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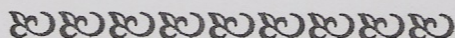
THE SOUTH CAROLINA AGRICULTURAL
EXPERIMENT STATION REPORT ON DAFFODILS

Dr. C. R. Johnson and J. H. Crawford of the Horticulture Department of the above-named Station at Clemson, South Carolina, have prepared a careful evaluation of 283 daffodils tested by them. The report, Research Series No. 127, bears the title *Daffodil Variety Evaluation Spring 1969* and was issued in February, 1970.

The bulletin furnishes information on the date of full bloom, the number of blooms produced, flower and stem measurements, and the date when the flowers fade. Of particular interest is the phrase in the report, "Did Not Survive", scattered through the tables. The figures showed a considerable mortality in the 1c's, the 2c's, and the 2d's.

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Willis H. Wheeler

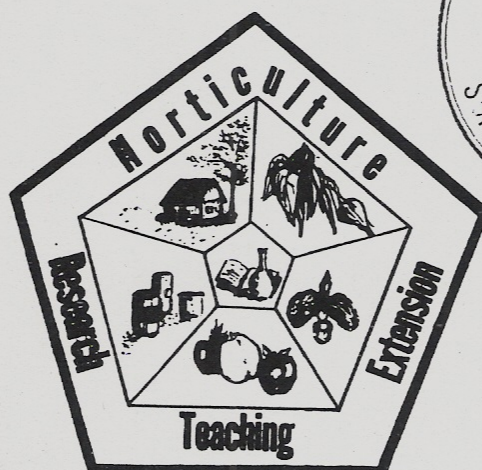
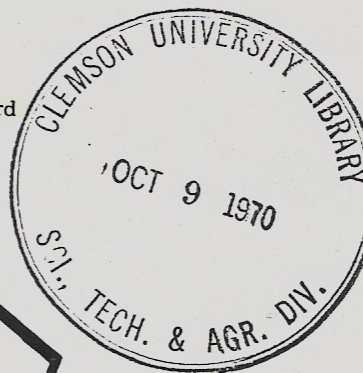


DAFFODIL VARIETY EVALUATION

SPRING 1969

BY

C. R. Johnson and J. H. Crawford



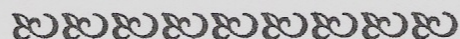
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DAFFODIL VARIETY EVALUATION

SPRING 1969

By C. R. Johnson and J. H. Crawford¹

INTRODUCTION

Every year many new varieties of daffodils are introduced as the result of breeding and selection programs over the world. Before these new varieties can be established on the commercial market for a given area, they should be tested over at least a three year period. This is to determine if they are capable of adapting to local environmental conditions.

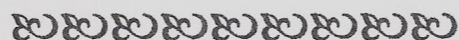
The daffodil plantings in this evaluation were established in the fall of 1966 and 1968 in the Clemson University variety trial gardens. The purpose of the evaluation was to determine the varieties that can be successfully grown in the Southeastern United States and particularly in upper South Carolina.

METHODS AND MATERIALS

Two hundred and eighty-three daffodil varieties were observed in the spring of 1969. These had been planted in the gardens either in the fall of 1966 or 1968. In some cases there were bulbs of the same variety from each source. The bulbs were received from individual persons and bulb companies in cooperation with the American Daffodil Society.

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¹Assistant Professor and Associate Professor of Horticulture, respectively.



Planting. The gardens are located in an open area with no shade or wind protection. The beds are 10 feet wide and vary in length from 50 to 100 feet. The soil was basically a heavy clay that had been amended with both sand and organic matter. The beds were fumigated with methyl bromide several days prior to planting. The bulbs were placed about 1 foot apart and 6 inches deep in the soil.

Growth records. Growth evaluations of all the daffodils were recorded as follows:

Variety name. Official name of the variety according to the Classified List and International Register of Daffodil Names, published by The Royal Horticultural Society.

Class. The classification of the variety according to flower size and color standardized by The Royal Horticultural Society.

Quantity. The number of individual rosettes of foliage counted soon after most varieties had bloomed.

Stem length. The height in inches of the stem from ground level to the ovary at the base of the flower.

Stem strength. A visual observation rating of excellent, good, fair, or poor. Stems were rated excellent if all were standing straight or nearly so at full bloom. Badly listing or broken ones were rated lower.

Full bloom. The date all or most of the flowers of a sample were fully open.

Flower diameter. Measurement (in inches) made from petal tip on one side of a flower to the same on the opposite side when most of the blooms of a sample were fully open.

Trumpet length. Distance in inches from the position where the corona and perianth segments join to the tip of the cor

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Number of blooms. The total number of flower stems per sample.

Flower fade. The date the flowers of a sample were no longer showy and began to wither or dry.

RESULTS

The measurements for varieties planted in fall 1966 are presented in Table 1. Results from varieties replanted in fall 1968 and from those newly established in 1968 are shown in Tables 2 and 3 respectively.

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DISCUSSION AND CONCLUSIONS

The data from the 1966 planting point out daffodil varieties that can be successfully grown in the upper South Carolina or similar climatic regions. A number of varieties did not survive over this period of time, because they are not adapted to this part of the United States. The records from the 1968 plantings can be compared to those of previous years as a means of selecting hardy varieties which are adapted to the Southeastern United States.

The information recorded for each variety is of value to both the home and commercial gardener. Stem strength, for example, is indicative of general plant health and is directly related to a stem's ability to withstand spring wind and rain. Stem length, on the other hand, is of value for making a flower garden more attractive and interesting; the shorter and smaller variety is planted in front of the taller and larger variety.

Flower diameter and trumpet length indicates size and general shape of the flower head. The date of fade indicates the length of time a variety remains in bloom with a fresh and attractive appearance. One would choose varieties when planting a garden that vary not only in height, size, and blooming date, but also those which stay in bloom the longest period of time.

