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Flowers - Cost of production

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Department of Agricultural Economics

MARCH, 1956

F.R. No. 135



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**TULIP AND NARCISSUS FORCING IN 1954/5
AND PREVIOUS SEASONS**



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PRICE 2/-

F.R. No. 135.

TULIP AND NARCISSUS FORCING IN 1954-55 AND PREVIOUS SEASONS.

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MARCH, 1956.

P R E F A C E

This report is divided into three main parts. The first part embodies the third year's financial results of this investigation and the second part reviews the results obtained over the entire three-year period, 1952-53 to 1954-55 inclusive. The third part, which is not directly concerned with financial results, deals with a special study of labour economy in the handling of flowers.

Although the number of growers participating in the investigation has been too small to be properly representative of the bulb-forcing industry, certain major economic features of this type of crop have been revealed which should be of interest not only to the growers directly concerned, but to others forcing bulbs in similar circumstances.

In conclusion, may I thank all the growers who have helped with this investigation for their support and co-operation over a period of three years.

K.A.I.

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INTRODUCTION TO RESULTS IN THE 1954-55 SEASON.

Seven growers took part in this investigation during the 1954-55 season. Two of these supplied details of forcing tulips and narcissi, four of tulips only, and one of narcissi only. There are, therefore, six records of tulips, and three records of narcissi.

All seven of these growers had participated in this investigation in the previous year and the location of the nurseries and types of horticultural business involved have been described in earlier reports.¹ Individual nurseries are designated in this report by the same code number as previously.

Size of Enterprise

The following table shows the number of tulips and weight of daffodils forced and costed on each of the seven nurseries.

SIZE OF THE BULB-FORCING ENTERPRISE.

TABLE 1

| Nursery Code No. | Quantity of bulbs forced. | |
|------------------|---------------------------|-----------|
| | Tulips. | Narcissi. |
| | Thousands | cwts. |
| 1 | 116 | - |
| 2 | 82 | 162 |
| 3 | 220 | 174 |
| 6 | 12 | - |
| 7 | 109 | - |
| 8 | - | 60 |
| 9 | 411 | - |

Varieties and Bulb Sizes

Particulars of the source and grade of bulbs forced on each nursery are shown in Table 2 :-

¹INGERSENT, K.A. The Cost of Forcing Narcissi and Tulips during the 1952-53 Season. University of Nottingham, Department of Agricultural Economics, Sutton Bonington, September, 1953, (also similar report on the 1953-54 Season, September, 1954).

SOURCES AND GRADES OF BULBS.

TABLE 2

| Nursery Code No. | T U L I P S | | | N A R C I S S I | | |
|------------------|-------------|-------------------------|------------------------------|-----------------|----------------------------|---------------------------------|
| | Size. | No. of bulbs (Imported) | No. of bulbs (English-grown) | Size. | Weight of bulbs (Imported) | Weight of bulbs (English-grown) |
| | cms. | | | | cwts. | cwts. |
| 1 | 12 | 97,100 | - | - | - | - |
| | 11 | 19,000 | - | - | - | - |
| 2 | 12 | 44,000 | - | D.N.1's and 2's | 162 | - |
| | 11 | 37,500 | - | | | |
| 3 | 12 | 130,000 | 10,000 | As lifted | - | 174 |
| | 11 | 80,000 | - | | | |
| 6 | 12 | 12,000 | - | - | - | - |
| 7 | 11 | 106,075 | - | - | - | - |
| | 12 | 3,000 | - | - | - | - |
| 8 | - | - | - | As lifted | - | 60 |
| 9 | 12 | 80,000 | - | - | - | - |
| | 11 | 273,500 | - | - | - | - |
| | 10 | 57,500 | - | - | - | - |

There follows a full list of the varieties costed on each nursery, together with details of the number of bulbs planted. Bulbs prepared for early forcing by pre-cooling are denoted in the list by a letter P placed after the varietal name.

BULB VARIETIES AND NUMBERS ON COSTED NURSERIES.

