



AgEcon SEARCH

RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

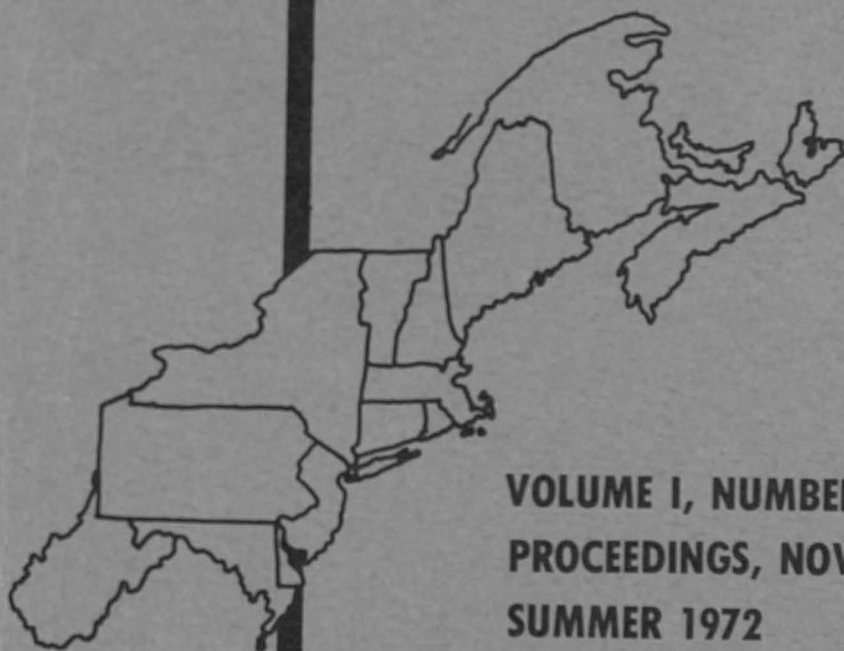
PER. SHELF

GIANNINI FOUNDATION OF
AGRICULTURAL ECONOMICS
LIBRARY

JAN 8 1973

JOURNAL OF

Northeastern Agricultural Economics Council



VOLUME I, NUMBER I
PROCEEDINGS, NOVA SCOTIA
SUMMER 1972

RECENT TRENDS IN CUT FLOWER IMPORTS --
IMPACT ON THE FLORICULTURAL INDUSTRY IN THE NORTHEAST

Elmar Jarvesoo
Associate Professor
Department of Agricultural and Food Economics
University of Massachusetts/Amherst

Nature of the Problem: A new Factor in Flower Imports

Until recently, cut flower imports to the United States have been largely of non-competitive type -- mostly minor novelty crops rarely produced locally, or crops out of production here seasonally.

We have been importing forced lilacs from Holland during the winter months, and lily-of-the-valley from Sweden. More recently, forced cut tulips from Holland from December through May have become a regular feature in our Eastern Markets. Other flowers from Holland -- the true flower garden of Europe -- have been appearing on our flower markets more sporadically, primarily at holiday seasons when local supplies of particular crops are short.

Imported volumes of such flowers are modest despite serious efforts of the Dutch exporters to penetrate the U.S. flower markets. Dutch flower growers are top efficient producers and they have captured a large share of the 40 percent of the West German flower market supplied by imports. But wages of greenhouse help in the Netherland have been rapidly approaching the levels in the United States. More recently, the Dutch guilder, along with the German mark, has been appreciated relative to the dollar, and air freight rates from Europe to the United States are relatively high. All these factors are acting as serious barriers and there is little hope (or fear) that the Dutch flowers will ever appear in our flower markets in any larger volumes.

Since the development of rapid air transport has made long-distance shipments of highly perishable products, including flowers, physically and economically feasible, orchids from such far-away places as Australia and New Zealand have established a firm place in our flower markets. They appear during the late summer and fall months, when local growers are off-crop

Recent cut flower imports from several Latin American countries, however, are an entirely new factor. These imports appeared in the Eastern and Southern markets more conspicuously first in 1969 and 1970. The primary flowers imported from Latin America -- carnations, standard and pompon chrysanthemums -- are in direct competition with our own major cut flowers. Consequently, they are of considerable concern to a large sector of the domestic flower producers.

Flower Production in the Northeast

Northeast flower producers are directly affected by imported cut flowers. Historically, flower production has located near the consumer markets and large population centers of which the Northeast is rich. Although postwar years have seen flower production moving out of the older production areas into locations with favorable climates, just about one-fourth of the nation's greenhouse and nursery production is still originating in the Northeast (Table 1).

