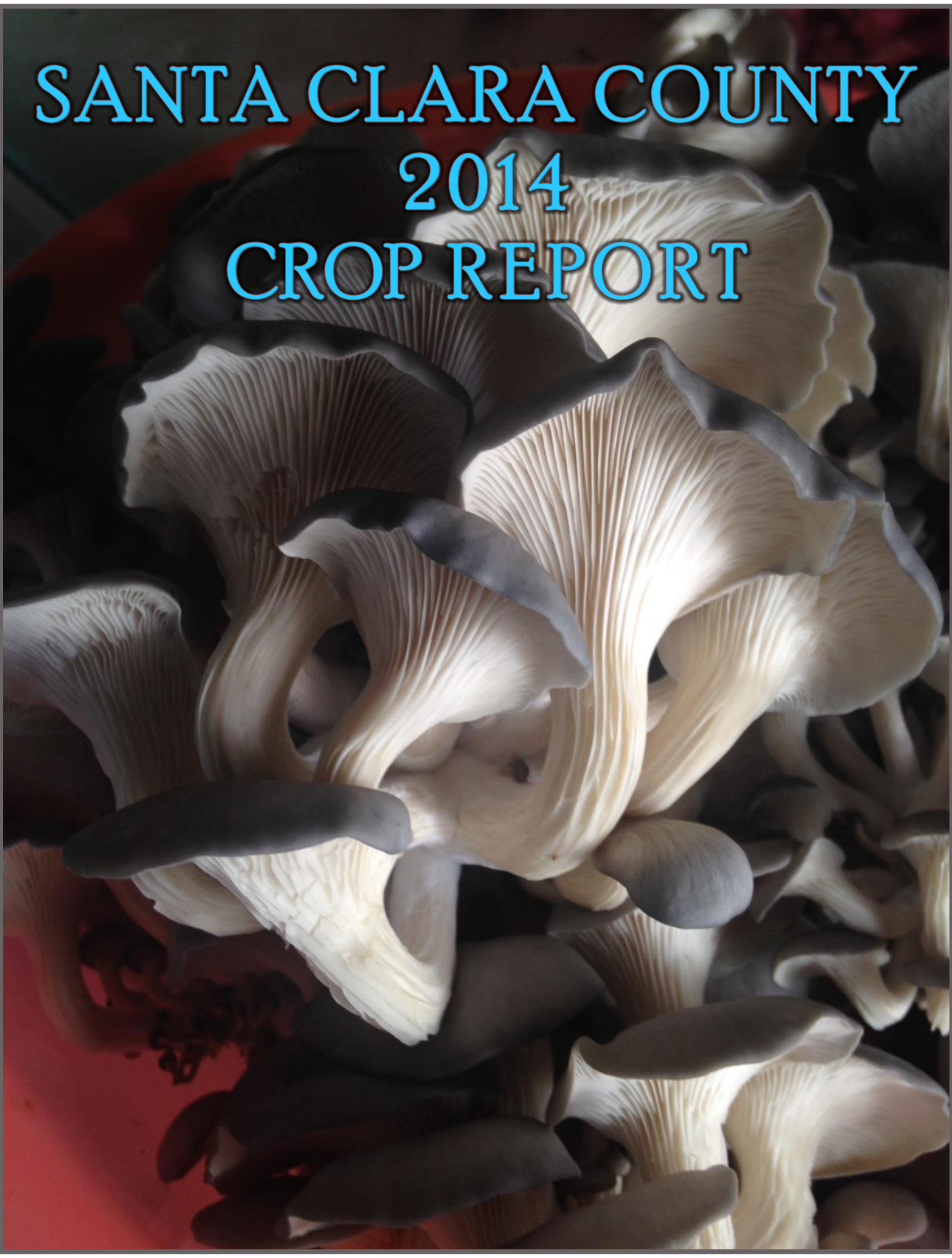


SANTA CLARA COUNTY 2014 CROP REPORT



In 2014, Santa Clara County produced 20,000 tons of mushrooms valued at \$72 million dollars. You can see a list of all of the million dollar crops on [page 11](#)



Mushrooms packed for shipping

NORTH COUNTY OFFICE

1553 Berger Drive,
Building 1
San Jose, CA 95112

(408) 918-4600

SOUTH COUNTY OFFICE

80 West Highland Avenue
Building K
San Martin, CA 95046

(408) 201-0640



Mushroom growing rooms

The strange life cycle of mushrooms on [page 14](#)

Busting mushroom myths on [page 8](#)



Mushrooms are sliced by machine, then are carried by a belt for packing.



Cutting stems and packing, growing trays in background

Cover: Oyster mushrooms, read more about oyster mushrooms and other fun fungi facts on [page 7](#)

Thank you to the Mushroom Council, and Maria De La Fuente, UC Cooperative Extension for photo use. All uncredited photographs taken by Santa Clara County staff: Nancy Barrera, Estela Cabral de Lara, Shannon Lundin, Lori Oleson and Jamison Stiehr.

