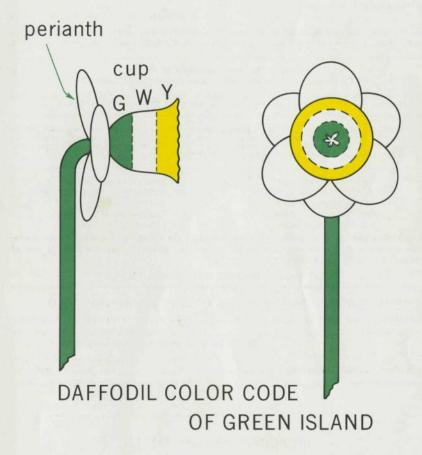
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A PROPOSAL OF MARRIAGE

By Tom D. THROCKMORTON, M.D., Des Moines, Iowa

Color is really what daffodils are all about! Very few colorblind persons are daffodil lovers — or judges. One has but to remember the upward sweeping hillside at Murray Evans', carpeted with multihued daffodils and with Mt. Hood as a backdrop, to realize that color is the main interest. What a pleasure it is to turn up daffodil faces in Grant Mitsch's seedling rows — always it is the colors that first strike the eye. And those daffodils standing at attention in carefully manicured rows at Prospect House, like a smart military parade. Would it not be a disaster if the lovely blooms were all the same color — or worse, not much of any color at all?

In the RHS Daffodil and Tulip Year Book, 1970, plate 1 shows three magnificent blooms of Avenger, crystalline white perianths and flaring cups of deep glowing red-lead. A picture in colors! But figure 19 shows Amber Light, a lovely form all done out in shades of gray. I remember seeing Amber Light growing in Mrs. Richardson's greenhouse with a lilting white perianth and a rolled-edged cup of yellow, hinting of other sunset colors. I would not have recognized the bloom in the white and black photograph without the footnote. The color is the thing!

A little more than 10 years ago the transference of most usable daffodil knowledge to a computer repository seemed a good idea. I made such an attempt, with the helpful cooperation of many friends, and the result has been dignified as the Daffodil Data Bank of the American Daffodil Society. I should not like to invest the amount of time and thought and money required in such a project again. However, it is now an on-going data file, and the upkeep is relatively simple and inexpensive.

Among the most useful data to be placed on record, whenever possble, has been a brief coded color description of each flower. These data, together with information relative to plant classification, height, and season of bloom do allow one to conjure up a fairly adequate mental picture of the plant and flower.

As it was necessary to give the computer an electronic sense of color, the following colors were chosen as representative of those occurring naturally in daffodil blooms:

White — W
Green — G
Yellow — Y
Pink — P
Orange — O
Red — R

The computer was taught to recognize and retrieve this color information when presented in the proper form. If I had it all to do over again, I would add one more color, Lemon — L, because there is such a spread between shades of yellow.

Few of you know better than I, the difficulties in trying to describe nuances of daffodil cup color. I think the most delightful and perfect shade of pink found in the daffodil world is that embodied in a freshly opened Rose of Tralee. Who among you has stood before a clump of this variety as the early morning sun has lifted above the low mists? As one gently shakes the dew from the blossoms, which have slowly opened during the cool of night, the lovely pink of those ridged but expanding cups is unforgettable. But the sun becomes warm, and by 10 o'clock in the morning, the cups are fully opened and the freshness of that first fleeting pink has gone. The gray of age is already dulling the initial charm, and in a day or two, Rose of Tralee is another watered-down "pink," undeserving of a second glance.

Then there is Ceylon. I have grown it for more than 20 years and have never had the cup color more than halfway back toward the ovary. Yet on the show bench, I have seen Ceylon's well-tailored cup a deep flaming orange-red back to the perianth. The color is there but so dependent upon climate, conditions of culture, and the age of the flower.

To compound the difficulties of color description, the scientists have gotten into the act. Providing us with color wheels, or cards, and helping us with

terms like "hue" and "reflectance," they have apparently simplified color coding into a series of meaningless numbers. To further complicate this scientific process, the dyes in the inks used in printing the cards are far from color fast, and the card surface bears no resemblance to the soft absorptive surface of flower petal or cup. Also, the true color of a daffodil depends upon the time of day (sunlight color), blue sky, white clouds, overcast sky, or artificial light sources.

The computer considered these numbered color descriptions and quickly decided that, even as you and I, the "eyeball determination" of color is the quickest, easiest and most ready to the hand. This commonplace method is

in worldwide usage.

