



2013

STATISTICAL REPORT

RELEASED JANUARY 2014

PRESENTED BY
HOP GROWERS OF AMERICA



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Conversions used while compiling
the data presented in this document:

1 hectare = 2.4711 acres
1 acre = 0.405 hectares
1 kilogram = 2.2046 pounds
1 pound = 0.45 kilograms
1 metric tonne = 2204.6 pounds
1 hectoliter = 21.997 gallons
1 zentner = 110.23 pounds

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U.S. HOP ACREAGE BY STATE AND VARIETY (FIVE YEARS)

STATE & VARIETY	ACRES HARVESTED					2012-13
	2009	2010	2011	2012	2013	% +/-
IDAHO						
Apollo	*	*	*	*	314	
Bravo	*	*	*	*	130	
Cascade	*	*	*	*	628	
Centennial	*	*	*	*	57	
Citra® (HBC 394)	*	*	*	*	19	
Chinook	*	*	*	*	324	
El Dorado®	*	*	*	*	14	
Super Galena	*	*	*	*	278	
Zeus	*	*	*	*	548	
Experimental	*	*	*	*	5	
Other Varieties	*	*	*	*	1059	
Total Idaho	4,030	2,331	2,265	2,423	3,376	39.33%
OREGON						
Cascade	152	122	263	346	423	22.25%
Centennial	*	*	*	208	249	19.71%
Fuggle	*	*	*	*	91	
Golding	*	*	*	*	194	
Liberty	*	*	108	83	*	
Magnum	*	*	64	58	104	79.31%
Mt. Hood	158	188	214	226	221	-2.21%
Nugget	1,773	1,356	1,438	1,619	1,667	2.96%
Perle	*	*	98	*	55	
Sterling	101	87	86	*	122	
Super Galena	177	134	241	175	155	-11.43%
Tettnanger	*	*	70	61	*	
Willamette	2,469	1,452	779	905	553	-38.90%
Experimental	*	*	*	*	35	
Other Varieties	934	1,283	841	789	917	16.22%
Total Oregon	5,764	4,622	4,202	4,470	4,786	7.07%
WASHINGTON						
Ahtanum	*	*	*	176	211	19.89%
Apollo	747	827	885	874	685	-21.62%
Bravo	335	414	593	528	466	-11.74%
Cascade	2,019	1,728	2,108	2,693	4,237	57.33%
Centennial	298	357	641	1,478	1,869	26.45%
Chinook	384	443	572	1,215	1,415	16.46%
Citra® (HBC 394)	98	113	239	538	1,296	140.89%
Cluster	501	392	482	546	802	46.89%
Columbus/Tomahawk®	4,858	3,401	2,947	2,523	2,336	-7.41%
Crystal	*	*	*	154	214	38.96%
El Dorado®	*	*	*	*	82	
Galena	2,412	1,920	1,415	954	440	-53.88%
Glacier	70	61	44	56	98	75.00%
Golding	42	*	*	*	105	
Mosaic™ (HBC 369)	*	*	*	*	382	
Millennium	557	555	403	397	420	5.79%
Mt. Hood	96	62	95	120	168	40.00%
Northern Brewer	92	94	159	120	170	41.67%
Nugget	1,028	829	861	875	395	-54.86%
Simcoe® (YCR 14)	183	237	495	940	1,298	38.09%
Summit™ 2	3,238	*	2,477	2,721	2,844	4.52%
Super Galena	839	886	990	959	779	-18.77%
Tettnanger	*	*	*	76	95	25.00%
Vanguard	*	*	*	59	76	28.81%
Willamette	2,719	1,734	894	692	522	-24.57%
YCR-4 - Palisade®	351	373	308	264	132	-50.00%
YCR-5 - Warrior®	301	296	260	195	180	-7.69%
Zeus	6,544	4,440	4,159	3,253	3,277	0.74%
Experimental	*	*	*	*	258	
Other*	1,212	5,174	2,293	2,634	1,810	-31.28%
Total Washington	28,924	24,336	23,320	25,040	27,062	8.08%
Total United States³	38,718	31,289	29,787	31,933	35,224	10.31%

SOURCE: USDA-NASS and ADHA. Prepared by HGA.

* Included in the category "Other" to avoid disclosure of individual operations.

² For 2009, 2011 and 2012 an estimate of Summit acreage provided by the American Dwarf Hop Association is reported as a separate variety in this chart, deducting that acreage from the "Other" acreage reported by NASS.

U.S. HOP YIELDS BY STATE AND VARIETY (FIVE YEARS)

STATE & VARIETY	YIELDS (POUNDS PER ACRE)					2012-13
	2009	2010	2011	2012	2013	% +/-
IDAHO						
Apollo	*	*	*	*	2,054	
Bravo	*	*	*	*	2,635	
Cascade	*	*	*	*	1,224	
Centennial	*	*	*	*	1,004	
Citra® (HBC 394)	*	*	*	*	1,011	
Chinook	*	*	*	*	1,801	
El Dorado®	*	*	*	*	971	
Super Galena	*	*	*	*	2,287	
Zeus	*	*	*	*	3,049	
Experimental	*	*	*	*	2,800	
Other Varieties	*	*	*	*	1,063	
Total Idaho	1,943	2,129	2,408	1,745	1,741	-0.23%
OREGON						
Cascade	1,741	1,680	1,616	1,802	1,483	-17.70%
Centennial	*	*	*	1,779	1,585	-10.91%
Fuggle	*	*	*	*	827	
Golding	*	*	*	*	1,148	
Liberty	*	*	1,326	2,519	*	
Magnum	*	*	1,928	1,737	1,406	-19.06%
Mt. Hood	1,671	1,640	1,890	1,737	1,567	-9.79%
Nugget	2,548	2,119	2,317	2,071	2,053	-0.87%
Perle	*	*	1,622	*	1,178	
Sterling	1,684	1,644	1,915	*	1,621	
Super Galena	2,563	2,421	2,263	2,763	2,557	-7.46%
Tettnanger	*	*	1,634	1,493	*	
Willamette	1,561	1,535	1,716	1,663	1,491	-10.34%
Experimental	*	*	*	*	1,734	
Other Varieties	1,601	1,711	1,511	1,690	1,931	14.26%
Total Oregon	1,948	1,791	1,908	1,885	1,786	-5.25%
WASHINGTON						
Ahtanum	*	*	*	1,489	1,647	
Apollo	2,941	2,778	2,758	2,655	2,993	12.73%
Bravo	2,397	2,566	2,609	2,647	3,076	16.21%
Cascade	2,120	1,905	1,955	1,854	1,723	-7.07%
Centennial	1,490	1,791	1,403	1,354	1,554	14.77%
Chinook	1,819	1,963	1,718	1,699	1,987	16.95%
Citra® (HBC 394)	836	1,930	1,812	1,342	1,405	4.69%
Cluster	2,370	2,060	2,019	1,965	1,948	-0.87%
Columbus/Tomahawk®	2,790	2,350	2,519	2,280	2,571	12.76%
Crystal	*	*	*	1,184	1,286	
El Dorado®	*	*	*	*	1,761	
Galena	1,852	1,810	1,821	1,742	1,969	13.03%
Glacier	2,093	1,943	2,182	1,461	1,258	-13.89%
Golding	826	*	*	*	1,010	
Mosaic™ (HBC 369)	*	*	*	*	1,709	
Millennium	2,465	2,185	2,562	2,017	2,266	12.35%
Mt. Hood	1,570	1,211	838	1,264	1,161	-8.15%
Northern Brewer	753	1,270	1,698	1,443	1,256	-12.96%
Nugget	2,060	1,808	1,969	1,679	1,931	15.01%
Simcoe® (YCR 14)	2,137	1,698	1,779	1,679	1,682	0.18%
Summit™ ²	2,687	*	2,705	2,084	1,873	-10.12%
Super Galena	3,186	2,622	3,041	2,645	2,812	6.31%
Tettnanger	*	*	*	1,003	755	
Vanguard	*	*	*	1,280	1,349	
Willamette	1,455	1,350	1,510	1,359	1,240	-8.76%
YCR-4 - Palisade®	2,756	2,431	2,562	2,356	2,790	18.42%
YCR-5 - Warrior®	2,110	1,778	2,061	1,968	2,169	10.21%
Zeus	3,387	2,678	2,572	2,390	2,940	23.01%
Experimental	*	*	*	*	1,562	
Other*	1,567	1,968	1,987	1,775	1,697	-4.39%
Total Washington	2,533	2,147	2,200	1,941	2,029	4.53%
Total United States	2,383	2,093	2,175	1,918	1,969	2.66%