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These data were recorded to be of value to the home or commercial flower gardener. The information gives insight as to the date of flowering, floriferousness, stability of plant stems and general adaptability of several current popular daffodil varieties for culture in the Southeastern United States.

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TABLE 1

| Variety Name   | Quantity | Class | Stem Strength                   | Stem Length inches | Full Bl. | Diameter Bl. inches | Trumpet Length inches | Number Bl. | Fade |
|----------------|----------|-------|---------------------------------|--------------------|----------|---------------------|-----------------------|------------|------|
| Abolone        | 1        | 2b    | E                               | 16 1/4             | 3/30     | 4                   | 1                     | 4          | 4/9  |
| Accolade       | 1        | 3b    | G                               | 16 1/2             | 4/9      | 3 1/8               | 1 1/4                 | 4          | 4/16 |
| Algaciras      | 0        | 3b    | Did Not Survive                 |                    |          |                     |                       |            |      |
| Alpine Eagle   | 2        | 7a    | E                               | 15 1/2             | 3/30     | 3 3/4               | 1 5/8                 | 2          | 4/10 |
| Amateur        | 5        | 3b    | G                               | 15 1/2             | 3/30     | 3 1/4               | 1/2                   | 12         | 4/11 |
| Angeline       | 3        | 3b    | F                               | 17 1/2             | 3/30     | 3                   | 3/8                   | 26         | 4/7  |
| Arbar          | 2        | 2b    | E                               | 16 1/2             | 3/30     | 3 7/8               | 1/2                   | 5          | 4/6  |
| Artic Gold     | 2        | 1a    | E                               | 16                 | 3/30     | 3 1/4               | 1 1/2                 | 8          | 4/6  |
| Ardbane        | 0        | 2c    | Did Not Survive                 |                    |          |                     |                       |            |      |
| Ark Royal      | 2        | 1a    | G                               | 17                 | 3/30     | 4                   | 1 1/2                 | 4          | 4/6  |
| Baby Doll      | 4        | 6a    | G                               | 10                 | 3/30     | 2 3/4               | 1 1/4                 | 10         | 4/7  |
| Bayard         | 3        | 1a    | E                               | 14 1/2             | 3/30     | 3 1/2               | 1 5/8                 | 1          | 4/9  |
| Bawn Boy       | 1        | 1a    | Did Not Survive                 |                    |          |                     |                       |            |      |
| Bizerta        | 3        | 2b    | G                               | 13                 | 3/30     | 3 3/4               | 7/8                   | 10         | 4/10 |
| Border Chief   | 4        | 2a    | E                               | 18                 | 3/30     | 4                   | 5/8                   | 20         | 4/7  |
| Bunting        | 1        | 7b    | E                               | 12 1/4             | 4/4      | 2 1/4               | 3/8                   | 8          | 4/9  |
| Burnished Gold | 1        | 1a    | G                               | 12 1/2             | 3/30     | 3                   | 1 1/2                 | 2          | 4/6  |
| Cantatrice     |          | 1c    | Did Not Survive                 |                    |          |                     |                       |            |      |
| Ceylon         | 2        | 2a    | E                               | 16 1/2             | 3/30     | 4                   | 1                     | 5          | 4/6  |
| Charity May    | 6        | 6a    | G                               | 13                 | 3/30     | 3 3/8               | 1                     | 19         | 4/9  |
| Charter        | 2        |       | Did Not Produce Buds or Flowers |                    |          |                     |                       |            |      |
| Chinith        | 1        |       | G                               | 13 1/2             | 4/1      | 2 1/8               | 1/8                   | 2          | 4/11 |
| Chula          | 4        | 1a    | E                               | 18 1/2             | 3/30     | 3 3/4               | 1 1/2                 | 16         | 4/6  |
| Clonmare       | 1        | 2a    | E                               | 16                 | 3/30     | 3 5/8               | 1 3/4                 | 6          | 4/6  |
| Court Martial  | 1        | 3c    | E                               | 18 1/2             | 3/30     | 4                   | 5/8                   | 4          | 4/15 |
| Cushendall     | 2        | 4     | G                               | 13                 | 4/16     | 2 1/2               | 1/8                   | 4          | 4/19 |
| Daphne         | 6        | 2b    | Did Not Produce Buds or Flowers |                    |          |                     |                       |            |      |
| Daviot         | 0        | 2b    | Did Not Survive                 |                    |          |                     |                       |            |      |
| Dillenberg     | 6        | 2a    | G                               | 14 3/4             | 3/30     | 3 1/2               | 5/8                   | 19         | 4/11 |
| Doue Wings     | 4        | 6a    | G                               | 14 3/4             | 3/30     | 2 3/4               | 7/8                   | 10         | 4/6  |
| Downhill       | 1        | 3c    | E                               | 15 1/2             | 3/30     | 3 1/4               | 3/8                   | 5          | 4/9  |
| Dragaman       | 2        | 3b    | G                               | 11 1/2             | 4/16     | 3 1/2               | 1/4                   | 1          | -    |
| Dream Castle   | 0        | 3c    | Did Not Survive                 |                    |          |                     |                       |            |      |
| Entrancement   | 4        | 1d    | E                               | 17                 | 3/30     | 3                   | 1 1/2                 | 8          | 4/6  |

Table 1 continued.

