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## Commodity Profile with an Emphasis on International Trade: Flowers and Nursery

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Data on production and acreage is difficult to assess for the flower and nursery sector, which is in part due to the vast variety of crops. According to the latest USDA survey of 36 states, California is a leading state in floriculture with a production value of \$858 million (USDA Report on Floriculture, 2001). Other important producing states were Florida, Michigan, Texas and Ohio. The five states accounted for \$2.42 billion, or 53 percent of the total value of production in 1999. California accounted for 19 percent of U.S. production. The production area for floricultural crops was estimated at 911 million square feet. Of the total area, 524 million square feet or 57 percent was greenhouse space.

According to the USDA Report on Nursery Crops (2001), the nursery production in 17 selected states was \$3.32 billion in 2000. Production was highest in California, with 28 percent of the total, followed by Oregon with 15 percent and Florida with 14 percent. The 6,535 nurseries surveyed in the report used an area of over 16 billion square feet, or just over 369,000 acres. California had 567 nursery operations with sales exceeding \$10,000 in 2000. Those operations used 842,265 acres for production.

### **Tariff Rates and Policy Changes Resulting from NAFTA**

The United States imposes a myriad of tariffs on various flower and nursery imports. A detailed listing of all current tariffs can be found in the 2002 Harmonized Tariff Schedule of the United States (see Sources).

Before the Canadian-U.S. Free Trade Agreement (CUSTA), many U.S. flower and nursery commodities entered Canada tariff-free. Certain bulbs and tubers as well as most cut flowers and flower buds faced tariffs ranging from 10 percent to 12.5 percent. The tariff for rosebushes, for example, was 10 percent. The tariff exceeding the 10-12.5 percent range was that for orchids from the United States (25 percent). All Canadian tariffs on flowers and nursery products were reduced in equal increments over 10 years until they reached zero in 1998.

Prior to NAFTA, the Mexican tariffs for flower and nursery imports varied, depending on the product. Most of the bulb and tuber imports entered Mexico duty-free. Certain products from that sector faced a tariff of 10 percent, which was eliminated immediately upon NAFTA's implementation. While some U.S. cuttings and trees did not face tariffs in Mexico in 1993, the majority faced a tariff of 10 percent, which was cut to zero in 1994 upon the implementation of NAFTA. Cut flowers and foliage (ornamental) plants had faced tariffs in Mexico if exported from the United States before NAFTA, but the tariffs were abolished in 1994.

The United States has reduced its tariff on flower and nursery imports from Canada and Mexico under NAFTA. In 1988, before CUSTA, the U.S. tariffs for bulb and tuber imports ranged from \$0.6 to \$2.5 per 1000 counts. Certain cutting and trees products (in essence, fruit or nut trees) entered the United States free and tariffs for the rest varied from 2.2 percent to 7.5 percent. All cut flowers and buds faced tariffs before CUSTA, which ranged from 4 percent for carnations to 8 percent for roses. Imports of foliage and ornamental plants were mostly duty-free. Under CUSTA, all existing tariffs were phased out over 10 years.

U.S. tariffs for Mexican imports in 1993 were the same that Canada had faced in 1988. With NAFTA, most tariffs were cut immediately and others were phased out over 5 years. Roses, for example, became duty-free in 1998.

### **Exports**

U.S. flower exports have increased over the past decade (Table 1). While in 1989 a total value of \$109.9 million was exported, in 2001, the value of exports had more than doubled to \$253.9 million. In 1993, the year before NAFTA, exports had already reached \$232.9 million. Exports showed an increasing trend until they peaked in 1998 at \$283.8 million. Exports from the flower and nursery sector slowed a little from 1999 to 2001 (Figure 1).

With regard to individual commodities, the largest share of exports consists of cuttings and trees. Their export value in 2001 was \$115 million, which equaled 43 percent of total exports. Exports of cuttings and trees more than doubled from \$47.1 million in 1989 to \$98.1 million in 1993. During NAFTA they increased to an all-time high of \$138.9 million in 1999, but have decreased in recent years. Another important export subcategory is foliages and other plants for ornamental purposes. Their share in 2001 was 32 percent of total flower and nursery exports. Exports of this subcategory increased most during the CUSTA years and reached \$87.1 million in 1993, which was approximately the 2001 level. Exports of cut flowers and buds have almost quadrupled from \$10.8 million in 1989 to \$39.4 million in 2001.

Interestingly, most subcategories had their highest increases in the early 1990s during the CUSTA rather than during the subsequent NAFTA years. The University of California Agricultural Issues Center estimated that, in 2001, the value of California flower and nursery exports totaled \$39.7 million. The major destinations for California flower and nursery exports were Canada and Mexico, receiving 49 percent and 24 percent of the

total, respectively. Other important export destinations were the European Union (12 percent), Japan (6 percent), and Hong Kong (3 percent).

U.S. flower and nursery exports to Canada accounted for more than half of total exports in 2001. The share of shipments to Canada of total U.S. flower and nursery exports has gained importance during the CUSTA/NAFTA eras, rising from 33 percent in 1989 to 44 percent in 1993 and to 52 percent in 2001. In absolute numbers, flower and nursery exports to Canada have more than tripled from \$37 million in 1989 to \$137 million in 2001 (Table 2).