SOURCE: USDA-NASS and ADHA. Prepared by HGA.

* included in the category "Other" to avoid disclosure of individual operations.

² A yield estimate for Summit provided by the American Dwarf Hop Association is provided as a separately reported variety in this chart, deducting that amount from the "Other" yields reported by NASS for 2009, 2011, and 2012.

U.S. HOP PRODUCTION BY STATE AND VARIETY (FIVE YEARS)

STATE & VARIETY	HOP PRODUCTION (POUNDS)					2012-13
	2009	2010	2011	2012	2013	% +/-
IDAHO						
Apollo	*	*	*	*	644,800	
Bravo	*	*	*	*	342,500	
Cascade	*	*	*	*	768,900	
Centennial	*	*	*	*	57,200	
Citra® (HBC 394)	*	*	*	*	19,200	
Chinook	*	*	*	*	583,400	
El Dorado®	*	*	*	*	13,600	
Super Galena	*	*	*	*	635,700	
Zeus	*	*	*	*	1,670,800	
Experimental	*	*	*	*	14,000	
Other Varieties	*	*	*	*	1,125,900	
Total Idaho	7,829,100	4,962,600	5,454,100	4,227,600	5,876,000	38.99%
OREGON						
Cascade	264,600	205,000	425,000	623,500	627,100	0.58%
Centennial	*	*	*	370,000	394,600	
Fuggle	*	*	*	*	75,300	
Golding	*	*	*	*	222,700	
Liberty	*	*	143,200	126,700	*	
Magnum	*	*	123,400	146,100	146,200	0.07%
Mt. Hood	264,000	308,300	404,500	392,600	346,200	-11.82%
Nugget	4,517,100	2,873,200	3,332,100	3,353,500	3,422,000	2.04%
Perle			159,000	*	64,800	
Sterling	170,100	143,000	164,700	*	197,800	
Super Galena	453,700	324,400	545,500	483,600	396,400	-18.03%
Tettnanger	*	*	114,400	91,100	*	
Willamette	3,853,900	2,228,300	1,337,000	1,504,700	824,700	-45.19%
Experimental	*	*	*	*	60,700	
Other Varieties	1,495,400	2,195,400	1,270,600	1,333,500	1,770,600	32.78%
Total Oregon	11,018,800	8,277,600	8,019,400	8,425,300	8,549,100	1.47%
WASHINGTON						
Ahtanum	*	*	*	262,000	347,500	32.63%
Apollo	2,196,900	2,297,400	2,440,400	2,320,600	2,050,000	-11.66%
Bravo	803,000	1,062,300	1,547,200	1,397,400	1,433,600	2.59%
Cascade	4,280,300	3,291,800	4,121,300	4,993,000	7,300,000	46.20%
Centennial	444,000	639,400	899,400	2,001,000	2,905,200	45.19%
Chinook	698,500	869,600	982,800	2,064,200	2,812,300	36.24%
Citra® (HBC 394)	81,900	218,100	433,100	721,900	1,820,300	152.15%
Cluster	1,187,400	807,500	973,300	1,073,000	1,562,000	45.57%
Columbus/Tomahawk®	13,553,800	7,992,400	7,422,400	5,751,700	6,006,100	4.42%
Crystal	*	*	*	182,300	275,300	51.01%
El Dorado®	*	*	*	*	144,400	
Galena	4,467,000	3,475,200	2,576,200	1,662,000	866,300	-47.88%
Glacier	146,500	118,500	96,000	81,800	123,300	50.73%
Golding	34,700	*	*	*	106,000	
Mosaic™ (HBC 369)	*	*	*	*	652,800	
Millennium	1,373,000	1,212,700	1,032,400	800,800	951,600	18.83%
Mt. Hood	150,700	75,100	79,600	151,700	195,000	28.54%
Northern Brewer	69,300	119,400	270,000	173,100	213,500	23.34%
Nugget	2,117,700	1,498,800	1,695,100	1,468,700	762,800	-48.06%
Simcoe® (YCR 14)	391,100	402,400	880,800	1,578,000	2,183,400	38.37%
Summit™ 2	8,700,568	*	6,702,506	5,670,361	5,326,600	-6.06%
Super Galena	2,673,100	2,323,100	3,010,600	2,536,400	2,190,300	-13.65%
Tettnanger	*	*	*	76,200	71,700	-5.91%
Vanguard	*	*	*	75,500	102,500	35.76%
Willamette	3,956,100	2,340,900	1,350,000	940,400	647,100	-31.19%
YCR-4 - Palisade®	967,400	906,800	789,100	622,100	368,300	-40.80%
YCR-5 - Warrior®	635,100	526,300	535,900	383,800	390,400	1.72%
Zeus	22,164,500	11,890,300	10,695,900	7,775,900	9,635,700	23.92%
Experimental	*	*	*	*	402,900	
Other*	1,899,232	10,184,400	2,774,094	3,832,439	3,071,900	-19.84%
Total Washington	72,991,800	52,252,400	51,308,100	48,596,300	54,918,800	13.01%
Total United States	91,839,700	65,492,600	64,781,600	61,249,200	69,343,900	13.22%

SOURCE: USDA-NASS and ADHA. Prepared by HGA.

