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THOMAS A. EDISON
(DAHLIADEL)
DESCRIPTION ON PAGE 5


## BOOK OF POTASH.FED DAHLIAS

By this time you know what potash-fed dahlias are. We thoroughly enjoy your letters and photographs describing and showing your success in growing them, and we appreciate any suggestions for our cultural instructions or classification. The wonderful comments on our catalog and stock make us feel that our work is appreciated and we hope you will enjoy this edition more than usual, as we have tried to make our cultural instructions cover a wider scope and be more explicit with the use of drawings on pruning and disbudding.

## New Features for 1931

One of the services rendered by Dahliadel is recommending varieties that will give you the most pleasure. To do this it is necessary for us to grow varieties from all parts of the world. From this collection we have selected what we consider best and cataloged in the usual way.

A second class, which we consider temperamental, doing well in some sections and responding to certain climatic conditions, but not giving universal satisfaction, is listed in small type. As a further explanation, these varieties are not condemned, but have not come up to the high standard we have set for our Potash-Fed Dahlia Family. Dahliadel recommendations stand out unmistakably throughout the catalog in bold type as one great family of Potash-Fed Dahlias.

You will find additional varieties listed in the index without page or folio for those who know the varieties they want.

Dahliadel grown plants from originator's stock, found on pages 3 and 4, are varieties we have not grown at Dahliadel, but we believe are the best of the 1931 introductions. We are, therefore, offering plants which we have grown from originators' stock.

Drawings for Pruning and Disbudding-On page 29 you will find Drawings $\mathbf{X}, \mathrm{Y}$ and $\mathbf{Z}$, which will give you the three recommended systems of pinching out and disbudding dahlias that we have found successful. In the index you will find a key letter following each variety just ahead of the price which will tell you which of the three systems we would recommend for that variety. These recommendations will have to be varied with different climatic conditions. Farther north less topping is needed, while in the south more topping and pruning are required.

You will find other changes in Dahliadel catalog, and we hope they will help you in selecting varieties. The number directly following the originator's name is our score of that dahlia, not copied from any trial grounds, but scored as the variety does for us at Vineland, N. J., grown in various types of soil under different methods of topping and pruning, scoring down for such weaknesses as late blooming, not standing August heat, sporting open centres, also scoring hard on foliage being susceptible to ravages of Thrips and Leaf Hoppers. Following is the score card used:

> 15 Form-True to type, artistic.
> 15 Size-According to type, diameter $x$ depth.
> 15 Color-Clean, attractive, pleasing and useful.
> 20 Stem-Erect but not cumbersome or brittle.
> 15 Foliage-Strong, healthy and insect resistant.
> 15 Substance-Including keeping qualities and tight petals.
> 5 Distinctiveness-Something different or unusual in form or color.

## 100

The letters, c g e, classifying the dahlia to its use: (c) Cut flowers-suitable for the florist, or for cutting for baskets, bouquets and decoration. Qualifications are good keepers with tight petals of suitable form and colors, on good stems. Keeping qualities have preference over size. (g) Garden varieties-suitable for landscape work, borders, beds and mass planting, free and early bloomers of showy colors. (e) Exhibition varieties-winners on the exhibition table, having qualities that score high in competitive judging, size, form, stem and color predominating.


FORMAL DECORATIVE
Omar Khayyam

## Dahliadel 1931 Introductions

OMAR KHAYYAM (Stout Dahliadel), 1931, ge, Bloom $9 \times 4$, Bush 6 ft. This much admired dahlia was certified with one of the highest scores at Storrs' Trial Grounds the past season, and was recommended for certificate at the New Jersey Trial Grounds. The unusual coloring is a Chinese red at the base of the petals, shading to bright orange and tipped lighter, making a wonderful soft color effect. It is a tall, healthy grower with strong foliage and, incidentally, a good root maker. Owing to the limited stock, we are offering green plants only, but personally guaranteeing them to make suitable roots to keep over Winter for you. We are proud to have the privilege of introducing this fine dahlia for Miss Virginia Stout, of Short Hills, N. J. The entire proceeds of its sales will go to charity, the Nurse's Sick Benefit Fund, Carson C. Peck Memorial Hospital, Brooklyn, N. Y.

Plants, $\$ 5.00$ net

## DAHEIADEL 1931 INTRODUCTIONS-Continued

DWIGHT W. MORROW (Dahliadel 86), 1931, g e, Bloom $12 \times 6$, Bush 5 ft. Informal Decorative, named by Frederick E. Dixon. A gigantic red dahlia that is admired by everyone. Not only does the size and form of bloom make all who see it ardent admirers, but its richness of color makes it one of the most spectacular dahlias. This dahlia likes heavy soil and will stand quite rich culture. It is a healthy grower with heavy leathery foliage, but should be topped once or twice and disbudded for terminal buds. It is by far the most outstanding red dahlia we have ever seen. At the Atlantic City Show it won first in the Informal Decorative Seedling Class and we prophesy it will be a consistent winner in the Informal Decorative and Red Classes the coming season.

Roots, $\$ 15.00 ;$ Plants, $\$ 7.50$
KARL BONAWITZ (Dahliadel 86). See illustration and description, page 10.
LINCOLN G. DICKEY (Dahliadel 85). See illustration and description, pages 14 and 15.

# 1931 INTRODUCTIONS Dahliadel Plants Grown from Originators' Stock 

ANDREA ERICSON (F. \& M.), 1931, ge, Bloom 10 x 4, Bush 5 ft. The easiest way to describe this dahlia is to call it a white Fort Monmouth. It is an Informal Decorative of good form, held on excellent stems and should be very successful in the White Class the coming show season.

Plants, $\$ 5.00$
ASBURY PARK (Wood-Burpee), 1931, c ge, Bloom $10 \times 4$, Bush 5 ft. An unusually good introduction of the Formal Decorative type that has been a consistent winner and received. a Certificate of Merit at Storrs, 1930. Color, strawberry red shaded salmon and old 'gold, making, in general, a copper-salmon effect. Blooms are well-built, held above the foliage on strong stems. Bush, a robust grower not troubled with insects.

Plants, $\$ 7.50^{\circ}$
CAPTAIN COSTE (Curran-Waite), 1931. This big Informal Decorative dahlia won about all a yellow dahlia could win at Red Bank. Best Undisseminated Seedling in both Open to All and Commercial Classes and the Best Yellow in the Show. An impressive 'and massive dahlia on extra long, strong stems.

Plants, $\$ 7.50$
CONGRESSMAN WOLVERTON (Peacock), 1931, c ge, Bloom $8 \times 4$, Bush $51 / 2 \mathrm{ft}$. This fine dahlia is described as a cross between Jersey's Beauty and Rodman Wanamaker. It has the full, high centre of Jersey's Beauty and the irregular back petals and free-branching habit of Rodman Wanamaker. The color is a bright luminous salmon pink and, like Rodman Wanamaker, it starts to open yellow, then develops into the luminous pink.

Roots, $\$ 10.00 ;$ Plants, $\$ 5.00$
F. A. VENDRELL (Peacock); 1931, c ge, Bloom $8 \times 3$, Bush $41 / 2 f t$. This dahlia has the typical Spanish combination of orange and red shades. It is an early and profuse bloomer, with full flowers even late in the season. This dahlia should make a host of friends.

Plants, $\$ 5.00$
FRAU O. BRACHT (Berger), $\boldsymbol{c} g e$, Bloom $8 \times 4$, Bush 5 ft. We believe this fine German dahlia will win a host of friends in this country, as it was the sensation of the New York Show in 1930. A clean-cut, straight-petaled cactus of a clear, light primrose yellow, keeping well and holding blooms on fine stems. Received A. D. S. Certificate of Merit 1929. 'It is just about the prettiest yellow cactus dahlia you can wish for.

Plants, $\$ 2.50$
FRAZIER (Peacock), 1931, c ge, Bloom 8 x 4, Bush 4 ft. The bushes of this variety are rather dwarfed, but it is a free, continuous bloomer on rigid stems. The flowers are formal decorative facing to upright. Color, a rich glowing oriental red, tipped yellow, with yellow at the base of petals. It is an exceptionally good keeper when cut and is very showy.

Roots, $\$ 5.00$; Plants, $\$ 2.50$
HARRIET HOCTOR (Alling), 1931. This Informal Decorative, with high, full centres, was named in the New York Show for the famous actress. Described as an outstanding shade of true purple, and we believe that it will be a popular variety. Was awarded American Home Achievement Medal for the best new seedling in the Hartford Show as well as other prizes.

Roots, $\$ 10.00$; Plants, $\$ 5.00$
IMPERIAL PINK (Hall), 1931, ge, Bloom $11 \times 6$, Bush 6 ft . One of the most imposing Informal Decorative dahlias shown in 1930, winning both Pennsylvania Horticultural Society and Camden Dahlia Society gold medals for best undisseminated seedling. This dahlia is not only massive, but graceful and artistic in form. In color, it is a beautiful true pink with primrose shadings toward the centre and a rose pink centre.

Plants, $\$ 7.50$

## 1931 INTRODUCTIONS - Continued

J. D. TORBERT (Eastman), 1931, c g, Bloom $7 \times 3$, Bush 6 ft. An Informal Decorative that will produce a quantity of medium-sized blooms on long wiry stems, making it admirable for garden or for cut flowers. Color, a combination of salmon apricot with flame and gold shadings. A. D. S. Certificate 1930.

Plants, $\$ 5.00$
MARY ELLEN (Loller), 1931, c ge, Bloom $10 \times 31 / 2$, Bush 6 ft. The 1930 winner of the American Home Achievement Medal at Baltimore. Has been a winner in the 1, 2 and 3-year seedling class as well. It is described as a seedling of Mrs. I. de Ver Warner with the same habit of growth, which is a good recommendation. The color is a lavender pink with considerably more pink than lavender.

Plants, $\$ 5.00$
PETER PAN (Peacock), 1931, ge, Bloom $8 \times 4$, Bush $21 / 2 f$. Here we have the unusual, a massive Formal Decorative on a pompon plant. It is ideal for borders, fronts of beds or pot plants. The color is a rich luminous pink and the flowers are produced in abundance on stiff stems.

Plants, $\$ 5.00$
PRINCE REGENT (Hall), 1931. A novelty that made quite a hit at Camden because of its color combination. An Informal Decorative of clear salmon buff, shading to true gold in the centre. Blooms are large and deep. A pleasing variety.

Plants, $\$ 5.00$
RISING SUN (De Wilde), 1931, Formal Decorative. It is prophesied that this dahlia will follow Golden Sonne in popularity. It is not a large flower, but the burnt orange, tipped gold at the centre and on the outside petals makes it outstanding in coloring. Plants, $\$ 5.00$
SGMMERTIME (Hall), 1931. One of the winners at the Camden Show as Best Yellow in the Open-to-All Section. A beautiful flower of clear golden yellow, of great depth and substance, held on graceful stems. Bushes are vigorous, of medium height with thick, dark green leaves. Promises to be a popular variety the coming season. A Semi-Cactus, inclining to the Informal Decorative Class.

Plants, $\$ 5.00$
TANG (Downs), 1931, ge, Bloom $9 \times 6$, Bush $41 / 2$ ft. A very showy and decidedly Informal Decorative that is surely a bright color combination of orange flame with gold shadings and a tan reverse showing up to advantage. Although the stem may not be as good as its predecessor, Jane Cowl, it will hold the bloom facing, which is sufficient. This dahlia is a good grower with dark, heavy foliage.

The Originator's Plants, $\$ 7.50$
TARRYTOWN (McDonald), 1931. We do not know much about this dahlia, but it looked good to us in Trenton. It is a deep gold with mauve and bronze shadings of the Informal Decorative type with broad heavy petals.