Karen Ross, Secretary
California Department of Food and Agriculture

Santa Clara County Board of Supervisors

District 1 – Mike Wasserman
District 2 – Cindy Chavez
District 3 – Dave Cortese

District 4 – Ken Yeager
District 5 – S. Joseph Simitian

It is my pleasure to present the 2014 Santa Clara County Crop Report. The efforts of our agricultural industry are displayed as the acreage, yield and gross value of commodities produced in Santa Clara County. It is important to note that the values presented in this report are **gross** values and do not reflect net profits or losses to our agricultural producers.

The gross value of Santa Clara County's agricultural production for 2014 is \$276,272,500, an increase of 4.7% from the 2013 value of \$263,394,800.

The County's top three crops for over 10 years continue to be nursery crops (\$75,746,000), mushrooms (\$72,153,000) and bell peppers (\$15,405,000). In 2014, 23 different agricultural commodities grown in Santa Clara County exceeded \$1,000,000 in crop value.

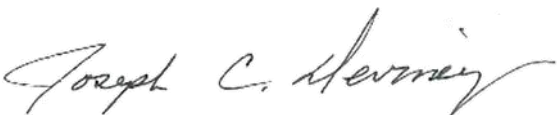
Nursery crops decreased in value slightly by 1.5% from 2013, and mushrooms' increase of 5% from 2013 brings the two leading crops closer together in value. Mushroom production is becoming more efficient with mechanized operation. At the same time, the statewide drought is reducing sales of nursery stock, especially bedding plants.

The 2014 cherry crop experienced a 70% decrease from \$8,351,000 in 2013 to \$2,610,000 in 2014 due to lack of rainfall and chill hours required for cherry production.

This year's crop report highlights mushrooms. Santa Clara County is ranked second in the state for mushroom production. The producers of these mysterious and coveted fungi are truly expert scientists who create the perfect medium and conditions to encourage the spores to become those tasty morsels that accompany so many gourmand dishes. I have added a few sections to dispel some myths about mushrooms and to trumpet their nutritional benefits. I have always loved them and found it interesting that although they are always found with the vegetables in stores they occupy a completely different biological kingdom.

I would like to express my gratitude for the continuing cooperation of all individuals, growers, and agencies who contribute the information necessary to prepare this report. I wish to thank my staff and, in particular, acknowledge the efforts of Agricultural Biologists Lori Oleson and Jennifer Pate, who made the publication of this report possible.

Sincerely,



Joseph C. Deviney
Agricultural Commissioner

A view of mushroom gills. The gills are used by the mushrooms as a means of spore dispersal, and are important for species identification.



SEED CROPS

| ITEM | YEAR | HARVESTED ACREAGE | TOTAL |
|----------------------|------|-------------------|-------------|
| Vegetable and Flower | 2014 | 442 | \$707,000 |
| | 2013 | 506 | \$1,115,000 |

FLORAL CROPS: CUT FLOWERS

| ITEM | YEAR | HOUSE (SQ. FT.) | TOTAL |
|----------------|-------------|-----------------|--------------------|
| Chrysanthemum | 2014 | 625,304 | \$886,600 |
| | 2013 | 1,129,600 | \$1,056,000 |
| Miscellaneous* | 2014 | — | \$1,763,000 |
| | 2013 | — | \$1,763,000 |
| TOTAL | 2014 | | \$2,649,600 |
| | 2013 | | \$2,819,000 |

*Includes Asters, Carnations, Delphiniums, Eucalyptus, Gardenias, Lisianthus, Snapdragons, Stephanotis, Sunflowers



NURSERY CROPS: INDOOR AND OUTDOOR GROWN



| ITEM | YEAR | HOUSE (SQ. FT.) | FIELD ACRES | SOLD BY PRODUCERS | UNIT | VALUE PER UNIT | TOTAL |
|-----------------------------------|-------------|-----------------|-------------|-------------------|--------|----------------|---------------------|
| Bedding Plants | 2014 | 2,167,350 | 38 | 1,887,306 | Flats | Various | \$20,659,000 |
| | 2013 | 2,875,000 | 49 | 2,097,927 | Flats | Various | \$22,571,000 |
| Christmas Trees | 2014 | — | 206 | 5,993 | Tree | \$52 | \$312,000 |
| | 2013 | — | 213 | 8,215 | Tree | \$47 | \$388,000 |
| Ornamental Trees, & Roses, Shrubs | 2014 | 92,000 | 196 | 1,022,626 | Plants | Various | \$21,942,000 |
| | 2013 | 94,000 | 230 | 1,044,406 | Plants | Various | \$19,082,000 |
| Miscellaneous* | 2014 | 2,461,903 | 198 | — | — | — | \$32,833,000 |
| | 2013 | 3,222,378 | 202 | — | — | — | \$34,923,000 |
| TOTAL | 2014 | | | | | | \$75,746,000 |
| | 2013 | | | | | | \$76,964,000 |

*Includes Herbaceous Perennials, Indoor Decoratives, Orchids, Propagative Materials, Succulents, Turf, Vegetables, etc.



