#### PUBLISHED BY

### American Daffodil Society

Incorporated

Summer Issue

August, 1960

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#### FROM THE PRESIDENT'S DESK

Greetings from your new president. In a moment of weakness I accepted this responsibility, knowing full well how very difficult it would be to measure up to the capable leadership set by your former presidents, Judge Quinn and George Lee. I am totally inexperienced for this assignment, my only qualifications being that I like daffodils and I like the people who grow them. But, with a very capable group of officers, directors, regional vice presidents and committee chairmen, I am hopeful that the Society will continue to grow and promote a wider interest in daffodils in America.

at Dallas, my wife and I visited the National Capital Daffodil Show in Washington, D. C., and the Middle Tennessee Daffodil Show in Nashville. The daffodils exhibited were the most beautiful we have ever seen, and we had the opportunity of meeting many of the enthusiastic members who grow them. Because of the limitation of time, we were unable to accept invitations to several other shows, but next Spring we are hopeful of meeting more of you.

Mrs. Garrett, chairman of our Judges

Committee, has now certified me as an

After our very successful convention

accredited ADS judge, so in addition to having fun, I can also be useful.

Our 1961 Convention will be held in Roanoke, Va., April 6-8 and the committee, under the direction of Mrs. William C. Seipp, vice president of the Middle Atlantic Region, is already well under way preparing an interesting program. Roanoke is close to many of our members, and we should have a large attendance. Plan now to come and have a wonderful time.

Mrs. Grover F. Roennfeldt, our new treasurer, assumed her duties August 1. So if you have not paid your 1960 dues by the time you read this, please send your \$3 to Mrs. Roennfeldt, 7426 Lynn Ave., University City 30, Mo. Many of our members have put off paying their dues this year and their names will not be included in the 1961 Yearbook if their dues are not paid by September 15, 1960. The cost of our Yearbook, BULLE-TINS and services are increasing, and if we are to maintain our low membership fee of \$3 we must not only maintain our membership of 1,500, but we must add new members.

Mrs. William A. Bridges, who has given faithful service to the Society as treasurer since its inception, has accepted

the chairmanship of a newly formed Supplies Committee. She will handle the sale of publications such as copies of the R.H.S. Yearbook, R.H.S. Classified List, and extra copies of our Yearbook, and the printing of letterheads, cards and circulars authorized by the Board of Directors. Orders for such material should be sent to Mrs. Bridges as before, and not to our new treasurer.

\* \* \*

Mrs. Link, our Schools chairman, and her committee have been doing a marvelous job of training our members for judging. Schools were held this year at Decatur, Ga., Dallas, Tex., Tulsa, Okla., and Middleburg, Va., and over 100 members participated. The Society's urgent need for accredited judges will be met as these people continue on and fulfill the requirements of completing Courses I, II and III, and judging three shows as a student judge. (I finally made the grade this year.)

\* \* \*

Larry Mains, our Photography chairman, has some wonderful sets of color slides. He has one or two of mine of which I am proud, and some better ones from other committee members. May I suggest you use them at garden club meetings to promote a wider interest in daffodils. It's a good way to get new members for the Society.

-WELLS KNIERIM

## MEETING CUSTOMS REQUIREMENTS

If you import bulbs, insist on their being sent by parcel post and not by freight or express.

Customs duties on all such parcel post importations, valued at \$250 or less, are finally collected from you by your local post office. Shipments arriving by freight or express pay the same duties, but added to that cost will be fees for the required formal customs entry, unless you are prepared to go to the port of arrival and make the entry yourself.

If your foreign shipper insists parcel post is too expensive, tell him you'll pay for it—and save money in the end.

# SOME NUTRITIONAL GLEANINGS By Carey E. Quinn

I once knew a man who had typed up what he felt was a proper prayer and had it framed and hung on the foot board of his bed. Each night this man would murmur, "Lord, them is my sentiments at the foot of my bed," and slip off to sleep. I wish some one could develop a nutritional formula like that man's prayer and forget the entire matter. There are so many factors involved that it is not possible to lay down a set rule for feeding daffodils.

However, it is possible to glean some guiding principles from the studies and experiments of Dr. J. Mitchell Jenkins of the North Carolina Agricultural Experiment Station, and Dr. Neil W. Stuart of the Plant Industry Station, USDA. Our hope herein is that with these principles each gardner will consider his own nutritional problem in the light of his soil character.

