United States Department of Agriculture
National Agricultural Statistics Service

Pacific Region - Hawaii
Macadamia Nuts
Final Season Estimates

The Pacific Region Includes the States of CA, HI, and NV
In Cooperation with the Hawaii Department of Agriculture
Pacific Regional Field Office - Hawaii· 300 Ala Moana Blvd Suite 7-118 · Honolulu, HI 96850 · 1-(800)-804-9514 · www.nass.usda.gov

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Hawaii Macadamia Nut Utilized Production Increased 15 Percent

Hawaii macadamia nut utilized production for 2019-2020 increased 15 percent from last season to 40.7 million pounds (net, wet-in-shell basis), according to the National Agricultural Statistics Service.

Harvested acreage was unchanged from previous year at 16,900 acres. The yield per acre averaged 2,410 pounds for the 2019-2020 crop year, increasing 15 percent from the previous estimate of 2,090 pounds.

Average moisture content for the overall crop this season was 20.2 percent compared with 19.5 percent from last season.

Farm value for the 2019-2020 crop is estimated at $48.8 million (net, wet-in-shell basis), up 16 percent from the 2018-2019 season. The 2019-2020 net farm price of 120.0 cents per pound was 1 cent higher than the 2018-2019 price and the fifth consecutive yearly increase. Please see Table 3 for the macadamia nut historical data series.

Table 1. MACADAMIA NUTS: Acreage, Yield, Production, Moisture, Price, and Value – Hawaii: 2015-2019 Crop years

Crop year [1]	Acreage Harvested	Yield per acre [2]	Utilized production [3]		Average moisture		Farm prices [3]		Farm value [6]
			Gross	Net [4]	Entire crop	Purchases only	Gross [5]	Net	
	--------Acres --------		*----------1,000 pounds ----------*		*--------Percent --------*		*- Cents per pound -*		*1,000 dollars*
2015-16	16,000	2.9	56,000	47,000	18.9	19.6	81.4	97.0	45,590
2016-17	16,500	2.6	49,000	42,000	19.8	19.0	85.7	100.0	42,000
2017-18	17,000	2.9	59,000	49,000	20.5	19.9	91.4	110.0	53,900
2018-19	16,900	2.1	42,500	35,300	19.5	19.4	98.8	119.0	42,007
2019-20	16,900	2.4	49,100	40,700	20.2	20.0	99.5	120.0	48,840

[1] Season begins July 1st and ends June 30th of the following year.
[2] Net production divided by acreage harvested.
[3] Wet-in-shell basis.
[4] Gross pounds less total spoilage.
[5] Farm value divided by gross production.
[6] Net production multiplied by net farm price.

2019-2020 CROP LOSS ASSESSMENT

Immature Nuts Still Account for Nearly 1/3 of the Crop Loss

Growers delivered an estimated 49.1 million pounds of macadamia nuts, wet-in-shell, to processors during the 2019-2020 season. About 17 percent of the harvest was culled, resulting in 40.7 million pounds net, wet-in-shell. The equivalent gross weight of losses, after adjusting for what would be the expected weight before the damage, was 12.9 million pounds.

Immature nuts, moldy/rotten nuts, and Koa Seed Worm continued to account for the top 3 causes of crop losses. The remaining causes of losses were attibuted to Stink Bug, Tropical Nut Borer, germinated nuts, and other causes. Macadamia nut losses shown in this report include only those culled by processors and do not include losses that occurred at the farm before delivery.

Macadamia Nuts: Loss By Cause
State of Hawaii, 2019-2020 Season

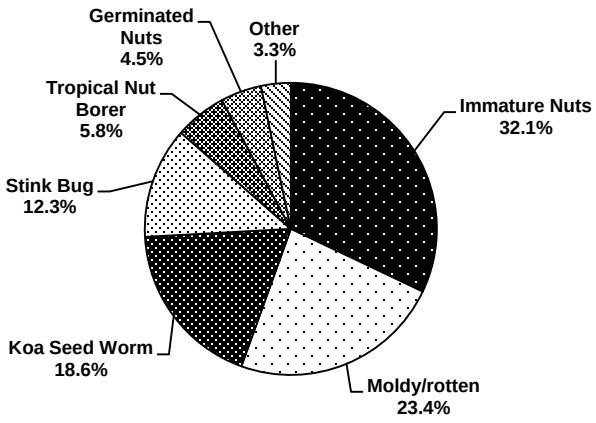

Table 2. MACADAMIA NUTS: Loss by cause, State of Hawaii, 2019-2020 and 2014-2015 [1]

