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# ORGANIC AGRICULTURE *IN THE* UNITED STATES

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# OUTLINE

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- What is organic food? OFPA, NOP, NOSB
  - US organic marketplace
  - US organic production
    - California
  - Organic agriculture in the Farm Bill
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# WHAT IS ORGANIC FOOD?

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- Organic Food Production Act of 1990 (OFPA)
  - Set national standards for production and processing (handling) for food labeled as “organic”
    - Prohibits the use of synthetic substances
    - Requires an organic plan
    - Requires certification by an accredited certifier
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# ORGANIC FOOD PRODUCTION ACT

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- Requires the Secretary of Ag to establish a National Organic Program and the National Organic Standards Board (NOSB)
  - Requires the NOSB to develop the National List
    - Prohibited natural substances
    - Allowed synthetics
    - Commercially unavailable organic agricultural ingredients
  - Requires the Secretary to promulgate regulations to carry out OFPA
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# U.S. Organic Production Systems

*A production system that is managed in accordance with the Organic Foods Production Act and regulations to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity.*

**---USDA National  
Organic Program**



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# 1990 Organic Foods Production Act

## *Government Role*

### SEC. 2102 -Purposes

- (1) to establish national standards governing the marketing...of organically produced products;
  - (2) to assure consumers that organically produced products meet a consistent standard; and
  - (3) to facilitate interstate commerce in fresh and processed food that is organically produced
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# NATIONAL ORGANIC PROGRAM FINAL RULE

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- Published December 2000
  - Effective October 2002
  - Organic crop production, wild crop harvesting, organic livestock management, and processing and handling of organic
  - All natural (non-synthetic) substances are allowed in organic production and all synthetic substances are prohibited
  - National List of Allowed Synthetic and Prohibited Non-Synthetic Substances contains specific exceptions
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# ***USDA National Organic Program (NOP)***

- All domestic organic production and imports must be in compliance
  
  - Provisions include:
    - **Organic Production & Processing Standards**
    - **Organic Labeling Requirements**
    - **USDA Organic Seal**
    - **Producer/Handler Certification**
    - **Certifier Accreditation**
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# *USDA Organic*

## Organic Production Standards

- Crop standards (transition period, rotations, pest/nutrient inputs, seeds)
  - Livestock standards (organic feed, antibiotic prohibition, outdoor access)
  - Processors (inputs, product commingling)
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# USDA Organic

## National List of Allowed & Prohibited Substances

- Evaluation Criteria (OFPA - Sec. 2119)
    - Potential for detrimental **chemical** interactions
    - Toxicity and mode of action
    - Probability of contamination during manufacture, use, misuse or disposal
    - Effect on human health
    - Effect on biological & chemical in agroecosystem
    - Alternative practices and materials available
    - Compatibility with sustainable agriculture
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# NOP FINAL RULE LABELING STANDARDS

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- Four tiered labeling system
    - “100% organic” all organic ingredients
    - “Organic” 95% - 100% organic ingredients
    - “Made with organic (ingredients listed)”  
70% -94% organic ingredients
    - “organic (ingredient listed)” on the ingredient statement less than 70% organic ingredients
    - Ecolabeling in addition to organic is permitted
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**USDA ORGANIC SEAL**  
**“100% ORGANIC” AND “ORGANIC”**



# FOUR TIER ORGANIC LABELING



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# NOP FINAL RULE CROP STANDARDS

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- No prohibited substances for at least 3 years
  - Genetic engineering and sewage sludge prohibited
  - Synthetic substances on the National List may be used
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# NOP FINAL RULE LIVESTOCK STANDARDS

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- Animals for slaughter must be raised under organic management from the last third of gestation or no later than the second day of life for poultry
  - 100 percent organic feed plus vitamin and mineral supplements
  - May not be given hormones to promote growth or antibiotics for any reason
  - Prohibited from withholding treatment from a sick or injured animal
  - Access to outdoors, including access to pasture for ruminants
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## NOP FINAL RULE

# HANDLING *AND* PROCESSING STANDARDS

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- All non-agricultural ingredients must be included on the National List
  - Must prevent commingling of organic and non-organic products and contact with prohibited substances
  - Processed products labeled as “organic” must include only organically produced agricultural ingredients unless the ingredient is not available in organic form
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## NATIONAL LIST *OF ALLOWED AND* PROHIBITED SUBSTANCES

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- Prohibited natural materials (e.g. arsenic)
  - Allowed synthetics (e.g. pectin, baking soda)
  - NOSB makes recommendations to the Secretary of Agriculture based on criteria:
    - ❑ Effect on human health and ecosystem
    - ❑ Toxicity
    - ❑ Availability of gentler alternatives
    - ❑ Probability of environmental contamination during manufacture, use, and disposal
    - ❑ Compatibility with sustainable agriculture
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## NATIONAL LIST *OF ALLOWED AND* PROHIBITED SUBSTANCES

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- Additional requirements for synthetic processing aids:
    - ❑ Has no organic ingredients as substitutes
    - ❑ Manufacture, use and disposal have no adverse environmental effects
    - ❑ Nutritional quality of food is maintained and the material has no adverse health effects
    - ❑ Primary purpose is not as a preservative
    - ❑ Generally Recognized as Safe (GRAS) by FDA
    - ❑ No other way to produce a similar product
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# NATIONAL LIST *OF ALLOWED AND* PROHIBITED SUBSTANCES

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- Synthetics allowed in crop production
  - Nonsynthetics prohibited from crop production
  - Synthetics allowed for use in livestock production
  - Nonsynthetics prohibited from livestock production
  - Nonagricultural substances allowed as ingredients in or on processed products labeled as “organic” or “made with organic”
  - Non - organically produced agricultural products allowed as ingredients in or on processed products if an organic version is not available
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# *USDA Organic*

## Organic Certification Requirements

- Certification required for producers and handlers-- with an exception for those earning \$5,000 or less in organic sales
  - Certification process involves preparation of an organic plan, record-keeping, and annual on-site inspection
  - Organizations (State, private, and foreign) that provide organic certification services must be accredited by USDA
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# *USDA Organic*

## Certifier Accreditation & Import Equivalency

- USDA accreditation to maintain certifier consistency and impartiality
  - Certifier requirements include record-keeping, confidentiality & annual performance appraisals of inspectors
  - Accreditation period is 5 years
  - Import equivalency based on USDA accreditation or equivalency agreement
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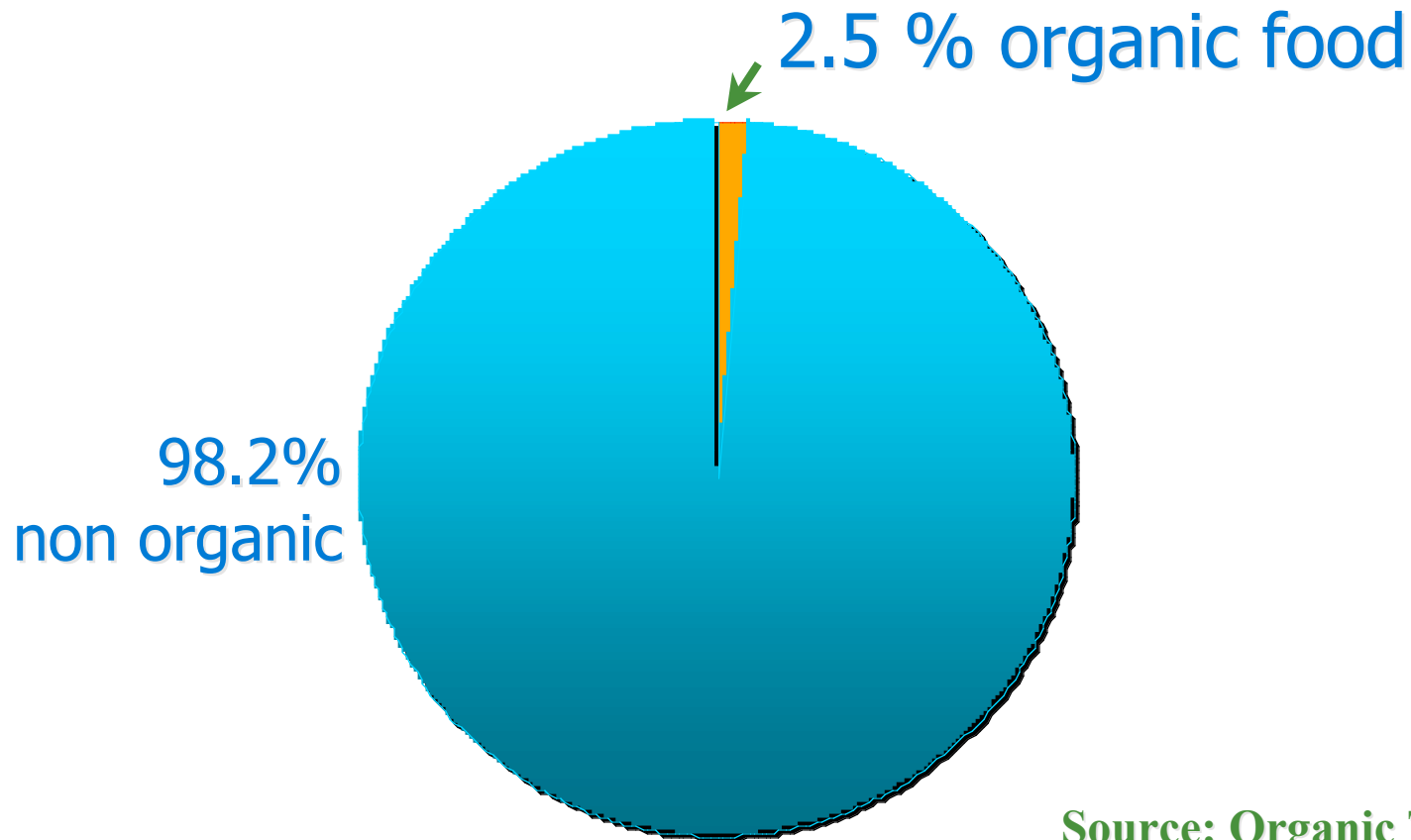
# ORGANIC MARKET TRENDS