Table 1.
Greenhouse and Nursery Production in New England and the Northeast
Source: Farm Income

	Receipts from Marketing			Percent of All
	1968	1969	1970	Farm Sales
	--in Million Dollars--			1970
Maine	2.8	3.0	3.1	1.2
New Hampshire	3.5	3.7	3.8	7.0
Vermont	1.1	1.1	1.2	2.8
Massachusetts	23.7	24.8	25.4	15.1
Connecticut	18.7	19.6	20.1	12.1
Rhode Island	4.3	4.5	4.6	22.0
New England Total	54.1	56.2	58.1	7.0
New York	52.6	55.9	57.1	5.1
Pennsylvania	40.7	41.2	40.2	3.8
New Jersey	32.5	34.8	35.0	14.0
Maryland	11.9	12.5	12.9	3.3
Delaware	3.8	3.9	4.0	2.7
West Virginia	3.4	3.6	3.7	3.3
Sub Total	144.9	151.9	152.9	5.0
North-East Total	199.0	208.7	211.0	
Total U.S.	843.8	888.8	915.2	1.9
North-East Percent	23.6	23.5	23.0	

New York and Pennsylvania are the leading flower states in the Northeast and represent about \$100 million combined annual sales, nearly half of the regions' total production. In the three Southern New England states and New Jersey, ornamental horticulture represents 12 to 22 percent of all farm sales.

A Brief History

While the focus of our interest is on cut flower imports, it is useful

to gain a complete picture of the U.S. foreign trade in all floricultural commodities.

Floricultural and nursery products represent a very minor proportion of the U.S. imports. In the 1969 fiscal year, all horticultural products had reached an all time high of \$613 dollars, or about 12 percent of the total U.S. agricultural imports of about \$5.2 billion. Floricultural and nursery products in the same year accounted for \$16.3 million or 2.6 percent of the horticultural products (3, p. 1,6, 7).

Table 2.
U. S. Imports of Floricultural and Nursery Products
Fiscal Years 1962-1969
Source: Lemon I.E. "U.S. Foreign Trade in Nursery...."

Commodity	Year ending June 30				
	1962	1964	1966	1968	1969
Bulbs, roots, and corms	13,616	12,652	13,182	14,058	n.a.
Fruit stocks, cuttings or seedlings	61	89	99	99	
Orchid plants	34	45	91	105	
Flowers, cut, fresh	110	97	285	548	
Rose stocks and plants	21	15	18	19	
Other nursery and greenhouse stock	321	326	349	493	
Total	14,163	13,224	14,024	15,322	16,292

Table 2 presents composition of the imports of Floricultural and Nursery Products as these items are lumped together in the import statistics. It must be noted that the import value statistics does not include shipments of less than \$250 dollars. In cut flowers and other live plants such small shipments account for nearly one-half of the total.^{1/} In bulb imports small shipments are negligible.

Total U.S. imports of floricultural and nursery products have fluctuated at around \$14 to \$16 million dollars in recent years. Increase of flower and nursery imports over the 1956-1969 period was a modest 26 percent compared with 192 percent rise in all horticultural imports (3, p. 7).

Well over 90 percent of the import value is made up of bulbs, roots, and corms of tulips, hyacinths, gladioli, narcissi, lilies, etc. These bulbs are primarily used for home garden plantings, although a certain proportion

^{1/} Oral communication at the Floricultural Economics Workshop, September 1-2, 1971, Washington, D.C.

is being used for forcing by commercial flower growers. The proportion of bulbs in total imports has been slowly decreasing from 96 percent in 1961-1962 to 92 percent in 1967-1968. Tulip bulbs, worth well over \$5 million, accounted for 40 percent of the import value of bulbs, followed by hyacinth (12 percent) and narcissus bulbs (9 percent), and gladiolus corms (7 percent).

The Netherland has been the dominant supplier of the U.S. bulb imports: 99 percent of hyacinths, 94 percent of narcissi and tulips, and 91 percent of gladiolus corms in 1968 came from that country. In other bulbs, including lily, crocus and others, the Netherlands' share was 56 percent, Belgium-Luxemburg supplied 19 percent, Canada nearly 9 percent, Japan 8 percent, Republic of South Africa 4 percent and all other countries 4 percent.

Fresh cut flower recorded imports in 1968 amounted to \$548,000. Actual total may have been over \$1 million if the small, less than \$250 dollar shipments were included. Indeed, another source, the Federal-State Market News Service, gives the following estimates of cut flower and foliage plant imports for the fiscal years 1965-1971 (10, p. 28, 11, p. 34):

	Flowers and Foliage Plants	Flowers Only
1965 -	\$ 1,120,000	\$ n.a.
1966 -	1,218,000	332,000
1967 -	1,401,000	406,000
1968 -	1,887,000	802,000
1969 -	2,624,000	1,198,000
1970 -	4,514,000	2,220,000
1971 -	5,398,000	n.a.

Both sources show a rapid increase of cut flower and foliage imports. Table 2 shows a rise from about \$100,000 in 1964 to \$548,000 in 1968. The above data show a nearly 7 time increase of flower imports between 1965 and 1970 -- from \$332,000 to \$2.22 million.

Recent Cut Flower Imports

Table 3 and Figures 1-4 show the trend and amounts of major cut flower imports since July 1969, primarily from Central and South America.

