



HAWAII FLOWERS & NURSERY PRODUCTS

Annual Summary

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1996 FLORICULTURE AND NURSERY SALES INCREASE 2 PERCENT

Grower sales of Hawaii's flower and nursery products increased for the second straight year to \$69.5 million. According to the Hawaii Agricultural Statistics Service, the 1996 wholesale value was 2 percent more than 1995.

Increases in orchids, foliage, and potted flowering plant categories helped push the wholesale value higher despite declines or no growth in other categories. Cut flower value declined 1 percent from

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FLORICULTURE AND NURSERY PRODUCTS: Wholesale value, State of Hawaii, 1992-96

Commodity	1992	1993	1994	1995	1996
<i>1,000 dollars</i>					
Cut flowers ¹	16,504	15,846	15,827	15,333	15,104
Orchids	10,907	11,466	11,244	12,890	16,752
Lei flowers	4,641	3,666	3,524	3,935	3,943
Foliage ²	18,206	19,305	17,185	16,576	16,864
Potted flowering plants	3,905	2,965	3,432	3,295	3,854
All other nursery products ³	14,426	15,288	14,353	14,623	11,593
Unspecified sales ⁴	1,090	977	1,440	1,523	1,365
Total	69,679	69,513	67,005	68,175	69,475

¹Cut orchids included in "Orchids" category.

²Includes potted, cut, and unfinished.

³Includes bedding plants, plant rentals, and any other nursery products not elsewhere classified.

⁴Includes sales of growers great than \$999 but less than \$10,000 which were not categorized.

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STATE SUMMARY (Continued)

1995 making 1996 the sixth consecutive year of declining values for this general category. Within the cut flower category, anthuriums, miniature carnations, other gingers, and proteas made positive gains over the previous year. Cut anthuriums and proteas advanced in valuation, a result of increased prices.

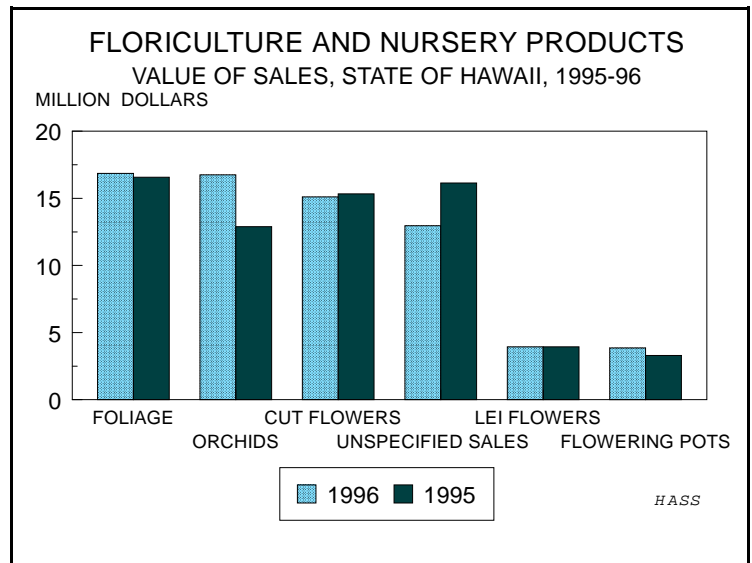
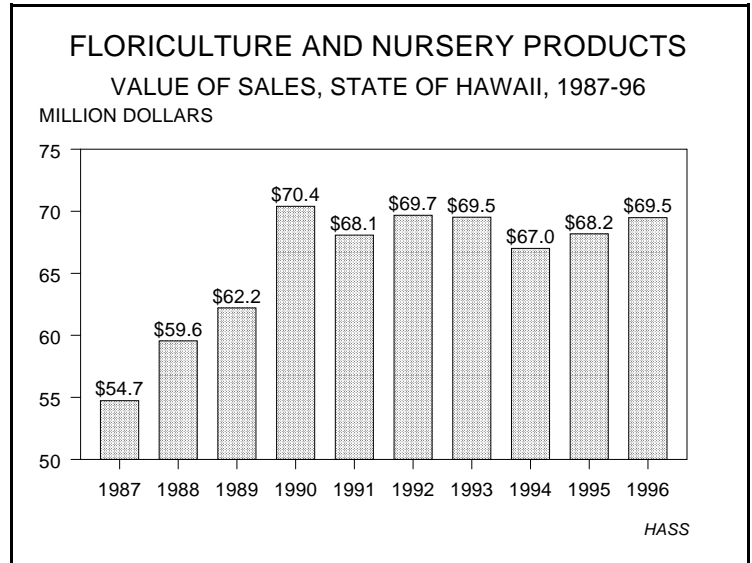
Value of orchid sales increased 30 percent in 1996. All orchid types contributed toward making positive gains.

The lei flower category remained relatively unchanged at \$3.9 million. Plumerias and lei dendrobiums increased sales by 47 percent and 3 percent, respectively. However, the increases were not enough to offset declines in other lei flower types.

Foliage sales (potted, cut, and unfinished), pegged at \$16.9 million, were 2 percent higher than 1995. Sales of potted flowering plants were valued at \$3.9 million, a 17 percent increase over the previous year.

COUNTY RANKINGS:

Hawaii island sales, pegged at \$34.7 million, were 6 percent higher than 1995. Oahu farmers registered sales of \$25.3 million, 3 percent lower than the previous year. Maui/Molokai sales totaled \$7.5 million, 4 percent lower than last year. Kauai posted nearly \$2.0 million in sales, 10 percent more than 1995.