Shadehouse nursery stock

FRUITS AND NUTS

| ITEM | YEAR | HARVESTED ACREAGE | TONS PER ACRE | PRODUCTION TOTAL | UNIT | VALUE PER UNIT | TOTAL |
|---------------------|-------------|----------------------|---------------------|---------------------|------|-------------------|---------------------|
| Apricots | 2014 | 203 | 3.5 | 710.5 | TON | \$701 | \$498,000 |
| | 2013 | 206 | 2.7 | 556.2 | TON | \$575 | \$320,000 |
| Cherries | 2014 | 748 | 0.7 | 523.6 | TON | \$4,985 | \$2,610,000 |
| | 2013 | 1,001 | 2.5 | 2,502.5 | TON | \$3,337 | \$8,351,000 |
| Grapes, Wine: White | 2014 | 414 | 4.2 | 1,738.8 | TON | \$1,164 | \$2,024,000 |
| | 2013 | 409 | 4.5 | 1,840.5 | TON | \$1,279 | \$2,354,000 |
| Grapes, Wine: Red | 2014 | 1,183 | 3.3 | 3,903.9 | TON | \$1,625 | \$6,344,000 |
| | 2013 | 1,183 | 3.6 | 4,258.8 | TON | \$1,514 | \$6,448,000 |
| Total Red & White | 2014 | 1,597 | | | | | \$8,368,000 |
| | 2013 | 1,592 | | | | | \$8,802,000 |
| Walnuts | 2014 | 208 | 0.9 | 187.2 | TON | \$4,066 | \$761,000 |
| | 2013 | 190 | 1.1 | 209.0 | TON | \$3,903 | \$816,000 |
| Miscellaneous* | 2014 | 257 | — | — | — | — | \$1,753,000 |
| | 2013 | 253 | — | — | — | — | \$1,441,000 |
| TOTAL | 2014 | 3,012 | | | | | \$13,990,000 |
| | 2013 | 3,242 | | | | | \$19,730,000 |

* Includes Apples, Asian Pears, Kiwis, Nectarines, Olives, Peaches, Persimmons, Plums, Prunes, etc.

VEGETABLE CROPS

| ITEM | YEAR | HARVESTED ACREAGE | TONS PER ACRE | PRODUCTION TOTAL | UNIT | VALUE PER UNIT | TOTAL |
|----------------------|------|-------------------|---------------|------------------|------|----------------|----------------------|
| Beans | 2014 | 973 | 4.3 | 4,183.9 | TON | \$1,309 | \$5,477,000 |
| | 2013 | 1,115 | 2.4 | 2,676.0 | TON | \$1,462 | \$3,912,000 |
| Broccoli | 2014 | 99 | 7.2 | 712.8 | TON | \$778 | \$555,000 |
| | 2013 | 129 | 6.9 | 890.1 | TON | \$525 | \$467,000 |
| Cabbage | 2014 | 215 | 24.8 | 5,332.0 | TON | \$236 | \$1,258,000 |
| | 2013 | 230 | 21.1 | 4,853.0 | TON | \$339 | \$1,645,000 |
| Celery | 2014 | 398 | 17.9 | 7,124.2 | TON | \$474 | \$3,377,000 |
| | 2013 | 308 | 30.0 | 9,240.0 | TON | \$320 | \$2,957,000 |
| Chinese Vegetables | 2014 | 529 | 17.3 | 9,151.7 | TON | \$681 | \$6,232,000 |
| | 2013 | 451 | 20.1 | 9,065.1 | TON | \$608 | \$5,512,000 |
| Corn | 2014 | 1,547 | 11.5 | 17,790.5 | TON | \$470 | \$8,362,000 |
| | 2013 | 1,243 | 10.7 | 13,300.1 | TON | \$402 | \$5,347,000 |
| Garlic | 2014 | 638 | 6.3 | 4,019.4 | TON | \$922 | \$3,706,000 |
| | 2013 | 254 | 3.9 | 990.6 | TON | \$1,049 | \$1,039,000 |
| Salad Greens * | 2014 | 620 | 5.8 | 3,596.0 | TON | \$1,324 | \$4,761,000 |
| | 2013 | 979 | 8.0 | 7,832.0 | TON | \$968 | \$7,581,000 |
| Lettuces** | 2014 | 1,618 | 20.9 | 33,816.2 | TON | \$362 | \$12,241,000 |
| | 2013 | 1,473 | 15.0 | 22,095.0 | TON | \$400 | \$8,838,000 |
| Mushrooms | 2014 | 140 | 143.4 | 20,076.0 | TON | \$3,594 | \$72,153,000 |
| | 2013 | 152 | 134.3 | 20,413.6 | TON | \$3,361 | \$68,610,000 |
| Onions, Dry | 2014 | 42 | 19.0 | 798.0 | TON | \$289 | \$231,000 |
| | 2013 | 32 | 14.0 | 448.0 | TON | \$163 | \$73,000 |
| Peppers - Bell | 2014 | 1,478 | 30.3 | 44,783.4 | TON | \$344 | \$15,405,000 |
| | 2013 | 1,574 | 30.6 | 48,164.4 | TON | \$353 | \$17,002,000 |
| Peppers -Wax & Chili | 2014 | 443 | 26.3 | 11,650.9 | TON | \$479 | \$5,581,000 |
| | 2013 | 480 | 24.2 | 11,616.0 | TON | \$483 | \$5,611,000 |
| Pumpkins | 2014 | 205 | 20.8 | 4,264.0 | TON | \$258 | \$1,100,000 |
| | 2013 | 202 | 19.0 | 3,838.0 | TON | \$347 | \$1,332,000 |
| Spinach | 2014 | 922 | 9.4 | 8,666.8 | TON | \$896 | \$7,765,000 |
| | 2013 | 860 | 5.9 | 5,074.0 | TON | \$979 | \$4,967,000 |
| Squash | 2014 | 160 | 7.8 | 1,248.0 | TON | \$692 | \$864,000 |
| | 2013 | 208 | 8.4 | 1,747.2 | TON | \$541 | \$945,000 |
| Tomatoes - Fresh | 2014 | 904 | 20.5 | 18,532.0 | TON | \$700 | \$12,972,000 |
| | 2013 | 811 | 15.4 | 12,489.4 | TON | \$657 | \$8,206,000 |
| Tomatoes - Processed | 2014 | 844 | 61.7 | 52,074.8 | TON | \$83 | \$4,322,000 |
| | 2013 | 749 | 58.5 | 43,816.5 | TON | \$74 | \$3,242,000 |
| Miscellaneous *** | 2014 | 439 | ---- | ---- | ---- | ---- | \$5,149,000 |
| | 2013 | 426 | ---- | ---- | ---- | ---- | \$3,940,000 |
| TOTAL | 2014 | 12,214 | | | | | \$171,511,000 |
| | 2013 | 11,676 | | | | | \$151,226,000 |