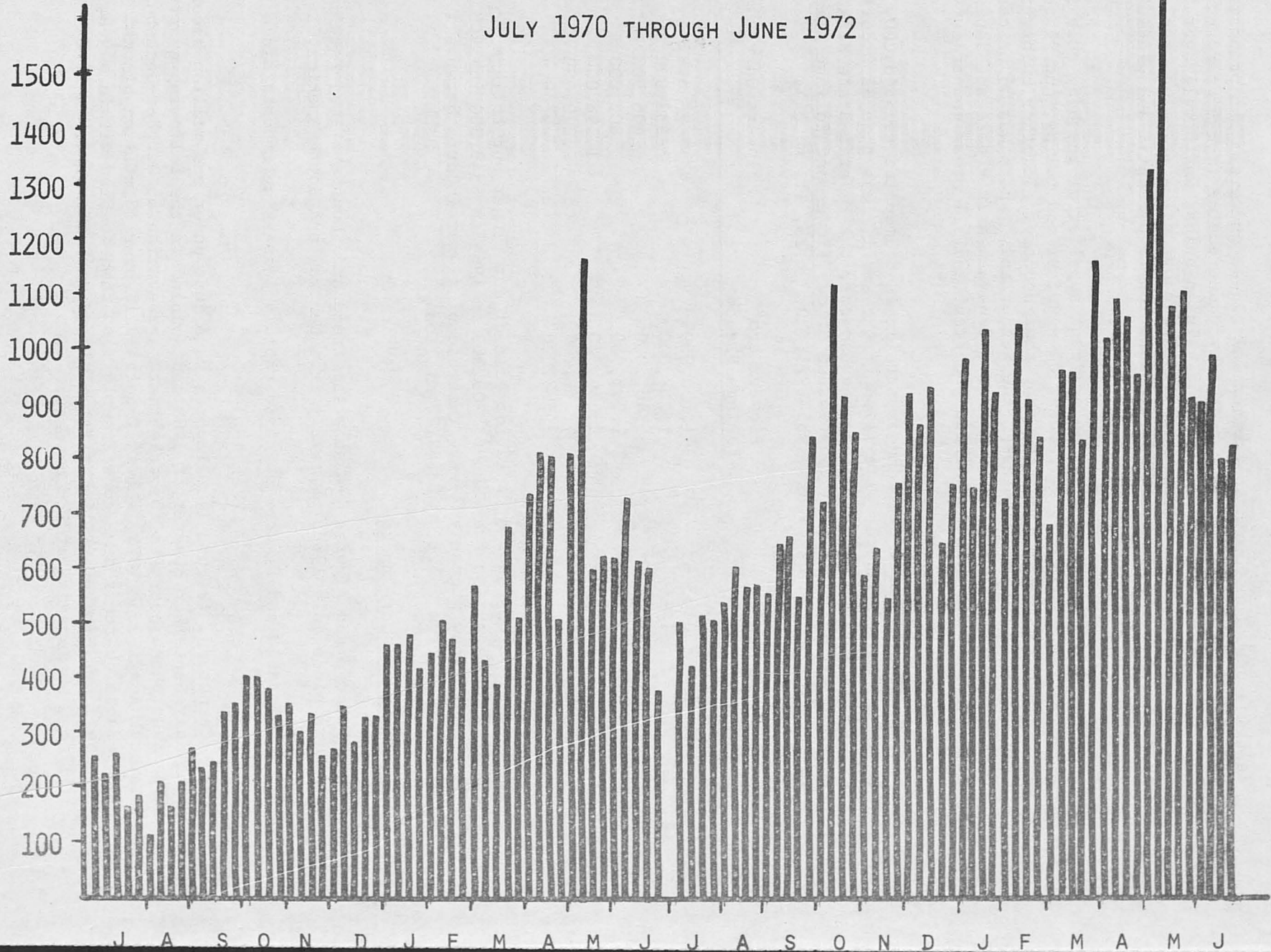
The table and figures point to rapidly increasing imports since mid 1969.

Carnations (Figure 1). Imports were just under one million blooms in the July-September quarter of 1969 and doubled in the following quarter. The last three quarters for which data are available, October-December 1971 through April-June 1972, showed imports well over 10 million blooms. Comparable quarters have consistently more than doubled within a year. In the 1971 calendar year, 15.4 million blooms were imported, in 1972 -- 32.2 million, an increase of 110 percent.