SELECTED CUT FLOWERS

FLORICULTURE AND NURSERY PRODUCTS: State of Hawaii, 1992-96¹

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
CUT FLOWERS				
Anthuriums - dozens				
1992	69	10,385	828	6,360
1993	64	10,890	865	7,156
1994	62	10,815	885	7,335
1995	69	11,310	965	7,042
1996	65	11,100	906	7,060
Birds of Paradise - dozens				
1992	35	2,965	114	660
1993	31	3,315	116	728
1994	28	2,875	108	702
1995	32	2,965	119	754
1996	29	2,740	102	554
Carnations, miniature - bunches				
1992	10	415	204	576
1993	10	250	152	455
1994	10	240	122	478
1995	9	385	110	383
1996	10	230	111	390
Carnations, standard - dozens				
1992 ³				
1993	7	350	37	170
1994 ³				
1995 ³				
1996 ³				
Chrysanthemums, pompon - bunches				
1992	6	315	265	519
1993	5	310	272	565
1994	5	315	290	588
1995	4	295	251	554
1996	4	275	225	479
Ginger, pink - dozens				
1992	50	2,530	71	486
1993	37	2,310	66	493
1994	40	2,135	69	483
1995	46	2,225	85	564
1996	54	2,180	76	528
Ginger, red - dozens				
1992	63	2,700	105	522
1993	50	2,615	101	529
1994	48	2,525	87	474
1995	51	2,655	117	599
1996	52	2,790	88	444

See footnotes at end of table.

Continued

SELECTED CUT FLOWERS (Continued)

FLORICULTURE AND NURSERY PRODUCTS: State of Hawaii, 1992-96¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
Gingers, other - dozens				
1992	23	435	8	59
1993	18	440	8	73
1994	15	305	6	62
1995	17	355	6	48
1996	26	610	13	100
Heliconias - dozens				
1992	56	5,395	84	684
1993	47	4,405	63	587
1994	47	4,750	59	547
1995	50	4,315	49	495
1996	51	3,920	44	476
Proteas - stems				
1992	27	4,750	1,228	732
1993	21	4,400	1,260	721
1994	21	5,620	2,080	869
1995	28	5,835	1,877	1,071
1996	31	7,100	1,772	1,233
Roses, Tea - dozens				
1992	12	1,060	745	3,829
1993	12	1,230	586	2,650
1994 ³				
1995 ³				
1996 ³				
Other cut flowers - dozens				
1992	36	NA	NA	2,077
1993	20	NA	NA	1,719
1994	37	NA	NA	4,289
1995	35	NA	NA	3,823
1996	36	NA	NA	3,840

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS: State of Hawaii, 1992-96¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
ORCHIDS				
<i>Cattleyas, cut - flowers</i>				
1992 ⁴				
1993	4	10	13	9
1994 ⁴				
1995 ⁴				
1996 ⁴				
<i>Cymbidiums, cut - flowers</i>				
1992	9	285	328	262
1993	5	265	311	143
1994	6	280	295	142
1995	9	440	251	159
1996	8	280	300	189
<i>Dendrobiums, sprays - dozens</i>				
1992	58	3,045	423	3,147
1993	49	2,700	426	2,995
1994	49	3,030	402	3,017
1995	58	3,435	410	3,078
1996	49	3,110	600	4,116
<i>Oncidiums, sprays - dozens</i>				
1992	15	130	17	196
1993	18	185	22	282
1994	19	175	28	279
1995	24	240	26	271
1996	28	275	40	386
<i>Other orchids, sprays⁵ - dozens</i>				
1992	6	NA	NA	48
1993	8	NA	NA	40
1994	8	NA	NA	142
1995	11	NA	NA	30
1996	7	NA	NA	37
<i>Dendrobiums, potted⁶ - pots</i>				
1992	55	836	641	3,403
1993	46	985	853	4,555
1994	50	1,060	667	3,922
1995	56	1,035	804	4,358
1996	63	1,200	1,162	5,205
<i>Other orchids, potted - pots</i>				
1992	42	955	1,100	3,851
1993	42	860	710	3,442
1994	42	795	652	3,742
1995	52	1,115	1,085	4,994
1996	57	1,185	1,553	6,819

See footnotes at end of table.

Continued

LEI FLOWERS & INDIVIDUAL BLOOMS

FLORICULTURE AND NURSERY PRODUCTS: State of Hawaii, 1992-96¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
LEI/INDIVIDUAL BLOOMS				
<i>Carnations - blooms</i>				
1992	15	NA	16,500	853
1993	12	NA	9,900	536
1994	11	NA	9,300	505
1995	10	NA	11,200	590
1996	11	NA	10,000	538
<i>Vanda, Miss Joaquim - blooms</i>				
1992	15	NA	27,900	797
1993	15	NA	25,400	885
1994	16	NA	24,900	692
1995	13	NA	22,500	677
1996	12	NA	22,200	627
<i>Plumerias - blooms</i>				
1992	11	NA	15,800	367
1993	11	NA	16,500	429
1994	11	NA	22,200	519
1995	7	NA	19,500	489
1996	12	NA	29,900	717
<i>Tuberoses - blooms</i>				
1992	6	NA	7	7
1993	6	NA	7	7
1994	7	NA	7	7
1995	8	NA	7	7
1996	7	NA	7	7
<i>Dendrobiums - blooms</i>				
1992	41	NA	42,000	1,119
1993	31	NA	29,900	927
1994	30	NA	24,600	752
1995	32	NA	22,400	716
1996	33	NA	24,700	740
<i>Pikake - strands</i>				
1992	7	NA	59,300	126
1993	5	NA	59,400	139
1994	4	NA	53,300	123
1995	5	NA	61,300	169
1996	4	NA	21,700	86
<i>Other lei/individual - blooms</i>				
1992	NA	NA	NA	1,379
1993	NA	NA	NA	750
1994	NA	NA	NA	933
1995	NA	NA	NA	1,294
1996	NA	NA	NA	1,235

See footnotes at end of table.