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- Organic sales are growing at double digit rates.
  - Vegetables and fruit still dominate.
  - Livestock and poultry sales are now growing at a faster rate than produce.
  - The National Organic Rule seems to have had a positive impact on sales.
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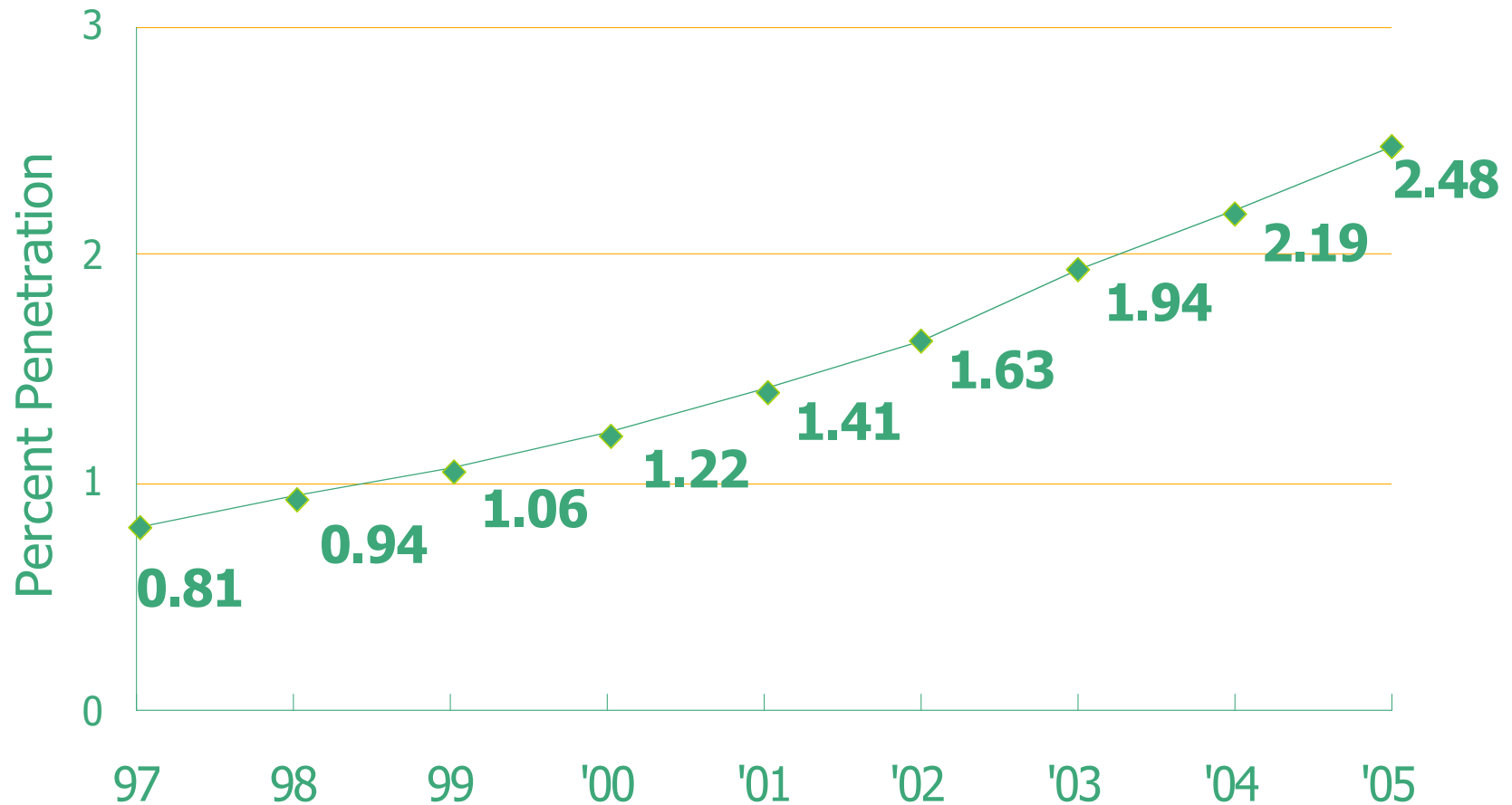
# \$556 BILLION US FOOD MARKET *in 2005*



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Source: Organic Trade Association's 2006 Manufacturer Survey

# US ORGANIC FOODS PENETRATION 1997 - 2005

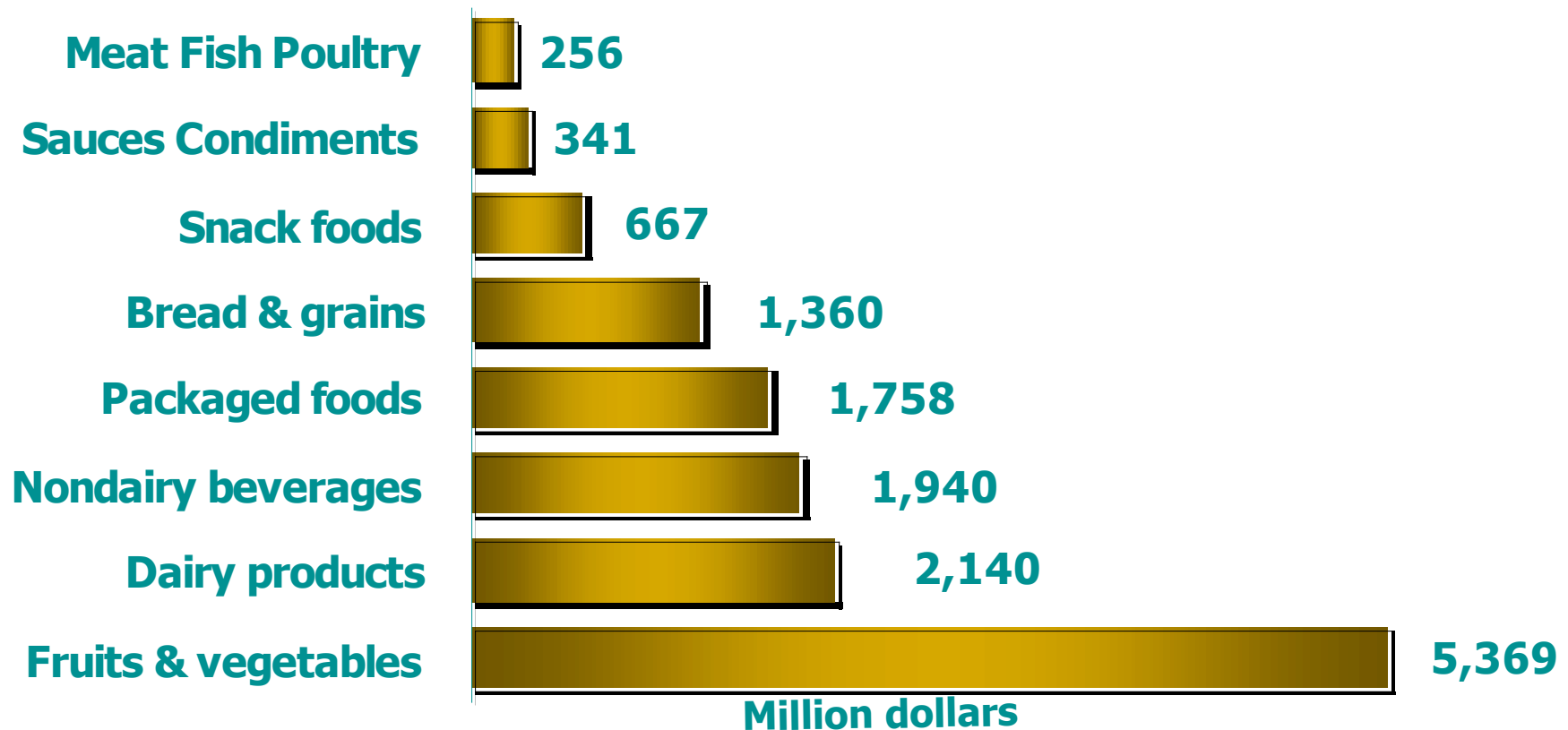


Source: Organic Trade Association's 2006 Manufacturer Survey

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# US RETAIL SALES OF ORGANIC FOOD

