



National Hop Report

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2016 Hop Production Up 11 Percent From Last Year

Production for Idaho, Oregon, and Washington in 2016 totaled 87.1 million pounds, up 11 percent from the 2015 crop of 78.8 million pounds. Production increased in all three States; 16 percent in Oregon, 10 percent in Washington, and 7 percent in Idaho. Combined area harvested for Idaho, Oregon, and Washington in 2016 totaled 50,857 acres, up 17 percent from the 2015 level of 43,633 acres. Acreage increased in all three States; 17 percent in Oregon, 16 percent in Washington, and 16 percent in Idaho. United States hop yield, at 1,713 pounds per acre, decreased 94 pounds from a year ago.

Washington growers produced 75 percent of the United States hop crop for 2016. Cascade, Simcoe, Zeus, Centennial, Citra, and Mosaic were the six leading varieties in Washington, accounting for about 58 percent of the State's hop crop. In Oregon, Nugget, Cascade, and Willamette were the major varieties, accounting for 49 percent of the State's hop production. In Idaho, Zeus, Cascade, and Mosaic were the major varieties, accounting for 42 percent of the State's hop production.

The 2016 value of production of the United States hop crop totaled \$498 million, up 44 percent from the record 2015 value of \$345 million. The increased value can be attributed to the higher hop acreage and production, and the continued trend to shift hop production from Alpha varieties to Aroma varieties that are higher in value. This shift occurred in all three States and resulted in a higher average price per pound in Idaho, Oregon and Washington.

Hop Area Harvested, Yield, Production, Price, and Value – States and United States: 2014-2016

State and year	Area harvested	Yield per acre	Production	Price per pound	Value of production
	(acres)	(pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
Idaho					
2014	3,743	1,847	6,913.8	2.72	18,806
2015	4,863	1,794	8,724.9	3.53	30,799
2016	5,648	1,646	9,297.7	5.50	51,137
Oregon					
2014	5,410	1,520	8,221.0	4.07	33,459
2015	6,612	1,613	10,667.8	3.24	34,564
2016	7,765	1,596	12,395.3	5.25	65,075
Washington					
2014	28,858	1,936	55,861.1	3.73	208,362
2015	32,158	1,849	59,453.3	4.71	280,025
2016	37,444	1,748	65,446.6	5.84	382,208
United States					
2014	38,011	1,868	70,995.9	3.67	260,627
2015	43,633	1,807	78,846.0	4.38	345,388
2016	50,857	1,713	87,139.6	5.72	498,420

Hop Area Harvested, Yield, and Production by Variety – States and United States: 2014-2016

State and variety	Area harvested			Yield per acre		
	2014	2015	2016	2014	2015	2016
	(acres)	(acres)	(acres)	(pounds)	(pounds)	(pounds)
Idaho						
Apollo ^R	285	286	235	2,004	2,062	1,893
Bravo ^R	126	166	151	2,579	2,625	2,359
Calypso	-	81	81	-	1,710	1,937
Cascade	821	770	788	1,746	1,633	1,585
Centennial	74	(D)	(D)	754	(D)	(D)
Chinook	344	358	418	1,673	1,850	1,712
Citra TM	91	412	576	1,200	1,271	1,213
Crystal	29	(D)	123	2,186	(D)	1,678
El Dorado ^R	63	205	227	1,144	1,125	1,658
Mosaic TM	-	272	496	-	2,278	2,204
Simcoe ^R	67	199	232	969	1,576	1,335
Super Galena ^R	161	92	69	2,165	2,189	1,872
Zeus	662	661	580	2,891	2,909	2,761
Experimental	41	72	9	1,366	1,269	1,000
Other varieties ¹	979	1,289	1,663	1,354	1,348	1,174
Total	3,743	4,863	5,648	1,847	1,794	1,646
Oregon						
Cascade	961	1,085	1,211	1,402	1,994	1,597
Centennial	443	631	723	1,095	1,352	1,235
Chinook	-	129	107	-	1,860	1,675
Citra TM	-	246	654	-	980	1,047
Crystal	-	377	423	-	2,011	2,216
Fuggle	(D)	85	141	(D)	1,066	1,021
Golding	234	238	(D)	955	837	(D)
Liberty	(D)	210	(D)	(D)	1,360	(D)
Magnum	176	199	151	1,077	1,572	1,493
Mt. Hood	269	288	324	1,450	1,276	1,463
Nugget	1,363	1,484	1,460	1,978	1,888	1,925
Perle	100	(D)	(D)	1,057	(D)	(D)
Simcoe ^R	-	191	330	-	1,678	1,969
Sterling	130	209	228	1,423	1,344	1,626
Super Galena ^R	125	82	(D)	2,309	2,340	(D)
Tettnanger	(D)	133	122	(D)	1,242	1,193
Willamette	564	661	833	1,453	1,226	1,573
Experimental	(D)	(D)	(D)	(D)	(D)	(D)
Other varieties ¹	1,045	364	1,058	1,426	1,609	1,546
Total	5,410	6,612	7,765	1,520	1,613	1,596

See footnote(s) at end of table.