Continued

FOLIAGE & POTTED FLOWERING PLANTS

FLORICULTURE AND NURSERY PRODUCTS: State of Hawaii, 1992-96¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
FOLIAGE				
Potted, primarily for indoor or patio use ⁸				
1992	80	8,100	NA	13,209
1993	69	7,670	NA	14,545
1994	77	6,845	NA	12,008
1995	76	7,540	NA	11,812
1996	75	7,495	NA	12,294
Potted, primarily for landscape use				
1992	63	NA	NA	3,449
1993	63	NA	NA	3,381
1994	66	NA	NA	3,982
1995	65	NA	NA	3,902
1996	62	NA	NA	3,527
Unfinished stock (for further growing on)				
1992	25	5,885	NA	886
1993	19	7,450	NA	655
1994	24	7,975	NA	708
1995	21	25,600	NA	622
1996	19	20,000	NA	664
Ti leaves, cut - <i>leaves</i>				
1992	44	2,265	8,300	462
1993	39	2,090	13,700	495
1994	29	2,050	7,100	385
1995	30	1,090	2,400	142
1996	36	1,480	3,000	213
Other greens, cut				
1992	26	NA	NA	200
1993	25	NA	NA	229
1994	22	NA	NA	102
1995	21	NA	NA	98
1996	24	NA	NA	166
POTTED FLOWERING PLANTS				
Anthuriums - <i>pots</i>				
1992	9	115	129	374
1993	7	130	159	283
1994	14	135	92	101
1995	16	68	61	97
1996	17	75	70	155
Poinsettias - <i>pots</i>				
1992	25	573	225	848
1993	28	700	215	903
1994	29	560	231	961
1995	27	545	221	904
1996	27	600	243	952

See footnotes at end of table.

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POTTED FLOWERING PLANTS & OTHER NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: State of Hawaii, 1992-96¹ -- Continued

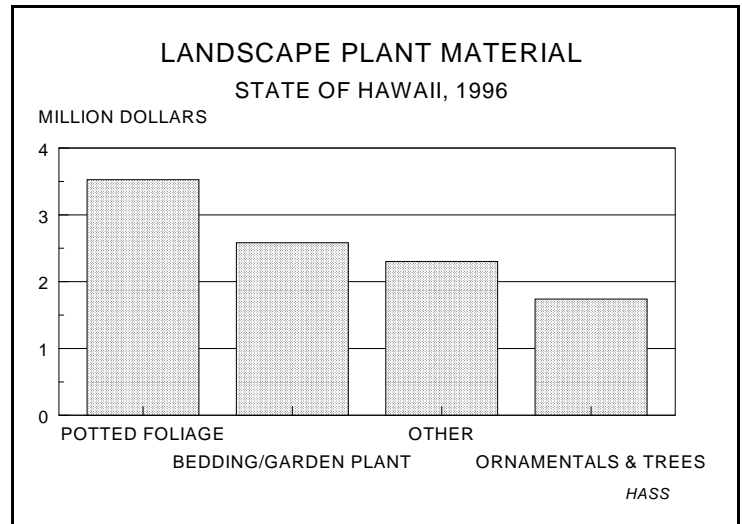
Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
Other potted flowering plants				
1992	35	NA	NA	2,683
1993	37	NA	NA	1,779
1994	36	NA	NA	2,370
1995	39	NA	NA	2,294
1996	39	NA	NA	2,747
ORNAMENTALS & TREES				
1992	44	NA	NA	3,341
1993	45	NA	NA	3,967
1994	43	NA	NA	3,868
1995	46	NA	NA	4,112
1996	43	NA	NA	1,741
PLANT RENTALS				
1992	42	NA	NA	3,985
1993	44	NA	NA	4,185
1994	42	NA	NA	3,860
1995	41	NA	NA	3,293
1996	44	NA	NA	3,690
OTHER NURSERY PRODUCTS⁹				
1992	82	NA	NA	7,100
1993	83	NA	NA	7,136
1994	69	NA	NA	6,625
1995	96	NA	NA	7,218
1996	95	NA	NA	6,162
UNSPECIFIED SALES¹⁰				
1992				1,090
1993				977
1994				1,440
1995				1,523
1996				1,365
TOTAL				
1992	686			69,679
1993	662			69,513
1994	660			67,005
1995	705			68,175
1996	690			69,475

NA = Not available. ¹Beginning 1992, includes only producers having total sales of \$10,000 or more. ²Number for each individual flower item is count of those having sales of that item during each year; "Total" is unduplicated count. ³Included with "Other cut flowers" to avoid disclosure of individual operations. ⁴Included with "Other orchid, sprays" to avoid disclosure of individual operations. ⁵Includes cattleyas, vanda hybrids, phalaenopsis, and paphiopedilums. ⁶Includes in bud/bloom and community pots. ⁷Included with "Other lei/individual" to avoid disclosure of individual operations. ⁸Includes hanging baskets. ⁹Includes bedding plants and other flowers or nursery products not elsewhere classified. ¹¹Beginning 1992, includes sales of growers greater than \$999 but less than \$10,000 which were not categorized.

LANDSCAPE PLANT MATERIAL VALUED AT \$10.2 MILLION

The State's growers of landscape material had sales pegged at \$10.2 million in 1996. This value combines items published elsewhere in this release. It does not include the value of landscape design or installation but only the wholesale value of plant material grown.

Potted foliage for landscape, pegged at \$3.5 million, accounted for 35 percent of the landscape plant material category in 1996. Bedding/Garden plants, with \$2.6 million, accounted for 25 percent of the total. Other landscape plant material and ornamentals and trees followed at \$2.3 million and \$1.7 million, respectively.



LANDSCAPE PLANT MATERIAL: Value of sales, State of Hawaii, 1992-96

Type	1992	1993	1994	1995	1996
<i>1,000 dollars</i>					
Ornamentals & trees	3,341	3,967	3,868	4,112	1,741
Landscape foliage pots	3,449	3,381	3,982	3,902	3,527
Bedding/garden plants	2,286	2,157	2,331	2,274	2,584
Other landscaping plants	3,549	3,714	3,215	3,212	2,304
Total	12,625	13,219	13,396	13,500	10,156

ISLAND SUMMARIES

BIG ISLAND ACCOUNTS FOR HALF OF TOTAL VALUE

Hawaii Island growers accounted for one-half of the State's total wholesale value of flower and nursery products in 1996. Big Island's 316 producers generated \$34.7 million in wholesale sales, 6 percent more than 1995. With the exception of cut flowers and all other nursery products, all categories registered increases. Oahu followed as the second leading island with a wholesale value of \$25.3 million. This was 3 percent lower than last year despite increases in the orchid, foliage, and potted flowering plant categories. Floriculture and nursery farms on Oahu numbered 211 in 1996. Maui/Molokai's 111 floriculture and nursery farms reported sales of \$7.5 million, 4 percent lower than a year ago. Kauai's 52 producers generated nearly \$2.0 million in wholesale sales, 10 percent more than 1995.