* Arugula, Endive, Frisee, Mizuna, Mustard, Radicchio, Spring Mix, Swiss Chard

** Romaine, Leaf, Head

*** Artichokes, Cauliflower, Cucumber, Herbs, Parsley, Shallots, etc.

FUN FUNGUS FACTS

- The mushroom is a very nutritious food. They serve as a good source of vitamins B and D along with essential minerals such as copper, potassium, selenium, and ergothioneine, a naturally occurring antioxidant that helps protect the body's cells. While mushrooms are low in fat, carbohydrate and salt content, a single large Portabella mushroom can contain more potassium than a banana!
- Traditional Chinese medicine has recognized the healthful properties of mushrooms for centuries. Modern studies suggest mushrooms can be useful for their antibacterial, anti-inflammatory and antioxidant properties — helping to reduce blood pressure, moderate blood sugar, reduce blood cholesterol levels, enhance the immune system, reduce stress and combat many types of cancer.
- Mushrooms are made up of around 90% water.
- In the US, 90% of mushrooms consumed are the White button mushroom, *Agaricus bisporus*. The brown version of *Agaricus bisporus* is called the Crimini, which, if allowed to mature is known as the Portobello. The three mushrooms you see to the right are all actually the same species.
- Mushrooms are used in cuisines throughout the world and are known as the "meat" of the vegetable world because of their rich taste and firm texture.
- Before the invention of synthetic dyes, mushrooms were widely used for dyeing wool and other natural fibers. Mushroom dyes are organic compounds and when mixed with things like alum to alter pH, produce strong, vivid colors.



Mushroom dyed wool fibers, *photo by mycopigments.com*

- California ranks second in the nation in mushroom production, and 20% of those mushrooms are grown in Santa Clara County. The Santa Clara Valley produces more than 20,000 tons of mushrooms with a total crop value of \$72 million. Most of those mushrooms are white, Crimini and Portabello varieties. Other mushrooms grown here, such as the oyster and shiitake, are increasing in popularity.



Packed Oyster Mushrooms²



Oyster Mushroom²

- Unlike the white button and crimini mushrooms grown in trays (see opposite page) the oyster and shiitake mushrooms are grown in upright bags because of their preferred method of growing out in clumps.

¹Photo backdrops courtesy Mushroom Council

Uncredited photos by Santa Clara County Staff

²Courtesy of Maria de la Fuente, UC Cooperative Extension

THE MUSHROOM MYTH

If you ask someone what they know about mushrooms, one of the first things that most people say is, "They are grown in manure and kept in the dark".

Contrary to this popular belief, mushrooms are not grown directly from manure. Mushrooms are grown in a pasteurized substrate, made up of several different organic materials such as wheat, straw, hay, stable bedding, gypsum, cornmeal, other supplements and a small percentage of either horse or poultry manure. The largest component is decomposing straw. Each ingredient helps provide necessary carbon and nitrogen and balances the pH level of the substrate. These components combine to create a nutritionally balanced growth medium for mushrooms. During the pasteurization process the substrate reaches a temperature of 160F/71C, and all bacteria is killed.