| Variety Name   | Quantity | Class | Stem Strength   | Stem Length inches | Full Bl. | Diameter Bl. inches | Trumpet Length inches | Number Bl. | Fade |
|----------------|----------|-------|-----------------|--------------------|----------|---------------------|-----------------------|------------|------|
| Erie           | 10       | 2a    | E               | 19                 | 3/30     | 3 1/2               | 1/2                   | 27         | 4/4  |
| Fair Colleen   | 2        | 3b    | E               | 13                 | 4/11     | 3                   | 1/4                   | 3          | 4/16 |
| Farewell       | 1        | 2b    | E               | 16                 | 3/30     | 4 1/2               | 1                     | 4          | 4/9  |
| Fawnflo        | 2        | 2a    | E               | 19 1/2             | 3/30     | 4 1/4               | 1 5/8                 | 5          | 4/6  |
| Festivity      | 1        | 2b    | E               | 16                 | 3/30     | 4 1/4               | 1                     | 5          | 4/19 |
| Foggy Dew      | 1        | 3c    | E               | 13 3/4             | 4/9      | 3                   | 3/8                   | 2          | 4/11 |
| Forty Miner    | 0        | 2a    | Did Not Survive |                    |          |                     |                       |            |      |
| Frolic         | 2        | 1d    | G               | 16                 | 3/30     | 4 3/8               | 1 1/2                 | 7          | 4/7  |
| Galway         | 0        | 2a    | Did Not Survive |                    |          |                     |                       |            |      |
| Gleeful        | 0        | 2d    | Did Not Survive |                    |          |                     |                       |            |      |
| Glen Chesk     | 2        | 1c    | E               | 16                 | 3/30     | 3 1/2               | 1 1/2                 | 6          | 4/6  |
| Godolphin      | 3        | 1a    | E               | 15 1/4             | 3/30     | 4                   | 1 5/8                 | 4          | 4/6  |
| Golden Incense | 4        | 7a    | G               | 16                 | 4/16     | 2 1/8               | 1/2                   | 24         | 4/22 |
| Gossamer       | 0        | 3b    | Did Not Survive |                    |          |                     |                       |            |      |
| Greenhills     | 1        | 3b    | E               | 15                 | 4/16     | 3                   | 3/8                   | 1          | 4/22 |
| Green Island   | 2        | 2b    | E               | 16                 | 3/30     | 4                   | 3/4                   | 9          | 4/11 |
| Halolight      | 0        | 2d    | Did Not Survive |                    |          |                     |                       |            |      |
| Halrose        | 1        | -     | G               | 10 3/4             | 3/30     | 2                   | 1/8                   | 1          | 4/6  |
| Honey Bird     | 0        | 1d    | Did Not Survive |                    |          |                     |                       |            |      |
| Hunters Moon   | 3        | 1a    | E               | 14                 | 3/30     | 4                   | 1 3/4                 | 9          | 4/11 |
| Imogen         | 2        | 2b    | E               | 17                 | 3/30     | 4 1/4               | 1 5/8                 | 7          | 4/9  |
| Inglescomb     | 5        | 4     | G               | 6                  | 3/30     | 2 1/2               | 5/8                   | 1          | 4/11 |
| Inver          | 3        | 1a    | E               | 17 1/2             | 4/7      | 3 1/2               | 5/8                   | 12         | 4/14 |
| Irish Luck     | 2        | 1a    | E               | 16 1/2             | 3/30     | 3 1/2               | 1 1/2                 | 9          | 4/1  |
| Jezebel        | 0        | 3a    | Did Not Survive |                    |          |                     |                       |            |      |
| Jubilation     | 2        | 2b    | G               | 14 3/4             | 3/30     | 4 1/4               | 7/8                   | 4          | 4/9  |
| Kings Court    | 3        | 1a    | E               | 15 1/2             | 3/30     | 3 7/8               | 1 5/8                 | 10         | 4/7  |
| King Fisher    | 1        | -     | E               | 13                 | 3/30     | 3                   | 1/4                   | 33         | 4/19 |
| Know-head      | 0        | 2c    | Did Not Survive |                    |          |                     |                       |            |      |
| Late Sun       | 2        | 1a    | G               | 13                 | 4/5      | 3 5/8               | 1 1/2                 | 9          | 4/11 |
| Le Beau        | 5        | 6a    | G               | 13 1/2             | 3/30     | 3 1/2               | 7/8                   | 13         | 4/6  |
| Leitrum        | 9        | 2a    | G               | 15 1/2             | 3/30     | 3 7/8               | 1 1/2                 | 16         | 4/6  |
| Leitrum        | 2        | 1a    | G               | 15                 | 3/30     | 3 1/2               | 1 3/4                 | 8          | 4/6  |



