstocks for Fanleaf virus protection grown in France in 2005*

SOURCE: "Co-existence project kicked-off", *European Biotechnology News*, Vol. 4, 2005