The second belief, regarding darkness, is true! Since mushrooms do not contain chlorophyll they do not require light or photosynthesis to grow. The mycelium (mushroom roots) need complete darkness, but most mushrooms can grow in light as long as the temperature and humidity are controlled. You can see the complete mushroom lifecycle on page 13.



Straw is the main component of the growing media.



Wood trays being filled with pasteurized substrate



Hand harvesting



Stacked trays and ladder, ready for harvest



Stemmed & ready for packaging

White button mushrooms



Crimini



The mushrooms that you see in your local grocery store were most likely picked 12-24 hours ago, so when you get them, you are getting the freshest mushrooms possible.

FIELD CROPS

| ITEM | YEAR | HARVESTED ACREAGE | TONS PER ACRE | PRODUCTION TOTAL | UNIT | VALUE PER UNIT | TOTAL |
|--------------------|-------------|----------------------|------------------|---------------------|------|-------------------|--------------------|
| Hay (Grain) | 2014 | 4,033 | 2.2 | 8,873 | TON | \$210 | \$1,863,000 |
| | 2013 | 3,655 | 1.8 | 6,710 | TON | \$177 | \$1,188,000 |
| Pasture, Irrigated | 2014 | 461 | — | — | ACRE | \$220 | \$101,000 |
| | 2013 | 464 | — | — | ACRE | \$215 | \$99,800 |
| Range | 2014 | 224,230 | — | — | ACRE | \$13 | \$2,915,000 |
| | 2013 | 222,652 | — | — | ACRE | \$12 | \$2,672,000 |
| Miscellaneous* | 2014 | 547 | — | — | — | — | \$532,000 |
| | 2013 | 594 | — | — | — | — | \$1,067,000 |
| TOTAL | 2014 | 229,271 | | | | | \$5,411,000 |
| | 2013 | 227,365 | | | | | \$5,026,800 |

*Includes Alfalfa, Triticale etc.

FOREST PRODUCTS

| ITEM | YEAR | PRODUCTION TOTAL | UNIT | TOTAL |
|--------|------|---------------------|------|----------|
| Timber | 2014 | 12 | MBF | \$47,700 |
| | 2013 | — | MBF | \$0 |

BUSHBERRIES AND STRAWBERRIES

| ITEM | YEAR | HARVESTED ACREAGE | TONS PER ACRE | PRODUCTION TOTAL | UNIT | VALUE PER UNIT | TOTAL |
|--------------|------|----------------------|------------------|---------------------|------|-------------------|-------------|
| Bushberries | 2014 | 10 | 3.7 | 37 | TON | \$1,891 | \$69,900 |
| | 2013 | 15 | 4.1 | 61.5 | TON | \$1,681 | \$103,000 |
| Strawberries | 2014 | 47 | 11.2 | 527 | TON | \$2,819 | \$1,486,000 |
| | 2013 | 59 | 15.5 | 914.5 | TON | \$1,595 | \$1,459,000 |
| TOTAL | 2014 | 57 | | | | | \$1,555,900 |
| | 2013 | 74 | | | | | \$1,562,000 |

Strawberries

LIVESTOCK AND POULTRY

| ITEM | YEAR | NUMBER OF HEADS SOLD | PRODUCTION TOTAL (LIVE WEIGHT) | UNIT | VALUE PER UNIT | TOTAL |
|------------------|------|-------------------------|-----------------------------------|------|-------------------|-------------|
| Steers & Heifers | 2014 | 4,547 | 18,546 | CWT | \$199 | \$3,701,000 |
| | 2013 | 5,068 | 29,477 | CWT | \$130 | \$3,832,000 |
| Cows & Bulls | 2014 | 704 | 6,411 | CWT | \$98 | \$628,000 |
| | 2013 | 908 | 11,100 | CWT | \$73 | \$810,000 |
| Miscellaneous* | 2014 | — | — | — | — | \$525,000 |
| | 2013 | — | — | — | — | \$310,000 |
| TOTAL | 2014 | | | | | \$4,854,000 |
| | 2013 | | | | | \$4,952,000 |

* Includes Chickens Eggs, Goats, Llamas, Pigs, Sheep, etc.

Grazing sheep

MILLION DOLLAR CROPS BY COMMODITY

2013

| <u>AGRICULTURAL PRODUCT</u> | <u>VALUE</u> |
|-----------------------------|--------------|
| 1. Nursery Crops | \$76,964,000 |
| 2. Mushrooms | \$68,610,000 |
| 3. Peppers, Bell | \$17,002,000 |
| 4. Lettuce, All | \$8,838,000 |
| 5. Wine Grapes, All | \$8,802,000 |
| 6. Cherry | \$8,351,000 |
| 7. Tomatoes, Fresh | \$8,206,000 |
| 8. Salad Greens | \$7,581,000 |
| 9. Peppers, Wax & Chili | \$5,611,000 |
| 10. Chinese Vegetables | \$5,512,000 |
| 11. Corn | \$5,347,000 |
| 12. Spinach | \$4,967,000 |
| 13. Beans | \$3,912,000 |
| 14. Steers & Heifers | \$3,832,000 |
| 15. Tomatoes, Processing | \$3,242,000 |
| 16. Celery | \$2,957,000 |
| 17. Cut Flowers | \$2,819,000 |
| 18. Range | \$2,672,000 |
| 19. Cabbage | \$1,645,000 |
| 20. Strawberry | \$1,459,000 |
| 21. Pumpkin | \$1,332,000 |
| 22. Hay (Grain) | \$1,188,000 |
| 23. Seed | \$1,115,000 |
| 24. Garlic | \$1,039,000 |