## \$13.8 Billion in 2006



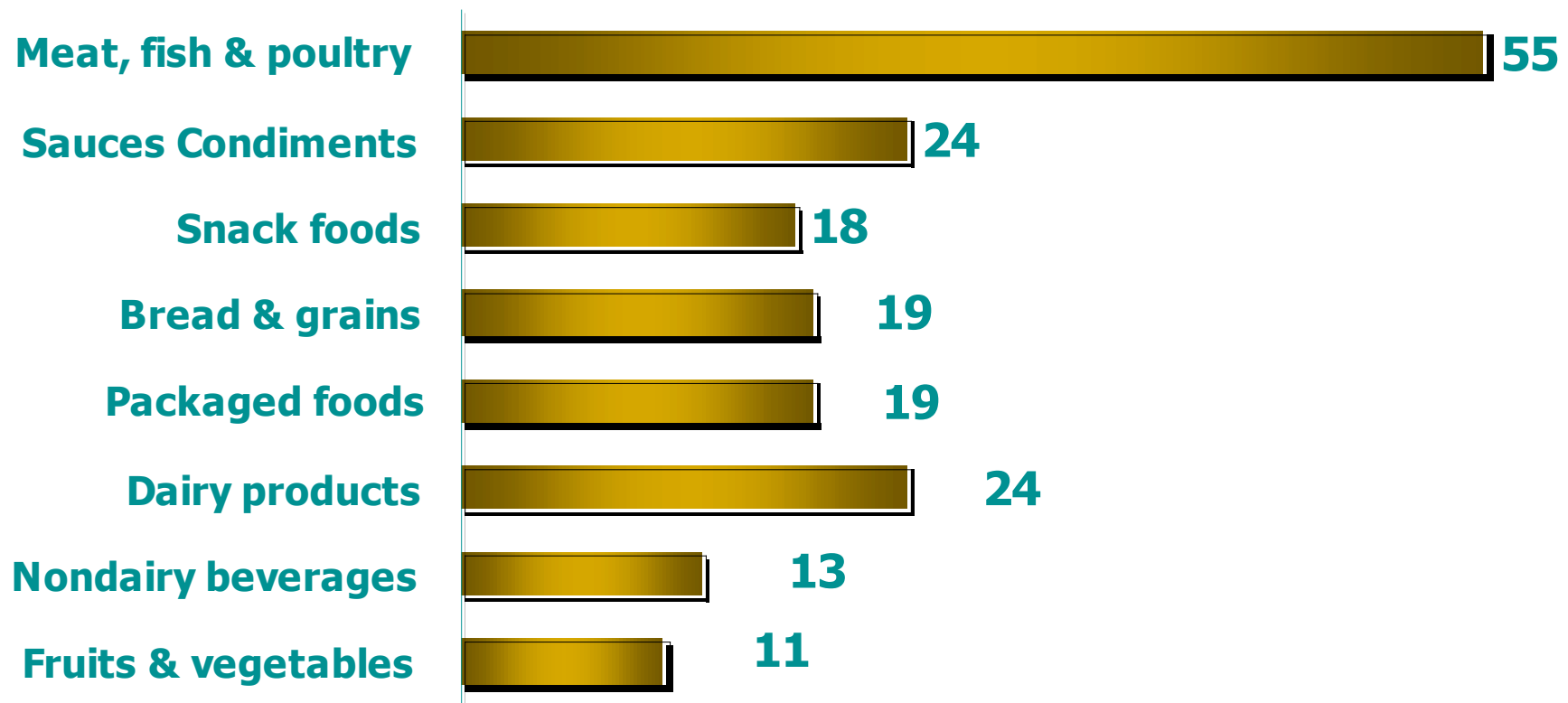
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Source: Organic Trade Association's 2006 Manufacturer Survey

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# US RETAIL SALES OF ORGANIC FOOD

## Per Cent Growth in 2006



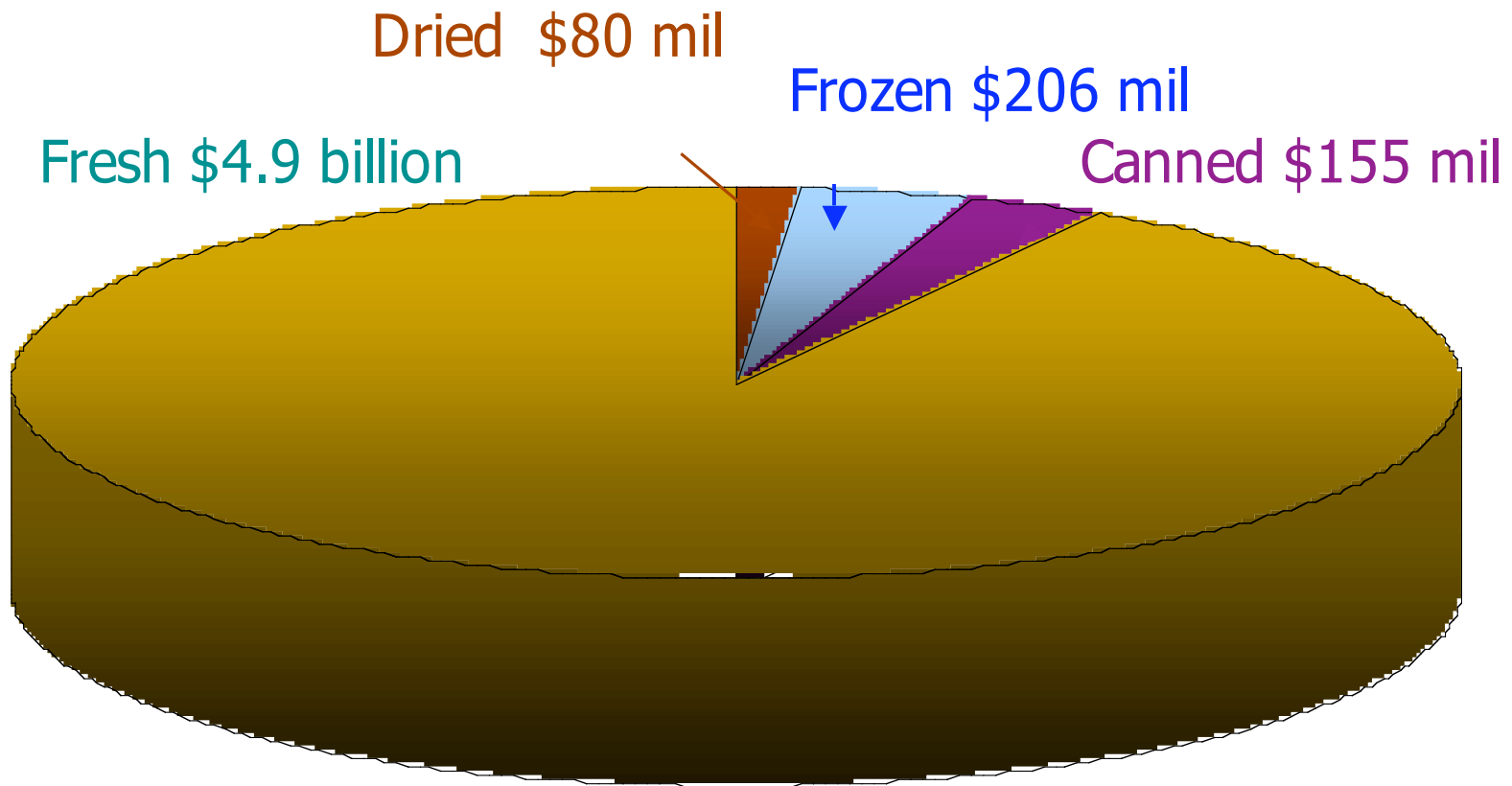
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Source: Organic Trade Association's 2006 Manufacturer Survey

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# US ORGANIC FRUIT *and* VEGETABLES