TABLE 3

| <u>Nursery 1.</u> | | <u>Nursery 1 continued</u> | |
|--------------------|------------|----------------------------|------------|
| <u>Tulips</u> | <u>No.</u> | <u>Tulips</u> | <u>No.</u> |
| Delice | 25,700 | Alberio | 8,050 |
| Hildegarde (P) | 10,000 | Delice (P) | 8,000 |
| Prunus | 9,850 | Edith Eddy | 8,000 |
| Fridjof Nansen (P) | 8,100 | Fridjof Nansen | 7,300 |

TABLE 3 continued

| <u>Nursery 1 continued</u> | | <u>Nursery 2 continued</u> | |
|----------------------------|------------|----------------------------|----------------|
| <u>Tulips</u> | <u>No.</u> | <u>Tulips</u> | <u>No.</u> |
| Elmus | 6,000 | Early Mixed | 1,000 |
| Hildegarde | 6,000 | Krelage Triumph | 1,000 |
| Philip Snowdon | 5,050 | Mount Tacoma | 1,000 |
| Her Grace | 4,400 | Ossi Oswaldi | 1,000 |
| Cellini | 2,000 | Princess Margaret Rose | 1,000 |
| Maralda | 2,000 | Rose Copeland | 1,000 |
| Pieter de Hoogh | 2,000 | Scarlet Wonder | 1,000 |
| Bartigon | 1,400 | Bonanza | 975 |
| Jo Warnaar | 1,000 | Blue Parrot | 500 |
| Piccadilly | 1,000 | | |
| Rose Copeland | 250 | | |
| | | <u>Narcissi</u> | <u>Tonnage</u> |
| | | Rembrandt | 3.00 |
| | | Golden Harvest | 1.10 |
| | | Covent Garden | 1.03 |
| | | Carlton | 1.00 |
| | | Fortune | 1.00 |
| | | King Alfred | 0.68 |
| | | Adventure | 0.50 |
| | | Flower Record | 0.50 |
| | | | |
| | | <u>Nursery 3.</u> | |
| | | <u>Tulips</u> | <u>No.</u> |
| | | Rose Copeland | 60,000 |
| | | Rose Copeland (P) | 55,000 |
| | | Edith Eddy | 30,000 |
| | | Piccadilly | 20,000 |
| | | Her Grace | 20,000 |
| | | Purple Copeland (P) | 15,000 |
| | | Bandoeing | 10,000 |
| | | Mothersday | 10,000 |
| | | | |
| | | <u>Narcissi</u> | <u>Tonnage</u> |
| | | Cheerfulness | 3.00 |
| | | Helios (P) | 2.50 |
| | | Flower Record | 1.83 |
| | | Naomi | 0.60 |
| | | Havelock | 0.40 |
| | | Geranium | 0.35 |

¹This list includes 7,300 bulbs of unspecified varieties that were either sold dry or planted in the open.

TABLE 3 continued

| <u>Nursery 6.</u> | | <u>Nursery 9.</u> | |
|--------------------|------------|------------------------|------------|
| <u>Tulips</u> | <u>No.</u> | <u>Tulips</u> | <u>No.</u> |
| Golden Harvest (P) | 6,000 | Rose Copeland (P) | 50,000 |
| Rose Copeland (P) | 6,000 | Elmus | 45,000 |
| | | Imperator (P) | 25,000 |
| | | Wintergold (P) | 21,000 |
| | | Early Queen (P) | 20,000 |
| | | Krelage Triumph | 20,000 |
| | | Palembang | 14,000 |
| | | Olga (P) | 10,500 |
| | | Fridjof Nansen | 10,000 |
| | | Golden Harvest (P) | 10,000 |
| | | Her Grace | 10,000 |
| | | Krelage Triumph (P) | 10,000 |
| | | Mothersday | 10,000 |
| | | Philip Snowdon | 10,000 |
| | | Rose Copeland | 10,000 |
| | | Sedalia | 10,000 |
| | | Superba | 10,000 |
| | | Supreme | 10,000 |
| | | Aviator | 5,000 |
| | | Cellini (P) | 5,000 |
| | | Dido | 5,000 |
| | | Herant (P) | 5,000 |
| | | Hindenburg | 5,000 |
| | | Korneforus | 5,000 |
| | | Orange Early Queen (P) | 5,000 |
| | | Zimmerman | 4,500 |
| | | Kansas | 4,000 |
| | | Orange King | 3,500 |
| | | Great City | 1,000 |
| | | Van de Hoogh) | |
| | | Peach Blossom) | |
| | | Orange Nassau) | 57,500 |
| | | Schoonoord) | |
| | | Electra) | |