| Variety Name     | Quantity | Class | Stem Strength   | Stem Length inches | Full Bl. | Diameter Bl. inches | Trumpet Length inches | Number Bl. | Fade |
|------------------|----------|-------|-----------------|--------------------|----------|---------------------|-----------------------|------------|------|
| Lennos           | 1        | 2a    | G               | 13 1/2             | 3/30     | 3 1/4               | 7/8                   | 4          | 4/7  |
| Limeade          | 0        | 2d    | Did Not Survive |                    |          |                     |                       |            |      |
| Limone           | 5        | 1a    | E               | 18                 | 3/30     | 3 1/2               | 1 5/8                 | 10         | 4/6  |
| Lough Erne       | 2        | 3b    | G               | 16                 | 3/30     | 3                   | 1 3/4                 | 3          | 4/19 |
| Luna Moth        | 1        | 1a    | G               | 17                 | 3/30     | 3 1/2               | 1 3/4                 | 1          | 4/1  |
| Lunar Sea        | -        | 1d    | Did Not Survive |                    |          |                     |                       |            |      |
| Mahee            | 2        | 1a    | G               | 12 1/2             | 3/30     | 3 1/2               | 1 1/2                 | 1          | 4/10 |
| Matador          | 2        | 8     | G               | 15                 | 3/30     | 2 1/8               | 1/8                   | 2          | 4/7  |
| Melody Lane      | 1        | -     | G               | 12 1/4             | 3/30     | 3 1/2               | 1 1/4                 | 1          | 4/11 |
| Merlin           | 2        | 3b    | E               | 15                 | 3/30     | 3 1/4               | 1/4                   | 3          | 4/19 |
| Milanian         | 7        | 1a    | G               | 15                 | 3/30     | 3 1/2               | 1 5/8                 | 17         | 4/9  |
| Moon Dance       | 1        | 3c    | E               | 15                 | 3/30     | 3 1/4               | 1/4                   | 2          | 4/9  |
| Moon Goddess     | 2        | -     | E               | 19                 | 3/30     | 4                   | 1 3/4                 | 7          | 4/5  |
| Moonlight Sonata | 1        | 1d    | G               | 13                 | 4/1      | 3                   | 1 1/4                 | 1          | 4/14 |
| Moonshot         | 1        | -     | G               | 17 1/2             | 3/30     | 4                   | 1 5/8                 | 3          | 4/7  |
| Moonstruck       | 1        | 1a    | E               | 17 1/2             | 3/30     | 4 1/2               | 2 1/8                 | 5          | 4/5  |
| Mullato          | 4        | 1a    | G               | 17 1/2             | 3/30     | 3 1/4               | 1 1/2                 | 7          | 4/4  |
| Nampa            | 1        | 1d    | E               | 15                 | 3/30     | 3 1/2               | 1 3/4                 | 2          | 4/6  |
| Nazareth         | 2        | 2b    | G               | 17                 | 3/30     | 3                   | 1                     | 6          | 4/6  |
| Newcastle        | 0        | 1b    | Did Not Survive |                    |          |                     |                       |            |      |
| Olivet           | 2        | 2c    | G               | 20 1/4             | 3/30     | 3 3/8               | 7/8                   | 8          | 4/7  |
| Ormeau           | 1        | 2a    | G               | 14                 | 3/30     | 4 1/4               | 1 5/8                 | 2          | 4/9  |
| Orrissa          | 2        | 3a    | G               | 17 1/2             | 3/30     | 3 1/4               | 1/4                   | 7          | 4/9  |
| Parigutin        | 2        | -     | G               | 15                 | 3/30     | 3 3/4               | 5/8                   | 4          | 4/9  |
| Passionale       | 2        | 2b    | E               | 12 1/2             | 3/30     | 4                   | 1 1/4                 | 3          | 4/14 |
| Pastorale        | 0        | 2d    | Did Not Survive |                    |          |                     |                       |            |      |
| Peeping Tom      | 6        | 6a    | E               | 16                 | 3/30     | 3                   | 1 3/8                 | 23         | 4/6  |
| Persuasion       | 1        | -     | E               | 12 1/4             | 3/30     | 3 5/8               | 3/8                   | 1          | 4/9  |
| Pink Chiffon     | 2        | 4     | E               | 17 1/2             | 4/6      | 3 1/2               | 1/2                   | 6          | 4/11 |
| Pipit            | 1        | 7b    | E               | 15 1/2             | 4/6      | 2 3/8               | 1/2                   | 18         | 4/16 |
| Pontresina       | 0        | 2b    | Did Not Survive |                    |          |                     |                       |            |      |
| Pres. Lebrum     | 12       | 1b    | E               | 16 1/2             | 3/30     | 3 3/4               | 1 5/8                 | 21         | 4/7  |
| Prospero         | 2        | 3b    | E               | 15                 | 3/30     | 3 1/4               | 1/4                   | 4          | 4/11 |

Table 1 continued

| Variety Name  | Quantity | Class | Stem Strength                   | Stem Length inches | Full Bl. | Diameter Bl. inches | Trumpet Length inches | Number Bl. | Fade |
|---------------|----------|-------|---------------------------------|--------------------|----------|---------------------|-----------------------|------------|------|
| Purity        | 0        | 2c    | Did Not Survive                 |                    |          |                     |                       |            |      |
| Rashee        | 0        | 1c    | Did Not Survive                 |                    |          |                     |                       |            |      |
| Rima          | 1        | 1b    | G                               | 15 1/2             | 3/30     | 3 7/8               | 1 1/2                 | 4          | 4/6  |
| Rinsey        | 0        | 3c    | Did Not Survive                 |                    |          |                     |                       |            |      |
| Royal Oak     | 2        | 1a    | E                               | 17                 | 3/30     | 3 1/2               | 1 1/2                 | 3          | 4/7  |
| Rush Light    | 1        | 2d    | Did Not Produce Buds or Flowers |                    |          |                     |                       |            |      |
| Salmon Trout  | 1        | 2b    | E                               | 13 1/2             | 3/30     | 4 3/8               | 1 3/8                 | 1          | 4/11 |
| Scarlet Gem   | 1        | 8     | G                               | 9 1/2              | 4/11     | 1 3/4               | 1/4                   | 2          | 4/16 |
| Sheppy        | 6        | 1a    | G                               | 17                 | 3/30     | 3 1/2               | 1 3/8                 | 12         | 4/7  |
| Slieve Boy    | 0        | 3     | Did Not Survive                 |                    |          |                     |                       |            |      |
| St. Keverne   | 2        | 2a    | E                               | 22                 | 3/30     | 3 3/4               | 1 3/8                 | 11         | 4/4  |
| Suzy          | 2        | 7b    | G                               | 14                 | 4/4      | 2 1/2               | 1/4                   | 6          | 4/16 |
| Tamino        | 10       | 2a    | G                               | 14                 | 4/4      | 3 3/4               | 1/2                   | 14         | 4/7  |
| Trostan       | 4        | 1b    | E                               | 15                 | 4/4      | 3 3/4               | 1 5/8                 | 6          | 4/11 |
| Ulster Prince | 2        | 1a    | G                               | 18                 | 3/30     | 4                   | 2                     | 7          | 4/9  |
| Verdin        | 1        | 7b    | G                               | 14 3/4             | 4/12     | 2 1/2               | 1/2                   | 6          | 4/11 |
| Vigil         | 1        | 1a    | E                               | 15                 | 3/30     | 4                   | 1 3/4                 | 3          | 4/9  |
| Viking        | 1        | 1c    | E                               | 16 1/2             | 3/30     | 4                   | 1 1/2                 | 2          | 4/7  |
| Vulcan        | 0        | 2a    | Did Not Survive                 |                    |          |                     |                       |            |      |
| Wedding Gift  | 0        | -     | Did Not Survive                 |                    |          |                     |                       |            |      |
| White Spire   | 0        | 2c    | Did Not Survive                 |                    |          |                     |                       |            |      |
| Woodcock      | 2        | 6a    | E                               | 16                 | 3/30     | 4                   | 1 1/2                 | 8          | 4/6  |