CARNATIONS

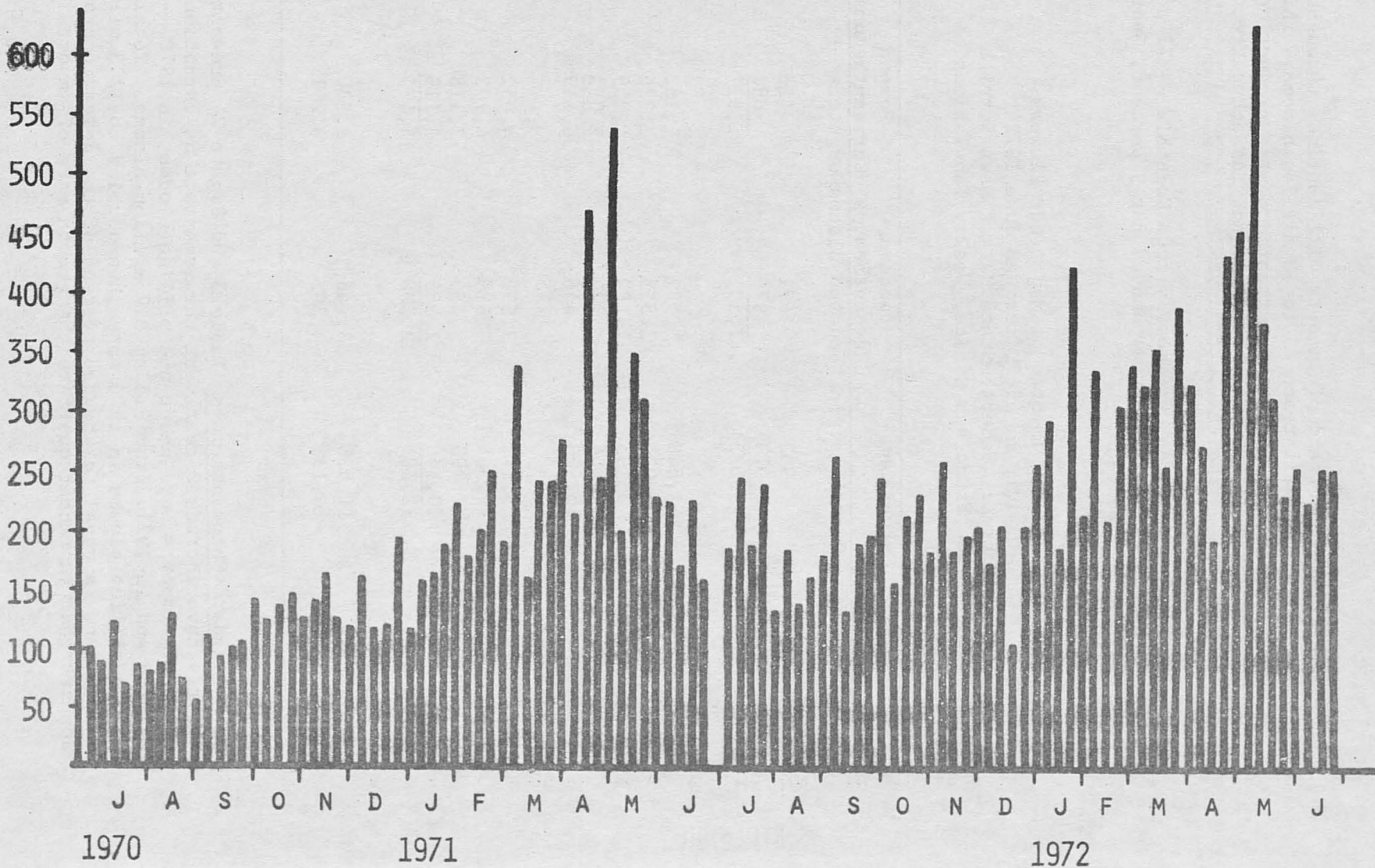
WEEKLY IMPORTS TO THE UNITED STATES
JULY 1970 THROUGH JUNE 1972

Thousand
Blooms



STANDARD CHRYSANTHEMUMS
 WEEKLY IMPORTS TO THE UNITED STATES
 JULY 1970 THROUGH JUNE 1972

Thousand
 Blooms



If the present trend of imports will continue throughout 1972, total annual imports may well reach 45 to 50 million blooms. This will represent about 7 percent of an estimated current domestic production (7) or nearly the combined production of Pennsylvania and Massachusetts, the leading carnation states in the East.