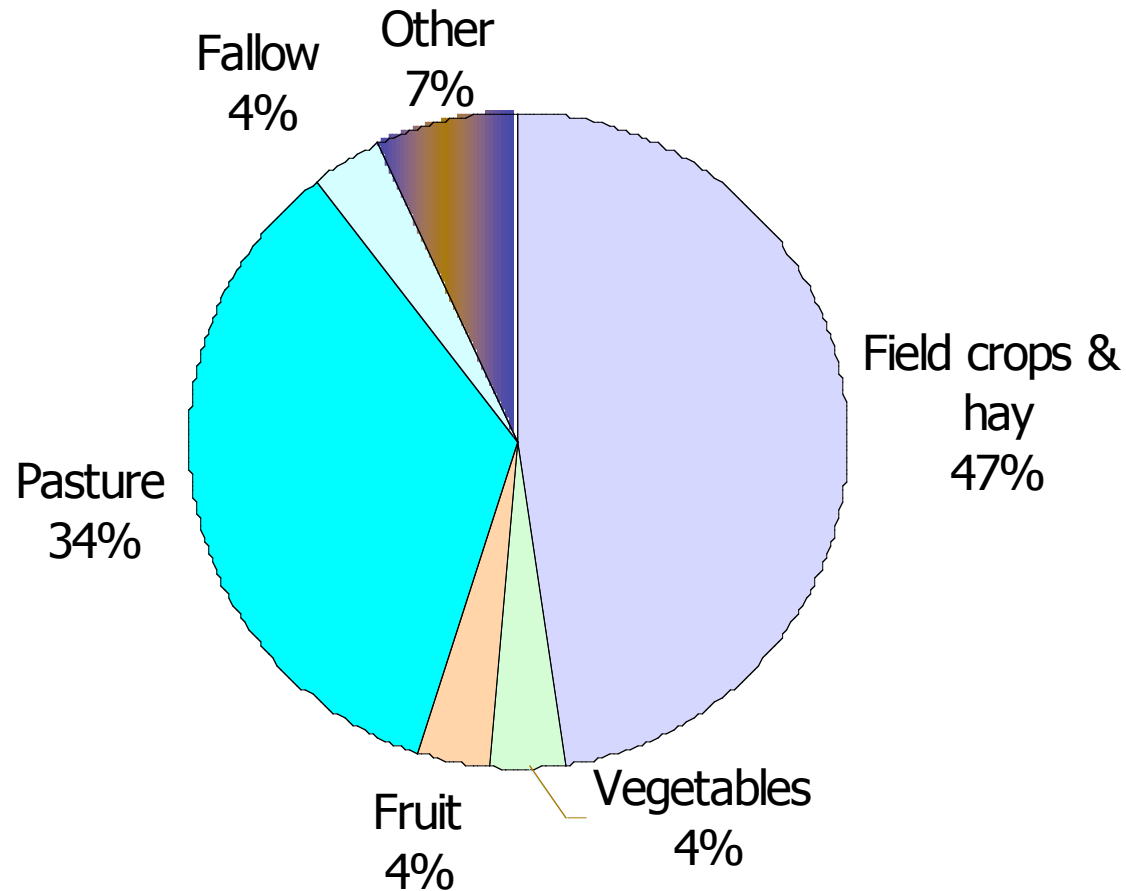
\$5.4 billion in retail sales - 2006



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Source: Organic Trade Association's 2006 Manufacturer Survey

# US CERTIFIED ORGANIC ACREAGE *by* CATEGORY, 2003

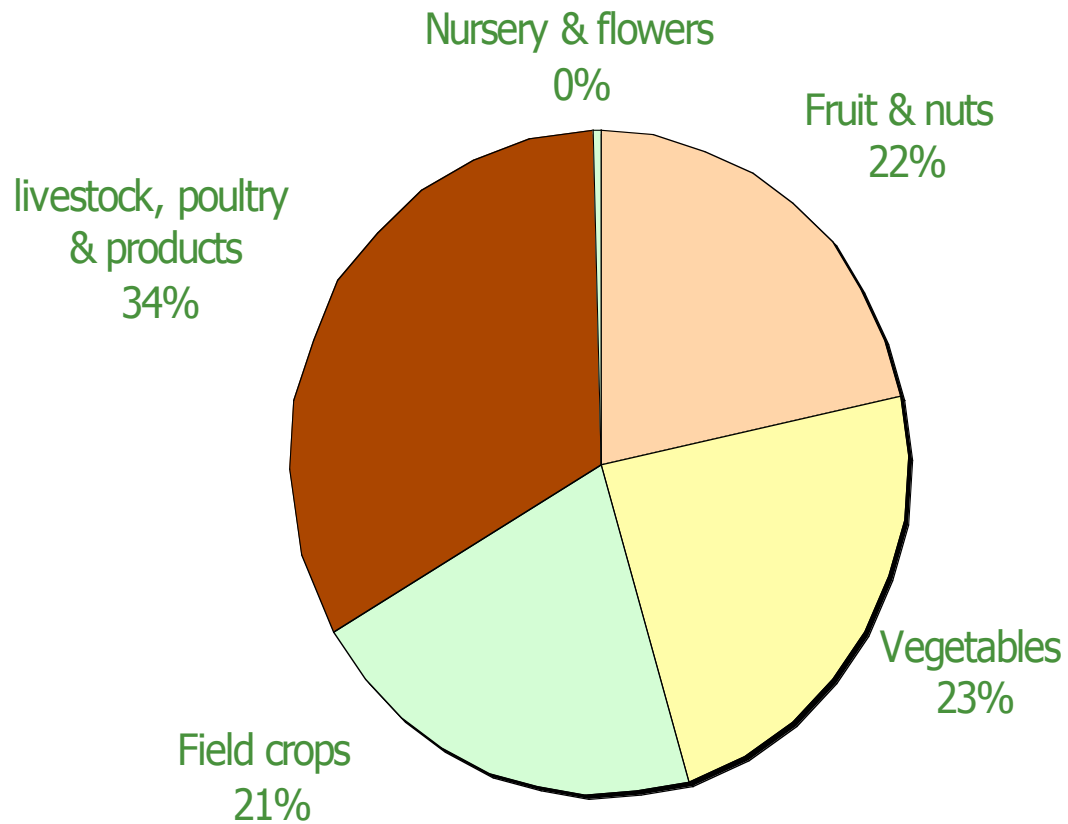


Source: Economic Research Service, USDA

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# ACRES OF CA ORGANIC COMMODITIES