Table 2. Varieties transplanted in 1968.

| Variety Name         | Quantity | Class | Stem Strength | Stem Length inches | Full Bl. | Diameter Bl. inches | Trumpet Length inches | Number Bl. | Fade |
|----------------------|----------|-------|---------------|--------------------|----------|---------------------|-----------------------|------------|------|
| Actaea               | 6        | 9     | E             | 14                 | 4/1      | 3 1/2               | 1/4                   | 5          | 4/7  |
| Alamein              | 7        | 2a    | G             | 10                 | 4/1      | 2 3/4               | 3/4                   | 6          | 4/7  |
| April Tears          | 6        | 5b    | E             | 2                  | 4/9      | 2                   | 1/4                   | 5          | 4/17 |
| April Showers        | 8        | 2b    | E             | 10 1/4             | 4/9      | 4                   | 1/2                   | 15         | 4/7  |
| Aspasia              | 8        | 8     | E             | 11                 | 4/1      | 2 1/4               | 1/8                   | 8          | 4/9  |
| Ave                  | 7        | 2c    | G             | 10 1/2             | 4/1      | 3 3/4               | 1/2                   | 11         | 4/4  |
| Beaucaillou          | 8        | 2b    | E             | 13                 | 4/1      | 3 1/2               | 1/2                   | 12         | 4/7  |
| Ben Hur              | 8        | 1a    | G             | 11 1/2             | 4/1      | 3 1/2               | 1/2                   | 6          | 4/7  |
| Beryl                | 1        | 6b    | G             | 8                  | 4/1      | 2                   | 1/2                   | 1          | 4/4  |
| Biflorus             | 6        | 10    | G             | 10                 | 4/20     | 1 1/2               | 1/8                   | 5          | 4/30 |
| Bodilly              | 2        | 2b    | G             | 12                 | 4/20     | 4                   | 1/2                   | 3          | 4/30 |
| Bolton               | 5        | 7b    | G             | 10                 | 4/20     | 3 1/2               | 3/4                   | 9          | 4/30 |
| Brightwork           | 7        | 3b    | G             | 9 3/4              | 4/1      | 2 1/2               | 1/4                   | 8          | 4/4  |
| Brookville           | 7        | 2b    | E             | 11                 | 4/1      | 3 1/2               | 3/4                   | 6          | 4/1  |
| California Gold      | 8        | 2a    | G             | 14 1/2             | 4/1      | 3                   | 1/2                   | 9          | 4/1  |
| Caneton              | 7        | ?     | G             | 12 1/2             | 4/1      | 3                   | 1                     | 10         | 4/1  |
| Carol'na             | 7        | 3b    | E             | 11                 | 4/6      | 2                   | 1/4                   | 6          | 4/13 |
| Charmant             | 8        | 3b    | G             | 11                 | 4/6      | 4                   | 1/2                   | 12         | 4/3  |
| Cheerio              | 8        | 2a    | G             | 14                 | 4/6      | 4                   | 1/2                   | 12         | 4/3  |
| Chinese White        | 7        | 3c    | E             | 10 1/2             | 4/7      | 3                   | 1/4                   | 9          | 4/9  |
| Chinook              | 6        | 2b    | G             | 13 1/2             | 4/7      | 3 1/2               | 3/4                   | 15         | 4/2  |
| Clackamas            | 5        | 2b    | E             | 12                 | 4/7      | 3 3/4               | 1/2                   | 3          | 4/6  |
| Clock Face           | 8        | 3b    | E             | 13                 | 4/8      | 3 1/2               | 1/8                   | 10         | 4/14 |
| Coloratura           | 7        | 3b    | E             | 7                  | 4/4      | 3                   | 1/2                   | 4          | 4/11 |
| Cornet               | 8        | 6a    | G             | 11                 | 4/2      | 3 1/2               | 3/4                   | 12         | 4/11 |
| Coverback Perfection | 5        | 2c    | F             | 11                 | 4/2      | 3 1/4               | 3/4                   | 7          | 4/11 |
| Cragford             | 7        | 8     | G             | 11                 | 4/2      | 3 1/2               | 1/4                   | 8          | 4/1  |
| Crush Lake           | 6        | 3c    | E             | 7                  | 4/5      | 3                   | 1/4                   | 9          | 4/14 |
| Dreamlight           | 6        | 3b    | G             | 13                 | 4/8      | 2 1/2               | 1/8                   | 8          | 4/16 |
| Dew Pond             | 5        | 2c    | G             | 8                  | 4/4      | 3 3/4               | 3/4                   | 3          | 4/14 |
| Earl Winterton       | 8        | 2a    | E             | 14 1/2             | 4/4      | 3 1/2               | 1                     | 15         | 4/14 |
| Elgin                | 8        | 1a    | E             | 13 1/2             | 4/4      | 3 1/2               | 1 1/2                 | 13         | 4/14 |
| Fireproof            | 7        | 2a    | E             | 13                 | 4/4      | 3 1/2               | 3/4                   | 8          | 4/14 |
| Flying Saucer        | 8        | 2b    | G             | 13                 | 4/4      | 4                   | 3/4                   | 12         | 4/4  |