* included in the category "Other" to avoid disclosure of individual operations.

2 A production estimate for Summit provided by the American Dwarf Hop Association is provided as a separately reported variety in this chart, deducting that amount from the "Other" production reported by NASS for 2009, 2011, and 2012.

U.S. HOP ACREAGE BY STATE (10 YEARS - IN ACRES)

YEAR	WASHINGTON	OREGON	IDAHO	TOTAL
2004	19,382	5,107	3,253	27,742
2005	21,013	5,163	3,287	29,463
2006	21,532	5,036	2,797	29,365
2007	22,745	5,270	2,896	30,911
2008	30,595	6,370	3,933	40,898
2009	28,925	5,764	4,030	39,726
2010	24,336	4,622	2,331	31,289
2011	23,320	4,202	2,265	29,787
2012	25,040	4,470	2,423	31,933
2013	27,062	4,786	3,376	35,224

SOURCE: USDA-NASS. Prepared by HGA.

U.S. AVERAGE HOP YIELD (TEN YEARS)

YEAR	POUNDS PER ACRE			
	WASHINGTON	OREGON	IDAHO	TOTAL U.S.
2004	2,137	1,686	1,588	1,990
2005	1,878	1,560	1,640	1,796
2006	2,058	1,757	1,613	1,964
2007	2,049	1,811	1,417	1,949
2008	2,072	1,569	1,841	1,971
2009	2,533	1,948	1,943	2,383
2010	2,147	1,791	2,129	2,093
2011	2,200	1,908	2,408	2,175
2012	1,941	1,885	1,745	1,918
2013	2,029	1,786	1,741	1,969

SOURCE: USDA-NASS. Prepared by HGA.

U.S. HOPS: SEASON AVERAGE PRICE & TOTAL CROP VALUE

Marketing Year	SEASON AVERAGE PRICE				U.S.	Total Crop
	Washington	Oregon	Idaho	U.S.	Production	Value
	----- (\$ / pound) -----				(Lbs. x 1,000)	(x 1,000)
2004	\$1.83	\$2.31	\$1.60	\$1.88	55,203	\$103,969
2005	\$1.86	\$2.56	\$1.63	\$1.94	52,914	\$102,818
2006	\$1.98	\$2.60	\$1.61	\$2.05	57,672	\$118,008
2007	\$2.94	\$3.31	\$2.77	\$2.99	60,253	\$179,978
2008	\$4.08	\$3.75	\$4.00	\$4.03	80,630	\$325,092
2009	\$3.54	\$3.63	\$3.75	\$3.57	94,678	\$337,874
2010	\$3.11	\$3.96	\$3.89	\$3.28	65,493	\$214,589
2011	\$3.06	\$3.79	\$2.93	\$3.14	64,782	\$203,378
2012	\$3.10	\$3.91	\$2.69	\$3.18	61,249	\$194,964
2013	\$3.68	\$3.68	\$2.64	\$3.59	69,344	\$249,075

SOURCE: USDA-NASS. Prepared by HGA.

2013 HOP INSPECTION REPORT

TABLE 1. Total Number of Bales Inspected – Weighted Average of Leaf & Stem in Parenthesis

YEAR	WASHINGTON (%)	OREGON (%)	IDAHO (%)	TOTAL (%)
2009	356,581 (0.12)	53,178 (0.25)	27,328 (0.15)	437,087 (0.14)
2010	259,380 (0.17)	41,384 (0.15)	24,000 (0.04)	324,764 (0.16)
2011	254,385 (0.14)	40,093 (0.09)	27,251 (0.02)	321,729 (0.12)
2012	236,025 (0.33)	39,233 (0.16)	19,312 (0.05)	294,570 (0.29)
2013	266,356 (0.28)	35,388 (0.34)	28,412 (0.23)	330,156 (0.28)

TABLE 2. Number of Bales in Each Leaf & Stem Category – 2013

	0%	1%	2%	3%	4%	5%	6%	7%	TOTAL
WA	201,912	56,011	6,434	1,397	541	61	-	-	266,356
OR	25,859	8,007	986	366	170	-	-	-	35,388
ID	22,441	5,286	685	-	-	-	-	-	28,412
Total	250,212	69,304	8,105	1,763	711	61	0	-	330,156
% of Total	76%	21%	2%	1%	0%	0%	0%	0%	100%

TABLE 3. Number of Bales in Each Seed Category – 2013

	0%	1%	2%	3%	4%	5%	6%	7+%	TOTAL
WA	167,147	65,768	20,019	8,447	3,216	1,162	360	237	266,356
OR	19,325	7,373	3,697	1,363	1,398	782	448	1,002	35,388
ID	21,215	2,365	459	29	420	82	101	3741	28,412
Total	207,687	75,506	24,175	9,839	5,034	2,026	909	4,980	330,156
% of Total	63%	23%	7%	3%	2%	1%	0%	2%	100%

SOURCE: USDA-GIPSA (Federal Grain Inspection Service).

U.S. HOP LEAF, STEM & SEED CONTENT PERCENTAGE (10 YEARS)

Year	WASHINGTON Leaf & Stem	OREGON Leaf & Stem	IDAHO Leaf & Stem	U.S. AVERAGE Leaf & Stem	% Seed Content
2004	0.11	0.28	0.01	0.07	0.56
2005	0.08	0.18	0.01	0.10	0.80
2006	0.09	0.16	0.14	0.15	0.56
2007	0.18	0.20	0.23	0.19	0.83
2008	0.34	0.22	0.03	0.31	1.85
2009	0.12	0.25	0.15	0.14	0.82
2010	0.17	0.15	0.04	0.16	1.31
2011	0.14	0.09	0.02	0.12	1.34
2012	0.33	0.16	0.05	0.29	0.66
2013	0.28	0.34	0.23	0.28	0.68

SOURCE: USDA-GIPSA (Federal Grain Inspection Service). Prepared by HGA.

IHGC AROMA ACREAGE (FIVE YEARS)

COUNTRY	AROMA ACREAGE (IN ACRES)					2012-13
	2009	2010	2011	2012	2013	% +/-
Australia*	67	79	119	128	158	23.08%
Austria	474	460	479	477	462	-3.11%
Belgium	126	126	148	175	173	-1.41%
China*	1,433	1,433	946	853	494	-42.03%
Czech Rep.	12,316	12,215	10,791	10,413	10,045	-3.54%
France	1,068	983	892	922	724	-21.45%
Germany	23,673	23,844	23,569	22,489	21,733	-3.36%
New Zealand	568	568	655	655	712	8.68%
Poland	1,905	1,008	1,008	988	897	-9.25%
Romania	183	158	151	151	156	3.28%
Russia*	376	855	208	208	208	0.00%
Serbia*	84	84	84	84	84	0.00%
Slovakia	581	566	549	529	430	-18.69%
Slovenia	3,581	3,210	3,168	2,634	2,797	6.19%
South Africa*	0	0	0	0	0	0.00%
Spain	0	0	0	0	0	0.00%
Ukraine*	1,589	1,663	1,268	853	932	9.28%
UK - England	2,002	2,019	1,984	1,965	1,829	-6.92%
USA	13,425	10,811	11,921	15,558	19,996	28.53%
IHGC Total	63,450	60,082	57,940	59,082	61,829	4.65%

SOURCE: IHGC Economic Commission annual reports.