Roots, $\$ 7.50$; Plants, $\$ 3.75$

## NEW VARIETIES

## Grown from Originators' Stock

ELEANOR REED (Reed-Dahliadel), cge, Bloom $8 \times 5$, Bush 4 ft. This fine Formal Decorative has been on the market a few years, but just came to our attention the past fall. It has been winning at local shows in the pink class, also in basket classes. It can be grown according to Drawing Z, as it does not need topping to make it branch. Keeps wonderfully well and is a free bloomer. Although in the same color class with many good dahlias, it is a clean, even shade of bright mauve rose, and its fine stems, depth of bloom, free blooming qualities and flowering habits will make it popular.

Roots, \$2.50; Plants, $\$ 1.25$
JEAN TRIMBEE (Trimbee), 1930, ge, Bloom $10 \times 4$. A dahlia that is classified as a SemiCactus, but really should be in the Informal Decorative Class, out of fairness to the former class. The petals are heavy, and not only are they revolute, but they curl and twist, making a massive yet artistic flower of a beautiful petunia violet. Strong, vigorous grower.

Plants, $\$ 5.00$
JOSEPHINE G (Grosscross), 1930. Semi-Cactus awarded Certificate of Merit at Storrs in 1929. Won in the Semi-Cactus Class in New York, 1930, and is one of the most charming of the new introductions. Color is a very pleasing true rose pink of a bright shade, some petals tipped yellow. A prolific bloomer and sturdy grower which comes to us well recommended.
ORIENTAL BEAUTY (Barker), 1930, cge, Bloom $7 \times$ 4, Bush 6 ft. This western variety has been very favorably spoken of in the East the past season. The color is a bright rose pink of a slightly deeper tone than Delice. Petals gracefully curl and twist, making in all a very artistic and useful flower. Produced over a long season on strong, rugged bushes.

Plants, \$2.50


# ROW OF THOMAS EDISON DAHLIA 

## Color Plate on Inside Front Cover

THOMAS A. EDISON (Dahliadel 87), 1930, ge, Bloom $9 \times 4$, Bush 4 ft. This gorgeous dahlia, selected and named by permission of the famous electrical wizard, has had its good share of winnings the past season in the West as well as in the East. In the garden it is impressive with its staghorn petal formation, the large, dark green, insect-resistant foliage, the cane-stiff stems, the thrifty growth, and greatest of all, that color, found in no other dahlia, which is as hard to describe as to reproduce in color. It may be described as a royal purple. Received A. D. S. Certificate in 1929 and was recommended for Certificate, D. S. of N. J., 1930. This dahlia is a slow grower and will therefore stand fairly good culture with safety, and should not be topped back, but handled according to Drawing Z. We are confident it will please you.

Roots, $\$ 10.00$; Plants, $\$ 5.00$

## DAHLIA ROOTS OR TUBERS

It has been common practice to call dahlia roots, tubers. This is not correct botanically, as a tuber is a thickened or fleshy portion of underground stem having eyes or buds, from which new plants are produced, such as the potato; while a root does not contain eyes or buds. In the case of the dahlia, we really have a tuberous root with eyes on the crown and not on the true root itself. New varieties or species of plants grown from roots, not tubers, are patentable under the new plant patent act. This makes it necessary to call a dahlia root by its correct name.


SPORT (Dahliadel 82), ge, Bloom $8 \times 31 / 2$, Bush $51 / 2 f$ t. As its name indicates, it is a sport of F. W. Fellows with all its merits, but a pleasing shade of deep buttercup yellow with buff shadings at centre. This variety has never reverted to its parent. A wonderful exhibition flower and a favorite in the garden.
.75
AMERICAN TRIUMPH (Nuneviller 85), 1930, $\boldsymbol{c} \boldsymbol{g}$ e, Bloom $8 \times 4$, Bush 5 ft. Color, oriental or bright, clear red. Blooms, with high, full centres, are held rigid on long, straight stems. Petals are decidedly incurved. Good garden and exhibition flower, as it is an exceptionally good keeper. Winner of the American Home Achievement Medal at New York 1929. Susceptible to th:ip and leaf-hopper injury, but is well worth your effort when sprayed or dusted.

Roots, $\$ 5.00$; Plants, $\$ 2.50$
BALLET GIRL (Boston 78), ge, Bloom $8 \times 31 / 2$, Bush $41 / 2 f$ f. Beautiful flowers of immense size. Color, orange, tipped white. Some flowers pure orange, with other variations on same bush. Early and free bloomer.
F. W. FELLOWS (Stredwick 80), ge, Bloom $8 \times 31 / 2$, Bush $51 / 2 \mathrm{ft}$. Still a favorite on the exhibition table- Flowers are of an ideal cactus form. Color, lively orange scarlet.


GOLDEN SONNE (De Wilde 85), c ge, Blocm 7 x 4, Bush 3 ft . This variety is one of the very best commercial cactus dahlias grown. It not only gives you a quantity of early blooms suitable for most any use, but continues throughout the season. Flowers are of medium size on excellent stems and keep wonderfully well either on the bush or when cut. Color, clear golden yellow, shading to soft salmon rose on the outside petals. A dahlia we can heartily recommend.

Roots, $\$ 2.00$; Plants, $\$ 1.00$
AMBASSADOR (Broomall 85), cge, Bloom $8 \times 4$, Bush 5 ft. This fine flower is very popular at the dahlia shows. Color, soft yellow buff, shaded salmon pink. Well-formed flowers, held erect above the foliage. Bushes branch readily and produce a multitude of flowers. . 75

ANDREAS HOFER (Holland 80), c g, Bloom $6 \times 3$, Bush $41 / 2 \mathrm{ft}$. Ideal form with narrow petals of a delicate pink with salmon suffusion, passing to a creamy white centre. A free bloomer on long, stiff, wiry stems.

C. B. GITHENS (Peacock 80), cge, Bloom $7 \times 31 / 2$, Bush $51 / 2 \mathrm{ft}$. One of the best clear yellow cactus dahlias we grow. Produces well-formed flowers of good substance and keeping qualities, on long, slender but stiff stems. Valuable for exhibition and as a commercial.
ADDA PATTERSON (Kemp 82), c ge, Bloom $8 \times 4$, Bush $61 / 2 \mathrm{ft}$. We believe it to be the best pure white of its type. Flowers are large, of a splendid, even form, on long, erect stems. A wonderful exhibition variety on account of its keeping qualities, along with its size, stem and form.

Roots, $\$ 1.50 ;$ Plants, $\$ 1.00$
A. LINCOLN (Peacock 83), 1930, cge, Bloom $8 \times 4$, Bush 5 ft. This dahlia is a free, open grower, especially good early in the season, stems long and erect. Color, bright spectrum red with a rose red reflex. Should prove very satisfactory where growing season is short.

Roots, \$5.00; Plants, \$2.50
CALIFORNIA BEAUTY (Broomall 81), cge, Bloom $7 \times 31 / 2$, Bush $41 / 2 f t$. A pure copper in color. We have found this variety to be one of the best keepers as a cut flower, and we have never had enough for the market. Bush growth and stem excellent.
.50
CONQUISTADOR (Ballay 84), 1929, g e, Bloom $10 \times 6$, Bush 6 ft. A massive dahlia with broad petals of a soft, creamy yellow, shading to a glowing pink at base of petals. Pink coloring from within gives an illuminated effect. Plant is tall and vigorous. An improved and enlarged Ambassador with petals somewhat heavier. It proved somewhat temperamental last season and, although not easy to grow and a shy bloomer, is real when you get it.

Roots, \$5.00; Plants, \$2.50
ELLA MAY (Prentice-Dahliadel 84), ge, Bloom $8 \times 5$, Bush 5 ft. Until recent years we have had few true cactus dahlias with a real good stem, but that is what we have in this dahlia. Flowers are large and deep, with full centres and a deep, rich crimson carmine, dark and yet rich. Bush is a good open grower. A dahlia that is decidedly distinctive.

Roots, \$2.00; Plants, \$1.00

## RECURVED and STRAIGHT CACTUS DAHLIAS-Continued

EAIR ELAINE (Ballay 82), 1929, $g e$, Bloom $9 x 3$, Bush 6 ft. This dahlia may be described as an improved Nibelungenhort. Delicate old rose with golden illumination. Numerous branches produce quantities of well-formed blooms.

Roots, \$5.00; Plants, \$2.50
FORDHOOK CRAWFISH (Burpee 80), c $g e$, Bloom $7 \times 31 / 2, B u s h 6 f t$. This well-formed flower is a violet rose, shading lighter, with a white centre. Keeps well when cut. Stems are long and stiff, bush growth healthy. A. D. S. Certificate.
$\$ 1.00$
IAN (Boston 82), ge, Bloom $8 x 4$, Bush $51 / 2 f t$. A giant of the incurved English form, but with heavier petals of unusual coloring and exceptionally good form. Color, very clear yellow, gradually shading to pink on the outer petals, while reverse of these petals reveals a golden suffusion. Flowers occasionally show a white tipping. Blooms freely on good stems, making it very desirable for cutting and exhibiting.
$\$ 1.00$
KALIF (G. \& K. 83), ge, Bloom $9 \times 4$, Bush 5 ft. Color, rich strawberry red or carmine. The mammoth flowers are borne in great profusion. An old favorite and a good cut flower. Base of petals broader than illustration.
.50

## POTASH FED DAHLIAS

"Potash Fed Dahlias" is not a secret or just a trade name, but a modern method of growing dahlias so that they are literally alive with energy, making failure well-nigh impossible. Our whole object in producing such stock is so that you may reap the harvest of blooms, and our cultural directions in the center of the catalog are to aid you in growing them successfully.

The application of Potash in combination with the other elements necessary for proper plant growth (See Fertilizer), accompanied with the following conditions, will produce Potash Fed Dahlias.

First: Cultivation to aerate and sweeten the soil to keep the plant in a steady, healthy, growing condition. See Cultivating.

Second: Watering when necessary to make and keep the plant food available at all times. See Irrigation.

Third: Most important of all is the health of the stock from which your plants or roots were grown. This condition has its direct effect on the results obtained, for an unhealthy plant, whether stunted or diseased, cannot take up potash or any other element of plant food in sufficient quantities while in this debilitated condition. Hence, unhealthy or diseased plants cannot be "Potash Fed" even if grown in the midst of plenty.

If we were to say "Corn Fed Pork," at once we would see the pig eating corn, but when we say "Potash Fed Dahlias," it is hard to visualize a dahlia feeding on potash, as it is something we cannot see. It is necessary to have the right food available when it is needed, and the animal or plant must be in a healthy state to make proper use of the food and give the results you are looking for.

## DAHLIADEL NEWS

Scattered through the catalog you will find short bits of news that we hope will be of interest to our readers, for it seems as though friends of the dahlia are friends of ours, and anyone interested in flowers should give dahlias their share of interest and admiration.

We urge all dahlia and flower lovers to join some society devoted to horticultural advancement. You know, somehow, the worthwhile people of today take to flowers, horticulture, music, or art as a hobby, if nothing else. It doesn't matter whether or not they have money, the love for beauty seems to be preeminent. You will get quite a thrill visiting their shows and even more pleasure if you take part in them and exhibit. It's lots of fun to win prizes. Let me assure you that the classes are very easy to enter, and after a little experience you will surely start winning.

Last season's drought discouraged only the timid, for good dahlias were grown, as shown by the exhibits. Imagine what our shows will be this fall if we only have the weather man with us, for without a doubt the varieties coming into prominence in the showroom are far ahead of those popular only two or three years ago. Our Potash-Fed Dahlia Family is sure to please, and here's hoping for better climatic conditions.


KARL BONAWITZ (Dahliadel 86), 1931, ge, Bloom $8 \times 5$, Height 6 ft. Chosen by and named for the noted organist who was playing in Atlantic City during the Flower and Garden Pageant. Upon naming the dahlia for Mr. Bonawitz, he, in turn, dedicated to Dahliadel Nurseries one of his latest compositions, an intermezzo, and named it Dahliadel. He also played it several times on the world's largest organ during the exhibit. The entire make-up of this dahlia will appeal to the artistic. It has sufficient size to assert itself, while the form, color and keeping qualities make it graceful as well as useful. It comes the nearest to developing a perfect bush without topping or disbudding of any dahlia we know, just naturally branches and produces perfect and uniform blooms on long, erect stems. It responds, however, to disbudding (as shown in Drawing X or Z ) and will give you stems up to 4 feet in length. Color is a brilliant velvety carmine. This variety was featured by us in four of the big Eastern shows where it was greatly admired and was one of our best keepers.