The most important commodities shipped to Canada during 2001 were cuttings and trees (\$88.6 million) followed by cut flowers (\$29.8 million). The cuttings and trees subcategory almost tripled from 1989 to 2001. However, most of that increase occurred in the first year of CUSTA when the value of exports jumped to \$84.2 million in 1990. Ever since, exports averaged \$79.5 million. Cut flowers rose from \$2.2 million in 1989 to \$29.8 million in 2001. As was also the case for cuttings and trees, much of this export surge occurred during the first year of CUSTA. The foliage sector rose from \$4.8 million in 1989 to \$13.4 million in 2001. Export value from that sector doubled in 1990 and ranged from \$10 million to \$14 million during the 1990s.

Exports to Mexico made up almost 10 percent of total U.S. exports in 2001. This is an increase from 1993, when Mexico received 7 percent of U.S. flower and nursery exports. In absolute numbers, exports increased from \$17 million in 1993 to \$23.6 million in 2001 (Table 3). However, in the early 90s, before NAFTA, exports to Mexico had already increased sharply. Export value tripled from 1989 to 1993.

Foliage and other ornamental plants accounted for 42 percent of total exports to Mexico. The second most important subcategory was cuttings and trees, which made up 32 percent of total exports. Exports from both subcategories have increased during NAFTA. Cuttings and tree rose from \$5.9 million in 1993 to \$8.4 million in 2001 and foliage rose from \$5.8 million in 1993 to \$10.9 million in 2001. The bulb and tuber subcategory was relatively insignificant. Cut flowers and buds were valued lower in 2001 at \$3.1 million, than in 1993 at \$4.8 million. That sector peaked at over \$11 million in 1996, but has been decreasing since.

### **Imports**

Imports of flower and nursery products into the United States amounted to \$1.15 billion in 2001 (Figure 2). The value of imports has doubled since 1989, when it was \$510 million, and has risen by 76 percent since 1993. Cut flowers and buds made up half of the imports in 2001, a 55 percent increase from 1989 and a 67 percent increase from 1993.

Imports of cut flowers and buds peaked in 1998 at \$614 million, decreasing to \$564 million in 2001. Other important import commodities were cuttings and trees, which accounted for \$315.6 million, or 27 percent of total imports. Cuttings and trees accounted for only \$58.9 million in 1989 and increased to \$93.7 million by 1993. Since

1993, the cuttings and trees subcategory has experienced substantial annual increases. The bulb and tuber imports totaled \$180 million, up 125 percent from 1989 and 46 percent from 1993. Imports of foliage and plants for ornamental purposes were valued at \$88.5 million in 2001. Most of the bulb and tuber imports come from the Netherlands. Other exporting countries include Columbia, China, Canada and Mexico.

Canada ships the majority of cuttings and trees to the United States (Table 4). That sector made up 72 percent of Canada's total shipments to the United States in 2001, which were valued at \$310.9 million. In 1989, cuttings and tree exports accounted for half of total imports into the United States. That share increased constantly over the past decade. Imports rose from \$36.8 million in 1989 to \$225.6 million in 2001. The second most important subcategory of Canadian imports was foliages and plants for ornamental purposes, which was valued at \$48.2 million in 2001, a 62 percent increase since 1989. Imports from Mexico accounted for just 4 percent of total U.S. imports in 2001 and were valued at \$45.7 million. Cut flowers and buds accounted for \$29.4 million, or almost two thirds of total imports from Mexico. Since 1993, imports from the cut flowers and buds sector have more than doubled.

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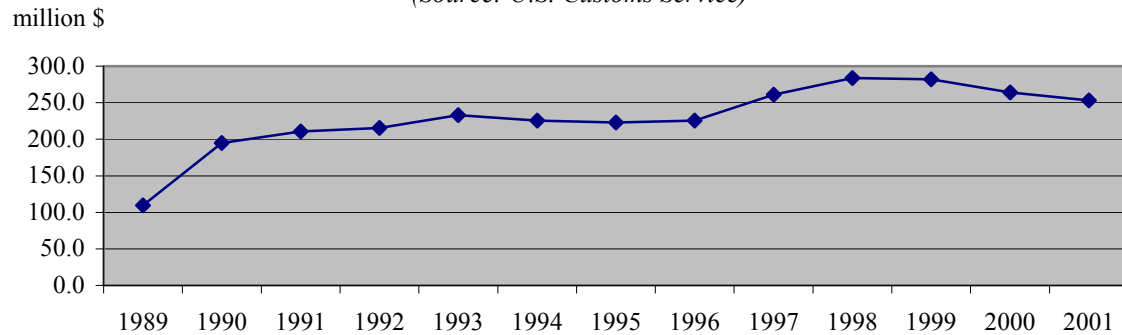
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## Tables and Figures:

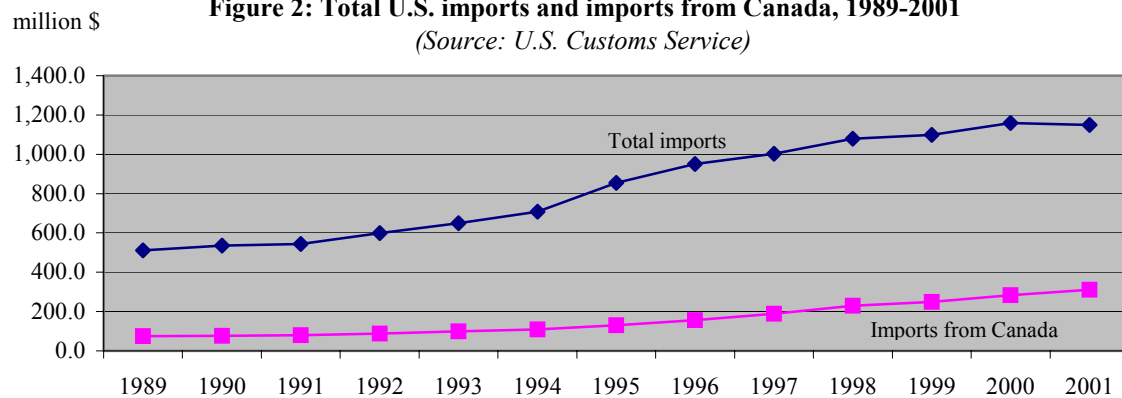
**Figure 1: Total U.S. flower and nursery exports, 1989 -2001.**

(Source: U.S. Customs Service)



**Figure 2: Total U.S. imports and imports from Canada, 1989-2001**

(Source: U.S. Customs Service)



**Table 1: U.S. Flower/Nursery exports, 1989-2001, in million \$**

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Bulb, tubers	5.7	7.2	7.4	8.9	8.6	8.1	9.9	10.0	12.9	22.6	16.1	13.7	11.9
Cuttings & trees	47.1	102.2	105.1	102.7	98.1	104.3	100.3	93.7	115.0	130.6	138.9	128.9	115.0
Cut flowers/buds	10.8	29.5	33.7	32.5	39.1	37.9	40.3	47.5	48.8	44.6	41.4	39.5	39.4
Foliage/ornamental	45.7	56.2	64.5	71.2	87.1	75.4	72.3	74.2	84.4	86.0	85.8	81.9	86.7
Total	109.3	195.1	210.7	215.3	232.9	225.7	222.8	225.4	261.1	283.8	282.2	264	253.9

(Source: U.S. Customs Service)

**Table 2: U.S. exports to Canada, 1989-2001, in million \$**

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Bulb, tubers	1.6	2.7	3.1	3.3	3.1	3.7	4.5	4.5	5.3	6.5	6.1	5.8	5.0
Cuttings and trees	28.4	84.2	81.6	78.9	74.4	74.9	73.4	70.4	75.6	82.7	82.3	87.3	88.6
Cut Flowers/buds	2.2	17.4	15.8	17.5	19.3	19.3	18.0	18.6	23.2	24.8	26.3	28.0	29.8
Foliage/ornam.	4.8	10.4	9.7	10.2	10.8	12.1	13.0	12.5	14.0	12.5	12.8	12.8	13.4
Total	37	114.7	110.2	109.9	107.6	110	108.9	106	118.1	126.5	127.5	133.9	136.8

(Source: U.S. Customs Service)

Table 3: U.S. exports to Mexico, 1989-2001, in million \$

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Bulb, tubers	0.3	0.1	0.1	0.4	0.5	0.2	0.1	0.3	0.1	0.5	0.9	1.3	1.2
Cuttings and trees	3.5	2.3	4.1	7.5	5.9	9.1	5.7	6.5	6.8	7.1	9.3	5.9	8.4
Cut Flowers/buds	0.6	0.9	4.2	2.9	4.8	5.5	9.5	11.1	9.5	7.1	5.8	4.7	3.1
Foliage/ornam.l	0.9	1.9	4.2	4.4	5.8	8.7	7.0	8.3	11.9	9.8	10.9	11.9	10.9
Total	5.3	5.2	12.6	15.2	17	23.5	22.3	26.2	28.3	24.5	26.9	23.8	23.6

(Source: U.S. Customs Service)

Table 4: U.S. imports from Canada, 1989-2001, in million \$

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Bulb, tubers	5.3	4.8	5.6	5.9	6.3	5.8	8.0	10.3	12.2	13.8	12.7	15.5	19.2
Cuttings and trees	36.8	37.1	42.1	50.7	59.5	68.4	82.2	99.8	123.3	155.2	178.1	203.4	225.6
Cut Flowers/buds	3.8	3.8	3.8	4.1	4.6	5.8	7.5	10.0	14.9	15.6	15.4	17.8	18.0
Foliage/ornam.	29.7	31.5	28.0	26.5	29.1	28.9	32.9	35.5	38.4	44.8	43.5	46.0	48.2

(Source: U.S. Customs Service)