#### **Must Control Basal Rot**

The great enemy of daffodils is Fusarium basal rot. The research to date makes it clear that root inducing growth substances and organic nitrogen compounds stimulate the growth of basal rot in culture, with the result of greater losses of bulbs in the field or garden.

In fact, Dr. Stuart goes so far as to say that a proper fungicidal procedure is more important than feeding daffodils, and since they go hand in hand you cannot consider one without the other. In consequence we have two principles to state as paramount—namely:

- (a) Use a fertilizer formulae low in nitrogen, with no organic nitrogen if possible; i.e. 3-10-6. Add after daffodils emerge in early spring a very light sprinkling of nitrogen if color and rate of growth indicates its need. A tiny pinch of borax will often make the flowers earlier and clearer.
- (b) As soon as bulbs are dug soak them for two minutes in a mercury solution (Mersolite is excellent in a solution of ½ teaspoon to two gallons of

water). Repeat the dip again just before planting—you can plant them wet—but just after digging the bulbs should be quickly dried off after dipping and stored, if only temporarily, in a well ventilated building or room.

#### **Sidelights**

Some interesting sidelights appear from the tests above mentioned:

- (a) In Norfolk, Va., a fertilizer formula containing superphosphate, potash, and lime, but no nitrogen, produced the earliest flowers and of show quality, but bulbs of poor quality.
- (b) At Beltsville, the tests showed the presence of nitrogen reduced both the weight and number of bulbs as well as the number of flowers, but increased the amount of basal rot. The same effect, although to a lesser extent, was obtained with phosphorus (usual source is superphosphate). On the other hand, the presence of potassium (potash) in the fertilizer had exactly the opposite effect—increasing the yield of flowers and bulbs, and decreasing the amount of basal rot.

#### Conclusions

The practical conclusions that can be drawn are: control basal rot, and feed lightly with a fertilizer worked into the row beneath the bulbs that contains a minimum of nitrogen (but some), more phosphorus, and potash—that is double the amount of nitrogen. Many of the Northwest commercial growers straddle the problems with a 3-10-6 formula, and use a light side dressing of nitrogen when the daffodils come up if they don't seem to grow off normally fast.

It is also gleaned that most beginners are cautioned to use no fertilizers—certainly not before planting—and to concentrate on deep digging (12 to 18 inches deep).

The nutritional program for daffodils should be planned in consideration of the growth cycle. The daffodil growth cycle begins in early fall and closes about eight months later.

It is to be remembered that the daffodil uses nitrogen first primarily to get up,

#### FREEZING IN POTS

In Men's Robin No. 1 John Larus (Connecticut) noted heavy loss among pots of bulbs stored in attic where they were subjected to alternate freezing and thawing. He plans to hold the bulbs hereafter in a section of the attic which stays above freezing.

Grant Mitsch (Oregon) is inclined to attribute the loss to the possibility that as freezing progresses inwardly from all sides it may compress the bulbs and damage the tissues. Most growers are familiar with stray bulbs left on top of the ground over winter which survive freezing and thawing.

Bulbs in pots sunk to or below the surrounding soil level are subjected to frost and pressure from only one direction, so that relief from pressure is always available until the bulbs are finally frozen solid and then all pressure ceases.

#### THE OFFICIAL FLOWER

Word has reached the BULLETIN indirectly from Mrs. Espic Leach of Marshall, Mich., a new member of the ADS, that the Marshall branch of the National Farm and Garden was instrumental in naming the daffodil the city flower, and has planted hundreds of bulbs in their parks, and around the schools, public buildings and the local hospital. This is a wonderful way to give pleasure to many people, while at the same time spreading the word of the beauty of the daffodil.

then phosphorus to encourage root growth and floriferousness, and finally potash after the bloom period. Any program should consider these facts.

It must be remembered that all the principal elements are needed—the absence, depletion or unavailability of any one element can cause harmful and abnormal results. And it must be remembered that the condition of the soil plus available water is paramount. A plant eats nothing in dry form, and the deeper your friability, the less fertilizer of any sort you will need.

### FORCING BULBS INDOORS WITH PLASTIC BAGS

#### By MARY MATTISON VAN SCHAIK

Each year my enthusiasm for forcing bulbs into bloom indoors mounts. Flowers thus obtained are available when outside gardening is at a standstill. One therefore has more leisure time in which to study them closely. This, added to the spring-like cheer they bring, makes them doubly valuable.