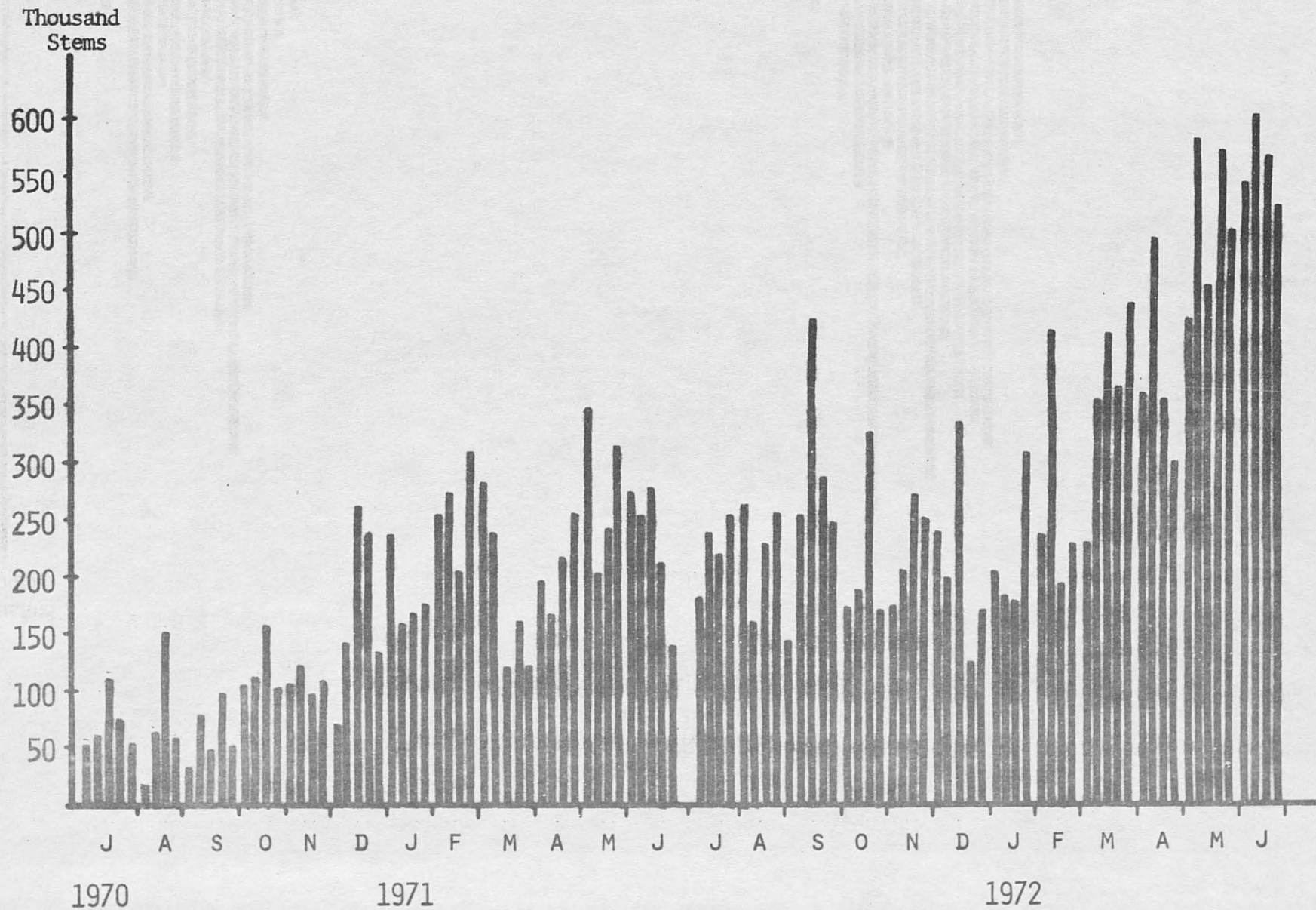
Imported carnations come mostly from Colombia -- 77 percent in the 1970-1971 crop year. Ecuador accounted for 9 percent, Guatemala 6 percent and Costa Rica 4 percent.

Table 3.
U. S. Imports of Major Cut Flowers
July 1, 1969, through June 1972
Source: Federal-State Market News Service
San Francisco Office, Weekly Tabulations

	Carnations	Standard Chrysanthemums	Pompon Chrysanthemums	Orchids
-- Quarterly, in thousand blooms or stems --				
1969				
July-Sept.	952	621	426	(1)
Oct.-Dec.	2,073	970	891
Total	(3,025)	(1,591)	(1,317)	1
1970				
Jan.-March	2,848	1,132	1,182
April-June	3,974	1,355	1,325
July-Sept.	3,195	1,182	1,259	309
Oct.-Dec.	5,406	1,777	2,353	296
Total	15,423	5,446	6,119	605
1971				
Jan.-March	5,176	2,632	4,052	1
April-June	9,364	3,675	4,192	3
July-Sept.	7,093	2,455	3,118	547
Oct.-Dec.	10,548	2,588	3,113	257
Total	32,181	12,300	14,475	808
1972				
Jan.-March	11,538	3,746	3,530	2
April-June	14,133	4,303	6,201	...