*Countries with partial provided report updates for the IHGC. Missing figures were used from previous reports or from IHGC estimates. Numbers may not total exactly due to rounding and standard/metric conversions.

IHGC ALPHA ACREAGE (FIVE YEARS)

COUNTRY	ALPHA ACREAGE (IN ACRES)					2012-13
	2009	2010	2011	2012	2013	% +/-
Australia*	1,203	1,028	1,006	988	741	-25.00%
Austria	54	79	94	94	106	13.16%
Belgium	334	334	297	215	217	1.15%
China*	12,889	12,889	10,070	9,108	6,919	-24.04%
Czech Rep.	163	183	161	151	133	-11.48%
France	99	111	156	163	146	-10.61%
Germany	20,228	20,906	20,248	18,397	17,162	-6.72%
New Zealand	420	371	284	247	222	-10.00%
Poland	3,613	3,361	3,361	2,471	2,187	-11.50%
Romania	428	425	428	445	450	1.11%
Russia*	168	183	133	133	133	0.00%
Serbia*	82	82	82	82	82	0.00%
Slovakia	0	0	0	0	0	0.00%
Slovenia	168	138	178	91	94	2.70%
South Africa*	1,189	1,216	1,216	1,216	1,216	0.00%
Spain	1,156	1,211	1,260	1,260	1,194	-5.29%
Ukraine*	808	588	297	208	203	-2.38%
UK - England	667	623	766	633	598	-5.47%
USA	26,300	20,436	17,866	15,249	15,444	1.28%
IHGC Total	69,969	64,162	57,900	51,152	47,247	-7.63%

SOURCE: IHGC Economic Commission annual reports.

*Countries with partial provided report updates for the IHGC. Missing figures were used from previous reports or from IHGC estimates. Numbers may not total exactly due to rounding and standard/metric conversions.

IHGC TOTAL ACREAGE (FIVE YEARS)

COUNTRY	TOTAL ACREAGE (IN ACRES)					2012-13
	2009	2010	2011	2012	2013	% +/-
Australia*	1,270	1,107	1,124	1,117	1,110	-0.66%
Austria	529	536	573	571	610	6.93%
Belgium	460	460	445	390	390	0.00%
China*	14,322	14,322	11,016	9,961	7,413	-25.58%
Czech Rep.	12,479	12,398	10,952	10,564	10,673	1.03%
France	1,164	1,095	1,048	1,085	1,058	-2.51%
Germany	43,902	44,749	43,818	40,887	41,636	1.83%
New Zealand	988	939	939	902	934	3.56%
Poland	5,518	4,369	4,369	3,460	3,353	-3.07%
Romania	610	583	578	596	618	3.73%
Russia*	544	1,038	341	341	390	14.49%
Serbia*	166	166	166	166	195	17.91%
Slovakia	581	566	549	529	430	-18.69%
Slovenia	3,749	3,348	3,346	2,726	2,891	6.07%
South Africa*	1,189	1,216	1,216	1,216	1,216	0.00%
Spain	1,156	1,211	1,260	1,260	1,194	-5.29%
Ukraine*	2,397	2,251	1,564	1,060	1,159	9.32%
UK - England	2,669	2,642	2,750	2,597	2,427	-6.57%
USA	39,725	31,247	29,787	30,807	35,223	14.33%
IHGC Total	133,417	124,242	115,840	110,233	112,919	2.44%

SOURCE: IHGC Economic Commission annual reports. IHGC Total Acreage includes baby acreage (not included in separate aroma and alpha tables. Numbers may not total exactly due to rounding and standard/metric conversions.

*Countries with partial provided report updates for the IHGC. Missing figures were used from previous reports or from IHGC estimates.

IHGC HOP ACREAGE AND PRODUCTION 2013

COUNTRY	HOP ACREAGE (acres)				HOP PRODUCTION (pounds)			
	AROMA	ALPHA	NEW	TOTAL	AROMA	ALPHA	TOTAL	Alpha MT.
Australia*	158	741	210	1,110	440,920	2,085,552	2,526,472	143
Austria	462	106	42	610	626,106	194,005	820,111	23
Belgium	173	217	0	390	176,368	308,644	485,012	20
China*	494	6,919	0	7,413	881,840	12,345,760	13,227,600	500
Czech Rep.	10,045	133	494	10,673	11,558,718	191,800	11,750,518	196
France	724	146	188	1,058	1,093,482	255,734	1,349,215	27
Germany	21,733	17,162	2,740	41,636	27,242,242	33,503,306	60,745,548	2,680
New Zealand	712	222	0	934	1,153,006	396,828	1,549,834	70
Poland	897	2,187	269	3,353	1,421,967	3,161,396	4,583,363	193
Romania	156	450	12	618	101,412	268,961	370,373	17
Russia*	208	133	49	390	202,823	154,322	357,145	9
Serbia*	84	82	30	195	127,867	167,550	295,416	11
Slovakia	430	0	0	430	425,488	0	425,488	7
Slovenia	2,797	94	25	2,891	2,724,886	132,276	2,857,162	100
South Africa*	0	1,216	0	1,216	0	2,012,800	2,012,800	128
Spain	0	1,194	0	1,194	0	1,869,501	1,869,501	104
Ukraine*	932	203	25	1,159	947,978	198,414	1,146,392	35
UK - England	1,829	598	0	2,427	1,620,381	1,102,300	2,722,681	96
USA	19,996	15,227	0	35,223	32,123,227	37,220,262	69,343,488	3,680
IHGC Total	61,829	47,030	4,085	112,919	82,868,709	95,569,410	178,438,119	8,039

SOURCE: IHGC Economic Commission annual reports. IHGC Total Acreage includes baby acreage (not included in separate aroma and alpha tables. Numbers may not total exactly due to rounding and standard/metric conversions.

*Countries with partial provided report updates for the IHGC. Missing figures were used from previous reports or from IHGC estimates.