FLORICULTURE AND NURSERY PRODUCTS: Value of grower sales, by islands, 1992-96

Year	Cut flowers ¹	Orchids	Lei flowers	Foliage ²	Potted flowering plants	All other nursery products ³	Unspecified sales ⁴	Total
<i>1,000 dollars</i>								
State								
1992	16,504	10,907	4,641	18,206	3,905	14,426	1,090	69,679
1993	15,846	11,466	3,666	19,305	2,965	15,288	977	69,513
1994	15,827	11,244	3,524	17,185	3,432	14,353	1,440	67,005
1995	15,333	12,890	3,935	16,576	3,295	14,623	1,523	68,175
1996	15,104	16,752	3,943	16,864	3,854	11,593	1,365	69,475
Hawaii								
1992	13,282	4,899	1,546	10,223	1,401	2,889	470	34,710
1993	12,600	5,329	1,426	10,424	618	3,070	435	33,902
1994	12,298	4,988	927	9,426	573	2,540	585	31,337
1995	12,082	6,197	977	10,187	564	2,082	519	32,608
1996	11,676	8,569	1,136	10,250	595	1,958	540	34,724
Kauai								
1992	100	263	95	5	5	1,458	110	2,026
1993	27	217	10	5	5	1,335	105	1,694
1994	*	184	10	5	5	1,561	144	1,899
1995	68	259	17	5	5	1,313	144	1,801
1996	117	344	73	5	5	1,323	120	1,977
Maui/Molokai								
1992	1,905	427	1,192	5	5	4,605	170	8,299
1993	1,960	619	1,102	5	5	5,300	155	9,136
1994	2,283	487	1,096	5	5	3,710	336	7,912
1995	2,188	470	1,331	5	5	3,533	274	7,796
1996	2,371	744	1,228	5	5	2,928	250	7,521
Oahu								
1992	1,217	5,318	1,808	6,671	1,511	7,779	340	24,644
1993	1,259	5,301	1,128	7,439	1,645	7,727	282	24,781
1994	1,246	5,585	1,491	6,532	2,064	8,564	375	25,857
1995	995	5,964	1,610	5,458	1,827	9,530	586	25,970
1996	940	7,095	1,506	5,693	2,282	7,282	455	25,253

* = Negligible. ¹Cut orchids included in "Orchids" category. ²Includes potted, cut, and unfinished. ³Includes bedding plants, plant rentals, sod, trees, and any other nursery products not elsewhere classified. Sum of islands may not add to total. ⁴Includes grower sales greater than \$999 but less than \$10,000 which were not categorized. ⁵Island data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

ISLAND SUMMARIES (Continued)

FLORICULTURE AND NURSERY PRODUCTS: Hawaii Island, 1994-96

Commodity	Number sold			Value of sales		
	1994	1995	1996	1994	1995	1996
<i>----- 1,000 dollars -----</i>						
Selected Items:						
Anthuriums, cut (000 dozens)	880	957	897	7,304	6,996	6,988
Foliage, cut	NA	NA	NA	409	142	264
Foliage, potted (indoor/patio use)	NA	NA	NA	8,177	9,224	9,269
Ginger, red (000 dozens)	31	72	39	181	357	161
Gingers, other (000 dozens)	26	50	38	179	306	208
Heliconias (000 dozens)	29	22	16	306	267	195
Orchids, potted (000 pots)	627	964	1,381	3,220	3,968	4,779
Ornamentals and trees	NA	NA	NA	648	495	157
Poinsettias (000 pots)	36	33	NA	138	142	NA
Vanda, Miss Joaquim (million flowers)	18.2	16.5	15.2	483	448	417
All other flowers and nursery products ¹	NA	NA	NA	9,707	9,744	11,746
Unspecified sales ²	NA	NA	NA	585	519	540
Total				31,337	32,608	34,724

NA = Not available.

¹Only selected items are shown separately. All other cut and lei flowers, potted plants, nursery products, plant rentals, etc., for the island are included in the "All other" category.

²Includes grower sales greater than \$999 but less than \$10,000.

FLORICULTURE AND NURSERY PRODUCTS: Kauai Island, 1994-96

Commodity	Number sold			Value of sales		
	1994	1995	1996	1994	1995	1996
<i>----- 1,000 dollars -----</i>						
Selected Items:						
Ginger, red (000 dozens)	NA	NA	3	NA	NA	17
Gingers, other (000 dozens)	NA	NA	3	NA	NA	22
Heliconias (000 dozens)	NA	NA	4	NA	NA	50
Ornamentals and trees	NA	NA	NA	NA	NA	NA
All other flowers and nursery products ¹	NA	NA	NA	NA	NA	1,768
Unspecified sales ²	NA	NA	NA	144	144	120
Total				1,899	1,801	1,977

NA = Not available.

¹Only selected items are shown separately. All other cut and lei flowers, potted plants, nursery products, plant rentals, etc., for the island are included in the "All other" category.

²Includes grower sales greater than \$999 but less than \$10,000.

ISLAND SUMMARIES (Continued)

FLORICULTURE AND NURSERY PRODUCTS: Maui/Molokai Islands, 1994-96

Commodity	Number sold			Value of sales		
	1994	1995	1996	1994	1995	1996
----- 1,000 dollars -----						
Selected Items:						
Carnations, heads (million flowers)	8.5	8.5	8.0	464	471	447
Gingers (000 dozens)	58	66	54	379	412	389
Heliconias (000 dozens)	16	15	14	152	136	148
All other flowers and nursery products ¹	NA	NA	NA	6,581	6,503	6,287
Unspecified sales ²	NA	NA	NA	336	274	250
Total				7,912	7,796	7,521

NA = Not available.