| <u>Nursery 7.</u> | | <u>Nursery 8.</u> | |
|-------------------|------------|-------------------|----------------|
| <u>Tulips</u> | <u>No.</u> | <u>Narcissi</u> | <u>Tonnage</u> |
| Early Queen (P) | 14,150 | Ellen Ney) | |
| Prunus | 8,000 | Poet Truias) | 3,00 |
| Van der Erden (P) | 8,000 | La Riante) | |
| White Sail (P) | 8,000 | | |
| Edith Eddy (P) | 7,000 | | |
| Edith Eddy | 6,050 | | |
| Purple Copeland | 6,000 | | |
| Elmus | 5,000 | | |
| White Virgin | 5,000 | | |
| Princess Beatrix | 4,000 | | |
| Hildegarde (P) | 4,000 | | |
| Mozart | 4,000 | | |
| Peach Blossom | 4,000 | | |
| Van der Erden | 4,000 | | |
| William Pitt | 3,750 | | |
| Elmus (P) | 3,175 | | |
| Delice (P) | 3,000 | | |
| Golden Harvest | 3,000 | | |
| Pax | 3,000 | | |
| Utopia | 3,000 | | |
| Imperator | 2,000 | | |
| Allbright | 950 | | |

Growing Practices

The growers differed to some extent in methods of growing and preparing the flowers for market. Since these differences were materially the same as in previous seasons, and have been described in the earlier reports on this investigation, details will be omitted from this report.

It was incorrectly stated in the 1953-54 report that all narcissus flowers at Nursery 3 were bunched in nines. In actual fact this applied only to Poetaz varieties, e.g. Cheerfulness, and Geranium. All other narcissus varieties at this nursery were bunched in twelves, both in 1954-55 and the two previous seasons.

Marketing

The proportions by quantity and value of the flowers sold in wholesale and retail markets by each grower are shown in the following table. In addition to direct sales to the consumer, sales to retailers have been counted as "retail sales" for the purposes of this table.

The flowers sold wholesale from Nurseries 3 and 8 and a proportion of those from Nursery 9 went to large markets outside the East Midlands area. The remaining wholesale sales were made in local wholesale markets.

TYPE OF MARKET.

TABLE 4

| Nursery Code No. | T U L I P S | | | | N A R C I S S I | | | |
|------------------------|------------------------|-------|---------------------|-------|------------------------|-------|---------------------|-------|
| | Per cent. wholesale | | Per cent. retail | | Per cent. wholesale | | Per cent. retail | |
| | Flowers | Value | Flowers | Value | Flowers | Value | Flowers | Value |
| 1 | 90.9 | 90.3 | 9.1 | 9.7 | - | - | - | - |
| 2 | 58.5 | 52.9 | 41.5 | 47.1 | 54.5 | 52.3 | 45.5 | 47.7 |
| 3 | 97.5 | 96.8 | 2.5 | 3.2 | 92.1 | 90.9 | 7.9 | 9.1 |
| 6 | 97.6 | 97.4 | 2.4 | 2.6 | - | - | - | - |
| 7 | 100.0 | 100.0 | - | - | - | - | - | - |
| 8 | - | - | - | - | 91.6 | 90.0 | 8.4 | 10.0 |
| 9 | 82.2 | 80.5 | 17.8 | 19.5 | - | - | - | - |

Table 5 shows the dates between which tulips and narcissi were sold from each of the nurseries.

Heating

Table 6 shows the dates between which tulips and/or narcissi received heat at each nursery.

PERIOD OF MARKETING.

TABLE 5

| Nursery Code No. | T U L I P S | | N A R C I S S I | |
|------------------------|-----------------------|----------------------|-----------------------|----------------------|
| | Date of first sale | Date of last sale | Date of first sale | Date of last sale |
| 1 | 20th December | 19th April | - | - |
| 2 | 19th January | 17th May | 19th January | 26th April |
| 3 | 10th January | 11th April | 3rd January | 7th April |
| 6 | 1st February | 25th February | - | - |
| 7 | 27th December | 13th April | - | - |
| 8 | - | - | 3rd February | 28th March |
| 9 | 17th December | 29th April | - | - |

PERIOD OF HEATING.

TABLE 6

| Nursery Code No. | T U L I P S | | N A R C I S S I | |
|------------------------|---|--|---|--|
| | Date at which bulbs first received heat | Date at which bulbs last received heat | Date at which bulbs first received heat | Date at which bulbs last received heat |
| 1 | 1st December | 29th March | - | - |
| 2 | 1st January | 21st April | 1st January | 21st April |
| 3 | 2nd December | 31st March | 30th November | 31st March |
| 6 | 1st January | 25th February | - | - |
| 7 | 1st December | 13th April | - | - |
| 8 | - | - | 30th December | 28th March |
| 9 | 23rd November | 29th April | - | - |

At Nursery 2, approximately 36,000 tulip bulbs were grown cold. Hence the results shown for tulips at this nursery relate to a mixture of forced and cold-house grown bulbs.