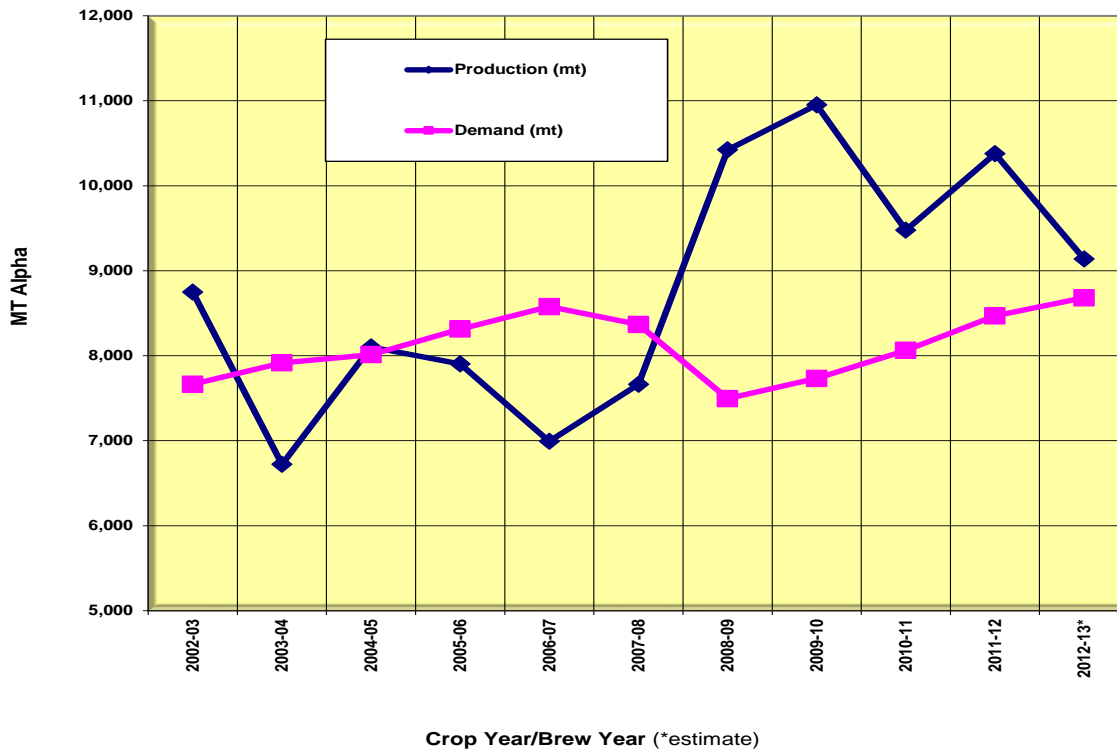
U.S. & GERMAN ALPHA ACID PRODUCTION (10 YEARS)

YEAR	UNITED STATES				GERMANY			
	Pounds of Hops (x 1,000)	MT Hops	MT Alpha	Avg. Alpha %*	Pounds of (x 1,000)	MT Hops	MT Alpha	Avg. Alpha %*
2004	55,538	25,192	2,900	11.5%	73,854	33,500	2,915	8.7%
2005	51,796	23,495	2,600	11.1%	75,397	34,200	3,272	9.6%
2006	53,815	24,410	2,929	12.0%	62,832	28,500	2,328	8.2%
2007	58,988	26,757	3,280	12.3%	70,854	32,139	2,880	9.0%
2008	80,630	36,574	4,150	11.3%	70,854	32,139	4,100	12.8%
2009	91,491	41,500	4,690	11.3%	87,104	39,510	3,520	8.9%
2010	64,954	29,463	3,517	11.9%	75,177	34,100	3,600	10.6%
2011	64,992	29,480	4,308	14.6%	82,673	37,500	4,400	11.7%
2012	61,249	27,782	3,500	12.6%	76,059	34,500	3,850	11.2%
2013	69,343	31,454	3,680	11.7%	60,746	27,554	2,680	9.7%

SOURCE: IHGC November Economic Commission reports. Prepared by HGA.

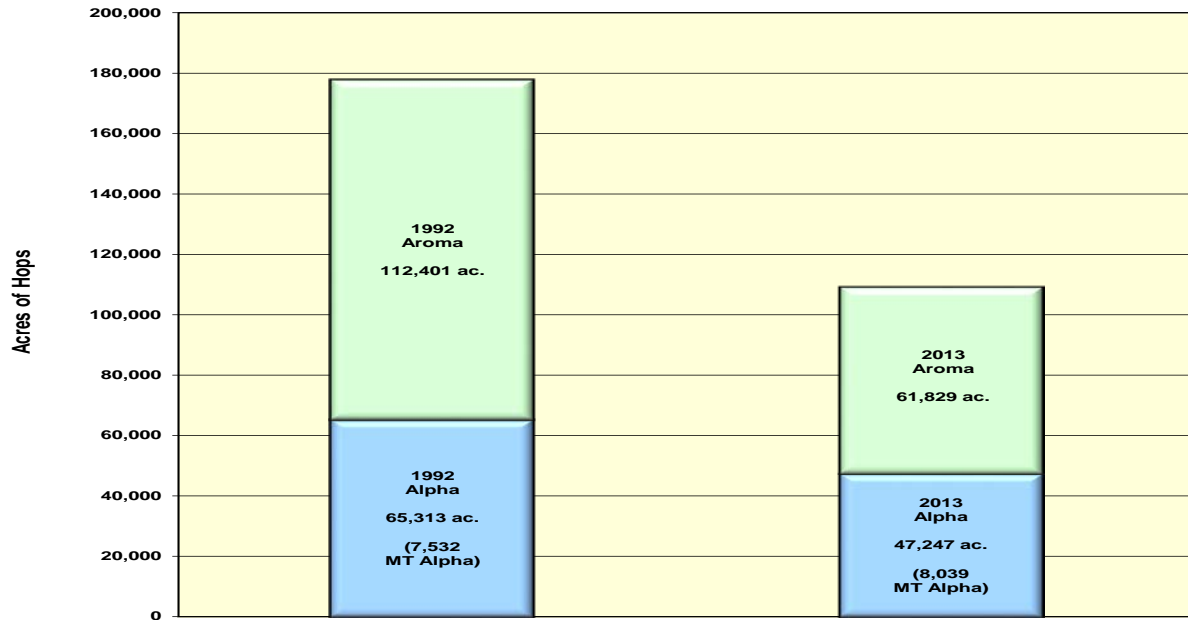
*Figures presented in the chart are the result of dividing the estimated MT Alpha by MT Hops for each year. This does not represent an estimate based on any type of analytical procedure.

WORLD ALPHA PRODUCTION & DEMAND 2002/03 – 2012/13



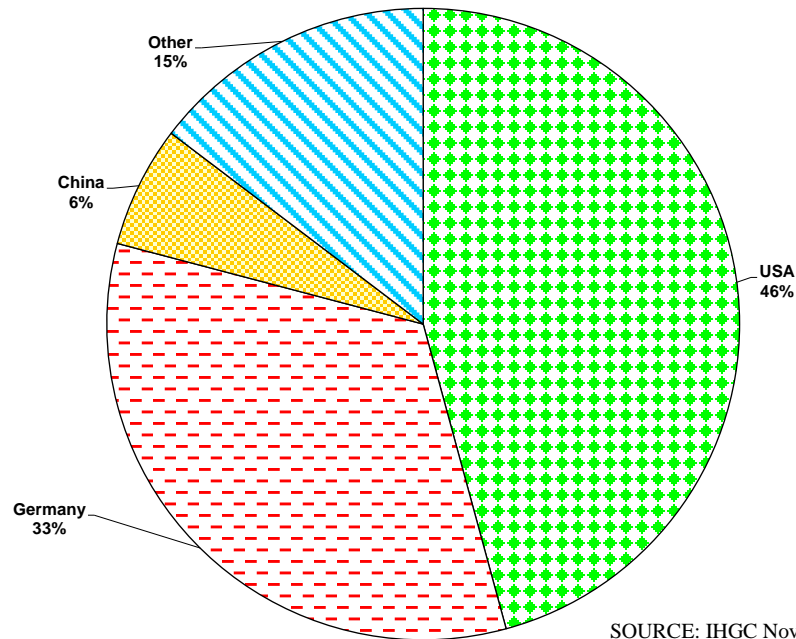
SOURCE: Barth Report. Prepared by HGA.