¹Only selected items are shown separately. All other cut and lei flowers, potted plants, nursery products, plant rentals, etc., for the islands are included in the "All other" category.

²Includes grower sales greater than \$999 but less than \$10,000.

FLORICULTURE AND NURSERY PRODUCTS: Oahu Island, 1994-96

Commodity	Number sold			Value of sales		
	1994	1995	1996	1994	1995	1996
----- 1,000 dollars -----						
Selected Items:						
Dendrobiums, sprays (000 dozens)	183	132	100	1,558	1,090	766
Dendrobiums, for lei (million flowers)	13.9	10.8	11.7	473	397	387
Foliage, cut	NA	NA	NA	46	57	67
Foliage, potted (indoor/patio use)	NA	NA	NA	3,579	2,455	2,869
Ginger, red (000 dozens)	28	13	19	154	73	105
Orchids, potted (000 pots)	608	834	1,223	3,858	4,791	6,263
Plumerias (million flowers)	5.7	5.6	4.5	153	144	107
All other flowers and nursery products ¹	NA	NA	NA	15,661	16,377	14,234
Unspecified sales ²	NA	NA	NA	375	586	455
Total				25,857	25,970	25,253

NA = Not available.

¹Only selected items are shown separately. All other cut and lei flowers, potted plants, nursery products, plant rentals, etc., for the island are included in the "All other" category.

²Includes grower sales greater than \$999 but less than \$10,000.

FARM NUMBERS & AREA SUMMARY

FLORICULTURE AND NURSERY PRODUCTS: Number of farms and growing area, by islands, 1992-96

Year	Farms	Greenhouse ¹	Artificial shade	Natural shade	Open field	Total area
	<i>Number</i>	<i>----- 1,000 square feet -----</i>			<i>----- Acres -----</i>	
State						
1992	686	3,880	22,025	13	1,890	2,497
1993	662	4,565	19,955	21	1,800	2,384
1994	660	3,770	21,600	18	1,690	2,290
1995	705	3,770	24,215	15	2,040	2,698
1996	690	3,000	24,630	10	1,900	2,544
Hawaii						
1992	314	2,815	16,665	13	1,000	1,460
1993	307	3,355	15,135	21	875	1,320
1994	304	2,715	16,330	18	720	1,175
1995	333	2,910	18,880	15	1,115	1,630
1996	316	2,105	18,710	10	870	1,358
Kauai						
1992	44	25	340	--	105	113
1993	40	20	230	0	95	101
1994	40	105	390	0	95	106
1995	46	40	375	0	95	105
1996	52	60	375	0	105	115
Maui/Molokai						
1992	104	275	650	--	440	461
1993	102	285	585	0	450	470
1994	102	310	505	0	480	499
1995	106	270	375	0	450	465
1996	111	240	390	0	470	484
Oahu						
1992	224	765	4,370	0	345	463
1993	213	905	4,005	0	380	493
1994	214	640	4,375	0	395	510
1995	220	550	4,585	0	380	498
1996	211	595	5,155	0	455	587

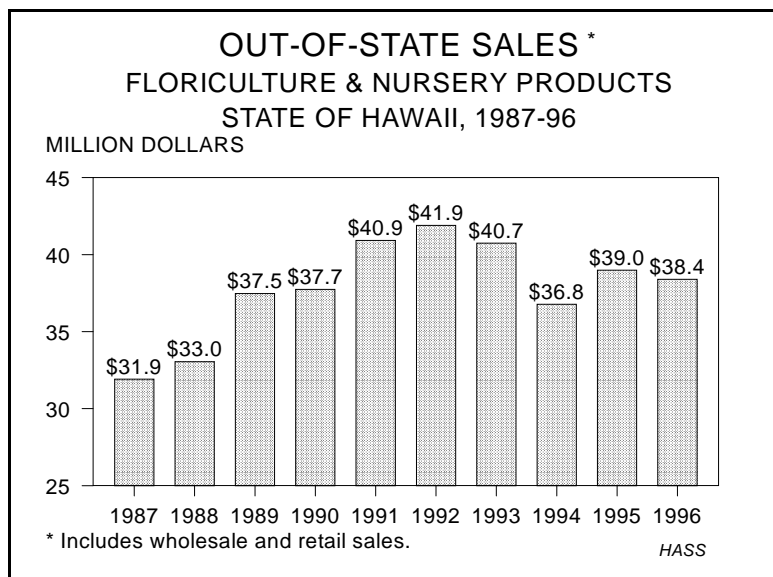
-- = Less than 1/2 acre.

¹Glass or glass substitute structure.

OUT-OF-STATE SALES

OUT-OF-STATE SALES DECLINE 2 PERCENT

The value of out-of-State sales of flowers and nursery products (including wholesale and retail sales) during 1996 was estimated at \$38.4 million. Increases in dendrobium sprays, cymbidiums, other cut greens, heliconias, other potted orchids, and the all other products category were not enough to offset declines by other commodities. Values in this table are not comparable to values shown in the majority of other tables throughout this release. The value of out-of-State sales represents the dollar received at the point the commodity leaves the State. Thus, the product contains retail and wholesale sales and may include multiple transactions by the time it leaves the State.



Anthuriums remained the number one floriculture crop or nursery product exported. The \$9.7 million in value was 7 percent lower than 1995. Potted foliage followed at \$9.5 million, 4 percent lower than a year ago. Dendrobium sprays moved into third with \$4.1 million in value. This was 32 percent higher than the previous year. Other potted orchids increased 17 percent from 1995. The \$4.0 million generated by other potted orchids ranked it fourth in out-of-State sales.