Plants only, $\$ 5.00$

## SEMI-CACTUS DAHLIAS-Continued

A. A. STYVERS (Boston), 1929, ge, Bloom $8 \times 3$, Bush $51 / 2 \mathrm{ft}$. Amber-shaded rose with creamy tan centre. A Semi-Cactus with incurved petals, somewhat distinctive in coloring, of good form on long stems, keeping well when cut.
$\$ 3.00$
ALICE WHITTIER (Reed 82), ge, Bloom $10 \times 5$, Bush 7 ft. One of the largest and finest primrose yellow semi-cactus dahlias for exhibition, on good stems. A. D. S. and The D. S. of N. J. Cert.

Roots, $\$ 1.50$; Plants, .75
DADDY BUTLER (Boston 80), ge, Bloom $7 \times 4$, Bush 6 ft. An early, profuse bloomer and good keeper on perfect stems. Color, rosy carmine, reverse of petals lighter.
.75
EAGLE ROCK WONDER (Broomall-Success), 1930, ge, Bloom $11 \times 5$, Bush 5 ft. A massive dahlia that does not respond particularly well to light soil, but we believe it will do well in heavy soil with plenty of feed, as it has won in several shows for the largest and most perfect bloom. Color is Mars orange flushed with gold and salmon. It sometimes forms buds on the back of the flowers, but these can be easily removed before the main flower is fully developed.

Rocts, $\$ 15.00$; Plants, $\$ 7.50$
EDNA FERBER (F. \& M. 89), c ge, Bloom $9 \times 4$, Bush 5 ft. The extreme size and beauty of this flower attract attention wherever shown. The petals are curled and twisted, forming an extremely full flower held erect on fine stems. Color, glistening coral, shading to old gold at base of petals. A good, strong grower with dark green foliage. D. S. of N. J. Cert.

Roots, $\$ 2.00$; Plants, $\$ 1.00$
MARIPOSA (Boston 83), cge,Bloom $\mathbf{8 x 4} \boldsymbol{\operatorname { c }}$, Bush 6 ft . This popular flower is of great depth, perfect form, with incurved petals. A beautiful pink, shading darker at the centre with a violet suffusion, which adds to the effect. A sturdy grower and great favorite. 75

PAULINA (Hall 80), ge, Bloom $8 \times 31 / 2$, Bush $51 / 2 \mathrm{ft}$. This dahlia grows to exhibition size on long, strong stems. It is an early and abundant bloomer with full-centred flowers. Color is a light orange suffused with amaranth pink on the reverse.
$\$ 1.00$
SUNKISS (Yezek 82), c g, Bloom $8 \times 4$, Bush $51 / 2$ ft. A truly pastel combination of straw yellow with a heavy fawn suffusion on the outer edge, making it a universal favorite. A free and early bloomer on fine stems, making it very desirable for cutting.
$\$ 1.00$
YOSEMITE (Redfern 82), 1930, ge, Bloom $8 \times 4$, Bush 5 ft. The form of this dahlia is very similar to the illustration of Karl Bonawitz. The blooms are a clear amaranth pink and are held on strong erect stems. Its artistic form and beautiful coloring make it very desirable.

Roots, $\$ 7.50$; Plants, $\$ 3.75$
ALL THE ABOVE VARIETIES ARE THE SAME FORM AS ILLUSTRATION

## DOINGS OF THE A. D. S.

The American Dahlia Society, our National Organization, will hold its show in the Ballroom of the Commodore Hotel, New York City, the third week in September, 1931. We consider the change from Madison Square Garden a very good one, and we are looking for a real show, so keep the date open and help us to make this show bigger and better than ever.

The A. D. S. membership is only $\$ 2.00$ a year, and the big quarterly bulletins are more than worth the dues. In them you will find much news and data of interest to all dahlia lovers which is found in no other publication. William J. Rathgeber, 198 Norton Street, New Haven, Conn., is our secretary.

The A. D. S. Trial Patch at Storrs, Conn., is under the supervision of Prof. Roland Patch, a very genial gentleman. This is where you send your seedlings to find out if they are any good. The fee for each seedling is $\$ 2.00$. Three roots or plants are required. They will be judged by competent judges. Scores and descriptions are published in the January Bulletin and the stock returned to you. Just write Professor Patch for entry blanks.

The new classification has worked very well in the big eastern shows the past season as well as in a number of smaller shows. It is the hope of the writer that with a few minor changes it will be submitted to the A. D. S. for official adoption. The new classification has been withheld until it was found to be workable under all conditions, and we believe it will be with only minor changes.


EMMA MARIE (Dahliadel 83), c ge, Bloom $71 / 2 x 3$, Bush 6 fi. A favorite because of its pleasing shade of clear pink with a creamy white centre and its combination of exhibition and commercial qualities. It is a robust grower, producing deep, full-centred blooms on three to four foot stems in ordinary field culture.

Roots, $\$ 1.00$; Plants, 50
ELSIE DANIELS (M. \& S. 83), ge, Bloom $9 \times 4$, Bush $41 / 2 f t$. The color of this wonderful dahlia is pale violet orchid with long, wavy white centre petals. Bushes grow well with immense exhibition blooms held well out of the foliage on strong stems.
.75
FRANCIS LOBDELL (Waite 80), ge, Bloom $7 \times 5$, Bush 5 ft. Flowers large and of perfect form, mallow pink, shading to white in the centre. Wonderful free and early bloomer, splendid bedding variety as well as exhibition.
.75
JERSEY'S SWEETHEART (Waite 82), c g, Bloom $7 \times 31 / 2$, Bush $31 / 2 f t$. A dainty, attractive variety for cutting. Delice pink, shading to white in the centre. Flowers produced in great quantities on slender, stiff stems. Roots, $\$ 1.00$; Plants, 50
LA MEXICANA (F. \& M. 85), 1928, ge, Bloom $8 \times 4$, Bush $41 / 2 f t$. This dahlia will appeal to those who liked the color of The U. S. A. Its form is very similar to illustration, while its color is a blending of burnt orange and copper tinged with gold. Blooms freely on slender, stiff stems.

Roots, $\$ 2.00$; Plants, $\$ 1.00$
MINNIE EASTMAN (Eastman 85), 1929, c ge, Bloom $8 \times 4$, Bush 6 ft . This fine introduction has been a popular winner for the past three years. It is a very pretty semi-cactus of a bright flame color with undershadings of deep yellow. Stems long and erect. Bush growth healthy, with smooth, glossy foliage.

Roots, \$5.00; Plants, $\$ 2.50$
SISKIYOU (Broomall 80), ge, Bloom $10 \times 3$, Bush $31 / 2$ ft. Here we have the dahlia that has won in the largest bloom class repeatedly, but on diameter, not considering depth. Flowers hrid erect on long, strong stems. Color, pink tinted mauve. Petals rather blunt and flat.

Roots, \$1.50; Plants, $\$ 1.00$


LA RODA (Broomall 84), c ge, Bloom $10 \times 4$, Bush 5 ft . This beautiful variety is an unusual silver rose pink shading lighter at the centre with large, well-formed flowers held on strong stems. The formation is somewhat irregular, with numerous petals at the centre. A good keeper for cutting. It is a shy root maker, either from roots or green plants.

Roots, $\$ 5.00$; Plants, $\$ 2.50$
CITY OF NEW YORK (Harding 86), 1929, ge, Bloom $10 \times 5$, Bush $41 / 2 \mathrm{ft}$. A very attractive and distinctive dahlia. Color, pale golden amber at centre, softly overshaded light salmon passing to a rich salmon rose on the edges of the petals. This unusual coloring, along with its graceful form, good-keeping qualities, and growing habits make it very desirable

Roots, $\$ 7.50$; Plants, $\$ 3.75$

SEMI-CACTUS \& INFORMAL DECORATIVE DAHLIAS— Continued
JIM MOORE (Loller S6), 1930, c ge, Bloom $10 \times 4$, Bush $5 \frac{1}{2} f t$. A dahlia worthy of space in anyone's garden. It is distinctive in form and color. The petals are long and regular, rolling back at tips, while the color is a primrose yellow shaded gold and suffused salmon. A good healthy grower.

Roots, \$7.50; Plants, \$3.75
META SCAMMEL (Andrews 82), 1929, ge, Blooms $9 \times 41 / 2$, Bush 5 ft. Centre pale amaranth pink shading to deep amaranth pink. Artistic because of its irregularly placed petals and pointed tips, which curl and twist, giving depth to the flower. Held high above dark green foliage on long, slender stems. Good growing habits.

Roots, $\$ 3.00$; Plants, $\$ 1.50$
ROBERT E. LEE (Peacock 85), 1930, c ge, Bloom $81 / 2 \times 4$, Bush 5 ft. A rich red that does not fade is decidedly uncommon and that is what attracts you to this dahlia, along with its good form, erect stems, and free-blooming habits, making it an ideal cut flower and exhibition dahlia. Winner in Open to All Class at Camden as Best Red. To get stems for cutting follow Drawing Y.

Roots $\$ \mathbf{1 0 . 0 0}$; Plants, $\$ 5.00$


## INFORMAL DECORATIVE OR SEMI-CACTUS DAHLIAS—Continued

Lincoln G. Dickey as pictured is an Informal Decorative and was photographed late in the season. In the early season this variety will be a perfect Semi-Cactus. Other varieties listed below will also vary in type with the season.
LINCOLN G. DICKEY (Dahliadel 85), 1931, g e, Bloom $91 / 2 \times 5$, Bush $31 / 2$ ft. Here is about the most prolific producer of fine blooms it has ever been our good fortune to grow. Color, primrose yellow with a decided rose suffusion. Disbud it and the blooms will be immense, grow it naturally and they will be of good size in great quantities. One of the earliest to bloom and among the last to finish. The growing habits are ideal, making this dahlia really great, though not spectacular. Lincoln G. Dickey, named for the Manager of the Atlantic City Auditorium, will be grown when many more spectacular dahlias have passed on. Won first in Atlantic City in Semi-Cactus Seedling Class and has been recommended for Certificate at the New Jersey Dahlia Society Trial Grounds 1930.

Roots, $\$ 10.00 ;$ Plants, $\$ 5.00$
BREAK O'DAY (Dahliadel 76), g, Bloom $7 \times 4$, Bush 6 ft. A popular standard variety. The color is a delicate clear sulphur yellow, shading to sulphur white at tips, illuminated by a satiny sheen, giving the flower a waxy appearance. A. D. S. Cert. A strong grower and profuse bloomer.
.50
CIGARETTE (Boston 81), c g, Bloom $7 \times 4$, Bush $61 / 2$ ft. Creamy white, heavily edged orange with color variations. Some flowers come all orange red. Petals are long and narrow, inclined to roll. Blooms large, of good substance on excellent stems. Good for cutting. . 75
DAINTY MAID (Kemp 81), c g, Bloom $6 \times 4$, Bush $51 / 2 \mathrm{ft}$. This is the dahlia for those desiring beauty and grace, but not size. It is an early and profuse bloomer on upright bushes. Color, light sulphur yellow, a little deeper than Break O'Day. Blooms and stems are perfect. Its wonderful keeping qualities make it an ideal cut flower. $\$ 1.00$
EAGLE ROCK BEAUTY (Broomall 84), ge, Bloom $9 \times 31 / 2$, Bush 5 ft. This fine, impressive dahlia certainly is a pretty combination of pastel pink with ivory or creamy white centre. Petals long and gracefully twisted. A pleasing and satisfactory variety.