The gamut of colors chosen for the computer means something to every daffodil grower; mental pictures, based on these chosen colors, seem satisfactory enough to the individual and are capable of ready comparison when

discussing daffodil colors.

There are but three striking colors present in species daffodils: white, yellow, and the startling red confined to the wire-rimmed cup of the species poet. We all owe a great debt to the greedy bumble bee and the thoughtful hybridist, through whose efforts this tiny edge of red has suffused throughout the daffodil cup. Subsequently, the red has diluted to pale lilac-pink and mingled with soft yellow to provide the apricots and softer pinks so common in our gardens. I can categorize these to my satisfaction without color cards, and so can you. Thus, to repeat, the computer recognizes the white of Panache and the green of its throat. It knows and records the yellow of Preamble, of Arctic Gold, and the cup rim of Irish Rover. It casts its approval over all pinks, from Passionale to Cool Flame. The computer recognizes the orange of Chemawa and the deep red of Actaea's tiny cup.

The colors chosen by the Daffodil Data Bank have been adequate to

their task.

Another difficult problem was solved before the computer could record its daffodil descriptions, i.e., the distribution of the various colors within the bloom. This became simple once two arbitrary rulings were accepted. First, all daffodil perianths are solidly colored, either yellow or white, and the handful of exceptions are unimportant at this time: the color of certain cups washes out into the base of the perianth, and pinkish tones suffuse into

certain perianths, as in Ambergate.

Secondly, for practical purposes the distribution of colors in the daffodil cup may easily be divided among three zones: the *inner* or eye zone, the *middle* zone, and the *outer* zone, or rim. Thus, the cup of Green Island may be said to have a green inner zone, a white middle zone, and a yellow outer zone or rim. Our cover illustration represents a computer-eye view of Green Island. Kilworth has a green inner zone, and orange middle and outer zones. Rima has a long trumpet, pink in all three zones, and Audubon has a lovely white cup, rimmed and frilled with a strong deep pink.

It is practical to assign colors and their distribution when describing daffodil blooms. And herein comes the "Proposal of Marriage"! I propose that a legal marriage be consummated between the scheme of Daffodil Classification as used and approved by the Royal Horticultural Society and the color capabilities of the Daffodil Data Bank as approved by the American Daffodil Society. As a matter of fact, a sort of common-law relationship between the two has prospered for more than 10 years, and it is high time this is given the respectability of approval.

As daffodil information has been filed away in the computer, the color code has been appended to the approved classification, as the two complement each other and provide a practical description of any variety, if the information is available. The Classification provides the physical formation and outline of the bloom; the Daffodil Data Bank colors it in.

Let us clarify this with some examples:

Green Island 2b G W Y — a white-perianthed large-cup with a green eye, white cup, and edged in yellow.

Kilworth 2b G O O — a white-perianthed large-cup, green eyed, with orange cup.

Romance 2b P — a white perianthed large-cup with solid pink cup, as indicated by the single P.

Statue 2b Y — a white-perianthed large-cup solid yellow cup.

Salome 2b P P Y — a white-perianthed large-cup, pink, rimmed in yellow.

Irish Rover 2b O O Y — a white-perianthed large-cup with orange cup rimmed in yellow.

Interim 2b Y Y P — a white-perianthed large-cup, yellow to edge which is banded pink.

Royal Coachman 2b G Y O — a white-perianthed large-cup with green eye, a yellow middle zone set off by outer band of strong orange.

Do you begin to get the idea? Listed above are eight daffodils, all classified as 2b's, and uniquely different from each other by virtue of cup color and the distribution of the color within the cup. Are not these differences worthy of note? But for these colors, I doubt a single one of the varieties would have survived the "mixed seedling" pile. Does not the added color code help provide a mental picture? As a spinoff from this color coding, it has been learned that the zones of distribution are not purely arbitrary but actually picture certain lines of genetic development. Should the hybridists wish to breed an orange-cupped daffodil with a golden rim, certain possible lines of breeding at once become obvious when the color codes are considered.

The present daffodil classification lends itself most helpfully to color coding in Divisions 1, 2, and 3, since perianth colors are signified as yellow in subdivision a, and white in subdivisions b and c. Subdivision d implies the yellow perianth and white cup of the reversed bicolor, although other combinations are possible. Subdivision c also signifies white perianth and cup in these divisions, and no further code is required.