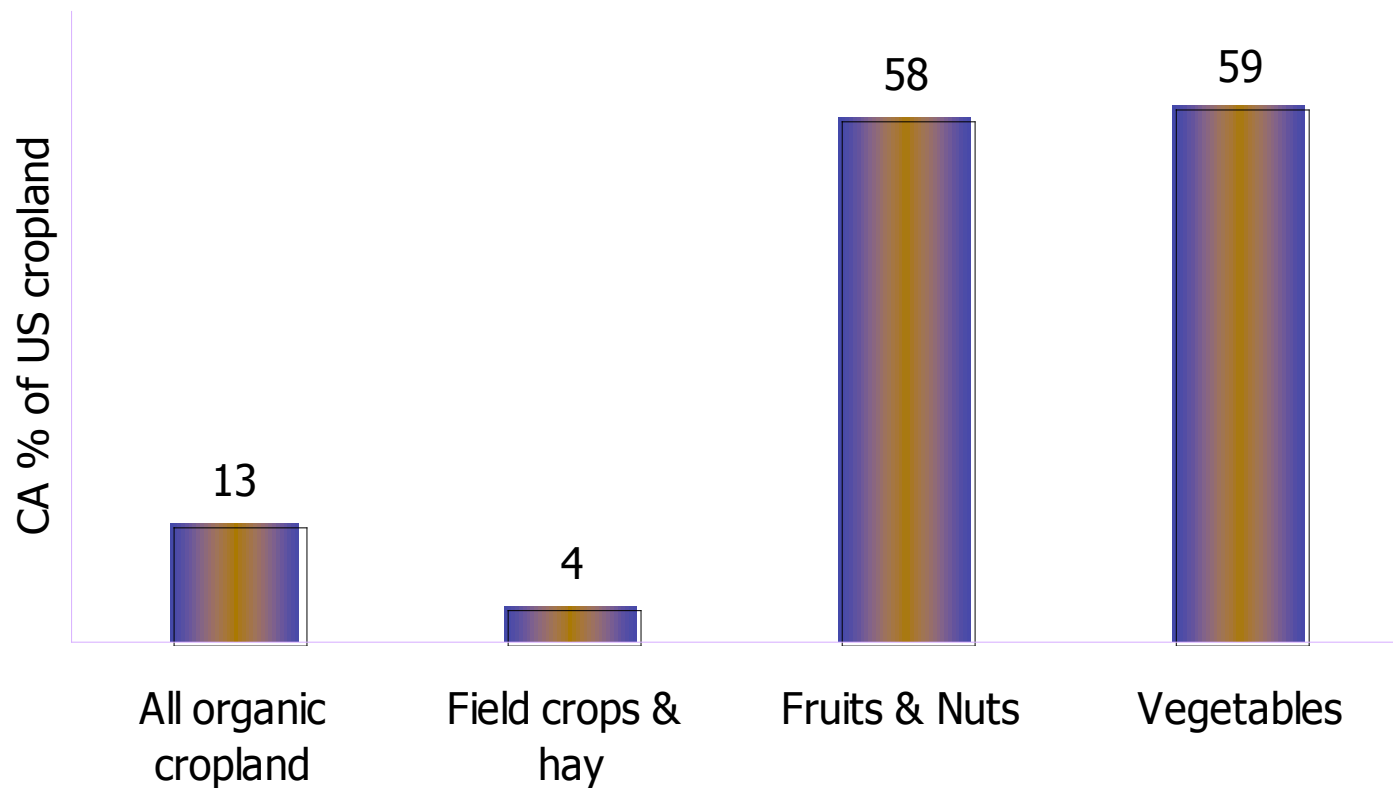
## 2005 – 194,907 ACRES



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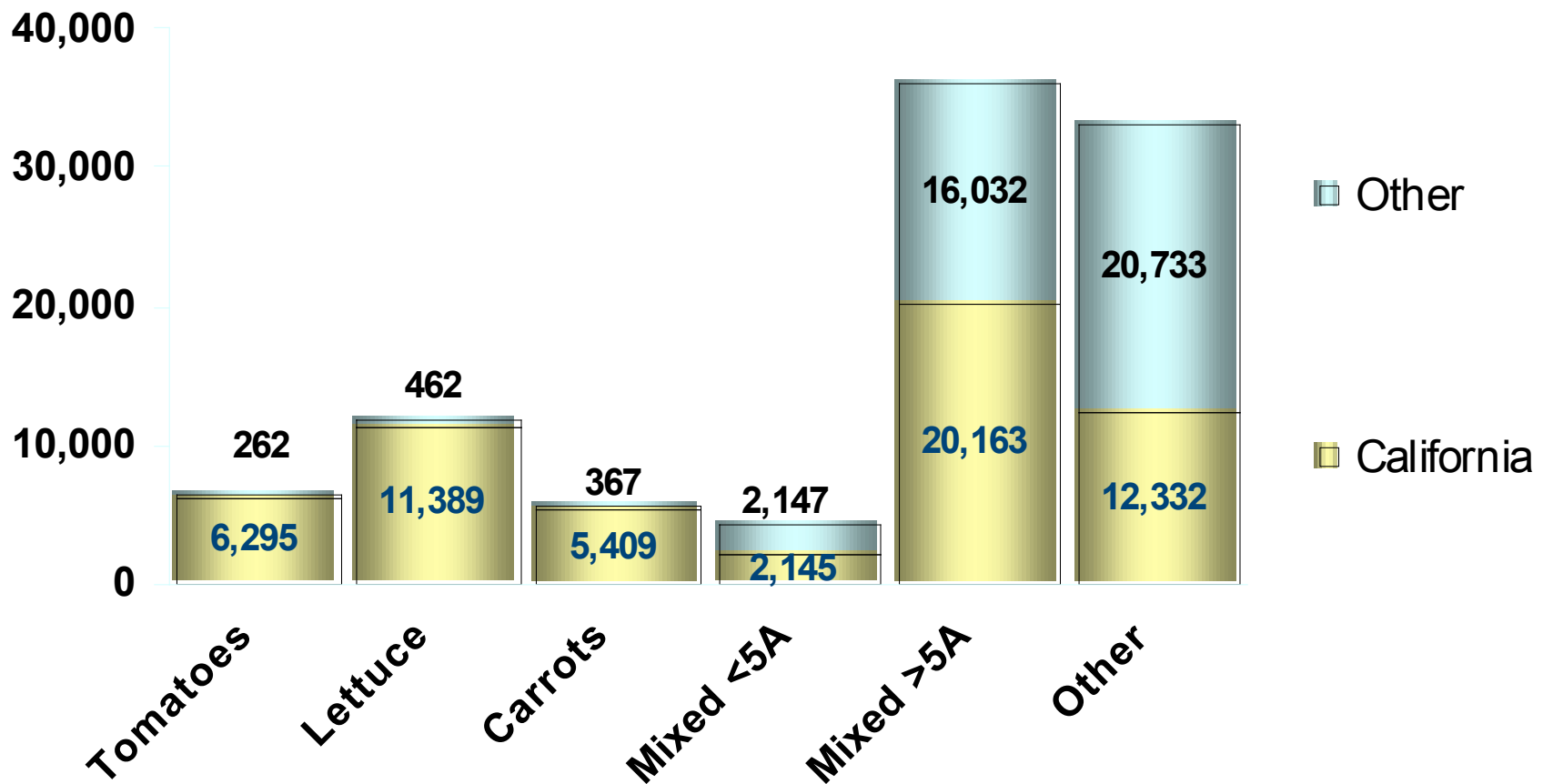
Source: CDFA Organic Program