Table 2 continued

| Variety Name      | Quantity | Class | Stem Strength | Stem Length inches | Full Bl. | Diameter Bl. inches | Trumpet Length inches | Number Bl. | Fade |
|-------------------|----------|-------|---------------|--------------------|----------|---------------------|-----------------------|------------|------|
| Foresight         | 5        | 1b    | E             | 11                 | 4/4      | 4                   | 1 1/4                 | 5          | 4/4  |
| Forfar            | 6        | 3b    | G             | 12                 | 3/31     | 3                   | 1/4                   | 7          | 4/4  |
| Geranium          | 6        | 8     | E             | 10                 | 4/4      | 2 1/4               | 1/4                   | 4          | 4/9  |
| Gloria            | 6        | 1c    | G             | 11                 | 4/4      | 2 1/4               | 1 1/2                 | 3          | 4/9  |
| Gold Digger       | 8        | 1a    | G             | 11                 | 4/4      | 3                   | 1/2                   | 8          | 4/9  |
| Golden Torch      | 8        | 2a    | E             | 11 1/2             | 4/4      | 4                   | 1 1/2                 | 11         | 4/9  |
| Golden Torch      | 8        | 2a    | E             | 13 1/2             | 4/4      | 3 1/4               | 1                     | 12         | 4/9  |
| Golden Riot       | 8        | 1a    | G             | 10                 | 3/31     | 2                   | 1/4                   | 7          | 4/11 |
| Golden Triumphato | 8        | 2a    | G             | 9 1/2              | 3/31     | 3                   | 1/2                   | 13         | 4/11 |
| Gracilus          | 7        | 10    | E             | 12                 | 3/31     | 1 1/4               | 1/8                   | 8          | 4/17 |
| Gratia            | 8        | 2b    | E             | 12                 | 3/31     | 4                   | 3/4                   | 11         | 4/1  |
| Greenland         | 6        | 2c    | E             | 10                 | 4/1      | 3 1/2               | 1                     | 8          | 4/6  |
| Hamzalic          | 5        | 3b    | G             | 10 1/2             | 4/1      | 3 3/4               | 1 1/4                 | 7          | 4/7  |
| Harvester         | 8        | 1a    | E             | 13 1/2             | 4/1      | 3 3/4               | 2                     | 12         | 4/7  |
| Hollywood         | 5        | 2a    | E             | 11                 | 4/1      | 3 3/4               | 2                     | 12         | 4/7  |
| Homefires         | 6        | 2a    | E             | 14                 | 4/1      | 3 1/2               | 1                     | 7          | 4/1  |
| Hugh Paote        | 8        | 2a    | G             | 11 1/4             | 4/1      | 3                   | 3/4                   | 8          | 4/1  |
| Imperator         | 6        | 1c    | E             | 10 1/2             | 4/2      | 3 3/4               | 3/4                   | 7          | 4/8  |
| Insulinde         | 8        | 4     | G             | 11                 | 4/2      | 3                   | 3/4                   | 10         | 4/4  |
| Interim           | 1        | 2bp   | G             | 9                  | 4/2      | 3 1/4               | 3/4                   | 1          | 4/4  |
| Ischia            | 7        | 2b    | G             | 6                  | 4/5      | 3 1/4               | 1/2                   | 6          | 4/9  |
| Isola             | 7        | 3b    | G             | 11                 | 4/1      | 2 3/4               | 1/4                   | 5          | 4/12 |
| Kilbride          | 8        | 2a    | E             | 12                 | 4/3      | 4                   | 3/4                   | 5          | 4/6  |
| Kilworth          | 7        | 2b    | E             | 12 1/2             | 4/1      | 4                   | 3/4                   | 12         | 4/14 |
| King of the North | 8        | 1a    | E             | 11                 | 4/1      | 4                   | 1 3/4                 | 6          | 4/14 |
| Lady Kesteven     | 6        | 3b    | G             | 9 1/2              | 4/1      | 4                   | 1/2                   | 5          | 4/7  |
| Lebanon           | 7        | 2b    | G             | 14                 | 4/1      | 4                   | 3/4                   | 9          | 4/7  |
| Lemon Heart       | 8        | 5a    | -             | 8                  | 4/1      | 3                   | 1                     | 12         | 4/8  |
| Lemstar           | 8        | 1a    | E             | 11                 | 4/1      | 3                   | 1 1/2                 | 5          | 4/8  |
| Linn              | 7        | 2b    | E             | 12 1/2             | 4/1      | 3 3/4               | 1                     | 14         | 4/8  |
| Lisbreen          | 8        | 2bp   | G             | 12 3/4             | 4/1      | 3 1/4               | 1 1/8                 | 8          | 4/8  |
|                   |          |       |               | 9 1/4              | 4/1      | 3 1/4               | 1/4                   | 11         | 4/7  |