Roots, \$2.50; Plants, $\$ 1.25$
MY MARYLAND (Downs 83), c $\boldsymbol{g}$ e, Bloom $8 \times 4$, Bush 5 ft. This graceful, broad-petaled dahlia is a rich bright pink, each petal tipped with ivory. Flowers are large on strong stems. This dahlia reminds one of a glorified Attraction with more pink in its make-up, larger and with a better centre. A. D. S. Cert.

Roots, $\$ 5.00 ;$ Plants, $\$ 2.50$

# Second National Atlantic City Flower and Garden Pageant 

## September 4 to 10, 1931, inclusive

Inaugurated last year for the first time, this great event in the world of horticulture immediately became a fixture. Staged in the largest and finest show hall in the world, the pageant offers to garden lovers a twofold opportunity-first, to exhibit some of the products of their own gardens for the many fine prizes offered, and second, to view the newest and finest in garden plants arranged in unusual and beautiful fashion. Dahliadel Nurseries invite their customers and friends to plan and plant for this most unusual event. The first show was a wonderful success, and from current comments the second show will be received even more enthusiastically, as those who missed this year's have been told so much about it by their friends who saw it. Complete information and schedules of classes may be secured by writing J. W. Johnston, Director, The Bourse, Philadelphia, Penna.

## Dahlia Society of New Jersey

The Dahlia Society of New Jersey will again hold its Show in Atlantic City with the Flower and Garden Pageant, where many valuable prizes will be offered as well as over $\$ 1,000$ in cash for the dahlia classes.

This, our state society, is a wide-awake organization, doing fully as much advance work to promote interest and uphold the high standards for growing the dahlia as any society I know of. It is now working with a new, snappy monthly periodical, New Jersey Gardens, which is included in the dues of $\$ 2.00$ a year.

Miss Virginia Stout, Short Hills, N. J., the head of our new Membership Committee, will be pleased to give you any information concerning what we are doing in New Jersey. Send dues, drawn to order of Dahlia Society of New Jersey, to Mrs. F. S. Fisher, 121 Abernethy Drive Trenton, N. J.


JANE COWL (Downs 88), cge, Bloom $10 \times 6$, Bush $51 / 2$ ft. This wonderful dahlia has been a success wherever grown. Color, a warm buff and old gold, blending to apricot and rose at the centre. Bush growth is ideal with strong stems holding the giant flowers upright. A dahlia that is sure to please you, for it is large and impressive. A. D. S. Certificate.

Roots, $\$ 3.00$; Plants, $\$ 1.50$
MILDRED BROOKS HOOVER (Broomall 83), 1929, ge, Bloom 10 x 5, Bush $41 / 2 \mathrm{ft}$. This dahlia is distinctive because of its unusual formation. Color, reddish violet or described by some as Spinel red. Stems are strong and hold the blooms well out of the foliage. This variety will remind you of Rosa Nell, with larger blooms of a shaggy formation.

Roots, \$5.00; Plants, \$2.50
MRS. KENYON (Harding 86), 1929, ge, Bloom 9 x 4, Bush $41 / 2 f t$. A dahlia you will be pleased with, as it is a rich salmon to peach pink, shading to orchid at the tips. It is a strong, healthy grower with leathery foliage. Flowers held facing partially upward on strong stems.

## INFORMAL DECORATIVE DAHLIAS - Continued

SANHICAN'S PEACH (F. \& M. 80), g e, Bloom $81 / 2 \times 4$, Bush $41 / 2$ ft. A charming, fluffy decorative. In color it is a reddish salmon with buttercup shadings, reminding one of a ripe California peach. Its attractiveness is further enhanced by the oddly twisted petals. Rich dark green foliage, upright stems and good habit of growth. Roots, $\mathbf{\$ 2 . 0 0}$; Plants, $\overline{\mathbf{s}} \mathbf{1} .00$ VALESKA (Ballay 85), ge, Bloom $9 \times 5$, Bush $5 f t$. An even tone, clear lilac without shadings, except being somewhat darker at the centre. Flowers are of a deep formation, full centres, and held on long, erect stems. Plant growth rugged and healthy.

Plants, \$1.75


FORT MONMOUTH (Kemp 90), 1928, ge, Bloom $11 \times 4$, Bush $61 / 2 \mathrm{ft}$. This giant dahlia was even a greater winner at the shows this year than last. The predominating color is rich claret with brightness, unusual in darker tones. Flowers are full centred and well
formed, borne on long, stiff stems high above the foliage. A very prolific grower and bloomer. The new classification has changed this dahlia to the Informal Decorative Class, but it will continue as a winner.

Roots, $\$ 5.00 ;$ Plants, $\$ 2.50$

COQUETTE (F. \& M. 86), 1929, c g, Bloom $10 \times 6$, Bush 5 ft. A very spectacular dahlia of Spanish coloring, bright red blending with gold. Petals twist and curl, showing the golden reflex. Blooms keep well if fully matured when cut. The heavy dark green foliage makes it insect-resistant. Free bloomer on long stems.

Roots, $\$ 3.00 ;$ Plants, $\$ 1.50$


WALDHEIM SUNSHINE (Peacock 85), c ge, Bloom $10 \times 41 / 2$, Bush $5 \frac{1}{2}$ ft. This giant yet graceful dahlia is one of the best. A true deep yellow that will show up yellow under artificial light. The reflex is darker, and there is a rich golden suffusion around the beautiful full, high centre. The bush growth is good, stems are strong and erect. It is a sturdy grower and free bloomer. The centres were perfectly full when killed by frost.

Roots, $\$ 5.00 ;$ Plants, $\$ 2.50$
BAGDAD (Redfern 86), 1930, ge, Bloom $10 \times 4$, Bush 6 ft. This dahlia proved very satisfactory and promising for us. It is a beautiful brilliant scarlet flame of wonderful size. Good bush growth and a good bloomer. The long stems hold blooms high above the bush. Should be a popular winner in the showroom.

Plants, $\$ 5.00$

## INFORMAL DECORATIVE DAHLIAS-Continued

BIG CHIEF (Reed 80), 1929, ge, Bloom $10 \times 5$, Bush 5 ft . A massive yet rather attractive dahlia on strong, erect stems. Stands a good chance of winning in the largest bloom class. Color, salmon buff with rose shadings. Bush healthy and strong.

Roots, $\$ 5.00 ;$ Plants, $\$ 2.50$
CHARLOTTE LAFRENZ (Seal 82), ge, Bloom $10 \times 31 / 2, B u s h 6 \mathrm{ft}$. The petals are long, partially fluted and then twisted, which give the flower an unusual form. Color, gold with rose red and apricot shadings. Flowers are held on long stems; bush a strong grower. Roots, $\$ 2.50$; Plants, $\$ 1.25$
DONNA CALIFORNIA (Ballay 82), 1930, ge, Bloom 12 x 4, Bush $51 / 2$ ft. A rather distinctive dahlia. Color, deep rose pink, suffused lavender with irregular pointed petals twisting gracefully. The petals are loose and artistic in formation and the flowers are large in diameter, but not very deep. Bush growth is strong and healthy with stems strong and erect. Plants, $\$ 5.00$
FORDHOOK EMPEROR (Burpee 85), 1930, c ge,Bloom 9 x 3, Bush 4 ft. A glorious blending of rich salmon and rose produces a general effect of apricot in this giant flower. The healthy foliage, good substance of the bloom, and the fine growing habits of this striking dahlia will make it a splendid addition to your garden. Roots, $\$ 5.00$; Plants, $\$ 2.50$
GOOD NIGHT (Broomall 86), 1929, ge, Bloom $10 \times 5$, Bush 5 ft. One of the prettiest dark dahlias we have had the pleasure of growing. Good throughout the season. Color, oxblood red shaded maroon. If this dahlia has a fault, we have not found it, which is saying a great deal, as it has size, form and stem, as well as being an early and profuse bloomer.

Plants, \$3.75
HATHOR (Seal 80), g, Bloom $8 \times 3$, Bush 6 ft. A dahlia of vivid coloring, not red, but soft flame, shading to lemon yellow at the base of each petal. Blooms are large with pointed petals and artistic formation on erect stems.
JERSEY'S EMPRESS (Waite 82), g, Bloom $9 \times 31 / 2$, Bush $51 / 2$ ft. A large anthracene violet dahlia of pleasing formation, having narrow and wavy petals. Good depth and substance Color is almost sunproof. Stems fair. Roots, \$2.00; Plants, \$1.00
JUDGE SHINN (Kemp 80), ge, Bloom $8 \times 31 / 2$, Bush 7 ft. Color, a pleasing combination of gold and salmon, gold predominating at the centre and salmon in the outer petals. This dahlia was named for the Hon. C. C. Shinn, an ardent dahlia fan, of Atlantic City. It is fine for background planting, as it is a tall, vigorous grower.
$\$ 5.00$
KING MIDAS (Peacock 85), ge, Bloom $10 \times 4$, Bush 4 ft. A very popular yellow dahlia. The plant growth is sturdy, stems are long and erect. For disbudding it responds best to Drawing X and comes into bloom about six weeks after second pinching out. Centres are high and full to the end of the season.

Roots, $\$ 5.00$; Plants, $\$ 2.50$
MABEL S. DOUGLAS (Thompson 83), 1930, ge, Bloom $10 \times 4$, Bush 6 ft. This dahlia is of artistic formation with long, curled, pointed petals. In color it is a beautiful pastel lavender. We believe this dahlia will do well in heavy soil. It needs staking and can be disbudded according to Drawing X or Z .

Plants, $\$ 5.00$
PAPILLON (Boston 79), ge, Bloom $8 \times 31 / 2$, Bush $51 / 2 \mathrm{ft}$. Described as an improved George Walters, which it resembles, although quite different in coloring. Beautiful old rose illuminated with golden lights.
RODMAN WANAMAKER (Peacock 82), c $\boldsymbol{g}$ e, Bloom $10 \times 3$, Bush $5 \frac{1}{2}$ ft. One of our strongest growing varieties, producing large flowers on long, strong stems. Buds are a pale yellow, but as the flower expands develop into a bronzy salmon pink. This variety has a real peony centre, which does not detract from its beauty. Roots, $\$ 1.50$; Plants, $\$ 1.00$
SANHICAN'S NYMPH (F. \& M. 84), ge, Bloom $8 \times 4$, Bush 5 ft. A dahlia suitable for exhibition. It is a deep flower with a very full centre. Color, a beautiful primrose yellow with a shade of fawn rose on the reverse of petals, the latter color showing up more clearly at the centre of the flower. Flowers face upward on strong stems. Roots, $\$ 3.00$; Plants, $\$ 1.50$
THE GRIZZLY (Burns 79), ge, Bloom 8 x 3, Bush 6 ft. Still a good seller and popular because it is a strong upright grower and free bloomer. Color, velvety, crimson maroon. $\$ .75$
TY COBB (Peacock 80), 1929, g, Bloom $8 \times 5$, Bush 5 ft . This well-formed dahlia is brilliant glowing garnet, shading deeper with a lustrous sheen and reflex of reddish violet. Strong plant of dark green, glossy leaves. A showy garden variety producing an abundance of flowers on fairly good stems.

Plants, $\$ 2.50$
WHITE EMPRESS (Jost 82), 1929, c ge, Bloom $8 \times 5$, Bush $51 / 2$ ft. This dahlia won in New York in 1928 as the best keeper. It is a strong, healthy grower with leathery foliage. Stems are strong and erect. Color, almost a pure white. Not an overly abundant root maker, either from roots or plants.

Roots, $\$ 5.00$; Plants, $\$ 2.50$
WONDERLAND (Bissell 78), g, Bloom $10 \times 3$, Bush 6 ft . Flowers are of large exhibition type, deep, velvety garnet purple, reverse light rosy magenta. Petals are twisted and curled, making a two-toned effect.