COMPOSITION OF WORLD HOP ACREAGE - 1992 VERSUS 2013



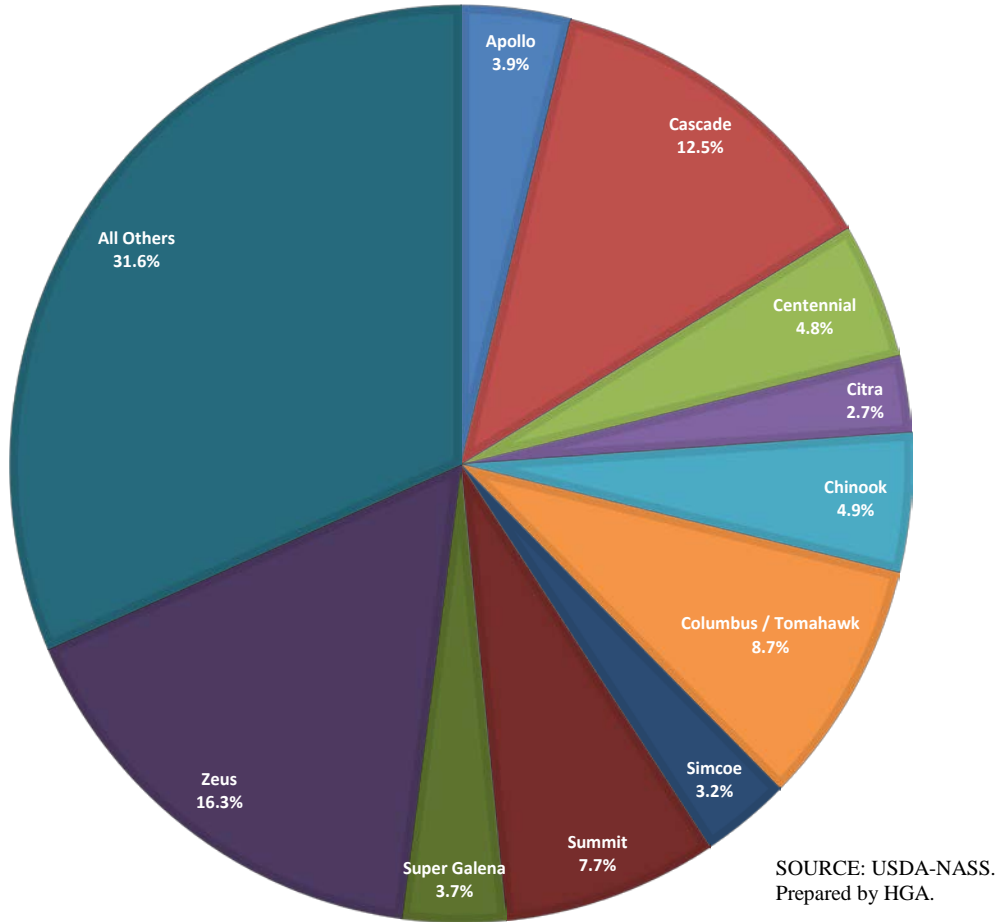
SOURCE: IHGC November Reports. Prepared by HGA.

WORLD'S LARGEST ALPHA PRODUCERS - 2013



SOURCE: IHGC November Reports, MT Alpha. Prepared by HGA.

MAJOR US HOP VARIETIES – 2013 (% of US Production)



WORLD HOP ACREAGE & PERCENT SHARE (acres)

COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Germany	43,168 36%	42,404 34%	41,247 36%	41,376 34%	43,269 33%	43,902 33%	44,749 36%	43,818 37%	40,887 37%	41,636 37%
UK-England	3,354 2.7%	2,932 2%	2,609 2%	2,619 2%	2,718 2%	2,669 2%	2,669 2%	2,570 2%	2,597 2%	2,427 2%
Czech Rep.	14,420 12%	14,010 11%	13,109 12%	12,832 11%	12,664 10%	12,479 9%	12,398 10%	10,952 9%	10,564 10%	10,673 9%
Europe (rest)	20,666 17.20%	20,236 16%	19,253 17%	17,313 14%	17,236 13%	16,222 12%	16,186 13%	13,178 11%	11,842 11%	11,897 11%
USA	28,020 23.30%	29,188 24%	29,435 26%	30,911 25%	39,263 29%	40,126 30%	31,247 25%	30,016 25%	30,807 28%	35,223 31%
China	11,697 9.70%	11,846 10%	4,910 4%	13,912 11%	14,322 11%	14,322 11%	14,322 11%	14,322 12%	9,961 9%	7,413 7%
World (rest)	3,607 3%	3,354 3%	2,853 3%	3,047 2%	3,633 3%	3,991 3%	3,941 3%	3,620 3%	3,575 3%	3,650 3%
World Totals	119,943	123,609	113,417	122,010	133,105	133,711	125,512	118,476	110,233	112,919

SOURCE: IHGC Economic Commission November 2013 report. Prepared by HGA.

WORLD HOP PRODUCTION & PERCENT SHARE (pounds x 1,000)

COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Germany	73,854 36.30%	75,397 37%	62,831 35%	70,854 35%	87,104 36%	68,894 28%	75,177 34%	82,673 38%	76,059 39%	60,746 34%
England	3,525 1.70%	3,732 2%	3,109 2%	3,108 2%	2,976 1%	3,197 1%	3,197 1%	3,351 2%	3,217 2%	2,723 2%
Czech	13,889 6.80%	15,238 8%	11,530 6%	12,414 6%	14,771 6%	14,109 6%	16,204 7%	13,779 6%	9,480 5%	11,750 7%
Europe (rest)	23,745 11.60%	24,960 12%	21,312 12%	20,891 10%	23,115 9%	22,780 9%	21,398 10%	17,077 8%	14,777 7%	14,202 8%
USA	55,200 27%	51,796 26%	53,815 30%	58,989 29%	76,235 31%	91,491 38%	64,954 29%	64,992 30%	61,316 31%	69,343 39%
China	25,882 12.70%	23,315 12%	20,944 12%	29,762 15%	35,494 14%	35,494 15%	35,494 16%	29,982 14%	26,334 13%	13,228 7%
World (rest)	7,095 3.5%	6,682 3%	5,227 3%	5,489 3%	5,324 2%	6,927 3%	7,068 3%	5,939 3%	6,309 3%	6,446 4%
World Totals	203,259	201,122	178,768	201,507	245,019	242,892	223,492	217,793	197,492	178,438

SOURCE: IHGC Economic Commission November 2013 report. Prepared by HGA.