All Other Crops **\$10,391,800**

2013 Total Gross **\$263,394,800**

2014

| <u>AGRICULTURAL PRODUCT</u> | <u>VALUE</u> |
|-----------------------------|--------------|
| 1. Nursery Crops | \$75,746,000 |
| 2. Mushrooms | \$72,153,000 |
| 3. Peppers, Bell | \$15,405,000 |
| 4. Tomatoes, Fresh | \$12,972,000 |
| 5. Lettuce, All | \$12,241,000 |
| 6. Wine Grapes, All | \$8,368,000 |
| 7. Corn | \$8,362,000 |
| 8. Spinach | \$7,765,000 |
| 9. Chinese Vegetables | \$6,232,000 |
| 10. Peppers, Wax & Chili | \$5,581,000 |
| 11. Beans | \$5,477,000 |
| 12. Salad Greens | \$4,761,000 |
| 13. Tomatoes, Processing | \$4,322,000 |
| 14. Garlic | \$3,706,000 |
| 15. Steers & Heifers | \$3,701,000 |
| 16. Celery | \$3,377,000 |
| 17. Range | \$2,915,000 |
| 18. Cherry | \$2,610,000 |
| 19. Cut Flowers | \$2,649,600 |
| 20. Hay (Grain) | \$1,863,000 |
| 21. Strawberry | \$1,486,000 |
| 22. Cabbage | \$1,258,000 |
| 23. Pumpkins | \$1,100,000 |

All Other Crops **\$12,221,600**

2014 Total Gross **\$276,472,200**

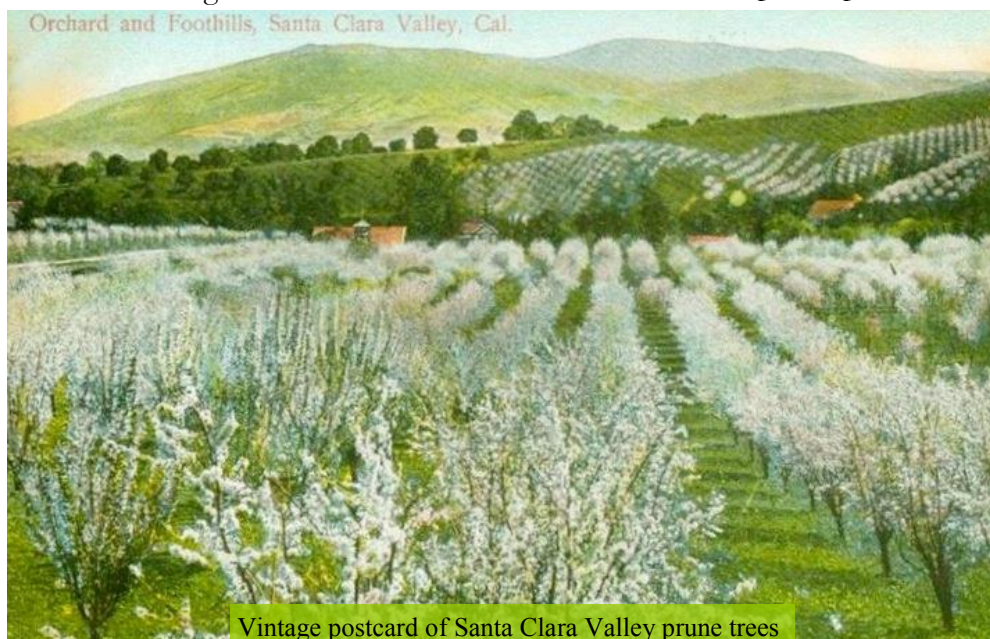


HISTORICAL COMPARISON OF HARVESTED ACREAGE

| | 1954 | 1974 | 1994 | 2014 |
|---|---------------|---------|---------|---------|
| Bushberry & Strawberry Crops | 2,365 | 389 | 264 | 57 |
| Field Crops* | 24,415 | 236,550 | 233,026 | 229,271 |
| Floral Crops - Cut Flowers | 193 | 907 | 660 | 14 |
| Fruit & Nut Crops | 78,519 | 22,876 | 5,310 | 3,012 |
| Nursery Crops | not available | 332 | 806 | 746 |
| Seed Crops | 750 | 2,120 | 950 | 442 |
| Vegetable Crops** | 18,736 | 14,583 | 12,030 | 11,594 |
| Total Acres | 124,978 | 277,757 | 253,046 | 245,136 |

*1953 Field Crops does not include Range or Pasture

**includes multiple crops at same site



CERTIFIED FARMERS' MARKETS

There were 38 Farmers' Markets registered in Santa Clara County last year.