Roots, \$1.50; Plants, . 75


INFORMAL DECORATIVE
DWIGHT W. MORROW

## INFORMAL DECORATIVE DAHLIAS-Continued

AVALON (Broomall 80), c ge, Bloom $7 \times 3$, Bush $5 f t$. This dahlia is a good root maker. Color, pure canary yellow. Long, erect stems under normal culture, but excessive water and manure will produce weak stems. Thinning out and disbudding is advisable shortly after topping.
AZTEC GLORY (Broomall 86), $g$ e, Bloom $10 \times 5$, Bush $31 / 2 f t$. "We believe this to be the most spectacular yellow exhibition dahlia yet introduced. It is a clear picric yellow with deep, massive flowers of most artistic formation held on strong, erect stems. Foliage is glossy green, having somewhat the appearance of holly.

Roots, $\$ 3.00 ;$ Plants, $\$ 1.50$
BARBARA WEAR (Seal 83), cge, Bloom $8 \times 4$, Bush $51 / 2 f t$. A rather unique dahlia of artistic formation and good size. Color, soft violet rose with creamy white undershadings. Stems are long and erect. Bushes strong, healthy.

Roots, \$2.50; Plants, \$1.25
FORDHOOK VICTORY (Burpee 80), g, Bloom $8 \times 4$, Bush 4 ft. Blooms are large and graceful with full centers. Color, silvery Tyrian rose. Bush growth good with heavy foliage. Stems fair.

Roots, $\$ 1.50 ;$ Plants, .75
JERSEY'S IDEAL (Waite 83), ge, Bloom $9 \times 5$, Bush $31 / 2 \mathrm{ft}$. We consider this one of the best of the Jerseys. The flowers are held erect on strong stems. Leaves inclined to yellow in hot weather, but do well when dahlia weather comes on. Color varies between a lavender and Phlox pink overlaid with a decided silver sheen.

Roots, $\$ 1.50 ;$ Plants, .75
JERSEY'S SOVEREIGN (Waite 80), ge, Bloom $7 \frac{1}{2} \times 4$, Bush 6 ft. A dahlia worthy of anyone's growing. A good grower, early bloomer, of pleasing shade of salmon orange. . 75
KEMP'S VIOLET WONDER (Kemp 85), ge, Bloom $10 \times 5$, Bush 5 ft. The predominating color of this fine dahlia is Napthaline violet, with an undertone of royal purple, lightening to a faint bluish violet at the tips of petals. Deep flowers of perfect form. Stems are stiff, holding flowers a foot above the foliage. A truly outstanding variety, keeping well when cut. Plant is a prolific bloomer, strong grower, not susceptible to sucking insects. D. S. of N. J. Cert. A. D. S. Gold Medal Ribbon.

Roots, $\$ 5.00$; Plants, $\$ 2.50$
MARGARET WOODROW WILSON (F. \& M. 84), ge, Bloom $9 \times 4$, Bush $41 / 2 \mathrm{ft}$. An exhibition decorative of immense size and wondrous beauty. Color, an opalescent pink. Face of petals creamy white with a phlox pink reverse. D. S. of N. J. Cert. A good grower and early and profuse bloomer.
$\$ 1.00$
MARTHA KEMP (Kemp 84), 1928, cge, Bloom $8 \times 5$, Bush 5 ft. A very pretty pastel combination of warm buff shading apricot yellow at base. Flowers deep and artistic, held on long, erect stems. A good grower and bloomer.

Roots, $\$ 3.00$; Plants, $\$ 1.50$
MRS. ALFRED B. SEAL (Seal 85), 1929, ge, Bloom $11 \times 5$, Bush 6 ft . This is an outstanding dahlia of recent introduction from the West. Color, pure glowing old rose or violet rose, but wonderfully lighted without shadings or suffusion. It seems useless to tell all its virtues, as it seems to have most all of them. We know you will like it. It has size, too, for exhibition. Disbud according to Drawing Z.

Roots, $\$ 10.00$; Plants, $\$ 5.00$
NOTTINGHAM BEAUTY ( 80 ), ge e, Bloom $8 \times 3$, Bush 7 ft . A strong, vigorous grower. Color, true purple with white tips. Flowers of good form, size and very showy. Stems pendant.

Roots, $\$ 1.50$; Plants, .75
POP STEWART (F. \& M. 84), $g$ e, Bloom $8 \times 3$, Bush $41 / 2 f t$. A very satisfactory dahlia, blooming early and late, on strong stems. A good grower, although not tall. Color, pure lilac pink and one of the best in this rolor D. S. of N. J. Cert.
$\$ 1.00$
SANHICAN'S BLUEBIRD (F. \& M. 80), ge, Bloom $7 \frac{1}{2} \times 31 / 2$, Bush $41 / 2$ ft. A pleasing near to blue decorative with outer petals of bright violet blue, while the center petals retain the violet tint. An attractive flower on wiry stems.
$\$ 1.50$
SANHICAN'S MAGNATE (F. \& M. 80), ge, Bloom $9 \times 4, B u s h 3 \mathrm{ft}$. A pale amaranth pink, face of petals tinged with a deeper shade and the reverse of petals a solid claret color, heavily veined. A large variety on a dwarf bush suitable for front plantings.
$\$ 1.50$
SUSAN G. TEVIS (Boston 80), ge, Bloom $8 \times 31 / 2$, Bush 5 ft. This variety trends to the blue tones, but is a bright, rich lilac with bluish sheen. A vigorous grower, producing large, perfect blooms on fine stems through the season.
$\$ 1.00$
THE LEMONADE (Ward 80), ge, Bloom $9 \times 4$, Bush 6 ft . Although we have a number of yellows, this dahlia is becoming very popular because of its beauty, size, erect stems, good habit of growth and wonderful keeping qualities. Color, clear sulphur yellow.:

Roots, $\$ 1.50 ;$ Plants, .75
WORLD'S BEST WHITE (Murphy 84), c ge, Bloom $9 \times 31 / 2$, Bush $51 / 2 f$ f. Although grown for a few years, this dahlia is still our best all-around commercial white and equally good for exhibition or the garden. The immense creamy white blooms are borne profusely on stiff stems.
$\$ 1.00$


NORTH'S YELLOW (Peacock-Dahliadel 86), 1929, c ge, Bloom 10 x 4, Bush 6 ft. We do not have many varicties that seem to enjoy August heat, but this one does, and will produce perfect blooms for us when lots of varieties will not. This dahlia should do well in the South, and, as it is such an early bloomer, proves equally good in the North. It is a rapid grower and should be handled according to Drawing X. Color, a clear sulphur yellow without any shadings.

Roots, $\$ 3.00$; Plants, $\$ 1.50$

## INFORMAL DECORATIVE DAHLIAS-Continued

ALBERT VESTAL (Eastman 83), 1930, ge, Bloom $10 \times 4$, Bush 5 ft. This dahlia is unusual in coloring, being a glowing old rose with the appearance of bronze shadings. The large blooms are of artistic formation, held erect well above the foliage. We would suggest Z Drawing for disbudding, otherwise it is apt to be late coming into bloom. A. D. S. Certifi-

Roots, $\$ 7.50$; Plants, $\$ 3.75$
ALTAMONT (Kemp 79), ge, Bloom $10 \times 4$, Bush 7 ft. Large, full flowers with long, slightly curved petals of artistic formation. Stems are long and slender but rigid. Flowers are good keepers and different enough to appeal to you. Color, rose pink, deepening to American Beauty rose at the centre of the flower.

Roots, $\$ 1.50 ;$ Plants, $\$ 1.00$
BARBARA REDFERN (Redfern 80), ge, Bloom $10 \times 41 / 2$, Bush $51 / 2 \mathrm{ft}$. This dahlia is a beautiful combination of old rose and gold. Petals are long, with a slight twist, showing both colors. Deep flowers are held on long stems. A continuous bloomer and healthy grower.

Roots, $\$ 2.00$; Plants, $\$ 1.00$
CHAS. G. REED (Ballay 82), 1930, ge, Bloom $9 \times 4$, Bush $41 / 2 f t$. A rather unusual dahlia in regard to color, which is Burgundy with a lighter reverse, or it might be described as a purple or petunia red. Anyway, it is pretty. Bush is upright and healthy, stems strong: and erect. It is a good garden variety, as well as a prize winner.

Plants, $\$ 5.00$
DOROTHY STONE (F. \& M.), 1930, c g e, Bloom 9 x 4, Bush 5 ft. This dahlia has shown up well in the gardens and in the show room although not as spectacular as its running mate ${ }_{r}$ Kathleen Norris. It is a deeper pink and a deeper flower. A good grower with deep green leathery foliage. Stems are long and erect.

Roots, $\$ 7.50$; Plants, $\$ 3.75$
FLAMING METEOR(Baker 85), $g$ e, Bloom $8 \times 3$, Bush 5 ft. This new dahlia is decidedly attractive owing to its unique form, bright color and good keeping qualities. The flowers have full centres and are borne in profusion on stiff, wiry stems. Color, deep cadmium yellow with heavy scarlet suffusion at the centre, the general effect being a flaming orange. $\quad \$ 1.00$
IVORY (Boston 86), 1929, $g e$, Bloom $91 / 2 \times 5$, Bush 5 ft. Beautifully formed dahlia with long, pointed, wavy petals. Deep cream at base of petals and a shade lighter at outer edges, except for a tiny tip of deep cream. Color does not vary during season and centres are always full. Blooms profusely on stiff stems.

Roots, $\$ \mathbf{1 0 . 0 0}$; Plants, $\$ 5.00$
JACK O'LANTERN (Reed 80), ge, Bloom $9 \times 3$, Bush $51 / 2 \mathrm{ft}$. A bright spot in the garden. Petals are wide and twisted, of a brilliant orange-red, shading to a dark Spanish red near the centre. The petals that form the centre are tipped with gold, making the general effect very bold and brilliant. A good grower and bloomer.
$\$ 1.50$
MARGARET WYLIE (Fraser 80), 1930, Bloom $8 \times 4$, Bush $31 / 2 \mathrm{ft}$. Immense loose-petaled blooms are a beautiful shade of rose red, reverse of petals rose pink and silver. Profuse bloomer on long, stiff stems. Won at Hartford, Conn., for Outstanding Seedling 1929.

Roots, $\$ 7.50$; Plants, $\$ 3.75$
MARMION (Tyler 85), ge, Bloom $11 \times 4$, Bush 6 ft . A giant dahlia of lovely coloring. Pure golden yellow with a bronze centre, and reverse of petals reveals a bronze suffusion. The blooms are held on good stems well above the foliage of the sturdy, strong-growing plant. Good exhibition variety.

Roots, $\$ 1.50$; Plants, .75
PRES. HOOVER (Peacock 82), 1930, ge, Bloom $8 \times 5$, Bush $61 / 2 \mathrm{ft}$. Color is a blending of peach red and begonia rose, reminding you of Papillon, only much brighter. Stems are long, mostly erect. Bush growth is strong and healthy with dark green foliage. It is one of the first dahlias to bloom, and, by pruning and disbudding, will be going strong at the end of the season.

Roots, $\$ 7.50 ;$ Plants, $\$ 3.75$
PRIDE OF STRATFORD (M. \& S. 76), ge, Bloom $9 \times 4, B u s h 5 \mathrm{ft}$. A large dahlia, inclined to be a little bashful, the bloom tipping somewhat at the neck. Form is very good, centres full and color cadmium orange, shaded light orange yellow at base of petals, reverse rose doree.
$\$ 1.00$
REGAL (Boston 82), 1928, ge, Bloom $10 \times 5$, Bush $41 / 2 f t$. Bronze, heavily suffused with dull old rose, with gold shadings at base of petals, giving it a burnished copper effect. Blooms profusely. Flowers held well above the foliage on long, rigid stems.

Roots, $\$ 7.50$; Plants, $\$ 3.75$
SANTA ANNA (Pelicano 83), ge, Bloom 9.x 4, Bush 6 ft . This variety is of artistic formation with petals curled and twisted, while the color is a beautiful salmon rose suffused with old gold. Plant is a good grower with large flowers held well above the foliage.