Type of loss	Estimated loss [2]		Percent of losses		Percent of delivered crop	
	2019-20	2014-15	2019-20	2014-15	2019-20	2014-15
	1,000 pounds		*Percent*			
Immature nuts [3]	4,140	4,590	32.1	32.3	8.4	8.4
Moldy/rotten	3,025	2,665	23.4	18.8	6.2	4.9
Koa seed worm	2,405	2,555	18.6	18.0	4.9	4.6
Stink bug	1,590	1,545	12.3	10.9	3.2	2.8
Tropical nut borer	740	1,980	5.8	14.0	1.5	3.6
Germinated nuts	585	790	4.5	5.6	1.2	1.4
Other causes	425	65	3.3	0.4	0.9	0.1
Total	**12,910**	**14,190**	**100.0**	**100.0**	**26.3**	**25.8**

[1] The Macadamia Nut Loss Report has not been conducted since the 2014-2015 season.

[2] Includes adjustments made to reported weights to account for damage that would lower kernel weights and have the effect of underestimating the actual amount of loss. The adjustment factors were provided by Dr. H. C. Bittenbender and Dr. Vince Jones, CTAHR, University of Hawaii and were applied to both crop years. Includes only losses for nuts completely rejected for processing. Does not include nuts with some damage but still utilized. Excludes losses in the field or culled before delivery.

[3] Includes naturally occurring premature drop.

HISTORICAL DATA

Table 3. MACADAMIA NUTS: Acreage, Yield, Production, Price, and Value – Hawaii: 1983-2019

Crop year [1]	Acreage Harvested	Yield per acre [2]	Utilized Production [3]		Farm price [3]		Farm value [6]
			Gross	Net [4]	Gross [5]	Net	
	--------- *Acres* ---------		---------- *1,000 pounds* ----------		----- *Cents per pound* -----		*- 1,000 dollars -*
1983-84	10,600	3.4	38,500	36,420	62.2	65.7	23,928
1984-85	12,000	3.1	40,500	37,700	64.4	69.2	26,088
1985-86	13,500	3.1	44,700	42,000	68.1	72.5	30,450
1986-87	14,400	3.1	46,600	44,000	75.5	80.0	35,200
1987-88	15,600	2.7	45,600	42,700	78.7	84.0	35,868
1988-89	16,600	2.7	49,000	45,500	83.6	90.0	40,950
1989-90	18,200	2.8	54,000	50,500	83.2	89.0	44,945
1990-91	18,400	2.7	54,300	50,000	75.5	82.0	41,000
1991-92	18,200	2.7	53,900	49,500	64.3	70.0	34,650
1992-93	17,500	2.7	53,000	48,000	61.6	68.0	32,640
1993-94	18,500	2.6	53,000	48,500	62.2	68.0	32,980
1994-95	18,500	2.8	58,000	52,500	62.5	69.0	36,225
1995-96	19,300	2.6	57,000	51,000	66.2	74.0	37,740
1996-97	19,200	2.9	63,000	56,500	70.0	78.0	44,070
1997-98	19,200	3.0	65,000	58,000	66.9	75.0	43,500
1998-99	19,200	3.0	66,000	57,500	57.0	65.0	37,375
1999-00	18,900	3.0	64,000	56,500	59.1	67.0	37,855
2000-01	17,700	2.8	56,000	50,000	52.7	59.0	29,500
2001-02	17,800	3.1	62,000	56,000	53.3	59.0	33,040
2002-03	17,800	3.0	60,000	53,000	50.4	57.0	30,210
2003-04	17,800	3.0	60,000	53,000	53.9	61.0	32,330
2004-05	17,800	3.2	63,000	56,500	65.5	73.0	41,245
2005-06	18,000	3.0	62,000	54,000	70.5	81.0	43,740
2006-07	15,000	3.9	65,000	58,000	59.8	67.0	38,860
2007-08	15,000	2.7	48,000	41,000	51.3	60.0	24,600
2008-09	15,000	3.3	60,000	50,000	55.8	67.0	33,500
2009-10	15,000	2.8	50,000	42,000	58.8	70.0	29,400
2010-11	15,000	2.7	47,000	40,000	63.8	75.0	30,000
2011-12	15,000	3.3	58,000	49,000	65.9	78.0	38,220
2012-13	15,000	2.9	52,000	44,000	67.7	80.0	35,200
2013-14	16,000	2.6	49,000	41,000	72.8	87.0	35,670
2014-15	16,000	2.9	55,000	46,000	72.8	87.0	40,020
2015-16	16,000	2.9	56,000	47,000	81.4	97.0	45,590
2016-17	16,500	2.6	49,000	42,000	85.7	100.0	42,000
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For the complete Noncitrus Fruits and Nuts 2019 Summary visit:
https://downloads.usda.library.cornell.edu/usda-esmis/files/zs25x846c/0g3551329/qj72pt50f/ncit0520.pdf