ORGANIC AGRICULTURE

| Type of Registrant | Number Registered |
|----------------------------|-------------------|
| Producers-primary county | 28 |
| Producers-secondary county | 4 |
| Handlers | 8 |
| Processors | 1 |

Santa Clara County has 32 organic farms operating on 62 growing locations for a total of 1,500 acres.



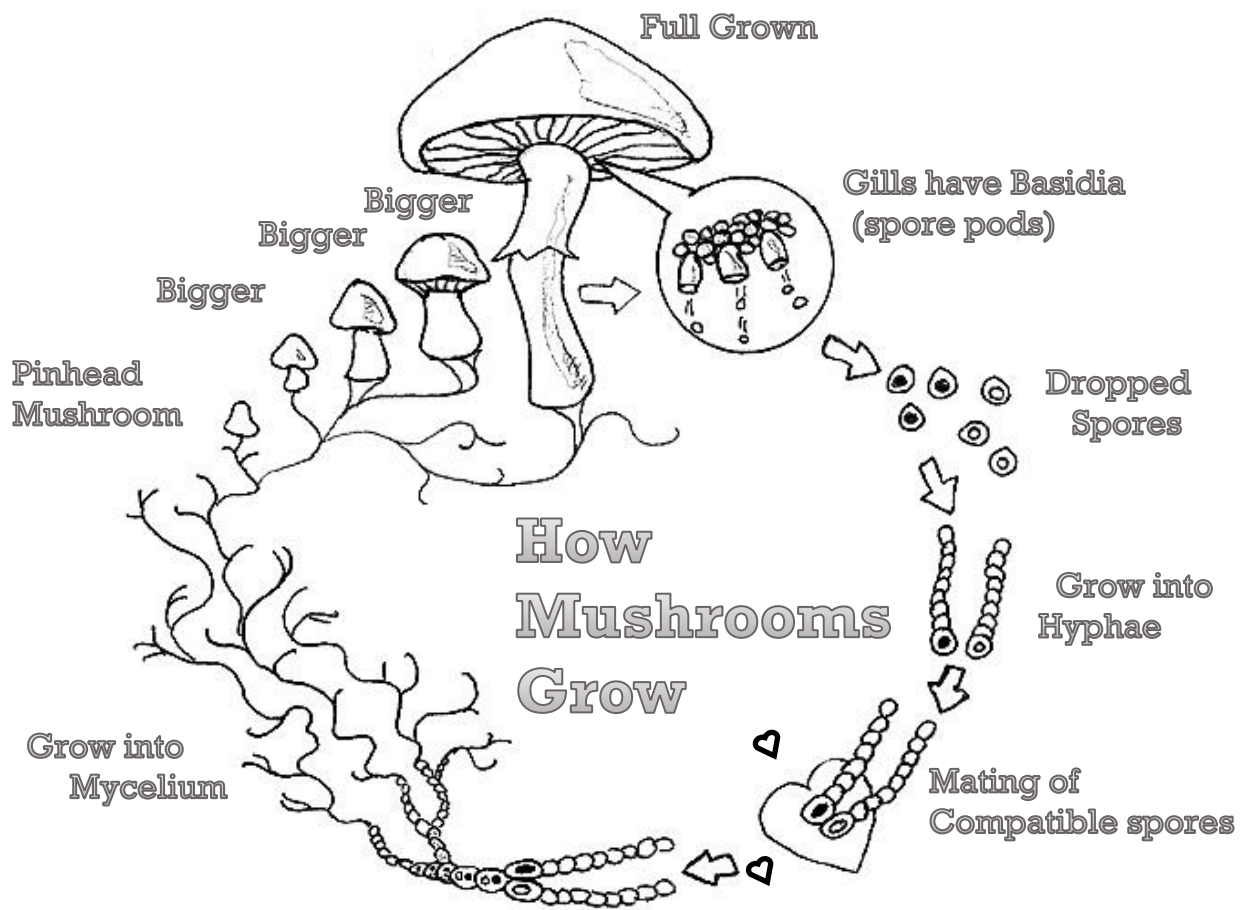
For more information on Farmers' Markets, including a list of times and locations, please visit our website at www.sccagriculture.org

THE MUSHROOM LIFE CYCLE

Mushrooms grow from spores -- not seeds -- that are so tiny you can't see individual spores with the naked eye. Just take a close look under the cap on the gills. Because the spores don't contain chlorophyll to begin germinating (as seeds do), they rely on substances such as sawdust, grain, straw, or liquid for nourishment. A blend of the spores and these nutrients is called spawn. Spawn performs a bit like the starter needed to make sourdough bread.