| Variety Name      | Quantity | Class | Stem Strength   | Stem Length inches | Full Bl. | Diameter Bl. inches | Trumpet Length inches | Number Bl. | Fade |
|-------------------|----------|-------|-----------------|--------------------|----------|---------------------|-----------------------|------------|------|
| Matapan           | 6        | 3b    | G               | 9 1/2              | 4/2      | 3 1/4               | 1/4                   | 6          | 4/7  |
| Mendel            | 7        | 2a    | E               | 9                  | 4/2      | 4/12                | 1 1/2                 | 7          | 4/4  |
| Merapi            | 8        | 2a    | G               | 11                 | 4/2      | 3 1/4               | 3/4                   | 8          | 4/4  |
| Moon Shihe        | 3        | 5a    | -               | 11                 | 4/2      | 3 1/4               | 3/4                   | 0          | 4/4  |
| Mrs. A.M. Pearson | 8        | 8     | E               | 8                  | 4/2      | 2 1/2               | 1/4                   | 11         | 4/9  |
| Mt Hood           | 7        | 1c    | E               | 9                  | 4/3      | 3 1/2               | 1 1/2                 | 7          | 4/9  |
| Narvik            | 8        | 2a    | E               | 15                 | 4/3      | 3 3/4               | 3/4                   | 12         | 4/9  |
| Nim               | 4        | 2b    | G               | 12 1/2             | 4/3      | 3                   | 3/4                   | 1          | 4/1  |
| Orange Lace       | 8        | 2b    | E               | 7                  | 4/3      | 3 1/2               | 3/4                   | 9          | 4/4  |
| Orange Glory      | 7        | 6a    | G               | 10 1/2             | 4/3      | 3 1/2               | 1                     | 2          | 4/4  |
| Pearly Queen      | 6        | 5a    | G               | 9                  | 4/3      | 2 1/2               | 3/4                   | 9          | 4/4  |
| Pigeon            | 3        | 2c    | E               | 10                 | 4/3      | 3 3/4               | 1 1/4                 | 3          | 4/8  |
| Pink Favorite     | 8        | 2bp   | E               | 9                  | 4/4      | 3 1/4               | 1                     | 11         | 4/8  |
| Pink Lace         | 7        | 2b    | G               | 9                  | 4/4      | 3 1/2               | 1 1/4                 | 7          | 4/7  |
| Pinwheel          | 3        | 2a    | G               | 11                 | 4/4      | 3 1/2               | 3/4                   | 3          | 4/7  |
| Playboy           | 3        | 2a    | E               | 9 1/2              | 4/2      | 3 1/2               | 3/4                   | 3          | 4/5  |
| Portrush          | 6        | 3c    | E               | 8                  | 4/10     | 3                   | 1/4                   | 6          | 4/17 |
| Pride of Holland  | -        | 8     | Did Not Survive |                    |          |                     |                       |            |      |
| Pulvius           | 7        | 2a    | E               | 11                 | 4/10     | 4                   | 1 1/4                 | 8          | 4/17 |
| Red Bird          | 6        | 2b    | G               | 9 1/2              | 4/1      | 3 1/4               | 3/4                   | 7          | 4/7  |
| Red Devon         | 6        | 2a    | E               | 12 1/2             | 4/1      | 3 1/4               | 3/4                   | 7          | 4/7  |
| Red Guard         | 7        | 8     | G               | 10                 | 4/1      | 2 3/4               | 1/2                   | 6          | 4/3  |
| Red Hackle        | 7        | 2b    | E               | 6                  | 4/5      | 3                   | 1/2                   | 7          | 4/11 |
| Red Riband        | 7        | 2a    | E               | 12                 | 4/5      | 3 1/2               | 3/4                   | 9          | 4/11 |
| Roman Star        | 8        | 3a    | G               | 14                 | 4/9      | 2 1/2               | 1/8                   | 6          | 4/13 |
| Rossmore          | 3        | 2a    | G               | 13                 | 4/9      | 2 1/2               | 1                     | 2          | 4/13 |
| Rouge             |          | 2a    | Did Not Survive |                    |          |                     |                       |            |      |
| Royal Crown       | 8        | 2a    | E               | 11 1/2             | 4/9      | 2 1/2               | 1                     | 16         | 4/13 |
| Ruston Pasha      | 8        | 2a    | G               | 12                 | 4/9      | 2 1/2               | 3/4                   | 9          | 4/13 |
| Santiam           | 8        | 2a    | E               | 15                 | 4/9      | 2 1/2               | 3/4                   | 11         | 4/13 |
| Scarlet Leader    | 7        | 2a    | G               | 11                 | 4/9      | 3                   | 1/2                   | 8          | 4/13 |
| Selma Lagerloff   | 7        | 2b    | G               | 14                 | 4/9      | 3 3/4               | 1/2                   | 13         | 4/13 |
| Shirley Temple    | 4        | 4     | G               | 10                 | 4/9      | 3 1/2               | 1                     | 3          | 4/7  |
| Silver Chimes     | 4        | 8     | E               | 5                  | 4/2      | 2                   | 1/2                   | 6          | 4/15 |

Table 2 continued

| Variety Name        | Quantity | Class | Stem Strength   | Stem Length inches | Full Bl. | Diameter Bl. inches | Trumpet Length inches | Number Bl. | Fade |
|---------------------|----------|-------|-----------------|--------------------|----------|---------------------|-----------------------|------------|------|
| Sincerity           | 7        | 1b    | E               | 10                 | 4/3      | 3                   | 1 1/2                 | 10         | 4/12 |
| Soundness           | 2        | 1b    | E               | 12                 | 4/3      | 3                   | 1 1/2                 | 2          | 4/12 |
| St. Egwin           |          | 2a    | Did Not Survive |                    |          |                     |                       |            |      |
| St. Issey           | 8        | 2a    | E               | 13                 | 4/3      | 3                   | 1 1/4                 | 6          | 4/12 |
| St. Louis           | 5        | 3b    | G               | 8                  | 4/5      | 4 1/4               | 1/4                   | 4          | 4/9  |
| Stoke               | 7        | 5a    | G               | 10                 | 4/1      | 2 3/4               | 1/2                   | 8          | 4/5  |
| Sweetness           | 8        | 7a    | G               | 11                 | 4/1      | 2                   | 3/4                   | 21         | 4/5  |
| Tarzan              | 3        | 2b    | E               | 12 3/4             | 4/1      | 3                   | 1/2                   | 14         | 4/5  |
| Thalia              | 8        | 5a    | E               | 8 1/2              | 4/1      | 3                   | 3/4                   | 8          | 4/7  |
| Tinker              | 8        | 2a    | G               | 13                 | 4/1      | 3 1/4               | 1                     | 11         | 4/7  |
| Tresamble           | 7        | 5a    | G               | 11                 | 4/1      | 3 1/2               | 3/4                   | 6          | 4/8  |
| Ulster Prince       | 10       | 1a    | E               | 9                  | 4/1      | 3 1/2               | 1 3/4                 | 10         | 4/8  |
| Unsurpassable       | 2        | 1a    | G               | 12 1/2             | 4/1      | 3 1/2               | 1 3/4                 | 1          | 4/8  |
| Valencia            | 8        | 4     | E               | 10                 | 4/11     | 2                   | Double                | 9          | 4/14 |
| White Lion          | 6        | 4     | G               | 12 1/2             | 4/11     | 3 1/2               | 1/2                   | 7          | 4/8  |
| White Marvel        | 5        | 4     | E               | 9                  | 4/7      | 2 3/4               | 1/2                   | 5          | 4/15 |
| White Pearl         | 3        | 3     | G               | 9                  | 4/7      | 1 1/4               | 1/8                   | 13         | 4/1  |
| Williamette         | 8        | 2b    | G               | 13                 | 4/7      | 3                   | 1/2                   | 10         | 4/1  |
| Worlds Favorite     | 7        | ?     | E               | 11                 | 4/7      | 3 1/2               | 1 1/2                 | 4          | 4/2  |
| Yankee Clipper      | 4        | 2a    | G               | 15                 | 4/7      | 3 1/2               | 1 1/2                 | 6          | 4/2  |
| Yellow Cheerfulness | 6        | 4     | E               | 10                 | 4/10     | 1 1/4               | 1/2                   | 1          | 4/17 |
| Zircon              | 7        | 2b    | G               | 13                 | -        | 4 1/4               | 1 1/4                 | 12         | 4/17 |