# CA PERCENTAGE *of* US CERTIFIED ORGANIC CROPLAND, 2005



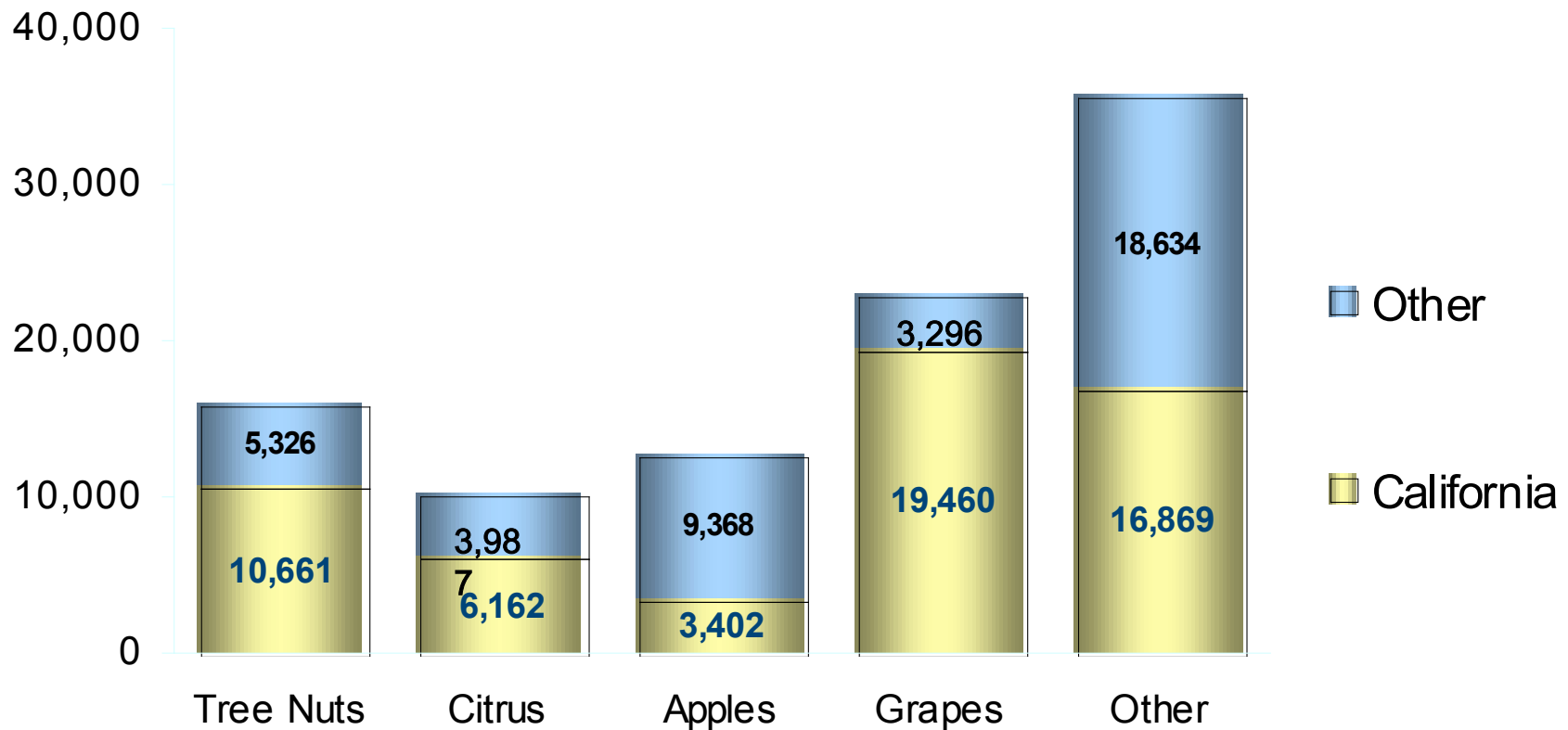
Source: Economic Research Service, USDA

# US CERTIFIED ORGANIC VEGETABLE ACREAGE *by* STATE, 2005



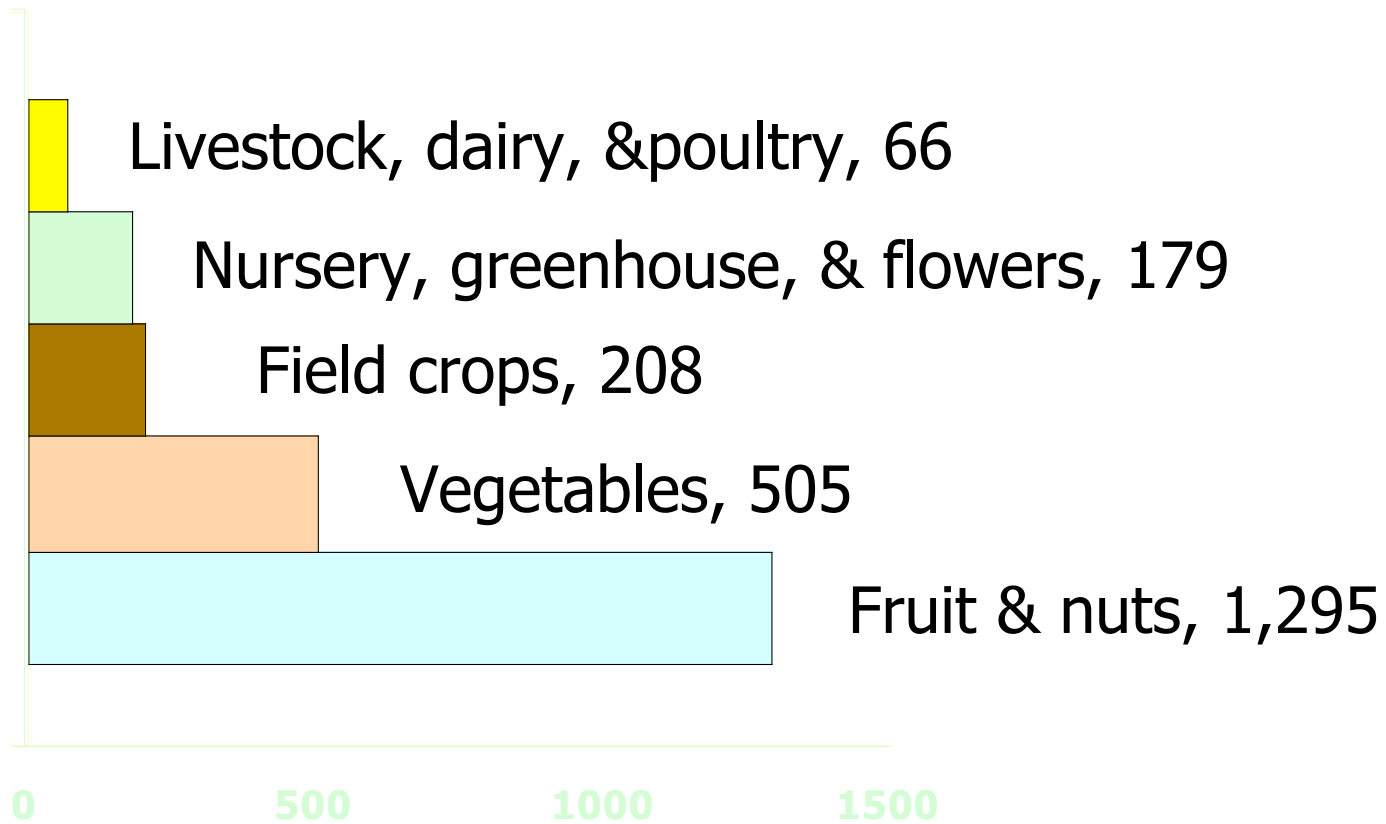
Source: Economic Research Service, USDA

# US CERTIFIED ORGANIC FRUIT *and* NUT ACREAGE *by* STATE, 2005



Source: Economic Research Service, USDA

# CA ORGANIC GROWERS 2005 – 1,815

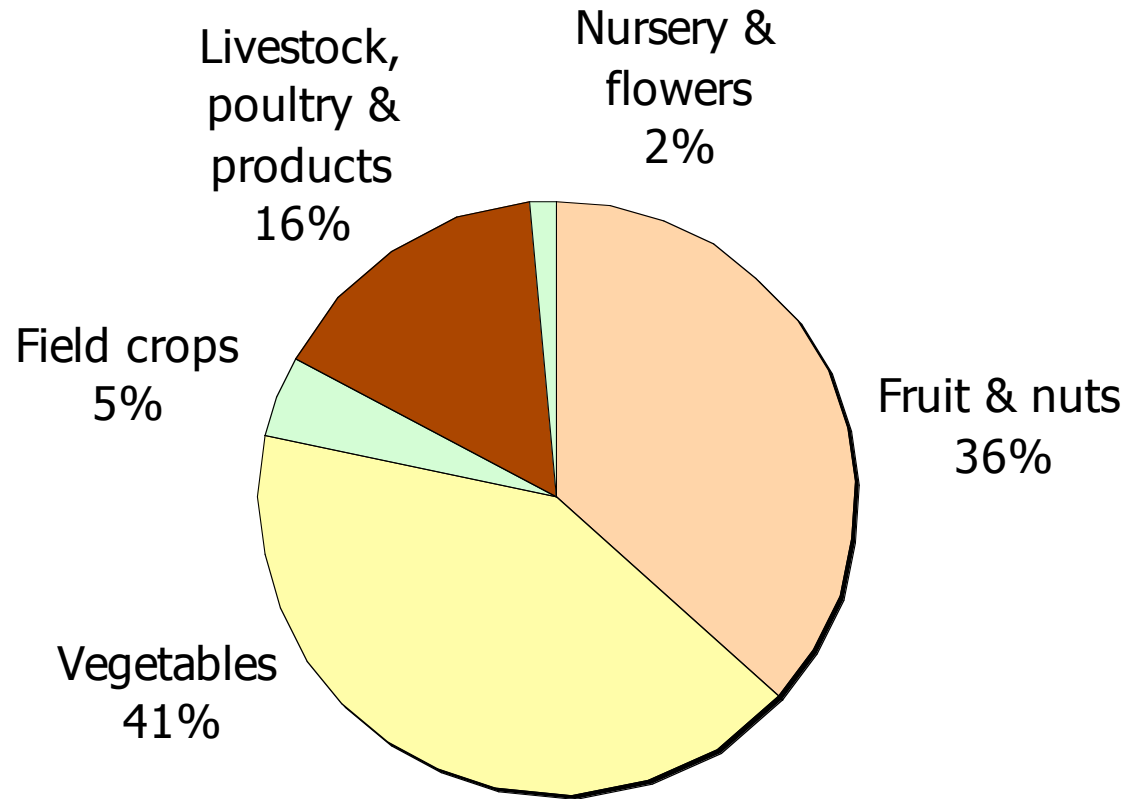


Source: CDFA Organic Program

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# CA ORGANIC SALES 2005

## \$530 MILLION



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Source: CDFA Organic Program

# CA ORGANIC *AND* CONVENTIONAL SALES - 2005

Commodity Group	% of all CA sales	% of CA organic sales	Organic as % of CA sales
Field crops	9%	5%	1%
Fruit and nut crops	30	37	2
Nursery, greenhouse & floriculture	10	2	.2
Vegetable crops	23	41	3
Livestock, poultry, and products	27	16	1

# SALES *of* TOP 20 ORGANIC COMMODITIES CA 2005

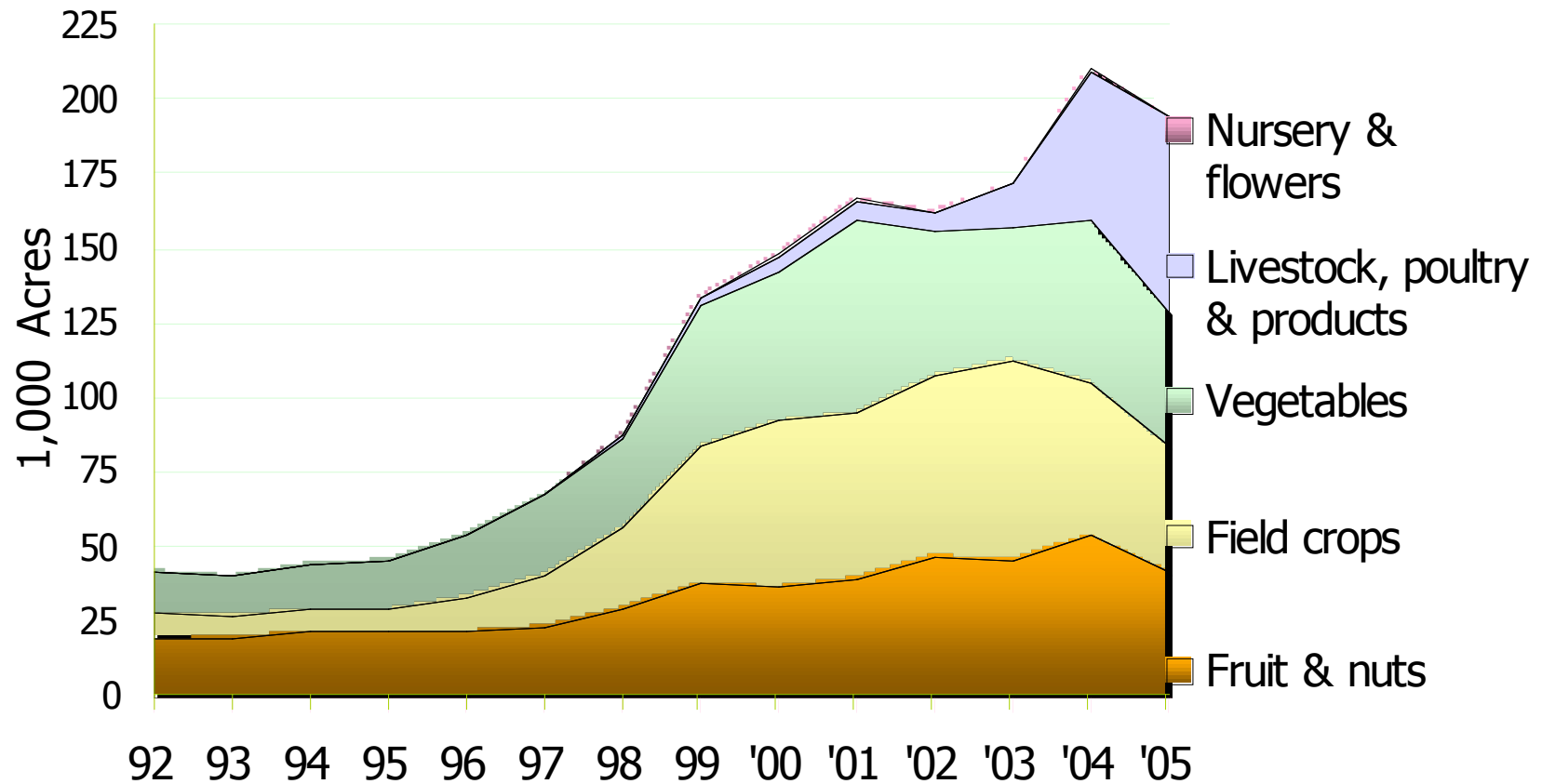
Rank	Commodity	Number of Growers	Acres	Sales
1	Dairy	17	14,504	40,424,591
2	Salad mix	87	8,895	\$39,184,000
3	Strawberry	112	1,406	25,141,000
4	Carrots	133	3,092	24,858,000
5	Table Grapes	75	2,830	24,648,000
6	Lettuce, all	173	4,362	19,223,000
7	Wine grapes	138	6,781	18,424,000
8	Spinach	121	3,321	17,155,000
9	Chicken – meat	3	NA	14,452,000
10	Layer hens	41	445	12,057,000