FLORICULTURE AND NURSERY PRODUCTS: Out-of-State sales, State of Hawaii, 1992-96¹

Commodity	1992	1993	1994	1995	1996
	<i>1,000 dollars</i>				
Anthuriums, cut	11,355	11,115	10,310	10,395	9,705
Birds of Paradise	1,230	970	960	905	650
Cymbidiums	185	190	90	80	115
Dendrobiums, sprays	3,015	2,705	3,015	3,120	4,110
Foliage, cut:					
Ti leaves	650	660	625	720	635
Other cut greens	1,095	800	765	885	1,010
Foliage, potted	10,015	9,655	9,090	9,910	9,500
Ginger, red	1,295	1,010	895	1,000	675
Gingers, other	685	640	340	740	605
Heliconias	1,500	975	805	740	800
Potted orchids:					
Dendrobiums	3,150	2,770	2,380	3,325	2,965
Other orchids	3,415	2,545	2,585	3,420	3,995
Proteas	1,700	1,400	1,755	1,675	1,625
Unfinished potted foliage stock	615	670	80	315	70
All other flowers and nursery	1,985	4,635	3,080	1,755	1,930
Total	41,890	40,740	36,775	38,985	38,390

¹Based on F.O.B. island value. Includes both wholesale and retail sales. Does not include sales of cut flowers, leis, etc., purchased within the State and hand carried out.

NATIONAL FLORICULTURE SUMMARY

U.S. FLORICULTURE VALUED AT \$3.42 BILLION

The value of floriculture crops continued upward in 1996. The total value of all crops at wholesale for all growers with \$10,000 or more in sales was estimated at \$3.42 billion for 1996, compared with \$3.33 billion in 1995. California continued as the leading state with crops valued at \$724 million, an increase of 5 percent from the value of floriculture in 1995. Florida continued to expand its output as the 1996 value reached \$660 million for a 5 percent gain. These two states accounted for 40 percent of the total value in the 36 states surveyed in the National Floriculture Survey. The top five states, California, Florida, Texas, Michigan, and Ohio accounted for \$1.90 billion, 56 percent of the total value. Growers with sales exceeding \$100,000 for the year accounted for 93 percent of the total, at \$3.17 billion. This size group included only 47 percent of the total number of growers.

State	Wholesale
	<i>Million dollars</i>
California	724
Florida	660
Texas	184
Michigan	182
Ohio	150

The number of floriculture growers continued to fall as the count in 1996 was 9,765, down 393 from the number in 1995. The number of growers with sales of \$100,000 or more declined from 4,657 in 1995 to 4,614 in 1996.

Year	All operations	Operations with hired workers	Average number of workers
1993	10,463	8,416	13.6
1994	10,263	8,384	13.4
1995	10,158	7,974	13.8
1996	9,765	8,242	13.8

The use of hired workers increased in 1996. A total of 8,242 operations reported hired workers during the year compared with 7,974 reporting hired workers in 1995. Overall, 84 percent of the operations used some hired workers in 1996

compared with 78 percent in 1995. The average number of hired workers used during peak times equaled the previous year's average of 13.8 workers.

The total value of floriculture crops grown by operations exceeding the \$100,000 minimum sales level reached \$3.17 billion in 1996, a 3 percent increase over the \$3.07 billion for 1995. Values for all categories rose in 1996. Bedding and garden plants, the largest contributor, recorded a 4 percent increase in wholesale value to \$1.41 billion. Flowering potted plants recorded a modest 1 percent boost over the previous year reaching \$686 million. Foliage showed a 2 percent higher value at \$508 million. Values of cut flowers and cut cultivated greens grew 5 percent and 7 percent, respectively.

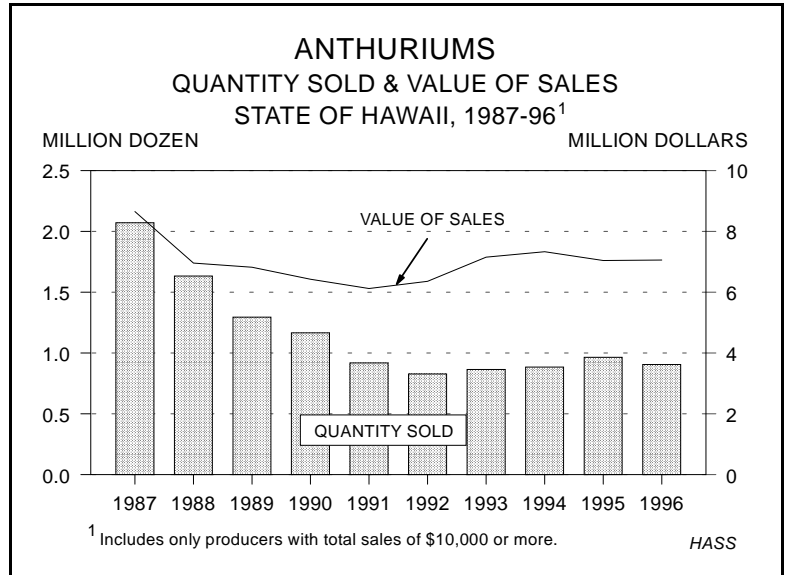
Where does Hawaii rank? For producers with \$100,000 or more in total sales, Hawaii's cut flower wholesale value of sales ranked 4th behind California, Florida, and Colorado. Hawaii's foliage for indoor or patio use growers also ranked 4th in the nation behind Florida, California, and Texas.

Source: Floriculture Crops, 1996 Summary, USDA, NASS.

HAWAII ANTHURIUMS

ANTHURIUM VALUE OF SALES FLAT

Hawaii's anthurium producers, with total flower and nursery sales of \$10,000 or more (total sales includes anthuriums and other crops), registered sales of \$7.1 million in 1996. This was relatively unchanged despite a 6 percent decline in quantity sold. Production area totaled 11.1 million square feet, 2 percent lower than a year ago.