Roots, $\$ 2.00 ;$ Plants, $\$ 1.00$
SEAL'S CALIFORNIAN (Seal 84), 1929, ge, Bloom $91 / 2$ x 5, Bush $31 / 2$ ft. Broad petals beautifully formed with tiny petaloids of light yellow give flowers an artistic break. Bright golden yellow at centre, shading lighter toward outer petals; tips are suffused very lightly with a bronze rosy pink. Held proudly on strong cane-like stems. Roots, $\$ 5.00$; Plants, $\$ 2.50$


DERRILL W. HART (Broomall 85), 1929, cge, Bloom 10 x 4, Bush 6 ft. Color, deep orange or copper, shading to henna brown. Has a wonderful stem, keeps well when cut, and is a free bloomer. It is a rapid grower, with heavy, dark foliage, and should be cut back severely during the hot weather.

Roots, $\$ 5.00 ;$ Plants, $\$ 2.50$
AMARILLO GRANDE (Broomall 80), $g$ e, Bloom $11 \times 4$, Bush 5 ft. One of the large light yellow dahlias often found on exhibition tables. The flowers are well formed and held on strong, erect stems. A good grower.
ANNA MARIE (Wiegand 81), ge, Bloom $6 \times 3$, Bush 6 ft . This dahlia's popularity is due to its attractive coloring of old gold, suffused reddish salmon, distinctly tipped white. Flowers of good form on fine stems. This variety should be topped, as centre crown blooms are apt to have green centres, but lateral blooms come good until frost.

Roots, $\$ 1.50$; Plants, $\$ 1.00$

## INFORMAL DECORATIVE DAHLIAS-Continued

COLOR SERGEANT (Hall 85), ge, Bloom $10 \times 4$, Bush $51 / 2 \mathrm{ft}$. This striking variety is becoming very popular. Color is unusual, being a rich, deep salmon bronze of one shade. A strong, upright grower with perfect stems. D. S. of N. J. Cert.

Roots, $\$ 3.50$; Plants, $\$ 1.75$
EARLE WILLIAMS (Doolittle 85), c $g$ e, Bloom $8 \times 4$, Bush $51 / 2 \mathrm{ft}$. One of the best bi-colored dahlias. A pleasing scarlet distinctly tipped white with an occasional bloom solid red. Flowers deep and large with full centres of regular form on erect stems.
$\$ 1.00$
FORDHOOK BRIDESMAID (Burpee 80), 1929, c g e, Bloom $7 \times 4$, Bush 6 ft . Reminds you of Insulinde in form, with slightly broader and more irregular petals. Color, amaranth pink shading to a light pink at the base, with the centre of the flowers frosted silver.

Roots, $\$ 2.50$; Plants, $\$ 1.25$
GOV. MORGAN F. LARSON (Hall), 1930, ge. Won Governor's Cup at New Jersey State Show at Trenton as Most Worthy Undisseminated Dahlia. Also won as best yellow, cream or buff at Camden. Color, clear golden yellow with slight apricot blush on reverse. Very impressive Formal Decorative medium to tall growth, but sturdy plant.

Roots, $\$ 7.50$; Plants, $\$ 3.75$
GRANDOLA (Broomall 81), ge, Bloom $9 \times 4$, Bush $61 / 2 \mathrm{ft}$. This dahlia is very attractive, its color being a brilliant golden orange. The blooms are of good size held erect on fine stems, making a very desirable dahlia.
$\$ 1.00$
JERSEY'S FIANCEE (Waite 80), ge, Bloom $8 \times 4$, Bush 6 ft. This variety will give you a lot of nice blooms. Color, rose pink with the points of the petals slightly tipped gold. A good, healthy grower, stems good.
$\$ 1.00$
KATHLEEN NORRIS (F. \& M.), c ge, Bloom $10 \times 5$, Bush $51 / 2 \mathrm{ft}$. This outstanding exhibition dahlia is a true rose pink, deepening later to mallow pink with young central petals a lighter shade. Petals are broad and overlap each other with twisted tips. Blooms are held erect on long, strong stems. It is a healthy grower, having dark green leathery foliage, which is decidedly insect repellent.

Roots, $\$ 10.00 ;$ Plants, $\$ 5.00$
LADY LYNDORA (Hall 84), ge, Bloom $9 \times 4$, Bush $31 / 2 f t$. This lovely dahlia is bound to become popular, especially in the pink class, as it is a pure pastel pink, with formation, size and stem to carry it through. Bush growth semi-dwarf, with exceptionally free blooming habits.

Roots, $\$ 2.00$; Plants, $\$ 1.00$
MRS. ELEANOR MARTIN (Pelicano 78), ge, Bloom $9 x 3$, Bush 5 ft. A very striking and popular dahlia. A peculiar rose shade with reverse of violet, well described as "Mulberry." A profuse bloomer with good stems.
$\$ 1.00$
MRS. F. A. C. PERRINE (F. \& M. 78), ge, Bloom $9 \times 4$, Bush 6 ft . Another exhibition dahlia of the stag horn type. Petals curiously curled and twisted, terminating in sharp points.
.75
WATCHUNG WONDER (Smith 88), 1929, g e, Bloom $10 \times 6$, Bush 5 ft. A spectacular dahlia of a rich royal red with a touch of gold at the centre of flowers, with an occasional yellow petaloid to enhance its beauty. Flowers might be described as being almost on the end of the stem and have unusual keeping qualities, for the back petals can be removed when withered and the centres will open out to perfect blooms.

Roots, $\$ 7.50$; Plants, $\$ 3.75$

ALL THE ABOVE VARIETIES ARE THE SAME FORM AS ILLUSTRATION


As a member and officer of the National Association of Commercial Dahlia Growers, we would like to tell you what the association is doing. First of all, we are banded together for a square deal to all and from all. Any member using the accompanying trade-mark is bound to give you a square deal or the association will find out why they did not. So any differences you may have with the members, report them to the Association for the good of the Dahlia Association and help us make the trademark mean just what it says, "A Square Deal." A well-organized Credit Bureau is an important part of the organization. Growers with a clean slate are hereby invited to send to Thomas Leavitt, Assinippi, Mass., for application blank for membership.

## GROWING POTASH FED DAHLIAS

The following directions are based upon years of experience and may be of value in solving some of your cultural problems. These suggestions should be changed to suit the local requirements. However, we sincerely believe that the fundamental principles involved will apply throughout the country.

## SOIL PREPARATION AND CONDITIONING

The dahlia will grow and produce excellent results in a wide range of soils. It is not as much a matter of soil type as it is conditioning. To grow exhibition blooms to perfection, the nearer soil can be to ideal the better your results will be. Soil should contain enough clay to keep the fertility from leaching and also enough sand or stones to facilitate drainage. Fifty to 65 per cent sand is considered ideal. The primary factor, however, in growing dahlias is that of drainage, which in sandy soils is well taken care of, but in heavy soils dig in and thoroughly mix a quantity of coarse coal ashes into the sub-soil. Then mix coarse manure, straw, litter or peat moss into the top-soil. The addition of a good quantity of coarse sand will help drainage and aeration wonderfully in compact or clayey soil.

The use of peat moss broadcast and mixed well into the top-soil without the use of coarser material in the sub-soil is an advantage on heavy soil to open it up and on light soil it will conserve moisture and hold fertility.

As soon as the soil can be worked in the spring, it may be further improved by a cover crop of oats and Canada field peas. Or, better still, where Winters are severe, sow rye in September or October. The green crop will do no harm during the late blooming season, will winter over, and should be turned under about two weeks before planting. In New Jersey and farther south, rye can be sowed after digging roots. A' cover crop will add organic matter, supply humus and further adjust soil conditions. If soil is poor, the oats or rye may be top-dressed with stable or hen manure, the sooner after planting the better.

## DRAINING

For soggy soil we might suggest ditching 18 or more inches deep where the row is to be planted, running the ditch with the slope if possible. Fill in with coarse ashes, clinkers or any coarse material that will not rot, keeping it below spading depth, then fill in top with a mixture of soil and peat moss, probably 15 to 20 per cent peat moss, and to each bale of peat moss add 2 pounds of powdered chalk (calcium carbonate $\mathrm{CaCO}_{3}$ ). This will prevent any additional acidity in the soil.

## LIMING

As a rule, the dahlia likes a reasonably acid soil, but will do equally well without the presence of much acid. Lime not only neutralizes acid, but makes the natural humus in the soil available as well as loosening heavy soil. With this in mind, liming at the rate of 1 pound to 20 to 30 square feet is a safe practice on heavy soil every 2 or 3 years.

## FERTILIZERS

Of the ten elements considered absolutely necessary to plant growth, we find nitrogen, phosphorus and potassium the prime essentials and the ones most lacking.

Nitrogen stimulates the growth above ground, producing large bushes and flowers, but if used to excess the flowers will be soft, wilting readily, and the bushes will be overgrown and lower the vitality of the roots. Nitrogen is found naturally in humus (decomposed vegetable matter or manure). It can best be supplied in animal matter, such as bone meal, tankage or manure.

Phosphoric acid increases the root development, especially the lateral and fibrous roots, strengthens the plant growth and gives substance to the bush and flowers. It also aids in ripening the roots. This element is found in bone meal, tankage and acid phosphate, with a small amount available in manures.

Potash is the balancing agent for nitrogen and phosphoric acid. It gives color to the flowers and foliage, and vigor and tone to the plant in general. It is an essential in starch formation and aids in the maturing of well-nourished roots. This is found in wood ashes, muriate or sulphate of potash.

Fertilizer to be applied before planting Scatter broadcast after spading and mix thoroughly into the top-soil to every 100 square feet of ground or to each 10 dahlia hills.
5 lbs. Raw bone meal.
10 lbs . Unleached wood ashes, or
1 lb . Muriate or sulphate of potash, not both.
An additional 5 lbs. bone meal may be spaded in before the above application if ground is very poor.

Fertilizer or top dressing to be applied about August 15. Scatter broadcast over ground not closer than 6 inches nor more than 18 inches from the stalk and rake in, to every 10 hills.
$11 / 2 \mathrm{lbs}$. Raw bone flour.
$11 / 2 \mathrm{lbs}$. Animal tankage, or
4 lbs. Sheep manure, not both.
5 lbs. Unleached wood ashes, or
$1 / 2 \mathrm{lb}$. Muriate or sulphate of potash, not both.

Manuring is not necessary, even in light soil, if the above formula is used, but an application of horse or cow manure or compost in the Fall is very good for soils lacking humus. This can be used as a top dressing for a cover crop, or dug in by shallow spading in the Fall to help decomposition and then spaded in deep about two weeks before planting.

Don't use nitrate of soda as a fertilizer. Don't try to grow exhibition blooms by forcing the life out of your stock with sheep or any other manure and expect your stock to do well for you the following year without balancing your plant food with phosphoric acid and potash. Exhibition blooms and good roots can be grown at the same time from green plants as well as from roots by following our cultural instructions.

## HOW TO PLANT

Roots should be planted in trenches or holes, 4 inches deep in heavy soil and 6 inches deep in sandy soil, laid flat down (not on end) and covered with earth not over 2 inches in depth, filling in as the plant develops. Where drainage is poor, do not plant so deep and keep a furrow open between rows to facilitate drainage in wet weather.

Do not plant roots or plants in or over hot manure or any quantity of compost. Although practiced by some, we do not recommend the use of any potato, dahlia fertilizer or bone meal in the hole directly under the dahlia root or plant, as there is too much danger of injuring the tender feed roots, but rather a broadcast application, as recommended above after spading. The stunt in dahlia plants can often be traced to the burning of the feed roots caused by excessive chemical feeding.

## WHEN TO PLANT

Should you desire a mass of color for landscape effect or a number of smaller blooms to cut, early planting is recommended. For exhibition blooms later planting is advisable, unless you intend to cut back, prune and disbud systematically.