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**Hop Area Harvested, Yield, and Production by Variety – States and United States:
2014-2016 (continued)**

State and variety	Production		
	2014 (1,000 pounds)	2015 (1,000 pounds)	2016 (1,000 pounds)
Idaho			
Apollo ^R	571.1	589.6	444.9
Bravo ^R	324.9	435.7	356.2
Calypso	-	138.5	156.9
Cascade	1,433.1	1,257.8	1,248.9
Centennial	55.8	(D)	(D)
Chinook	575.4	662.2	715.5
Citra TM	109.2	523.7	698.5
Crystal	63.4	(D)	206.4
El Dorado ^R	72.1	230.6	376.3
Mosaic TM	-	619.7	1,093.4
Simcoe ^R	64.9	313.6	309.8
Super Galena ^R	348.5	201.4	129.2
Zeus	1,913.9	1,922.8	1,601.1
Experimental	56.0	91.4	9.0
Other varieties ¹	1,325.5	1,737.9	1,951.6
Total	6,913.8	8,724.9	9,297.7
Oregon			
Cascade	1,347.4	2,163.0	1,934.5
Centennial	485.2	853.3	893.2
Chinook	-	240.0	179.2
Citra TM	-	241.0	684.7
Crystal	-	758.1	937.2
Fuggle	(D)	90.6	143.9
Golding	223.5	199.3	(D)
Liberty	(D)	285.6	(D)
Magnum	189.6	312.9	225.5
Mt. Hood	390.0	367.6	473.9
Nugget	2,696.4	2,802.1	2,810.9
Perle	105.7	(D)	(D)
Simcoe ^R	-	320.5	649.9
Sterling	185.0	280.8	370.8
Super Galena ^R	288.6	191.9	(D)
Tettnanger	(D)	165.2	145.6
Willamette	819.5	810.3	1,310.0
Experimental	(D)	(D)	(D)
Other varieties ¹	1,490.1	585.6	1,636.0
Total	8,221.0	10,667.8	12,395.3

See footnote(s) at end of table.

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**Hop Area Harvested, Yield, and Production by Variety – States and United States:
2014-2016 (continued)**

State and variety	Area harvested			Yield per acre		
	2014 (acres)	2015 (acres)	2016 (acres)	2014 (pounds)	2015 (pounds)	2016 (pounds)
Washington						
ADHA-483 Azacca TM	79	175	506	1,704	1,872	1,870
ADHA-881 Jarrylo TM	75	122	131	1,548	1,541	1,408
Ahtanum TM	194	145	155	1,680	1,557	1,012
Apollo ^R	700	708	735	2,649	2,738	2,225
Bravo ^R	584	569	573	2,768	2,824	2,671
Cascade	4,837	4,935	5,582	1,824	1,936	1,727
Centennial	2,836	3,770	4,359	1,347	1,145	1,355
Chinook	1,297	1,300	1,415	1,815	1,793	1,420
Citra TM	1,670	2,335	3,264	1,570	1,541	1,543
Cluster	728	666	623	1,825	1,705	1,700
Columbus/Tomahawk ^R	1,738	1,673	1,416	2,629	2,524	1,969
Comet	-	108	163	-	1,780	949
Crystal	181	131	191	1,366	1,183	1,475
El Dorado ^R	82	243	396	2,206	2,154	1,904
Galena	306	295	262	1,801	1,968	1,692
Glacier	126	155	145	1,202	996	1,168
Golding	94	53	(D)	772	854	(D)
Magnum	-	108	(D)	-	1,255	(D)
Millennium	113	(D)	(D)	1,996	(D)	(D)
Mosaic TM	671	1,528	2,029	2,225	2,036	2,326
Mt. Hood	150	130	88	1,333	1,069	1,075
Northern Brewer	131	123	(D)	1,244	991	(D)
Nugget	265	202	186	1,583	1,927	1,774
Simcoe ^R	1,819	2,916	3,769	1,542	1,540	1,673
Summit TM	2,522	1,620	1,769	2,105	1,969	1,648
Super Galena ^R	606	351	310	2,562	2,729	2,501
Vanguard	58	84	(D)	1,455	1,223	(D)
Willamette	595	698	728	1,130	1,007	1,277
YCR-4 (Palisade ^R)	223	454	580	2,469	1,950	2,228
YCR-5 (Warrior ^R)	192	(D)	(D)	1,821	(D)	(D)
Zeus	3,375	2,989	2,502	2,811	2,819	2,469
Experimental	392	316	567	1,625	1,546	1,592
Other varieties ¹	2,219	3,256	5,000	1,418	1,603	1,662
Total	28,858	32,158	37,444	1,936	1,849	1,748
United States ²	38,011	43,633	50,857	1,868	1,807	1,713