In all other divisions, beginning with Division 4 the Classified List abandons color entirely, except it is common knowledge that all flowers in Division 9 have white perianths. Thus, in these other Divisions, the color code must describe the perianth color as well as color distribution within the cup. In all these Divisions, the first color code letter refers to the perianth; other letters apply to the bloom center or cup. Let me give you examples:

Acropolis 4 W W R — a double with white perianth and center composed of both white and red petaloids.

Double Event 4 W W Y—a white double with white and yellow petaloids.

Tahiti 4 Y Y R — a yellow double with yellow and red center.

Sunburst 4 Y Y — a yellow double with yellow center.

Other divisions follow rather obviously:

Harmony Bells 5a YY — a yellow triandrus hybrid with long yellow cup.

Tuesday's Child 5b W Y — a short-cupped white triandrus hybrid with yellow cup.

Jetfire 6a Y R — a yellow cyclamineus hybrid with long red cup.

Beryl 6b Y O — a short-cupped cyclamineus hybrid with yellow perianth and orange cup.

Waterperry 7a W P — a short-cupped jonquil hybrid with white perianth and pink cup.

Dickcissel 7b Y W — a short-cupped yellow jonquil with white cup; i.e., a reversed bicolor jonquil.

Matador 8 Y R — a tazetta hybrid with yellow perianth and red cup. Cantabile 9 G G R — as noted above, all poets have white perianths. This one has solid green cup with red rim.

triandrus albus 10 W W — in Division 10 the first letter of the color code refers to the perianth; other letters to the cup. N. triandrus albus is a white species triandrus with white cup.

pseudo-narcissus bicolor 10 W Y — a species pseudo-narcissus with whitish perianth and yellow trumpet.

Parisienne 11 W O — a split-corona daffodil with a white perianth and orange corona.

As for Division 12, I believe that the use of the first letter of the color code for the perianth and subsequent letters for the cup or center will cover most contingencies.

An added note applies to Division 1a. For so many decades, this Division has contained only yellow daffodil trumpets that the color code has seemed superfluous until the arrival of W. O. Backhouse's "red trumpets." Thus, in Division 1a no color code is used, unless the trumpet color is other than yellow;

Bre'r Fox 1a O — a yellow-perianthed daffodil with orange trumpet. These seem sufficient examples to illustrate the simplicity and advantages of an established relationship between the Classified List and the Daffodil Data Bank. It is most important that all of us realize the current scheme of classification used by the Royal Horticultural Society is left intact by such a union. The structures and purposes are left unchanged. To this classification the American Daffodil Society wishes to append a simple color code. The usefulness of this alliance has become increasingly obvious to our Society, to hybridists, to retail merchants who rely upon catalogs, and to those hardworking people who arrange and supervise daffodil competitions or shows.

The use of color coding is becoming a "manner of speaking" at our daffodil meetings. Antipodean catalogs for years have used modified color codes to describe their daffodils. Many prestigious awards, given in daffodil shows, are based on color. Therefore, the American Daffodil Society is proposing this marriage, of style and measurement with color. We ask for the consideration of this proposal by an RHS Committee concerned with daffodil classification. We seek the thoughtful cooperation of our friends in Holland. Such a modified classification can only expedite the marketing of bulbs.

Color descriptions of many one-time great daffodils have been lost or are not readily available. Take as examples, Beacon and Princess Mary, two daffodils of utmost historical importance. Do either of these bring to mind a mental picture? I believe these varieties have been lost for many years, yet they are frequently referred to in daffodil literature. Would it not be satisfying if mention of these important ancestors could also call to mind a color

portrait? The computer can help. Beacon is 3a Y Y O, a small-cupped yellow daffodil with an orange rim.

Princess Mary is 2a Y Y O, a vellow-perianthed daffodil with a large yellow cup rimmed in orange. I find a certain personal satisfaction in this knowledge and am fearful that it is being lost. Another generation of daffodil lovers should not be denied at least a casual acquaintance with Green Island. Perhaps it is well for each of us to remember that the present scheme of daffodil classification was not handed down from above, graven on stone tablets. It has been a product of thoughtful persons, subject to modification from time to time, and the better for each change. The Board of the American Daffodil Society is asking, through this "Proposal of Marriage," that a further

modification be considered. I have an intense admiration for those men who have loved daffodils enough to categorize them into useful divisions. By the same token. I believe that those same men would and will approve changes in any such classification made apparent by the burgeoning of both interest in and varieties of their favorite flower.