For two successive seasons I have used the so-called "van Tubergen Method" for potted bulbs to be forced into bloom indoors. The main advantage is that moisture around the growing plants remains fairly constant with a minimum of effort expended on watering. One proceeds as follows:

After the bulbs have been potted up in the usual way and watered thoroughly, the pots are placed in polyethylene bags with the opening of the bag well above the edge of the pot. The bag is then closed at the top with a rubber band. The pots thus shrouded are placed in the coolest section of the cellar (average temperature 45 degrees). The pots are watered once a month by opening the bags at the top after which the bags are again closed. Keep the plastic bags around the pots after they are exposed to daylight and warmer temperature. When the young leaf-growth needs more room open the bags, but keep them around the pots until color shows in the flowerbuds.

More frequent watering is necessary once the bags have been opened, but they do continue to keep the air immediately around the plants more moist than in the rest of the room. Van Tubergen advises keeping the bags around the pots until the flowers bloom. I have produced stronger plants by removing the bags when the flowerbuds begin to show color. It is advisable to acclimate the plant gradually to the drier atmosphere of the room by rolling down the plastic bag a little each day until it is level with the edge of the pot.

#### DAFFODILS FOR HOUSE DECORATION

#### By JOHN R. LARUS

If we had ten times as many daffodils in our borders and beside our beds, we would still grudge each one we pick and carry indoors to bloom out its beauty in telescoped time. It is, therefore, only when a stem has been broken or a blossom is completely hidden from view that our vases stingily receive occupants.

So potted bulbs seem the answer to house decoration and carry the additional advantage that by judicious calculations, or sometimes contrariwise by complete miscalculations, blooms can be enjoyed over a season different from that of their outdoor counterparts.

The conventional potting method of burial in a bed covered by leaves is satisfactory for those with a suitable garden spot, except that pots dug during the dead of winter in our climate are come at with varying degrees of difficulty and discomfort. The wisdom of Solomon, moreover, is needed to divine just the right digging moment when the roots have formed and yet the leaves have not grown out of hand.

Pure creature comfort has led to devising a modified method that has proved quite satisfactory. We pot the bulbs in October as usual and then, after a good watering, set half a dozen pots in the bottom of an orange crate or even a cardboard carton. We pack under and between the pots moist sphagnum moss.

For six inch pots the bags used for fruit at the chain grocery stores are large enough. For wider pots I use dry cleaners' bags and cut off some of the bag at the open end, leaving about 18 inches to accommodate the plants as they shoot upwards. Narcissus varieties: Brunswick, Indian Chief, Mangosteen, Diotima, and Nanus have been grown this way with excellent results. The same may be said of muscari and many varieties of hyacinths, crocus, and tulips.

#### AWARDED MEDAL

Mrs. C. M. Gooch of Memphis, Tenn., a member of the ADS, has just been awarded the Distinguished Service Medal of the Garden Club of America. It is awarded for outstanding achievement in horticulture and is acknowledged internationally as a notable honor.

The boxes are then placed in our dark, cold attic. Every few weeks they are examined to see that there is sufficient moisture which, if needed, we apply over the whole box with a watering can. There would be no real hurt if the temperature were quite steadily below freezing, but from past experience we have found that alternate freezing and thawing will rot the bulbs, so we throw old sacks over the boxes to maintain a reasonably level temperature. If one has a dark vegetable cellar that stays around 40 degrees in all weather, this might be an even better location.

Mice have a strange way of slipping into our cellar when the door occasionally blows open (I stoutly resent family accusations that I occasionally fail to close it after wheeling in fall garden gleanings), so that against the day that they can be trapped it is wise to place inverted flower pots over any bulbs except the daffodils, which apparently are immune.

We have good luck in bringing individual pots gradually to more heat and then to light as they seem to be considering blooming. Obviously their supply of water must be maintained at a high level, a point which needs more frequent attention if and when the pots are removed from their sphagnum nest. As is generally known, the warmth of the living room should be reserved for pots that are actually breaking into bloom, and even when in full bloom, nights spent in a cooler spot will lengthen the life of the flowers.