See footnote(s) at end of table.

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**Hop Area Harvested, Yield, and Production by Variety – States and United States:
2014-2016 (continued)**

State and variety	Production		
	2014 (1,000 pounds)	2015 (1,000 pounds)	2016 (1,000 pounds)
Washington			
ADHA-483 Azacca TM	134.6	327.6	946.4
ADHA-881 Jarrylo TM	116.1	188.0	184.4
Ahtanum TM	326.0	225.8	156.9
Apollo ^R	1,854.3	1,938.6	1,635.6
Bravo ^R	1,616.7	1,606.7	1,530.5
Cascade	8,821.0	9,553.3	9,638.8
Centennial	3,818.8	4,317.3	5,908.6
Chinook	2,354.3	2,331.1	2,008.9
Citra TM	2,622.5	3,597.2	5,035.0
Cluster	1,328.6	1,135.7	1,058.8
Columbus/Tomahawk ^R	4,569.2	4,223.4	2,787.9
Comet	-	192.2	154.7
Crystal	247.2	155.0	281.7
El Dorado ^R	180.9	523.5	754.0
Galena	551.0	580.6	443.3
Glacier	151.5	154.4	169.3
Golding	72.6	45.3	(D)
Magnum	-	135.5	(D)
Millennium	225.6	(D)	(D)
Mosaic TM	1,493.2	3,111.6	4,720.4
Mt. Hood	199.9	139.0	94.6
Northern Brewer	163.0	121.9	(D)
Nugget	419.5	389.2	330.0
Simcoe ^R	2,805.8	4,489.5	6,305.1
Summit TM	5,308.3	3,189.6	2,914.5
Super Galena ^R	1,552.4	957.8	775.3
Vanguard	84.4	102.7	(D)
Willamette	672.5	703.1	929.3
YCR-4(Palisade ^R)	550.6	885.2	1,292.5
YCR-5(Warrior ^R)	349.7	(D)	(D)
Zeus	9,488.4	8,426.3	6,178.5
Experimental	637.0	488.4	902.7
Other varieties ¹	3,145.5	5,217.8	8,308.9
Total	55,861.1	59,453.3	65,446.6
United States²	70,995.9	78,846.0	87,139.6

- Represents zero.

(D) Withheld to avoid disclosing data for individual operations.

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¹ Includes data withheld to avoid disclosure of individual operations and varieties not listed.

² Includes 330 acres of organic hops for 2016 with yield equal to 1,344 pounds per acre and production at 444,400 pounds.

Statistical Methodology

Survey Procedures: Grower surveys are conducted in the three estimating States to collect acreage, yield, and production data from growers. Additionally, contacts are made with each of the three Hop Commissions.

Estimating Procedures: Information obtained from the hops growers surveys are used to establish estimates of hops. These estimates are reviewed for errors, reasonableness, and consistency with historical estimates and industry check data.

Revision Policy: All hop estimates are subject to revision the following year based on a thorough review of all available data.

Reliability: Survey results are subject to non-sampling errors such as omission, duplication, imputation for missing data, and mistakes in reporting, recording, and processing the data. These errors cannot be measured directly, but are minimized through rigid quality controls in the data collection process and a careful review of all reported data for consistency and reasonableness.

Information Contacts

Listed below are the commodity statisticians in the Crops Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to nass@nass.usda.gov

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Fleming Gibson – Citrus, Coffee, Tropical Fruits.....	(202) 720-5412
Greg Lemmons – Berries, Cranberries, Potatoes, Sweet Potatoes	(202) 720-4285
Dan Norris – Austrian Winter Peas, Dry Edible Peas, Lentils, Mint, Mushrooms, Peaches, Pears, Wrinkled Seed Peas, Dry Beans	(202) 720-3250
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