Dahlias should be planted in Southern New England, Southern New York State, Pennsylvania and North Jersey between May 15 th and June 15 th, while in South Jersey, Delaware, Maryland, Virginia and interior States of the same latitude the planting period extends from May 1st to July 1st; North Carolina from April 15 th on, South Carolina and Georgia from April 1st on, advancing through Florida to January in the citrus fruit belt. Farther north, where hot Summers are less harmful and early frosts are prevalent, planting may commence as soon as danger of frost is over. In the northern parts of the United States and Canada we recommend starting dahlia roots or plants in a cold frame in pots or in squares of inverted sod, so they can be planted in your garden without disturbing the feed roots. Should the top growth be over 6 inches at time of planting out it would be well to top out, leaving preferably two nodes above the ground, see $P$ on Drawing $X$. When green plants are grown in 2 to $2 \mathrm{I} / 2$-inch pots, as soon as a good root growth is developed they should be repotted in 3 to 4 -inch pots and pinched out at time of re-potting.

## GREEN PLANTS

Dabliadel plants are sprouts or cuttings taken from stock of named varieties, grown in specially built greenhouses, rooted in sand benches in a propagating house, potted and grown inside until established, then moved to cold frames for hardening off, ready for shipping and field planting.

The popularity of Dahliadel green plants is growing fast, and we suggest that you give them a trial on your next order if you are buying the higher-priced varieties, as plants are one-half root price in most cases. Green plants, when properly grown from healthy stock, give equal or better blooms than from roots, and most varieties make a nice clump. The way the plant is grown has a lot to do with root production, but we believe by following our cultural instructions you will have roots as well as blooms.

DAHLIADEL NURSERIES

Where dahlia plants are grown with only a reasonable amount of fertilizer and water they are apt to make more roots than when grown in the midst of plenty. To produce roots on plants use a balanced plant food, as recommended under Fertilizer, but not to excess, and water only when necessary to produce a good, healthy, but not soft growth. When setting plants the last of June for September blooms, we recommend disbudding, according to Drawings $\mathrm{X}, \mathrm{Y}$ and Z . When planting a month earlier it will be necessary to cut bushes back severely six weeks before you want blooms, leaving about one-half the growth and not more than six laterals for the first blooms. Then disbud these, as shown on Drawings X or Y , as soon as branches develop sufficiently. This will give the plant an oversupply of feed roots, which will start root production at once. On digging in the Fall you will find mature roots, where on check plants not cut back you will find more fibrous or feed roots.

In growing Dahliadel green plants, only the strongest cuttings are potted, and again the best plants are selected for filling orders. This assures you of the best stock procurable.

## EXPLANATION OF DRAWINGS

These drawings are made with the hope of making disbudding easier. The left side of each drawing shows half of the plant disbudded, while the right side shows the normal development of branches and buds on the same plant when not disbudded.

## PINCHING OUT OR BRANCHING

This is indicated on Drawings X and Y , at P and P 2, first and second pinching out, respectively. We recommend this system for most varieties. The smaller a plant is when pinched out the quicker it will heal and branches develop.

Allow only one main stalk to grow (never more than two). Pinch out the crown or centre above the second pair of leaves. The principle of taking out the centre is to develop the eyes, which are located at the base of the leaves. The top pair of eyes will make themselves evident in surprisingly short time, and these shoots or branches on most varieties should be pinched back again, P2, leaving not more than one pair of eyes on each branch. By the time these get a start, the second or lower set of eyes on the main stalk will have developed along with the four above. These six stems should bear the first six flowers.

## DISBUDDING

Disbudding, as indicated by T in drawings, is the pinching or rolling out of the small bud growing at the base of each leaf. These can be cut out with a pointed knife if they have developed considerably before disbudding.

When the terminal bud on each of these stems is about the size of a small acorn, or as soon as the side shoots are large enough to pull out, disbud by taking out all the side buds and shoots except the lower pair on each of the branches. Leave only one side shoot on each, as shown in Drawings X or Y , should you desire very large flowers. These new branches should be handled as the previous set as soon as they have developed sufficiently. All of the disbudded stem should be cut with the flower. This early disbudding and pruning is not solely for the benefit of the first six flowers, but mainly to keep the bush low and properly branched for the future crop, also aiding in root development.

Notice in the index the key letter just ahead of the price is our recommendation of the system to use in topping and disbudding for each variety listed.

Drawing $X$ is recommended for most varieties under normal growing conditions. Pinching out once is best for varieties that branch readily, while pinching out twice will prove advisable on varieties that grow main branches rapidly and develop lower branches slowly.

Drawing $Y$ differs from X in that the variety is known as a crotch bloomer, or a variety with short stems where the flowers are often down in the foliage. This is easily handled by side pruning, as indicated at $F$, using the secondary terminal bud instead of the first terminal bud for your bloom. The right side of the drawing shows natural growth after pinching out twice, which is not desirable except for mass color in landscape effects.

Drawing $Z$ is another system which is recommended for some varieties but can be used for most dahlias (except crotch bloomers) should you desire to see one early bloom. Our reason for not recommending this is that dahlias are not at their best in the hot weather and this one bloom is not always what we are expecting. Again, the right half shows normal branch and bud development when not disbudded. There are a few varieties that need the old foliage on the main stalk to keep the roots functioning properly, so when removing this crown bloom leave the central stalk and leaves on the plant but disbud the entire stalk, as shown on the left half of drawing.

## DAHLIADEL NURSERIES



Key Letters to Drawings
B Terminal Flower Bud
C Secondary Terminal Bud
D Lateral Bud
E Branch
F Side pruning, removing B and D
I Internode
L Lateral Branch
N Node
P Pinched out once
$\mathbf{P}_{2}$ Pinched out twice
R Stalk
S Stem
T Where shoot or bud has been removed U Stem Stalk

## Key Letters Used in Index

V Cut back 6 weeks before you want bloom, but do not disbud
W Cut back six weeks before you want bloom and disbud as soon as laterals are large enough
X Drawing-pinch back twice then disbud
Y Drawing-pinch back twice then side prune
Z Drawing-just disbud


DAHLIADEL NURSERIES

Should you fail to pinch out when plants are small, it will be necessary to use system shown on Drawing $Z$ or exercise care with late topping or cutting back not to open hollow stems so that water can get in and start stem rot. These openings can be stopped up with wax or plaster paris. Should water get into the stalk, slit the stalk just above the nodes with the point of a sharp knife, and by twisting the knife let the water out.

Certain varieties branch to excess. These should be thinned out at intervals of two weeks, and not more than six shoots allowed to come into bloom for the first flowers. This affords the plant better air circulation and sunlight. Without plenty of air and sunlight your blooms cannot be fully developed and your foliage will be easy prey for mildew.

## CARE OF GREEN PLANTS

After removing moss and paper pots from plants that have been shipped, plant them with the top of the ball of dirt about 3 inches below the ground level and cover the top of the ball of dirt about 1 inch. Fill in gradually as the plant develops. In locations where there is danger of flooding, or poor drainage, do not plant this deep.

Where dahlia plants are to be set in heavy soil it is advisable to at least prepare the hill by mixing sand or the coarser part of coal ashes into the ground directly under and over the roots of the plant. The dirt can also be washed off the roots and the roots straightened out. This is not at all necessary in light soil, but plants will make better clumps in heavy soil if the above recommendation is followed.

Cut all plants back to two or three pairs of leaves above the ground, or at least pinch out the top to cause the plant to branch, unless plants have been shipped a distance and lower leaves are somewhat yellowed. It is then best to set the plants without cutting back to get feed roots started. After the plant has started to grow you can cut back with safety.

Water thoroughly if ground is dry and then protect with open basket or open crate for a few days as a partial protection from the sun and wind. For cut worms, scatter poison bait the evening of planting. See "Cut Worms."

Dahliadel green plants are properly grown and hardened for shipment and in our specially designed shipping box have been successfully sent all over the United States.

## IRRIGATION

When your dahlias need water, wet the ground so it will penetrate about a foot deep when growing in light soil. In heavy soil, watering need not be as heavy, as it may be followed by a rain and over-watering may result. Cultivate as soon as sufficient drainage has taken place, and do not water again until necessary, which will be a week or more.

Except as recommended below for insect control, do not spray your dahlia bushes, and sprinkle the surface of the ground every night or so, for this will only pack the surface, preventing air circulation and causing the soil to crust and dry rapidly in the sunshine. This also draws the feed roots to the surface, to be sickened by the heat of the sun's rays. The flowers produced are soft and the root development very poor, low in vitality and hard to winter.

Automatic overhead irrigation is the most satisfactory all-around system. It is ideal for the early growing season and we recommend its use in the middle of the day in bright sunshine during this period, as it will discourage thrips and leaf hoppers and control red spider. If insects are bad we recommend sprinkling every two or three days from 1 to $11 / 2$ hours each time until insects are under control, then harden the plants off with less water and more cultivation. This will not only discourage insects but help the plants out-grow the insect injury. When bushes are well developed and buds breaking it is best to water after nightfall, less often and more thorough. Once a week should be sufficient in real dry weather.

## CULTIVATION

By cultivating at least once a week, and as soon after rain or irrigating as the ground can be worked, the weeds will be held in check and a soil mulch formed which will conserve the moisture and lessen the need of irrigation.

As the plant develops and the feed roots come toward the surface, the ground should be worked rather shallow around the hill for the radius of at least a foot. Still work the balance of the ground rather deep and bring some fresh soil to the plant at each cultivation, giving the plant a new supply of food and protecting the surface roots from the heat of the sun. Have the hills mounded 3 to 5 inches by the middle of September. This will help support the stalks and protect the roots from freezing should an unexpected cold spell catch you before digging.

## THRIPS

Thrips are tiny insects which in the nymph stage are less than $1 / 8$ of an inch long and a greenish gray color. They enter the growing leaf bud and chafe the newly formed leaves, injuring them so that they develop malformed and curled, also injuring the small flower buds and stems. These insects seem to enjoy the life blood of certain varieties on account of its flavor and do not molest the adjacent bush. If the attack is not checked the leaves will be gnarled and twisted, the buds one-sided or so injured that they dry up and fall off. This usually results in a stunted bush, which in reality is only debilitated by insect ravages.

## LEAF-HOPPERS

Leaf-hoppers are larger than thrips and of a pale yellowish green color, a little over 1/8 of an inch in length. They fly when the bush is touched during the heat of the day. These sucking insects do much to keep a plant from getting a good start. They, as well as thrips and aphids, are common carriers of virus diseases and should be kept in control for this reason if for no other. During the windy weather when dust cannot be applied to advantage, overhead sprinklers used during the heat of the day will control red spider and check the leaf-hoppers and thrips. See "Irrigation."

We believe that the best control of thrips, leaf-hoppers and aphids is dusting with a good nicotine dust. Apply in sunshine with the temperature above 70 degrees at weekly intervals as a preventive from the time the plants are set or roots start to grow, and if any should appear then about every four days until they disappear.

Another good control method is to spray with pyrethrum soap. This can be done at any time of the day and regardless of weather conditions, except rain. We have found this very effective for leaf-hoppers, thrips, red spiders and aphids. Use 4 ounces to 5 gallons of water. For all beetles, grasshoppers, ants and more hardy insects, use double strength or half the amount of water. Some of our customers have had wonderful results by using a pyrethrum soap, 4 ounces to 5 gallons, and adding 1 teaspoonful of Black Leaf 40 to each gallon. This kills not only by asphyxiation, but also by the toxic action of the pyrethrum. Should a bush be infested with ants, spray bush and pour a few quarts of spray down the ant hill or enough to fill the hill. This will do the dahlia no harm, but kill the ants.

By dusting or spraying before the presence of insects, it is doubtful if you will see any. Ăs it is difficult to procure nicotine dust and pyrethrum soap in most localities, we are listing them under "Dahlia Grower's Supplies."

## CUT WORMS

Cut worms are easily controlled by scattering about a teaspoonful of poison bran bait around the plant (but not touching it) as soon as plants are set or shoots appear from roots. The early evening is the best time to apply it.

2 tablespoonfuls of molasses or brown sugar (dissolved).
1 level teaspoonful paris green mixed in.
Juice of an orange or equivalent in water.
1 quart of bran or enough to make a reasonably dry mash.