The spawn supports the growth of mushrooms' tiny, white, threadlike roots, called mycelium. The mycelium grows first, before anything that resembles a mushroom pushes through the growing medium. The spawn itself could grow mushrooms, but you'll get a lot better mushroom harvest when the spawn is applied to a substrate, or growing medium. So the mushroom spawn is then mixed thoroughly with the pasteurized substrate back at the farm.

After this spawning takes place the substrate and spawn mixture is transferred to beds or trays. A layer of casing is then spread over the mushroom bed. This casing is usually about 2 inches thick, and is made up of mostly peat moss. Water is applied right after the casing. The beds are then watered periodically to the maximum holding capacity of the casing layer. In a few weeks the mushrooms will be ready for their first harvest.



Mushroom growers often get more than one harvest from their single crop. Sometimes two or three harvests, 7-10 days apart, can occur. The mushroom yield will decrease with each subsequent harvest. Agaricus mushrooms are harvested over a 16 to 35 day period. During this harvest time, bed temperatures, humidity and air ventilation are all controlled and monitored to ensure a healthy crop.

All mushrooms are hand harvested, which is very labor intensive. After picking the mushroom from the bed, the harvester cuts off the base of the mushroom, called the "stump". The mushrooms are then immediately put into cold storage which stops any deterioration or browning. They are then shipped to sales locations within twelve to 24 hours!

Federal Phytosanitary Certification Program

Sustainable Agriculture : Pest Prevention

This program ensures that plants and plant commodities exported to foreign countries from Santa Clara County are free from injurious pests. In 2014, the county staff inspected and issued Phytosanitary Certificates for 2,168 export shipments. The charts below details all the countries and states our growers export to.

Number of Phytosanitary Certificates Issued By Country

Our growers ship vegetable and flower seed, garlic, cut flowers, nursery stock and more around the world

| | | | | | |
|--------------------|-----|-------------|-----|----------------------|----|
| Argentina | 6 | Honduras | 12 | Panama | 11 |
| Australia | 66 | Hong Kong | 14 | Peru | 30 |
| Austria | 1 | India | 40 | Poland | 2 |
| Belize | 3 | Israel | 11 | Portugal | 2 |
| Brazil | 25 | Italy | 7 | Singapore | 12 |
| Canada | 434 | Japan | 194 | South Africa | 22 |
| Chile | 20 | Jordan | 2 | Spain | 3 |
| China | 69 | Kenya | 5 | Sweden | 2 |
| Colombia | 76 | Korea | 131 | Switzerland | 1 |
| Costa Rica | 19 | Lebanon | 1 | Taiwan | 47 |
| Denmark | 5 | Libya | 1 | Thailand | 20 |
| Dominican Republic | 3 | Malaysia | 40 | Tunisia | 1 |
| Ecuador | 13 | Mexico | 121 | Turkey | 1 |
| Ethiopia | 2 | Nepal | 14 | Uganda | 1 |
| France | 39 | Netherlands | 238 | United Arab Emirates | 2 |
| French Polynesia | 1 | New Zealand | 25 | United Kingdom | 8 |
| Germany | 17 | Nicaragua | 2 | Uruguay | 3 |
| Grenada | 8 | Pakistan | 1 | Vietnam | 23 |
| Guatemala | 90 | Palestine | 1 | | |

Number of Phytosanitary Certificates Issued By State

Our growers ship cut flowers, orchids, and more around the United States and territory

| | | | | | |
|------------|----|---------|-----|-------------|----|
| Arkansas | 1 | Florida | 162 | Hawaii | 10 |
| Nevada | 43 | Oregon | 1 | Puerto Rico | 2 |
| Washington | 1 | | | | |

Vegetable starts in nursery greenhouse

Santa Clara County Consumer and Environmental Protection Agency

2014 OFFICE OF THE AGRICULTURAL COMMISSIONER

AGRICULTURAL COMMISSIONER/
SEALER OF WEIGHTS & MEASURES

JOSEPH C. DEVINEY

AGRICULTURAL
DIVISION STAFF

DEPUTY COMMISSIONERS
MICHELLE THOM
ERIC WYLDE

SUPERVISING BIOLOGIST
HELENA ROBERTS

BIOLOGISTS
KRISTIAN BARBEAU
NANCY BARRERA
MATT BEAUREGARD
SHERRIE BESSON
JULIUS CALSO
DONALD COPELAND
JENNIFER GRACY
SHANNON LUNDIN
TINO MENCHACA
GARY MEYER
MARIO NUNEZ
LORI OLESON
NICHOLAS OTTERLEI
JENNIFER PATE
PAULO PHILIPPIDIS
KARL STAGEN
JAMISON STIEHR
MIKE WALKER

WEIGHTS & MEASURES
DIVISION STAFF

DEPUTY SEALER
STAN TOY

SUPERVISING INSPECTOR
DAVID AGUAYO

WEIGHTS INSPECTORS
ERIN BECKER
JASON GIBILISCO
MARK HANEY
MARTIN LOBATO
REGIDOR MANIQUIS
JAMES SCHILLING
GINA STIEHR
JUSTIN THIEU

