



United States Department of Agriculture  
National Agricultural Statistics Service



# 2013 California Raisin Grape Mechanical Harvest Report

Cooperating with the California Department of Food and Agriculture

Pacific Regional Office-California · P.O. Box 1258 · Sacramento, CA 95812 · (916) 498-5161 · (855) 270-2722 Fax · [www.nass.usda.gov/ca](http://www.nass.usda.gov/ca)

Released: May 6, 2014

## RESULTS

Total acreage harvested by mechanical means was 31,483, just over 16 percent of the State's total raisin-type grape acreage. The Overhead Trellis Management System was used on 14,604 bearing acres in 2013, accounting for 8 percent of the total raisin-type grape acreage. Fresno and Madera County growers have 41 and 36 percent of the Overhead Trellis acreage in the State. Kern County growers have 21 percent of the Overhead Trellis acreage. Other mechanical harvest systems include Continuous Tray at 8.5 percent of the acreage and South Side with less than 1/2 of 1 percent of the raisin-type grape acreage.

Fresno County has the most acreage with mechanical harvesting, at 19,121, 14 percent of the Fresno County raisin-type grape acreage. Kern and Madera County growers harvest 25 and 27 percent of their raisin-type grape acreage by mechanical means, respectively.

By variety, Thompson Seedless grape acreage with mechanical harvesting is 21,344 or 12 percent of the total raisin-type grape acreage. Sixty-two percent of the Fiesta grape acreage is harvested mechanically and 46 percent of the Selma Pete acreage is harvested mechanically.

Most California raisins are produced by sun drying after placing the bunches on paper trays on terraces between vine rows. The Overhead Trellis System has led to increased production of dried-on-the-vine raisins, increased machine harvesting, and decreased hand labor use.

## PROCEDURES

The Pacific Regional Office-California of USDA's National Agricultural Statistics Service, in cooperation with the California Department of Food and Agriculture, conducts an annual grape acreage survey. The 2013 Grape Acreage Report, published in April, summarized the latest survey results. At the request of the raisin industry, an additional question was added to the grape acreage survey form the past seven years to gather information on raisin-type acreage that is harvested mechanically. In addition to the mechanical harvest data, producers were asked to update acreage by variety and year planted. Growers were contacted by telephone. This report summarizes data for raisin-type grapes grown using mechanical harvest.

## ACKNOWLEDGMENTS

We sincerely thank the many vineyard operators, owners, and management firms providing the information. Funding for the raisin-type grape acreage report was provided by the Raisin Administrative Committee.

VIC TOLOMEO, Director  
DAVE DEWALT & KELLY KRUG, Deputy Director

JENNIFER VAN COURT,  
Statistician, Estimates Group

### Raisin-Type Grapes: Acreage by County, California, 2013

| County         | Total Acreage  | Mechanical Harvest |                          | Type of Mechanical Harvest |                       |                          |
|----------------|----------------|--------------------|--------------------------|----------------------------|-----------------------|--------------------------|
|                |                | Acres              | Percent of Total Acreage | Overhead Trellis Acres     | Continuous Tray Acres | South Side Trellis Acres |
| Fresno         | 132,939        | 19,121             | 14                       | 5,950                      | 13,012                | 159                      |
| Kern           | 12,657         | 3,169              | 25                       | 2,995                      | 1/                    | 1/                       |
| Madera         | 32,703         | 8,669              | 27                       | 5,236                      | 3,173                 | 260                      |
| Tulare         | 11,547         | 1/                 | 1/                       | 390                        | 1/                    | 1/                       |
| Other Counties | 2,508          | 524                | 21                       | 33                         | 237                   | 2/                       |
| <b>Total</b>   | <b>192,354</b> | <b>31,483</b>      | <b>16</b>                | <b>14,604</b>              | <b>16,422</b>         | <b>457</b>               |

1/ Included in Other Counties.

2/ Included in Total.

### Raisin-Type Grapes: Acreage by Variety, California, 2013

| Variety                  | Total Acreage  | Mechanical Harvest |                          | Type of Mechanical Harvest |                       |                          |
|--------------------------|----------------|--------------------|--------------------------|----------------------------|-----------------------|--------------------------|
|                          |                | Acres              | Percent of Total Acreage | Overhead Trellis Acres     | Continuous Tray Acres | South Side Trellis Acres |
| Black Corinth            | 1,645          | 1/                 | 1/                       | 1/                         | 1/                    | 1/                       |
| Fiesta                   | 12,461         | 7,702              | 62                       | 6,667                      | 1/                    | 1/                       |
| Selma Pete               | 3,622          | 1,662              | 46                       | 1,111                      | 1/                    | 1/                       |
| Thompson Seedless        | 173,017        | 21,344             | 12                       | 6,384                      | 14,621                | 339                      |
| Other Raisin-Type 2/     | 1,609          | 775                | 48                       | 442                        | 1,801                 | 1/                       |
| <b>Total Raisin-Type</b> | <b>192,354</b> | <b>31,483</b>      | <b>16</b>                | <b>14,604</b>              | <b>16,422</b>         | <b>457</b>               |

1/ Less than 1,000 acres and included in Other Raisin-Type varieties.

2/ Includes Dovine, Negrita Black, and Sultana varieties.

## MECHANICAL HARVEST METHODS

**OVERHEAD TRELLIS** – Grapes are dried directly on the vine, forming a canopy over the rows. It allows the mechanical grape harvester to get underneath and gather the dried fruit.

**SOUTH SIDE TRELLIS** – In an east-west row orientation vineyard, an angled cross-arm is added to each trellis stake to support two wires on which fruiting canes are tied. The southern exposure of the fruit facilitates drying. The raisins may be harvested mechanically with a south side harvester.

**CONTINUOUS TRAY** – Grapes are mechanically harvested and laid out on a continuous (rather than individual) thin sheet of paper where they dry in the sun for two or three weeks.