# SALES of TOP 20 ORGANIC COMMODITIES

Rank	Commodity	Number of Growers	Acres	Sales
11	Rice	70	14,475	11,531,000
12	Almond	75	3,470	11,252,000
13	Raisin grapes	53	4,445	10,657,000
14	Broccoli	143	2,997	10,253,000
15	Raspberry	56	332	9,718,033
16	Avocado	179	1,876	8,134,000
17	Tomato – fresh	231	668	7,480,000
18	Tomato–processi ng	29	4,173	7,372,000
19	Celery	48	1,043	6,764,933
20	Dates	13	800	6,781,837

# CA ORGANIC ACREAGE

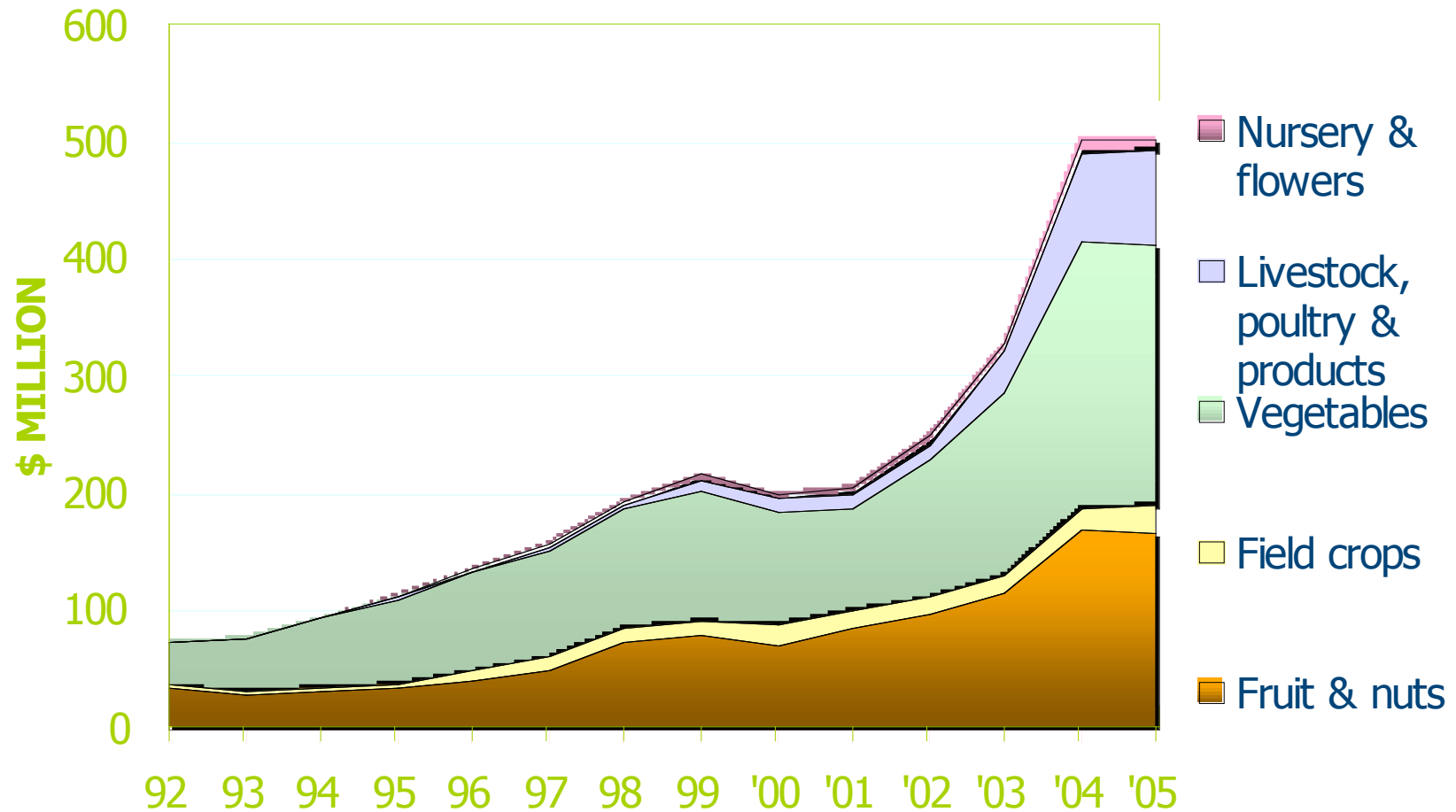
194,907 ACRES in 2005



Source: CDFA Organic Program

# CA ORGANIC SALES

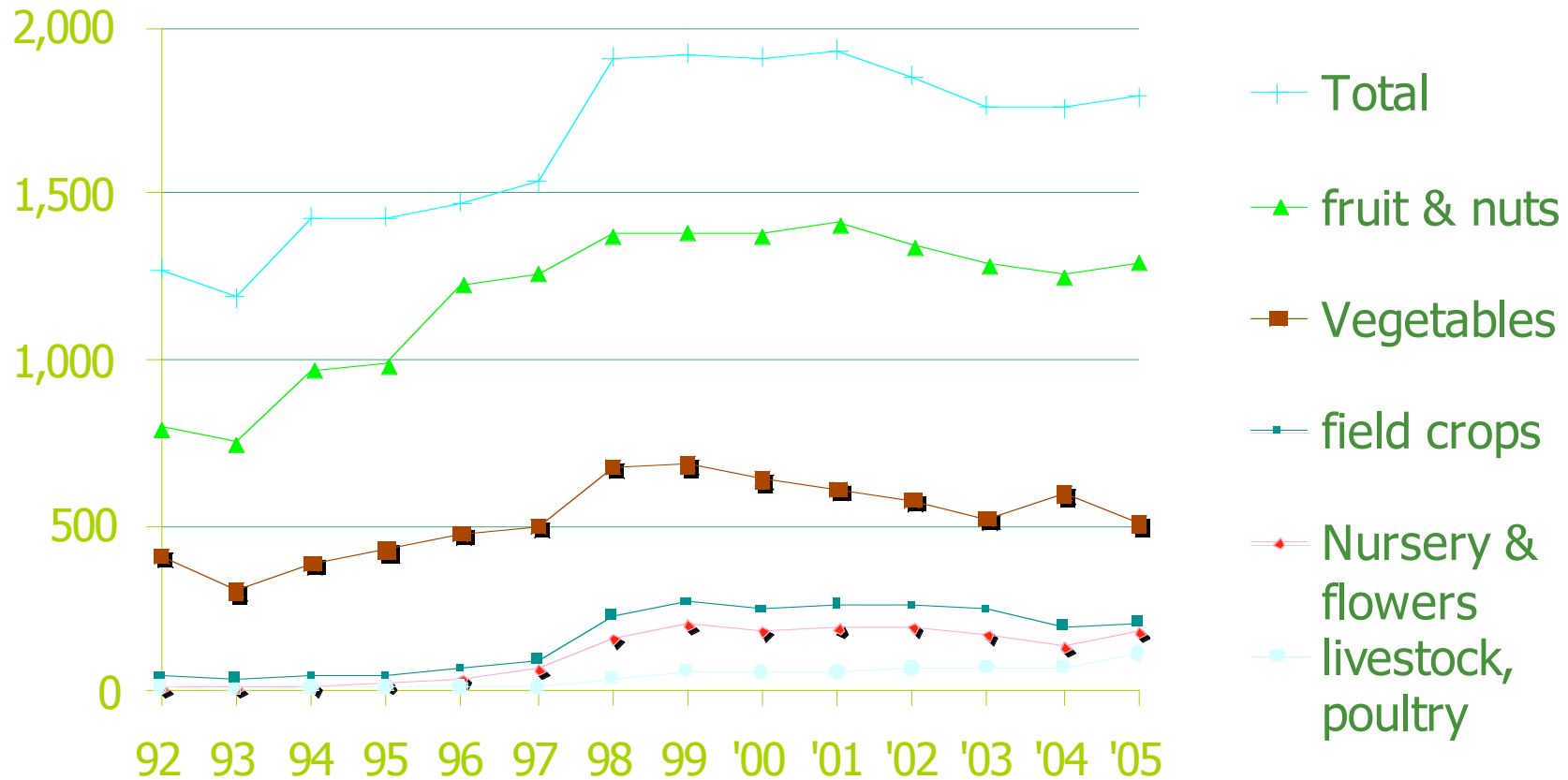
\$503 MILLION in 2005



Source: CDFA Organic Program

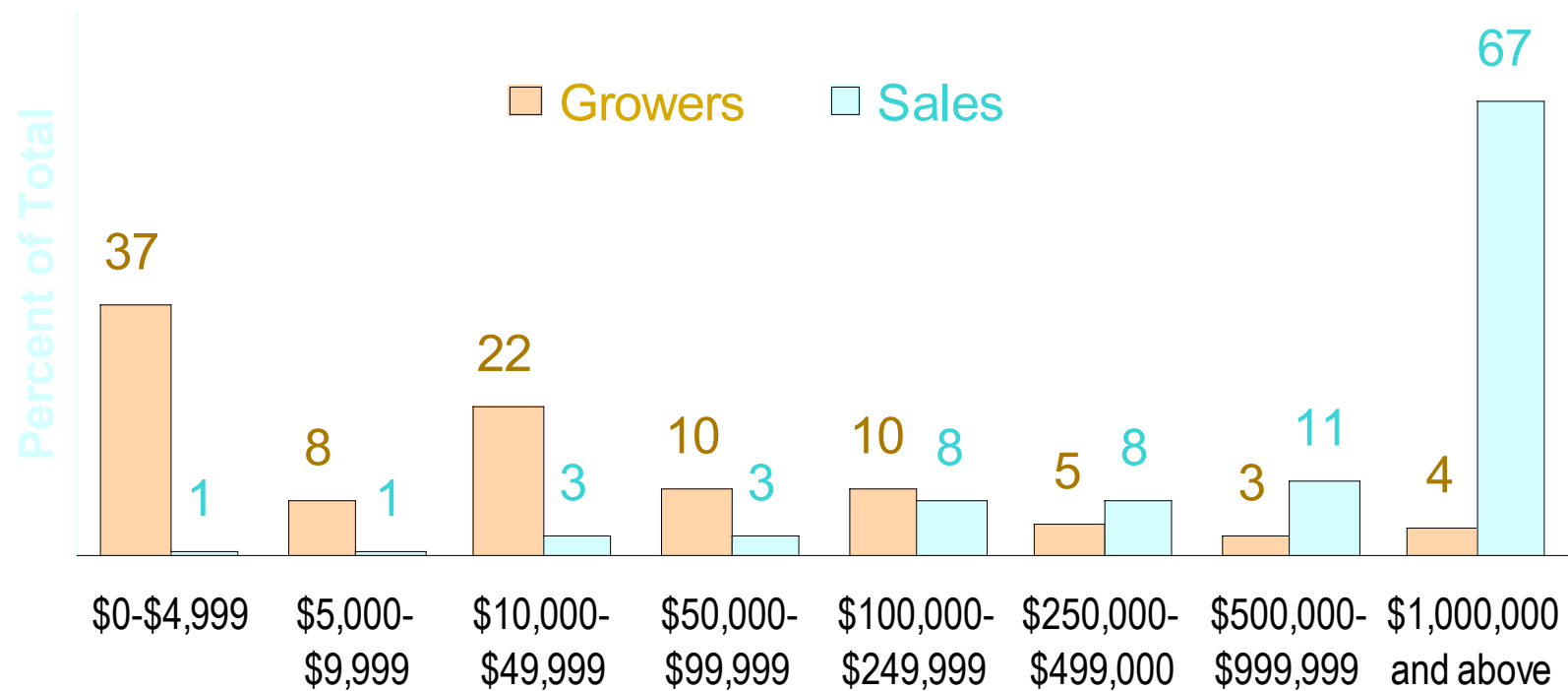
# NUMBER OF CA ORGANIC GROWERS

2005 – 1,795 GROWERS\*



\* Excludes registered growers reporting no sales Source: CDFA Organic Program

# INCOME CONCENTRATION *in* CA ORGANIC AG, 2005



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# CALIFORNIA TRENDS

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- Organic sales in CA are growing at double digit rates without an increase in the number of growers.
  - Vegetable crops and fruits dominate.
  - Livestock and poultry sales are now growing at a faster rate than produce.
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# ORGANIC ISSUES

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- Production
  - Marketing
  - Price
  - Regulatory
  - Management
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# PRODUCTION ISSUES

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- Poor quality/high rates of unmarketable product
  - Weed related yield losses
  - Pest and disease related losses
  - Fertility related losses
  - Access to technical assistance & info
  - Labor not available
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# MARKETING ISSUES

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- Could not find organic market
  - Could not supply enough volume for customer(s)
  - Could not find enough customers to absorb production
  - Problems with handler/wholesaler
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# PRICE ISSUES

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- Price premiums too low
  - Premiums only available for part of the season
  - Premiums only available for part of production
  - Price too inconsistent
  - Lack of organic price information
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# REGULATORY ISSUES

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- Certification costs
  - Too much paperwork
  - Difficulty finding a certifier
  - Difficult to meet regulatory requirements
  - Lost certification
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# MANAGEMENT ISSUES

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- Field management too time consuming
  - Marketing too time consuming
  - Labor management too time consuming
  - Access to credit difficult
  - Difficulty in learning new methods
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# UCCE COST & RETURN STUDIES

## <http://coststudies.ucdavis.edu>

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- Narrative describing production practices
  - Costs of production by operation including details of labor, materials, and equipment use
  - Monthly cash flow
  - Equipment list
  - Ranging analysis of net returns over costs at varying prices and yields
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# ORGANIC COST AND RETURN STUDIES AVAILABLE

Commodity	Location	Year
Almonds	San Joaquin Valley	2007
Apples	Central and North Coasts	1994
Beef	Lake and Mendocino	2005
Broccoli	Central Coast	2004
Grapes / Wine	Napa and Sonoma	2005
Grapes / Raisins	San Joaquin Valley	1997

# ORGANIC COST AND RETURN STUDIES AVAILABLE cont.

Commodity	Location	Year
Lemons	South Coast	1997
Lettuce	Central Coast	2004
Oranges	South Coast	1997
Rice	Sacramento Valley	1992
Strawberries	Central Coast	2006
Tomatoes	Sacramento Valley	1994
Walnuts	North Coast	2007

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# ORGANIC AGRICULTURE in the 2002 FARM BILL



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## EXEMPTION FROM ASSESMENT UNDER A COMMODITY PROMOTION LAW

