



2015 California Raisin Grape Mechanical Harvest Report

Cooperating with the California Department of Food and Agriculture

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RESULTS

Total acreage harvested by mechanical means was 47,754, just over 28 percent of the State's total raisin-type grape acreage, according to the Pacific Regional Office of USDA's National Agricultural Statistics Service. The Overhead Trellis Management System was used on 13,695 bearing acres in 2015, accounting for 8 percent of the total raisin-type grape acreage. Fresno and Madera County growers have 48 and 40 percent of the Overhead Trellis acreage in the State, respectively. Kern County growers have 10 percent of the Overhead Trellis acreage. Other mechanical harvest systems include Continuous Tray at 19 percent of the acreage and South Side with about one half of 1 percent of the raisin-type grape acreage. Open Gable accounted for less than one half of 1 percent of the total raisin acreage.

Although Fresno County has the most acreage with mechanical harvesting, at 33,746, that acreage only represents 28 percent of the Fresno County raisin-type grape acreage. Kern and Madera County growers harvest 21 and 40 percent of their raisin-type grape acreage by mechanical means, respectively.

By variety, Thompson Seedless grape acreage with mechanical harvesting is 35,041 or 23 percent of the total raisin-type grape acreage. Seventy-two percent of the Fiesta grape acreage is harvested mechanically and 56 percent of the Selma Pete acreage is harvested mechanically.

Most California raisins are produced by sun drying after placing 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 of USDA's National Agricultural Statistics Service, in cooperation with the California Department of Food and Agriculture, conducts an annual grape acreage survey. The 2015 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 nine 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 initially contacted by mail and follow up was done by telephone. This report summarizes data for mechanical harvest methods of raisin-type grapes. The totals included are only for those that voluntarily reported to this survey.

ACKNOWLEDGMENTS

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Raisin-Type Grapes: Acreage by County, California, 2015

County	Total acreage	Mechanical harvest		Type of mechanical harvest			
		Acres	Percent of total acreage	Overhead trellis acres	Continuous tray acres	South side trellis acres	Open gable acres
Fresno	121,578	33,746	28	6,542	26,327	a/	a/
Kern	9,176	1,896	21	1,367	a/	a/	a/
Madera	27,991	11,192	40	5,485	5,344	a/	a/
Tulare	9,339	a/	a/	a/	a/	a/	a/
Other Counties	2,064	920	45	301	896	947	545
Total	170,148	47,754	28	13,695	32,567	947	545

a/ Included in Other Counties to avoid disclosing data for individual operations.

Raisin-Type Grapes: Acreage by Variety, California, 2015

Variety	Total acreage	Mechanical harvest		Type of mechanical harvest			
		Acres	Percent of total acreage	Overhead trellis acres	Continuous tray acres	South side trellis acres	Open gable acres
Fiesta	12,566	9,009	72	6,042	2,803	a/	a/
Selma Pete	4,977	2,807	56	1,466	1,046	a/	a/
Thompson Seedless	149,379	35,041	23	5,871	28,138	810	a/
Other Raisin-Type b/	3,226	897	55	316	580	137	545
Total Raisin-Type	170,148	47,754	28	13,695	32,567	947	545

a/ Included in Other Raisin-Type varieties to avoid disclosing data for individual operations.

b/ Includes Black Corinth, 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.

OPEN GABLE – Trellis wires are connected between rows of v-shaped supports. The unique V-shape lets in additional sunlight and traps the heat. This greatly improves ripening and drying. Raisins are harvested mechanically with a harvester that has been modified to place the raisins in bins instead of gondolas.