U.S. IMPORTS OF HOPS (FIVE YEARS)

(In pounds; extract converted at 4:1 ratio)

2012/13 Rank	Country	2008/09	2009/10	2010/11	2011/12	2012/13
1	Germany	8,133,073	4,753,166	4,673,359	4,483,541	5,401,987
2	United Kingdom	804,026	792,782	858,700	1,008,174	1,328,065
3	Australia	1,533,976	569,013	372,802	720,250	634,490
4	China	2,205	13,669	1,764	0	544,983
5	New Zealand	292,553	369,274	559,533	668,221	333,780
6	Czech Republic	130,514	162,481	76,721	136,246	283,735
7	Slovenia	372,361	397,493	102,956	95,019	113,097
8	France	136,246	202,384	16,535	45,636	23,810
9	Canada	0	0	1,764	78,925	14,991
10	Poland	7,275	9,700	1,984	12,346	11,684
11	Switzerland	0	0	8,818	0	4,409
12	Ethiopia	661	0	2,425	4,409	2,205
13	Italy	19,401	0	882	8,818	2,205
14	Argentina	882	0	882	1,102	1,764
15	South Africa	0	0	0	0	882
16	Israel	0	882	0	0	0
17	Venezuela	0	0	0	0	0
18	Hong Kong	0	0	0	0	0
19	Belgium-Luxembourg	48,502	9,700	16,755	0	0
20	Thailand	0	0	0	0	0
21	India	0	0	0	0	0
22	Vietnam	0	0	0	0	0
23	Somalia	0	1,543	0	0	0
24	Japan	0	0	0	0	0
25	Spain	0	0	0	0	0
	Grand Total	11,481,674	7,282,089	6,695,879	7,262,688	8,702,086

Source: USDA Foreign Agricultural Service - Global Agricultural Trade System, <http://www.fas.usda.gov/gats/default.aspx>.
Prepared by Bryant Christie Inc.

U.S. HOP EXPORTS, TOP 40 COUNTRIES (2007/08 through 2012/13)*(In pounds; extract is converted to fresh hop equivalent at a ratio of 4:1)*

2012/13 Rank	Country	2008/09 (Sep-Aug)	2009/10 (Sep-Aug)	2010/11 (Sep-Aug)	2011/12 (Sep-Aug)	2012/13 (Sep-Aug)
1	Mexico	9,408,227	8,070,903	8,553,274	5,096,867	9,029,252
2	United Kingdom	5,594,671	6,214,610	6,928,247	6,799,717	7,173,842
3	Germany	10,149,862	5,988,196	4,161,005	5,560,940	5,132,802
4	Belgium-Luxembourg	8,837,229	8,637,931	8,307,238	5,503,179	4,627,723
5	Brazil	4,905,285	5,345,769	3,950,684	4,755,591	4,056,505
6	Venezuela	687,181	718,927	1,682,788	1,224,888	2,895,992
7	China	2,303,169	4,039,089	3,205,080	2,223,803	2,862,702
8	Colombia	2,379,008	3,252,039	3,210,151	2,243,424	2,223,362
9	Japan	2,259,738	2,440,958	2,754,455	1,626,130	1,815,948
10	Canada	5,077,907	4,071,497	2,036,410	1,950,430	1,788,390
11	Korea, South	1,197,771	1,738,124	1,541,693	1,253,989	1,173,961
12	Australia	1,263,910	1,507,521	917,784	1,342,174	1,070,344
13	Hong Kong	1,077,399	1,319,026	2,119,083	1,441,823	1,046,755
14	Argentina	921,532	947,326	1,231,282	1,091,950	985,907
15	Peru	1,487,679	1,144,199	1,075,194	1,075,635	949,751
16	Dominican Republic	714,518	591,280	861,566	762,138	766,547
17	Chile	821,883	503,977	635,593	614,428	741,855
18	Philippines	841,725	1,399,715	836,654	679,244	600,760
19	South Africa	259,925	426,815	578,713	506,843	427,035
20	Russia	582,020	1,205,708	589,296	488,544	416,012
21	Ecuador	585,989	1,089,745	466,719	442,688	398,596
22	India	646,616	879,644	523,377	158,953	395,950
23	Vietnam	741,194	1,027,354	963,200	553,581	385,368
24	Ireland	318,127	37,920	298,947	369,495	349,433
25	Guatemala	115,522	386,691	463,853	316,804	287,262
26	Nigeria	302,033	642,868	435,633	640,222	258,382
27	Indonesia	56,438	26,676	54,675	166,669	213,407
28	Thailand	1,976,224	578,052	444,672	428,799	168,433
29	Costa Rica	130,734	221,124	163,803	165,126	153,442
30	Bolivia	145,064	208,998	195,330	80,248	153,221
31	Honduras	295,419	197,975	113,759	61,289	146,166
32	Malaysia	203,707	268,964	502,874	114,640	135,805
33	Cambodia	212,085	52,470	85,539	70,548	129,191
34	France	6,173	145,946	95,019	222,446	121,034
35	Paraguay	77,382	194,448	45,856	44,974	107,586
36	Netherlands	112,436	231,044	71,650	366,188	102,294
37	Singapore	210,982	138,450	114,640	113,318	88,626
38	Tanzania	132,498	40,345	122,357	69,666	85,980
39	El Salvador	216,494	114,420	137,789	98,106	77,823
40	New Zealand	29,321	36,376	51,809	83,555	74,516
	All Other Countries	3,810,470	1,821,900	1,743,856	1,196,449	762,579
	Grand Total	71,095,548	67,905,019	62,271,547	52,005,502	54,380,541

Source: USDA Foreign Agricultural Service - Global Agricultural Trade System, <http://www.fas.usda.gov/gats/default.aspx>.

Prepared by Bryant Christie Inc.