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- Allows a person who produces and markets only 100 percent organic products to be exempt from the payments of an assessment under a commodity promotion law.
  - The Secretary was required to develop regulations by May 13, 2002.
  - Initial regulations only grower/handlers were exempt. Eventually, all 100 percent organic growers were exempt.
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# ORGANIC AGRICULTURE RESEARCH AND EXTENSION INITIATIVE

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- Authorizes \$3 million a year in new **mandatory** appropriations for 6 years.
  - Funds will be used to administer competitive research grants through CSREES.
  - Research will include marketing, production, and marketing and policy constraints.
  - On farm research for marketing, production and socioeconomic research.
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# NATIONAL ORGANIC CERTIFICATION COST-SHARE PROGRAM

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- Producers and handlers of organic products grossing over \$5,000 per year are required to be certified under OFPA.
  - Provides \$5 million in 2002 to be available until expended.
  - Maximum cost share is 75% annually and \$500 per producer or handler.
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# MARKETING *AND* CONSERVATION PROGRAMS

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- Organically produced products now qualify for value – added market development grants.
  - Agricultural Management Assistance now specifically mentions organic farming as a practice that qualifies for assistance.
  - Conservation Security Program provides payments to farmers for adopting practices common to organic farming systems.
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# OTHER PROGRAMS AUTHORIZED

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- Required data development on organic agricultural production and marketing as part of USDA baseline data collection.
  - International Organic Research Collaboration National Ag. Library and ERS to facilitate access to research conducted outside of the US.
  - A study of availability of key inputs into organic production, including organically produced feedstuffs.
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## **Nine USDA agencies conduct research, regulatory or other organic program activities**

- **Agricultural Marketing Service (AMS)**
- **Alternative Farming Systems Information Center (National Agricultural Library)**
- **Agricultural Research Service (ARS)**
- **Cooperative State Research, Education, and Extension Service (CSREES)**
- **Economic Research Service (ERS)**
- **Foreign Agricultural Service (FAS)**
- **National Agricultural Statistics Service (NASS)**
- **Natural Resources Conservation Service (NRCS)**
- **Risk Management Agency (RMA)**



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# USDA Organic-Sector Statistics

## USDA-Economic Research Service

- **Certified organic acreage and livestock analysis**
- **Annual USDA producer surveys: Organic dairy farms in '05; organic soybean operations in '06**
- **Upcoming nationwide organic handler survey**

## USDA-National Agricultural Statistics Service

- **Census statistics (every 5 years)**
- **Administers USDA producer surveys**

## USDA-Agricultural Marketing Service

- **Occasional Market News prices for organic produce**
- **Weekly Market News report organic poultry & eggs**

## USDA-Foreign Agricultural Service

- **Trade estimates**
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# Federal Policy Directions in the U.S.

## *Market facilitation*

- **Implementing uniform national standards and certification**
- **Market research and analysis**
- **Promoting organic exports**

*Research and education* **Competitive grants program developed for organic systems research (mandatory funds allocated in the 2002 Farm Act)**

## *Risk reduction*

- **Crop insurance products are being developed for organic producers**

## *Certification cost share and conservation programs*

- **USDA certification cost-share program expanded to 50 states in 2002**
  - **States tapping EQIP and other conservation programs to support organic producers**
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