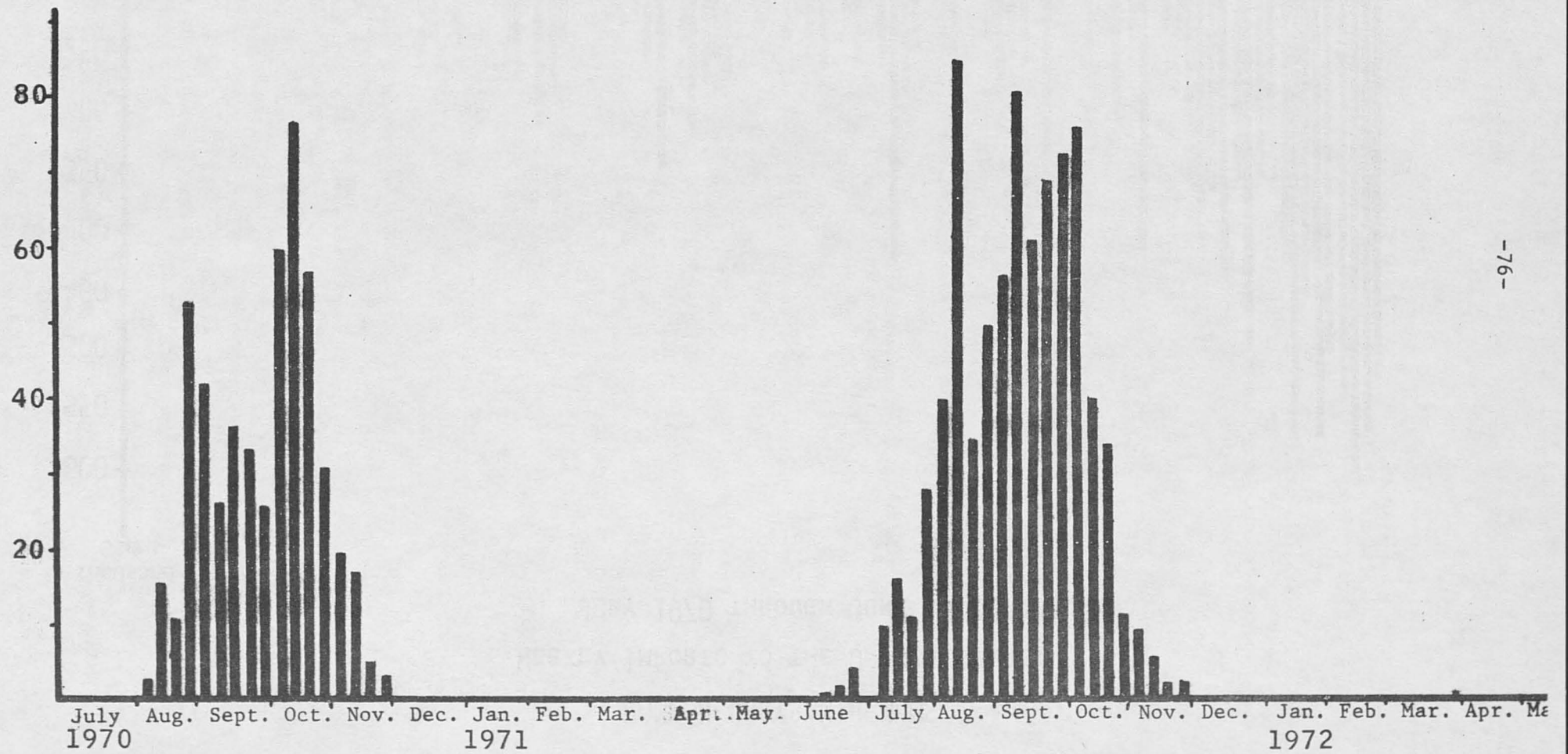
Standard Chrysanthemums (Table 3 and Figure 2) present a similar picture. Imports have increased nearly at the same rate as carnation imports. In 1969, quarterly imports were under one million blooms, in 1970 -- from 1.1 to 1.8 million and in 1971, from 2.5 to 3.7 million blooms. Total annual imports of 5.4 million blooms in 1970 more than doubled to 12.3 million 1971. The last figure is equal to about 8 percent of the domestic production (7). It appears that in recent quarters the growth rate of imports has slowed down.

POMPON CHRYSANTHEMUMS
WEEKLY IMPORTS TO THE UNITED STATES
JULY 1970 THROUGH JUNE 1972



ORCHIDS
 Weekly Imports to the United States
 July 1970 through May 1972

Thousand
Blooms



Colombia (38 percent) and Guatemala (35 percent) lead as suppliers, followed by Ecuador (17 percent) and Costa Rica (7 percent).

Pompon Chrysanthemums showed the fastest import growth rate. But this growth has also moderated in recent quarters. Nearly 15 million pompon stems were imported in 1971 compared with 6.1 million in 1970. The 1971 imports are equal to about 6 percent of domestic production (7).

Orchids are included as a typical crop imported seasonally, during the summer and fall months, with the peak in September-October. In 1971, the imports were about one-third higher than in 1970. Australia supplied 76 percent of the imports and New Zealand 21 percent.

Commercial Flower Production in Latin America

Commercial large scale flower production for exports is a new venture for Latin American countries. It has been started recently, often with U.S. capital and know-how.

Potentials of these countries are estimated as favorable. At suitably selected elevations nearly ideal climates can be found for year-round outdoor flower production of certain flower crops. No expensive greenhouse structures and heating expenses are needed, although some protection of tender blooms is necessary.

Professor W. D. Holley, of Colorado State University, characterizes the situation in Central America, which applies also to South America, as follows: (1, No. 229) "Their present success is directly related to the following: 1) Excellent natural elements for specific crops; 2) air space for shipping the products to the U.S., preferably on direct flights; 3) accessibility to international airports; and 4) know-how on culture and varieties from North Americans. Also common to these export growers are relatively low labor costs. Problems experienced by all of these producers include: 1) labor inefficiency; 2) difficulties in importing supplies and equipment and the high costs involved; and 3) shipping problems such as petal burn, heating or freezing of the flowers in transit." For Costa Rica, Holley points out that the particular grower he visited had a climate somewhat too warm for carnations while chrysanthemums were doing well.

Imported carnations and chrysanthemums from Latin America, particularly from Colombia, Ecuador, Guatemala and Costa Rica, are admittedly of high quality, are selling at premium prices in our markets, and are generally accepted by retail florists and the buying public. Wholesale florists like to handle them also. It must be emphasized that the shipping problems indicated by Holley still exist and cause concern, particularly with chrysanthemums. As volumes shipped have increased cargo space availability has become a problem, causing occasional delays. Petal burns with chrysanthemums is a frequent complaint. The problems appear sporadically making flower quality somewhat undependable.

Flowers from South and Central America are shipped primarily to Miami and New Orleans for distribution in the Eastern and Central large flower

markets. Importers in Miami and New Orleans process the flowers through the customs and plant quarantine, and then reship to the final destination: to wholesalers in Boston, New York, Chicago, etc.