#### KEEP ON THE MULCH

By Harold S. King Chairman, Health and Culture Committee

Mulching prevents splashing of the bloom with mud, discourages weeds, and lessens erosion by heavy rainfall. However, after the flowers fade daffodils still appreciate a mulch. It aids in keeping the soil cooler and moister and helps maintain even temperature and moisture content in the soil. These are important in prolonging the life of the leaves. It is in the leaves that water, carbon dioxide and sunshine combine to produce the sugars that make fat bulbs. The amount of sugar produced is dependent on the surface area of the leaves and on the length of time they can function in the manufacture of the sugars.

Sugar is stored, largely as starch, in the bulb. Some sugars are also stored as such and may act as a sort of antifreeze, lessening winter injury by ice crystals within the bulb. They are also a quick source of energy. More research is needed on the seasonal variation of the types and concentration of the sugars in the bulb.

Few people realize the extent to which the strength of a daffodil is dependent on an even supply of water after the leaves have disappeared and new roots are pushing down in the soil for moisture and nutrients. Here again a mulch helps by stabilizing the temperature and moisture in the soil. Stunting or partial killing of roots by fluctuating conditions not only diminishes the vigor of the whole plant, but may give a source of entry for microorganisms present in the soil.

#### ATTENTION DIRECTORS

Will the members of the Board of Directors please hold open the dates of October 22-23 until they receive further word? This is the contemplated time of the Fall meeting.

# NARCISSUS OF THE OLD SOUTH By Jo N. Evans

Where did they come from, these old bulbs that grow in such profusion throughout the Middle South?

In the early 1800's many fine homes were built around cities like Natchez, Miss. All these places had large gardens, often designed by foreign landscape architects. One such place is Elgin Plantation, with several miles of garden walks bordered with daffodils, remnants of which may still be found. Old cemeteries are filled with these bulbs which have often escaped into the neighboring woods and ditch banks. Early settlers doubtless brought bulbs with them when they settled on small farms in the hills.

The bulbs multiplied and were shared with friends until they gradually covered the South. Today you may see them blooming along the fence rows or in the corners of pastures, spared by grazing cattle, as well as in the gardens of the old mansions.

What are they? First to appear about Thanksgiving are forms of Paperwhites, varing in size, height, and earliness. Around Christmas comes another *N. tazetta*, known locally as "Christmas", "Star", or "Old January", with pointed petals. Early in January comes the finest of the old *N. tazettas*, "Pearl". It turns pure white and has heavy substance, tall stems, and large heads of flowers. It is followed by other forms, almost as lovely. There are double forms of these *N. tazettas*, but they are uncertain bloomers.

The season continues with the campernelles and jonquils. The former are everywhere, and sometimes we find double forms. The jonquils bloom in February and March and vary to the point of complete confusion. Stems may be tall, medium, or as short as four inches. The one I believe is N. jonquilla simplex is known locally as "Sweeties" or "Honeydews". Along with the jonquils comes a cluster-type yellow known as "Gold Dollars", probably a late tazetta.

During February the little yellow Trumpet Minor blooms. These are more attractive in our Southern gardens than the modern February Gold. The little white trumpet, called "Swan's Neck", is one of our treasured old bulbs, but requires perfect drainage.

There is no way to name the many short-cupped varieties that we find; some are beautiful garden flowers, others have poor form; all are sturdy and will thrive without care.

At Haphazard we have hundreds of these bulbs collected from old gardens while in bloom by picking up the entire clump of bulbs with soil on them and treating it as a living plant.

I do not believe the early-flowering N. tazettas will survive much farther north than Arkansas or northern Mississippi; however, there are a lot of these old bulbs which will adapt themselves to any garden that can grow the modern, named varieties. Any flower that has withstood the ravages of time and the encroachment of civilization is worthy of a place in our gardens.

#### SEEDS OF FRIENDSHIP

The following is an excerpt from a letter:

"For the past three years we have sent out to garden and flower lovers three packets of easy growing South African wild flower seeds. Our movement is not meant to lead to further correspondence between sender and receiver, and is a non-profit organization with the sole idea of spreading Friendship, Peace and Goodwill among all gardening people of the world . . . we would be more than glad to send such seeds to members of your Society . . ."

For further information you may write: Jack Bester, "Seeds of Friendship," P.O. DE DEHR, Transvaal, South Africa.