ANTHURIUMS: Farm numbers, sales, value, and production area, State of Hawaii, 1992-96¹

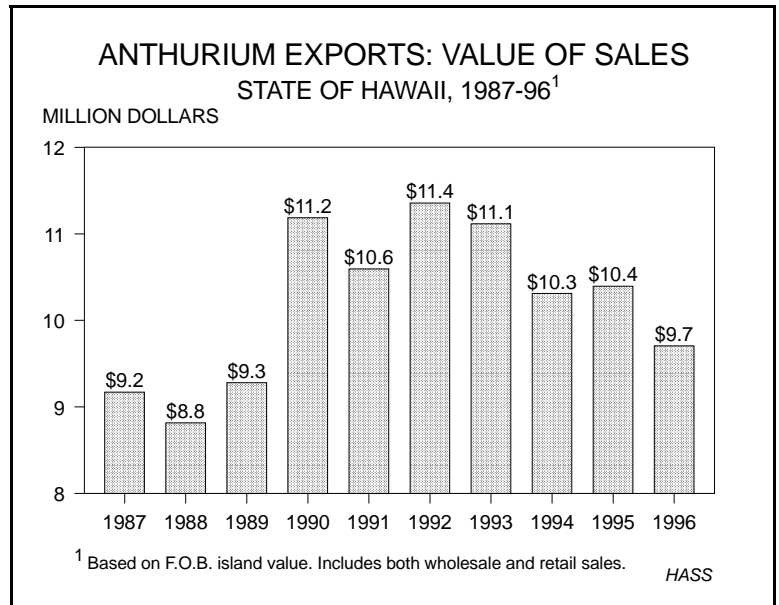
Year	Farms	Number sold	Value of sales	Production area		
				Artificial shade	Natural shade	Total
	<i>Number</i>	<i>1,000 dozens</i>	<i>1,000 dollars</i>	<i>1,000 square feet</i>		
1992	69	828	6,360	9,920	465	10,385
1993	64	865	7,156	10,060	830	10,890
1994	62	885	7,335	10,275	540	10,815
1995	69	965	7,042	10,670	640	11,310
1996	65	906	7,060	10,665	435	11,100

¹Includes nursery and flower producers with total sales of \$10,000 or more (total sales include anthuriums and other crops). Does not include potted anthuriums.

VALUE OF ANTHURIUM EXPORTS DECLINES IN 1996

Out-of-State anthurium sales were estimated at \$9.7 million for 1996, 7 percent lower than 1995. The out-of-State value includes wholesale and retail sales and is a relative gauge of sales outside of the State of Hawaii.

Out-of-State shipments from the Big Island, which produces more than 99 percent of the State's anthuriums, totaled 675,300 dozen in 1996. Big Island's total out-of-State shipments were 11 percent fewer than 1995. Mainland destinations, which made up about 55 percent of the Big Island's exports, were 3 percent higher than 1996. Foreign shipments declined 23 percent from the previous year.



Note: Big Island shipment figures include production from growers with less than \$10,000 in total floriculture and nursery sales. Big Island shipment figures are not comparable to production values published in Island Summary tables, page 11. Big Island shipment figures are also not comparable with value of out-of-State anthurium shipments, page 14.

ANTHURIUMS: Mainland and foreign shipments from the Island of Hawaii, 1992-96

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
<i>1,000 dozens</i>													
Mainland													
1992	37.2	45.5	38.0	39.2	45.8	40.7	40.6	42.4	42.1	40.6	40.9	55.2	508.2
1993	36.6	44.2	40.0	43.5	41.6	42.2	39.7	43.8	42.5	38.3	35.1	43.4	490.9
1994	31.0	38.8	35.4	38.0	42.9	39.5	28.6	30.8	31.4	32.3	29.3	33.0	411.0
1995	27.0	33.0	27.0	28.4	35.9	29.1	29.6	28.9	30.0	30.8	28.1	32.2	360.0
1996	25.4	34.3	25.6	31.6	40.3	27.8	32.5	28.7	28.4	30.6	27.0	37.6	369.8
Foreign													
1992	15.1	9.9	16.2	19.3	19.4	30.6	40.5	35.4	41.6	39.9	32.6	24.3	324.8
1993	14.3	13.4	17.3	20.4	25.3	25.2	31.0	33.4	35.3	41.8	34.1	25.7	317.2
1994	15.2	12.2	18.6	26.8	28.1	30.1	45.1	44.9	48.3	35.6	35.3	30.7	370.9
1995	19.1	12.8	22.3	20.8	27.3	37.8	46.8	47.1	45.3	48.1	36.7	34.4	398.5
1996	15.8	10.4	16.1	17.8	22.1	26.0	36.1	35.3	38.2	31.6	32.8	23.3	305.5
Total shipments¹													
1992	52.3	55.4	54.2	58.5	65.2	71.3	81.1	77.8	83.7	80.5	73.5	79.5	833.0
1993	50.9	57.6	57.3	63.9	66.9	67.4	70.7	77.2	77.8	80.1	69.2	69.1	808.1
1994	46.2	51.0	54.0	64.8	71.0	69.6	73.7	75.7	79.7	67.9	64.6	63.7	781.9
1995	46.1	45.8	49.3	49.2	63.2	66.9	76.4	76.0	75.3	78.9	64.8	66.6	758.5
1996	41.2	44.7	41.7	49.4	62.4	53.8	68.6	64.0	66.6	62.2	59.8	60.9	675.3

¹Sum of mainland and foreign may not add to total shipments due to rounding.

HAWAII DENDROBIUM ORCHIDS

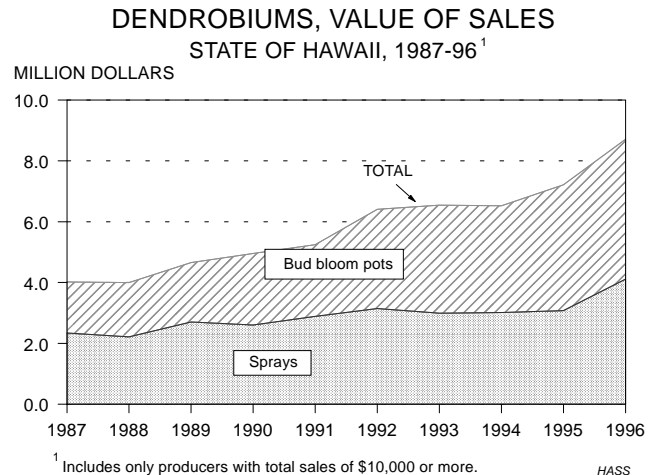


DENDROBIUM ORCHID SALES JUMP 23 PERCENT

Dendrobium orchid sales were pegged at \$10.1 million in 1996. All dendrobium orchid categories registered increases to push the total value of dendrobiums 23 percent higher than 1995.