TABLE 3

| Variety Name          | Quantity | Class | Stem Strength   | Stem Length inches | Full Bl. | Diameter Bl. Inches | Trumpet Length inches | Number Bl. | Fade |
|-----------------------|----------|-------|-----------------|--------------------|----------|---------------------|-----------------------|------------|------|
| Accent                | 3        | 2b    | E               | 12 1/2             | 4/2      | 4                   | 1                     | 9          | 4/7  |
| Aircastle             | 5        | 3b    | E               | 14                 | 4/2      | 4 1/2               | 1/2                   | 11         | 4/9  |
| Angeles               | 7        | -     | G               | 15                 | 4/2      | 3 3/4               | 3/4                   | 11         | 4/9  |
| Artic Doric           | 8        | -     | E               | 14                 | 4/2      | 4 1/4               | 1 1/4                 | 18         | 4/7  |
| Bethany               | 3        | 2d    | E               | 13                 | 4/2      | 3 1/2               | 1 1/4                 | 4          | 4/9  |
| Bobolink              | 4        | 2b    | E               | 15 1/2             | 4/2      | 3 1/2               | 1/2                   | 8          | 4/9  |
| Bridal Crown          | 10       | 4     | E               | 13 1/2             | 4/2      | 1 3/4               | 1/2                   | 20         | 4/11 |
| Brussels              | 2        | 1c    | E               | 12                 | 4/2      | 3 3/4               | 1 3/4                 | 5          | 4/7  |
| Cadence               | 0        | 3b    | Did Not Survive |                    |          |                     |                       |            |      |
| Carita                | 4        | 2b    | G               | 15                 | 4/2      | 3 3/4               | 1                     | 13         | 4/7  |
| Cascade               | 2        | -     | E               | 10 3/4             | 4/3      | 3 1/2               | 1/2                   | 3          | 4/13 |
| Cocktail              | 7        | 2d    | E               | 15                 | 4/3      | 3 1/4               | 1 1/2                 | 22         | 4/13 |
| Dallas                | 9        | 3c    | E               | 10                 | 4/9      | 3 1/4               | 1/4                   | 9          | 4/17 |
| Daydream              | 5        | 2d    | G               | 13                 | 4/9      | 3 3/4               | 1 1/4                 | 14         | 4/6  |
| Frigid                | 1        | 3c    | E               | 13 1/2             | 4/9      | 3 1/2               | 1/2                   | 4          | 4/7  |
| Kantara               | 0        | 1c    | Did Not Survive |                    |          |                     |                       |            |      |
| Kasota                | 2        | 7b    | E               | 11 1/2             | 4/3      | 2                   | 1/4                   | 10         | 4/7  |
| Liberty Bells         | 5        | 5a    | E               | 8                  | 4/3      | 3                   | 1                     | 11         | 4/13 |
| Little Witch          | 9        | 6a    | E               | 9                  | 4/3      | 3                   | 1                     | 31         | 4/13 |
| Matador               | 4        | 8     | E               | 13                 | 4/3      | 1 3/4               | 1/8                   | 7          | 4/13 |
| Matlock               | 5        | 2a    | G               | 15 1/2             | 4/3      | 1 3/4               | 3/4                   | 6          | 4/13 |
| Moonmist              | 4        | 1a    | E               | 12                 | 4/3      | 1 3/4               | 3/4                   | 12         | 4/13 |
| Primrose Cheerfulness | 10       | 4     | E               | 11                 | 4/1      | 1 3/4               | 1/2                   | 20         | 4/9  |
| Pristine              | 1        | -     | E               | 15                 | 4/1      | 4 3/4               | 1                     | 5          | 4/9  |
| Radiation             | 6        | 2b    | E               | 18                 | 4/1      | 4 1/4               | 1 1/4                 | 16         | 4/10 |
| Redstart              | 7        | 3b    | E               | 13 1/2             | 4/1      | 4                   | 1/2                   | 17         | 4/9  |
| Seltan                | 4        | 2b    | E               | 13 1/4             | 4/1      | 4 1/4               | 1 1/4                 | 13         | 4/10 |
| Statue                | -        | 2b    | Did Not Survive |                    |          |                     |                       |            |      |
| Tinkleton             | 5        | 5b    | E               | 20 3/4             | 4/4      | 2 3/4               | 1/2                   | 9          | 4/9  |
| Tonto                 | 6        | 3b    | E               | 13 3/4             | 4/2      | 3 3/4               | 1/2                   | 12         | 4/7  |
| Treasure              | 7        | 2a    | G               | 9 1/2              | 4/2      | 3 1/2               | 1 1/2                 | 5          | 4/6  |
| Vigil                 | 9        | 1c    | G               | 14                 | 4/2      | 4                   | 1 3/4                 | 17         | 4/5  |
| Wedding Gift          | 6        | -     | E               | 13                 | 4/2      | 4                   | 1 1/2                 | 12         | 4/9  |
| Woodlea               | 7        | 1b    | G               | 14 1/2             | 4/2      | 3 1/2               | 1 1/4                 | 14         | -    |
| Zero                  | 0        | 2c    | Did Not Survive |                    |          |                     |                       |            |      |

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