According to Holley, (1, No. 229) shipping costs on flowers from San Jose, C.R., to New Orleans and Miami run about 7 to 8 cents per pound on a commodity rate basis. It is estimated that the shipping costs per carnation bloom are one cent to one-and-a-half cents from the origin to Miami, and just about one cent from Miami to most of the Eastern and central destinations, a total of about 2½ to 3 cents. The f.o.b. prices at shipping points are typically 5 to 6 cents per bloom. Selling prices in Boston, for example, have been 12 to 14 cents for the top quality carnations, during the winter season and 8 to 10 cents for the lower grade.

Customs duties are applied to imported flowers, but not at excessive rates. On cut flowers, 10 percent, and on foliage plants, 9 percent of the invoice value is charged. Florist greens, classified by customs as a crude vegetable substance, enter duty-free.

Small shipments, up to \$250 value per shipment, can be customs-cleared by the importer, or recipient, without much red tape or formalities. For larger shipments, a bonded agent is required to process the customs formalities. This method occasionally proves cumbersome and costly for shipments of flowers just exceeding the \$250 limit per shipment.

Future Trends, and Impacts on the Northeast

Latin American carnations and chrysanthemums have caused great concern and uncertainty among the U.S. flower producers and wholesalers. Carnation growers in the Northeast, in Pennsylvania, New York, Massachusetts and Connecticut in particular, operating in a high cost producing area, feel the pinch of the new competition keenly and are urging that "something be done" to protect them from this competition. Higher import duties are being suggested, and a more rigorous application of plant quarantine rules recommended.

It seems unlikely that any restrictive policies for the Latin American flower imports will be seriously considered, still less applied. The United States is strongly committed to assist these countries and to improve their balance of trade with the U.S.

In an address to the general assembly of the Organization of the American States, Secretary of State, Rogers has stated our official position as follows: (5, p. 12)

"In recent years, Latin America has become increasingly impatient with its traditional and unfavorable trade relationship with the United States. In its simplest form, the Latins export raw materials to the United States and import finished products in return, a losing proposition for them".

"Under the administration proposal, the United States would abolish tariffs in some 500 items, most of them manufactured and semimanufactured

goods. This would provide easier access to the North American market and thereby encourage Latin American production of the items for export" (Underlining the author's).

Although Secretary Roger's speech did not make any reference to commercial cut flower production in Latin America and flower exports, implications for our flower industry seem to be clear: restrictions on Latin American imports are not in line with the present official trade policies.

Furthermore, the plight of the flower growers in the Northeast is older than the Latin American flower imports, although these have undoubtedly aggravated the situation.

As rapid air transportation developed and expanded during the post-war years, flower production in the U.S. has followed the principle of comparative and absolute advantage and moved into Florida, California, and Colorado. This has caused a steady decline of flower production in the Northeastern and Northcentral states as Table 4 (Appendix) will show.

California is now producing about 57 percent (31 percent in 1959) of the nation's carnations, 55 percent (40 percent in 1959) of standard chrysanthemums, 37 percent (16 percent in 1969) of pompons, 39 percent (21 percent in 1959) of roses, and 13 percent (9 percent in 1959) of gladioli. Florida produces 64 percent (53 percent in 1959) of all gladioli 35 percent (32 percent in 1959) of pompons, and about 60 percent of foliage plants. Colorado produces 24 percent of all carnations compared with 17 percent in 1959. It must be noted that in 1959 the shift away from the historical, consumer oriented production location was well under way. Consequently, the changes since 1959 tell only a partial story of the extent of relocation of our flower production.

During the 1960's, California carnations began winning a permanent place in the Eastern wholesale markets crowding out New England, New York, and Pennsylvania produced carnations. At present a large part of carnations in the East are supplied by California.

Unfortunately, reliable current cost of production figures are not available. It is estimated that it costs a least 8-9 cents per bloom to produce carnations in Massachusetts and Pennsylvania compared to about 5-6 cents in California. Shipping costs across the continent are about 1½ cents per bloom. As an indication of the situation is the fact that, according to the annual cut flower report, California growers have been receiving about 6 cents at wholesale per carnation bloom and have been expanding production rapidly. In Massachusetts about 9 cents per bloom was reported, and growers are going out of business at a steady stream. In 1970 and 1971, Pennsylvania growers reported receiving nearly 10 cents per bloom but production was declining at a rate of 10-15 percent a year.

With small modifications the same can be said about standard and pompon chrysanthemums. These flowers from California and Florida have established a firm position in the Eastern markets earlier. The Florida pompon industry

started in the early 1950's and expanded very rapidly. California at the same time became the primary supplier of the standard and fuji type of chrysanthemums.

Land values, taxes and labor costs are too high in the East for flower growers to compete successfully with shipped-in cut flowers from California, Florida, and Colorado, or with imported flowers from Latin America.

The trend can hardly be reversed. Economic forces are working overwhelmingly against cut flower production in the Northeast. Appropriate adjustments are unavoidable. Frequently, resources are being transferred out of flower production altogether. In other cases, a shift into pot plant production has been considered an alternative.