#### BASAL ROT AND VIRUS MALADY

My daffodil collection was moved in fall of 1957 into new quarters. Starting with clean woods soil (minus stumps, roots, and largest stones), the raised beds were constructed with railroad crosstires and prepared with basal rot prevention in mind. No compost or manure has been used, nor has any form of organic fertilizer. (I would use wood ashes if I had them). Large quantities of sterile Michigan peat (100 pounds per ten square feet) and of sharp builder's sand were forked in, and a good application of 3-18-18 was worked into the root area. No fertilizer was added the first year after planting, but a moderate side dressing of the 3-18-18 was cultivated into top inch of soil the second year as soon as foliage was through the ground.

Varieties susceptible to rot are dipped in Mersolite solution shortly after diging, and the bulbs are stored in a cool, dry place (under 70 degrees) until replanted in the fall. The only major cultural detail that has been omitted is a summer mulch—which will be utilized this season. This program has resulted in less than six bulbs out of over a thousand succumbing to basal rot in summer storage of 1959, and they were bulbs of 'Tudor Minstrel' which were overlooked for Mersolite treatment. Tudor Minstrel has been lost twice previously to the same malady.

And on the subject of diseases, there is increasing awareness of the problem of virus infection in daffodils, especially in the South. I do not distinguish between the various types, for apparently the only effective practice (certainly not a treatment) is to rogue and burn every questionable plant. Diligent roguing has been practiced for years, regardless of cost, yet the problem has not abated for me. I am not convinced that everything (rather, much of anything) is known about these virus infections that should be known, and a more definite and easier means of detection in questionable cases is needed. I believe that there are

varieties which are serving as carriers—that display no symptoms of infection.

Also, from experience, I have found a number of varieties of which I have been unable to obtain a clean stock from any source, yet they continue to be offered commercially. Could it be that many of the major bulb growers (Dutch, British, and Pacific Northwest) have climate conditions that hide or mask virus symptoms? I know that when we have damp, sunless weather, stripe is difficult to detect, but when we have our normal sunny, clear, and often hot seasons, striped foliage is easily detected.

-HARRY I. TUGGLE

#### CHANGES IN CLASSIFICATION

Changes approved by the RHS are listed here:

Angie—8, not 2c. April Tears—5b, not 5a. Cyclataz—8, not 10. Cyclathinus—6a, not 10. Kentucky-3b (i.e. 3a?), not 9. Lady Bee—2b, not 3b. Lady Hillingdon—7a, not 7b. Larkelly—6a, not 7b. Little Beauty—1b, not 10. Pearly Queen—5a, not 5 b. Pink Cloud—4, not 2b. Red Sunrise—2a, not 2b. Rosabella—1b. not 1c. Tittle-Tattle—7b, not merely 7. Tullus Hostilius—7a. not 7b. White Wedgewood—7a, not 7b.

#### THE ROMANCE OF DAFFODILS,

by William C. Brumbach. (47 pages, \$2.00, Greenwich Book Publishers, 489 Fifth Avenue, New York 17, N. Y.)

Christmas gift for a sentimental gardner?—here is an appropriate selection. The author's pleasant account of his hobby of seeking and collecting old daffodil species and early hybrids includes neither scientific nor cultural information, but his journeys to ancient southern plantations are nicely described.

-E.R.B.

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#### COMMENTS ON COLOR

Halbert Cunningham (Mississippi) has observed in Men's Robin No. 1 that whereas daylilies attain great brilliance and clarity of coloring in the Middle West, it is difficult to develop daffodils with these qualities under similar growing conditions.

Pierce Timmis (Vermont) cites article by V. H. Booth in the RHS Yearbook for 1959 (p. 21) suggesting that antioxidents present in all parts of plants to prevent destruction of plant substances by oxygen may control degree of resistance to fading in daffodils. If so, varieties rich in antioxidents might be used to breed fadeproof red cups. The amount of antioxidents can be determined chemically.

Grant Mitsch (Oregon) speculates that white- or red-cupped varieties, if rich in antioxidents, might produce stable colors if combined for two or three generations with best of present red cups. However, he also observes that the orange-red coloring of some varieties, like Rustom Pasha, increases rather than decreases after opening.

So far as known, no research has been done on variation in amount of antioxidents in individual varieties.

#### FROZEN FOLIAGE?

If the foliage of your daffodils froze this spring, be sure to fertilize a little heavier than usual. This advice comes from both Dr. Freeman Weiss and Mr. Willis Wheeler. If you did not fertilize after the blooming season, then do so in August.

#### BULLETIN DEADLINE

Material for publication in the Fall Bulletin must reach the Editor not later than October 15.