Potted in bud/bloom, valued at \$4.6 million, represented 46 percent of the total dendrobium orchid value. Value of sales for pots in bud/bloom increased 11 percent from a year ago and was the highest sales value recorded.

Growers of cut sprays registered \$4.1 million in sales, nearly 41 percent of the total dendrobium value. At 34 percent more than 1995, this was the highest value on record and the first time cut sprays exceeded \$4 million in value of sales. Individual blossoms of dendrobiums were valued at \$740,000, 3 percent more than 1995. Value of community pots, pegged at \$610,000, nearly tripled the 1995 value.



DENDROBIUM ORCHIDS: Sales and value, State of Hawaii, 1992-96¹

Year	Individual blossoms		Cut sprays		Potted plants				Total value
	Number sold	Value	Number sold	Value	In bud/bloom		Community pots		
					Number sold	Value	Number sold	Value	
<i>Million blooms</i>	<i>1,000 dollars</i>	<i>1,000 dozens</i>	<i>1,000 dollars</i>	<i>1,000 pots</i>	<i>1,000 dollars</i>	<i>1,000 pots</i>	<i>1,000 dollars</i>		
1992	42.0	1,119	423	3,147	597	3,265	44	138	7,669
1993	29.9	927	426	2,995	753	4,052	100	503	8,477
1994	24.6	752	402	3,017	619	3,510	48	412	7,691
1995	22.4	716	410	3,078	762	4,137	42	221	8,152
1996	24.7	740	600	4,116	1,025	4,595	137	610	10,061

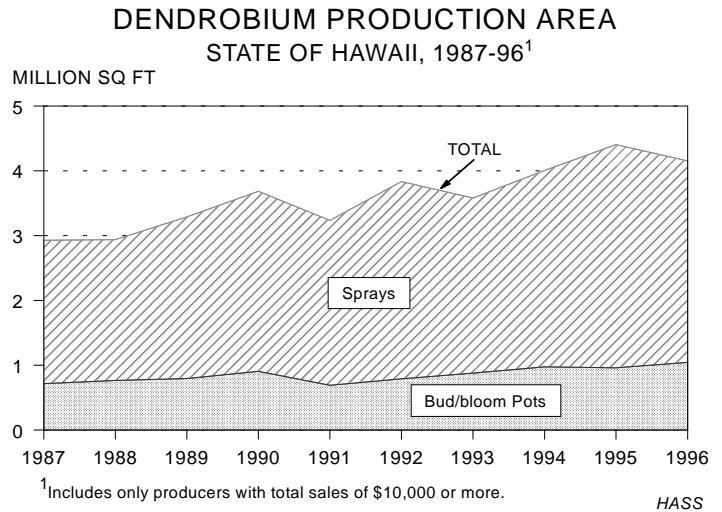
¹Includes only producers with total sales of \$10,000 or more.

HAWAII DENDROBIUM ORCHIDS (Continued)

PRODUCTION AREA 6 PERCENT LOWER

The combined production area for dendrobium cut sprays and bud/bloom pots totaled 4.2 million square feet, 6 percent lower than 1995 for growers with \$10,000 or more in total sales (total sales can include crops other than dendrobiums). Production area reported by growers includes newly planted, as well as established acreage; thus, year-to-year yield comparisons calculated using area and sales may be misleading.

Area utilized for cut sprays totaled 3.1 million square feet, 9 percent lower than 1995. Production area for potted in bud/bloom totaled 1.0 million square feet, 8 percent more than last year.



DENDROBIUM ORCHIDS (POTTED IN BUD/BLOOM AND CUT SPRAYS): Number of farms and production area, State of Hawaii, 1992-96¹

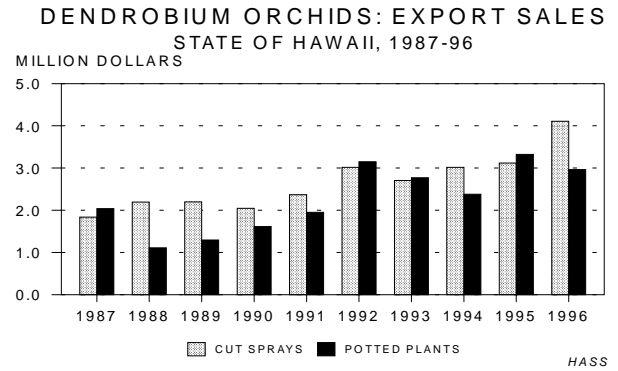
Year	Farms		Production area		
	Cut sprays	Potted in bud/bloom	Cut sprays	Potted in bud/bloom	Total
	----- Number -----		----- 1,000 square feet -----		
1992	58	51	3,045	791	3,836
1993	49	46	2,700	880	3,580
1994	49	46	3,030	975	4,005
1995	58	52	3,435	970	4,405
1996	49	57	3,110	1,045	4,155

¹Data includes only producers with \$10,000 or more in total sales.

HAWAII DENDROBIUM ORCHIDS (Continued)

CUT SPRAYS CARRY DENDROBIUM EXPORTS TO NEW HIGH

Export dendrobium sales totaled \$7.1 million in 1996, 10 percent higher than the previous highest year, 1995. Potted dendrobiums, with \$3.0 million in sales, declined 11 percent. However, cut sprays with \$4.1 million in export sales registered a 32 percent increase which was enough to offset the lower value of the potted category.



DENDROBIUM ORCHIDS: Out-of-State sales, 1992-96

Year	Value of Sales		Total value
	Cut sprays	Potted plants ¹	
<i>1,000 dollars</i>			
1992	3,015	3,150	6,165
1993	2,705	2,770	5,475
1994	3,015	2,380	5,395
1995	3,120	3,325	6,445
1996	4,110	2,965	7,075

¹Includes community pots.