Concluding Remarks

The modest purpose of this paper was to make fellow agricultural economists aware of the recent developments in a peripheral segment of agriculture and to inform them about problems that this segment of our concern -- the flower growing industry in the Northeast -- currently faces.

As we have seen, flower production is a prominent part of agriculture in many states of the Northeast. Its production technology has been an intergral part and concern of the Colleges of Agriculture -- in resident instruction, research, and extension activities.

It is only recently that the economists have concerned themselves with the peculiar problems of this segment of agriculture, and that a body of knowledge in floricultural production and marketing economics has been developing.

It seems certainly appropriate that the current adjustment problems of the flower producers in the Northeast, and the forces behind it, should occupy the attention of our profession.

Appendix

Table 4. Shifts in Major Cut Flower Production
U.S., 1959 to 1971

Source: Hortic. Specialities Census, 1959
and Cut Flowers and Foliage Plants, 1972

	1959			1971		
	No. of Growers	No. Blooms in millions	Percent of total	No. of Growers	No. Blooms in millions	Percent of total
<u>Carnations</u>						
California	189	134.3	31%	272	379.6	57%
Colorado	130	73.6	17%	162	161.4	24%
New York	308	27.6	6%	139	7.8	1%
Mass.	218	39.4	9%	74	25.2	4%
Penna.	370	33.7	8%	189	26.2	4%
Illinois	200	18.1	4%	57	5.8	1%
<u>Standard Chrysanthemums</u>						
California	153	36.6	40%	200	80.5	55%
Florida	24	2.2	2%	25	9.2	6%
New York	435	5.8	6%	269	5.2	3%
Mass.	212	2.0	2%	108	3.2	2%
Penna.	442	5.8	6%	268	7.7	5%
Illinois	281	5.6	6%	111	2.7	2%
Ohio	411	5.6	6%	260	9.3	6%
<u>Pompons, bunches</u>						
California	226	3.94	16%	216	12.6	37%
Florida	51	7.64	32%	40	11.9	35%
New York	516	1.66	7%	283	1.4	4%
Mass.	297	.71	3%	141	.4	1%
Penna.	475	1.87	8%	247	2.2	6%
Illinois	296	1.10	5%	110	.5	1%
Ohio	421	1.14	5%	243	1.1	3%
<u>Roses</u>						
California	43	74.0	21%	60	167.6	39%
New York	48	36.3	10%	26	26.1	6%
Mass.	21	11.5	3%	13	23.4	5%
Conn.	11	17.6	5%	5	15.0	3%
Penna.	48	44.5	12%	33	44.0	10%
Illinois	40	43.3	12%	17	21.9	5%
Ohio	31	11.3	3%	23	11.9	3%
<u>Gladioli, dozens</u>						
Florida	53	15.09	53%	19	15.0	64%
California	79	2.49	9%	18	3.1	13%
New Jersey	108	1.42	5%	34	1.8	8%
New York	147	.84	3%	37
N. Carolina	54	2.36	8%	16	1.5	6%
Illinois	94	1.20	4%	26	1.0	4%

Bibliography

1. Holley, W.D., "Frontiers in Floriculture", Colorado State Flower Grower Association Bulletin. No's. 229, 230 and 231 -- 1969. 237 -- 1970.
2. Lemon, I.E., "U.S. Foreign Trade in Nursery and Greenhouse Stock." Foreign Agricultural Trade of the United States. April 1969, pp. 17-20.
3. Schroeter, Richard B., U.S. Imports of Horticultural Products. Foreign Agricultural Service, U.S. Department of Agriculture. May 1971.
4. Smith, Cecil N. and Will E. Walters. "Continued Growth of Latin America's Floriculture Industry Forecasted". Southern Florist and Nurseryman. February 13, 1970, pp. 13, 17, 26-28.
5. Voigt, Alvi O., "Flower Imports". Southern Florist and Nurseryman. May 28, 1971, p. 12.
6. Farm Income. State Estimates 1949-1970. FIS 218 Supplement. Economic Research Service. U.S. Department of Agriculture, Washington, D.C. August 1971.
7. Flowers and Foliage Plants. Production and Sales, 1970 and 1971. Intentions for 1972. SpCr. 6-1-(72) Crop Reporting Board, SRS, USDA. Washington, April 1972.
8. Federal-State Market News Service. Boston Office. U.S. Department of Agriculture. Current reports since 1970-1971. Annual Summary, Boston 1972.
9. Federal-State Market News Service. San Francisco Office. U.S. Department of Agriculture. Ornamental Crop Report. Weekly tabulations of Imports of Ornamented Crops. From 1969 up-to-date.
10. Marketing California Ornamental Crops 1971. U.S. Department of Agriculture. Federal-State Market News Service, San Francisco Office. June 1972.
11. Marketing Florida Ornamental Crops. Summary 1969 and 1970 seasons. U.S. Department of Agriculture. Federal-State Market News Service, Orlando Office. Orlando, Florida. September 1970 and 1971.
12. United States Census of Agriculture: 1959, Volume V -- Part I. Horticultural Specialties, Special Reports. U.S. Department of Commerce, Bureau of the Census, Washington, D.C. 1962.