U.S. HOP EXPORTS BY PRODUCT (TOP 40) – 2012/13*(In pounds; extract is converted to fresh hop equivalent at a ratio of 4:1)*

2012/13 Rank	Country	Extract (Converted to Raw Hop Equivalent)	Fresh/Dried	Ground	Pellets	Grand Total
1	Mexico	8,023,062	352,299	3,527	650,364	9,029,252
2	United Kingdom	4,797,259	704,156	16,976	1,655,451	7,173,842
3	Germany	3,122,627	7,496		2,002,679	5,132,802
4	Belgium-Luxembourg	3,962,148	24,912	882	639,781	4,627,723
5	Brazil	2,348,364	4,409	20,062	1,683,670	4,056,505
6	Venezuela	2,895,992	0	0	0	2,895,992
7	China	2,644,665	16,535	0	201,502	2,862,702
8	Colombia	748,690	0	0	1,474,672	2,223,362
9	Japan	1,313,073	28,660	0	474,214	1,815,948
10	Canada	316,584	84,658	89,067	1,298,082	1,788,390
11	Korea, South	1,028,236	0	58,202	87,524	1,173,961
12	Australia	906,541	17,857	0	145,946	1,070,344
13	Hong Kong	873,031		0	173,724	1,046,755
14	Argentina	649,041	1,323		335,544	985,907
15	Peru	738,108			211,644	949,751
16	Dominican Republic	759,272	0	3,527	3,748	766,547
17	Chile	640,222	1,323	0	100,310	741,855
18	Philippines	579,375	0		21,385	600,760
19	South Africa	388,895	0	0	38,140	427,035
20	Russia	403,005			13,007	416,012
21	Ecuador	181,661		0	216,935	398,596
22	India	40,565	0	0	355,385	395,950
23	Vietnam	356,267			29,101	385,368
24	Ireland	315,702	220	0	33,510	349,433
25	Guatemala	268,082	0	0	19,180	287,262
26	Nigeria	258,382			0	258,382
27	Indonesia	178,133	17,637		17,637	213,407
28	Thailand	116,404	2,425		49,604	168,433
29	Costa Rica	150,796			2,646	153,442
30	Bolivia	15,873			137,348	153,221
31	Honduras	141,096			5,071	146,166
32	Malaysia	124,341	0		11,464	135,805
33	Cambodia	74,957	0	0	54,234	129,191
34	France	118,168	0	2,866	0	121,034
35	Paraguay	67,902	39,683		0	107,586
36	Netherlands	52,911	0	14,110	35,274	102,294
37	Singapore	88,185	0	0	441	88,626
38	Tanzania				85,980	85,980
39	El Salvador	64,375			13,448	77,823
40	New Zealand	37,038			37,479	74,516
	All Other Countries	603,185	16,094	0	143,300	762,579
	Grand Total	40,392,212	1,319,687	209,219	12,459,424	54,380,541

Source: USDA Foreign Agricultural Service - Global Agricultural Trade System, <http://www.fas.usda.gov/gats/default.aspx>.

Prepared by Bryant Christie Inc.

WORLD BEER PRODUCTION (FIVE YEARS - MILLION HL)

	2009	2010	2011	2012	2013*
Russia	108.5	103.0	99.4	97.2	97.0
Germany	102.9	98.3	98.2	94.6	94.0
Great Britain	45.2	45.0	42.5	42.0	42.0
Poland	32.3	33.5	37.9	37.8	37.1
Spain	33.8	32.7	33.6	33.0	33.0
Ukraine	30.0	30.9	30.5	30.0	30.5
Netherlands	25.4	24.0	23.6	24.3	23.6
France	14.2	14.3	16.0	18.9	19.0
Belgium	18.0	18.0	18.0	18.5	18.5
Czech Republic	20.0	17.0	18.3	18.3	18.4
Romania	17.2	15.5	17.0	17.9	18.2
Italy	12.4	12.3	13.4	12.7	13.1
Turkey	9.4	9.7	9.8	10.0	10.0
Austria	8.9	9.0	8.9	8.9	9.0
Ireland	8.5	8.4	8.6	8.3	8.4
Portugal	7.8	8.3	8.3	7.6	7.8
Other Europe	64.5	49.4	53.1	49.6	49.1
Total Europe	559.4	544.3	548.0	544.5	544.0
USA	228.5	228.4	226.0	226.5	226.9
Brazil	106.7	113.9	127.2	132.0	134.0
Mexico	82.0	80.0	81.2	81.5	81.5
Colombia	19.0	19.5	20.8	22.3	22.4
Venezuela	23.2	22.0	23.2	21.7	22.2
Canada	23.2	22.4	19.8	19.5	19.7
Argentina	16.5	17.0	17.3	17.5	17.5
Other Americas	35.1	39.2	52.1	59.4	63.5
Total Americas	541.1	545.2	558.1	565.4	569.5
P.R. China	422.6	449.0	489.9	490.0	510.0
Japan	59.7	57.0	56.0	55.3	55.9
Vietnam	21.0	25.0	27.0	29.7	30.8
Thailand	18.5	19.2	20.4	23.9	24.7
India	15.0	14.8	18.3	19.2	19.8
South Korea	18.5	18.5	18.8	19.0	19.5
Philippines	14.2	15.2	15.7	15.8	16.0
Other Asia	43.5	76.2	123.1	133.4	159.3
Total Asia	593.5	626.2	673.1	683.4	709.3
South Africa	26.2	29.5	30.0	31.3	31.6
Nigeria	16.0	17.5	19.4	23.5	25.0
Other Africa	50.6	58.7	63.0	74.2	78.4
Total Africa	92.1	100.2	104.5	115.7	119.9
Australia	17.0	17.2	16.6	17.2	17.1
New Zealand	3.4	3.2	3.3	3.2	3.2
Oceania	1.2	1.2	1.2	1.2	1.2
Total Australia	21.6	21.6	21.1	21.6	21.4
WORLD TOTALS	1,807.7	1,837.5	1,904.8	1,930.6	1,964.1

* Estimate

Source: S.S. Steiner 2013 Guidelines for Hop Buying

WORLD BEER PRODUCTION BY BREWERY (TOP 10) - 1988 (MILLION HL)

Brewery	1988 Production	1988 % Share
Anheuser-Busch	90	7%
Miller	47	4%
Heineken	43	3%
Kirin	30	2%
Bond	30	2%
Stroh	25	2%
Elders	21	2%
Kronenbourg	20	2%
Coors	20	2%
Brahma	18	1%
Top 10 total	344	26%

WORLD BEER PRODUCTION BY BREWERY (TOP 10) – 2011-12 (MILLION HL)

Brewery	2011 Production	2011 % Share	2012 Production	2012 % Share
ABInBev	358.8	18.6%	352.9	18.1%
SABMiller	178.5	9.3%	190.0	9.7%
Heineken	164.6	8.5%	171.7	8.8%
Carlsberg	118.7	6.2%	120.4	6.2%
China Resource Brewery Ltd.	103.3	5.4%	106.2	5.4%
Tsingtao Brewery Group	72.8	3.8%	78.8	4.0%
Grupo Modelo	55.1	2.9%	55.8	2.9%
Molson-Coors	48.4	2.5%	55.1	2.8%
Yanjing	55.0	2.9%	54.0	2.8%
Top 10 total	1,155.2	60.0%	1,184.9	60.7%

The top 3 brewing groups control 36% of the market share.

The top 40 brewing groups worldwide represented 82.4% market share in 2011, up from 81.7% in 2011.

Source: Barth-Haas Group Beer Production 2012