## STEM BORER

This black-and-white-striped worm when small enters the stem just above the ground and usually works upward. It will be noticed in the early season by the shortening of the internodes and later on by wilting. When noticed early, cut the plant off near the ground and get the borer with your knife. If the borer is below where you want to cut back, use a hooked wire from the top. A plant cut back not later than July 15 th should be in full bloom early in September. Wax or plaster paris may be used to close up top of plant after borer is out so water will not get in and rot the plant.

Should a plant be too large to cut back when borer is discovered, use pyrethrum soap at strength of $2 \mathrm{I} / 2$ ounces to gallon and inject with ear syringe. This will kill the borer or drive it out. Drain stalk out by slitting at the bottom to prevent stem rot.

## STUNT

In over twenty years with dahlias, we have dug and destroyed all unhealthy stock as soon as detected, and the results are most gratifying. This is properly called rogueing. As there are a number of reasons why a plant should stunt, it is hard to tell the exact cause. However, we do know that rogueing is the only practical way of eradication, and believe some of the causes of stunt may be attributed to one or more of the following conditions:

First: From lowered vitality as a result of poor culture, lack of cultivation, etc., or forcing the stock with manure and water the previous season.

Second: The ravages of attacking insects, thrips, leaf-hoppers, stem borers, etc.

Third: The rotting of the feed roots caused by too much water where drainage is poor, or water in the hollow part of the stem.

Regardless of cause, all stunt should be dug out and destroyed. Our many years of this practice leaves us less than 1 per cent to dig annually on most varieties.

## CUT FLOWERS

Dahlias should be cut in the evening or early morning, removing the lower leaves and all of the buds if not disbudded. Immediately put in water in a cool, dark place to freshen for a few hours.

Hot Water Treatment-Cut and freshen as above, then put stems in 1 to 2 inches of water, almost boiling, for 1 to 2 minutes. Then place in deep cold water to cool. Flowers are then ready to ship by packing in a strong corrugated box lined with tissue paper. Fasten stems down by nailing a wooden strip in the centre of the box or by tying down through the bottom. Flowers packed snugly will carry better than when packed loose and allowed to batter.

Flowers when wilted can be freshened by cutting end of stem and placing in hot water as above. Repeat until flower is freshened.

The hot water treatment will do wonders in making your exhibition blooms keep fresh after staging, but do not cut off the discolored end of stem unless you are again going to treat it.

The physical action of a cut flower is to take water up into the stem which evaporates through the flower and foliage. The slower this action of evaporation or transpiration takes place, the longer the life of the flower. From this you will see that buds and foliage will shorten the life of your flower. Also avoid placing cut flowers in a draft.

## DIGGING AND STORING

After the first black frost, cut off the tops at the ground and allow a few days for the stalks to bleed out before digging. Then dig with a garden fork. Care should be exercised not to break the necks of the tuberous roots. Cut the stalk back again to about 2 inches above the crown. Then by tapping on the cut stalk endwise with a light instrument, most of the dirt will free without injury to the necks of the roots. Dry in the sun a few hours, and your clumps are ready to store. A root or white potato cellar is preferable with a temperature of about 40 degrees. In this they need no protection or covering. The average house cellar is too dry and hot, and in such conditions the clumps should be placed in the coolest part and packed upside down in a box in dry sand, ashes or, preferably, ground peat moss.

When packing in peat moss, care should be exercised, first, not to allow clumps to sit around and shrivel before packing away, but pack away the same day as dug if you are using dry peat moss as it comes from the bale. Second, do not use more peat moss than necessary to just barely cover each layer of clumps before putting in the next layer. The reason for this precaution is that all root crops sweat when taken into storage. The purpose of the peat moss is to absorb this sweat and conserve it for later on when the roots need it. Therefore, too much peat moss will cause your roots to dry out.

After the roots are stored a month, it is well to look them over, trim out any portion showing rot and dip all the fresh cuts in fine dusting sulphur, and pack them back again as before. Should the roots show signs of shriveling, place dampened peat moss over the top of the box to prevent further drying.

Dahlia roots air dried and so packed should keep well until spring with no further handling, providing they were grown properly, well ripened, and not frosted.

## DAHLIA TUBERS THAT WILL WINTER

First, sidestep the varieties that are known to be poor root makers.
Second, plant only stock that has been properly grown without previous forcing.
Third, fertilize so that your plants will have a balanced ration, namely, nitrogen in manures. humus or bone meal, and phosphoric acid in acid phosphate or bone meal, and potash in wood ashes, sulphate, or muriate of potash.

Fourth, cultivation is worth more than watering for healthy plant growth. Water thoroughly only when necessary, but cultivate once a week throughout the season, until the middle of September, then stop. This check will help materially in ripening the roots.

Selected stock, in either green plants or roots, properly fertilized, watered and cultivated, will produce wonderful blooms, and the roots will have every chance of wintering. A complete starch formation is essential for proper wintering of a dahlia root, and the above suggestions are essential.

## DIVIDING CLUMPS

It requires a little judgment to divide dahlia roots properly, as some varieties are more compact than others. The eyes will be found around the stem or crown, and never on the root itself, like a potato. Hence a root without a piece of the crown is worthless. A division consisting of a good root with one good eye is all that is necessary; more are of no advantage. Large clumps should never be planted whole.

## New Classification of the Dahlia

CLASS 1. SINGLE DAHLIAS. Open-centred flowers with only one row of ray florets regardless of form or number of florets. For example, Newport Wonder, Fugi San, Eckford Century, Coltness Gem.
CLASS 2. ANEMONE DAHLIAS. Open-centred flowers with only one row of ray florets regardless of form or number of the florets, with the tubular disc florets elongated, forming a pin-cushion effect. For example, Ada Finch.
CLASS 3. COLLARETTE DAHLIAS. Open-centred flowers with only one row of ray florets with the addition of one or more rows of petaloids, usually of a different color, forming a collar around the disc. For example, Diadem, San Mateo Star, Ami Nonin, Geant de Lyon.
CLASS 4. DUPLEX DAHLIAS. Open-centred flowers with only two rows of ray florets regardless of form or number of florets. For example, Golden Sunshine, Mrs. J. Coissard.
CLASS 5. PEONY DAHLIAS. Open-centred flowers with not more than THREE rows of ray florets regardless of form or number of florets, with the addition of smaller curled or twisted floral rays around the disc. For example, Geisha, Gorgeous, City of Portland.
CLASS 6. INCURVED CACTUS DAHLIAS. Fully double flowers with the margins of the majority of the floral rays revolute for one-half or more of their length. The floral rays tending to curve toward the centre of the flower. For example, F. W. Fellows, Bearclaws, Farncot.
CLASS 7. RECURVED AND STRAIGHT CACTUS DAHLIAS. Fully double flowers with the margins of the majority of the floral rays revolute for one-half of their length or more, the floral rays being recurved or straight. For example, Ambassador.
CLASS 8. SEMI-CACTUS DAHLIAS. Fully double flowers with the margin of the majority of the floral rays revolute for less than one-half of their length. For example, Edna Ferber, Francis Lobdell, Sunkiss Alice Whittier.
CLASS 9. FORMAL DECORATIVE DAHLIAS. Fully double flowers, floral rays generally broad, either pointed or rounded at tips, with outer floral rays tending to recurve and central floral rays tending to be cupped; all floral rays in a somewhat regular arrangement. For example, Regal, Sagamore, Jersey's Beauty, Glory of Monmouth, Trentonian, Mrs. I. de Ver Warner, Judge Marean.
CLASS 10. INFORMAL DECORATIVE DȦHLIAS. Fully double flowers, floral rays generally long, twisted or pointed and usually irregular in arrangement. For example, Ft. Monmouth, Jane Cowl, Barbara Redfern, Mrs. Alfred B. Seal, Insulinde, Kathleen Norris.
CLASS 11. MINIATURE DECORATIVE DAHLIAS. Fully double flowers, floral rays not revolute, conforming to the definitions for either the formal or informal decorative types, and less than three inches in diameter. For example, Little Jewel.
CLASS 12. BALL DAHLIAS. Fully double flowers, ball shape or slightly flattened, floral rays in spiral arrangement, blunt or rounded at tips and quilled or with markedly involute margins, two inches or more in diameter.
CLASS 13. POMPON DAHLIAS. Having same characteristics as Ball dahlias but less than two inches in diameter.
CLASS 14. UNCLASSIFIED DAHLIAS.

## Suggestions for Premium List Classifications

SECTION A-For those other than professional gardeners who grow less than 100 hills exclusive of pompons and seedlings; do their garden work except soil preparation and do not sell roots, plants or cut flowers.
SECTION B-For those other than professional gardeners who grow less than 250 hills exclusive of pompons and seedlings; do their own garden work except soil preparation and do not sell blooms or plants, but are allowed to sell surplus roots.
SECTION C-For those other than professional gardeners who grow Dahlias for pleasure, selling roots, plants or cut flowers as a side line, issuing none other than a non-descriptive price list.


PENN CHARTER (Hall 85), 1930, g e, Bloom $10 \times 5$, Bush 41/2 ft. A strong grower with heavy leathery foliage. Blooms have great depth and beauty. Rich gold, tinted with reddish apricot. Massive, graceful flowers are held on long stems. A bright spot in your garden or home. Won as best Established Seedling at Philadelphia Show.

Roots, $\$ 7.50$; Plants, $\$ 3.75$
CARDINALIS (Jas. Kennedy 82), 1930, ge, Bloom $\boldsymbol{8} \boldsymbol{x} \mathbf{3}$, Bush 5 ft. True to its name, this dahlia is a brilliant cardinal red that holds its color in the sunshine. As an exhibition flower it has been a winner in North Jersey for the past three years. An upright grower with good, long stems.

Roots, $\$ 10.00$; Plants, $\$ 5.00$
MISS DELAWARE (Swift 84), ge, Blooms $8 \times 4$, Bush 5 ft. Flowers are of even formation of a clear, soft rose pink shading lighter to the centre. An upright grower, dark insect resistant foliage, but should be disbudded according to Drawing Y for stems. Won A. D. S. Certificate 1929.

Roots, $\$ 7.50$; Plants, $\$ 3.75$

## FORMAL DECORATIVE DAHLIAS-Continued

MONMOUTH CHAMPION (Kemp), ge, Bloom $11 \times 4$, Bush $51 / 2 f$. One of the best of the ' 30 introductions of immense size. A strong, vigorous grower, producing beautiful exhibition blooms of a brilliant orange flame color. Perfect stems and insect-resistant foliage. A prize winner in all sections.

Roots, $\$ 10.00 ;$ Plants, $\$ 5.00$
PRIDE OF CALIFORNIA (Lohrman 78), c g, Bloom $6 \times 31 / 2$, Bush $51 / 2 \mathrm{ft}$. A large crimson red shading darker at the centre, which is very full; petals notched. Profuse bloomer on good stems.
.35
ROBERT SCOTT (Brock 80), ge, Bloom $8 \times 31 / 2$, Bush 5 ft. This fine new dahlia is of a bright apricot yellow with shades of rose. Flowers are large and deep, of good form, on excellent stems. The bush is of stocky growth.
$\$ 1.00$
SANHICAN'S QUEEN (F. \& M. 85), 1929, c ge, Bloom $8 \times 4$, Bush 4½ ft. Most unusual coloring. A blending of apricot with a faint blush of carmine rose deepening toward the tight centres, which are always full. Attractive blooms are held high above dark green foliage on straight, stiff stems. Good growing habits and good keeper.

Roots, $\$ 3.00$; Plants, $\$ 1.50$
VALENTINO (Boston 83), cge, Bloom $8 \times 4$, Bush 5 ft. A dahlia, attractive in formation, which blooms prolifically on good stems and remains true to type throughout the season. The bush is an upright grower. Color, true salmon pink shading to cream at centre.

Plants, \$2.50

ALL THE ABOVE VARIETIES ARE THE SAME FORM AS ILLUSTRATION


Another view of Dahliadel Gold Medal Exhibit at Atlantic City, looking from our Spanish Office Building into the Garden.

# INFORMAL DECORATIVE DAHLIAS-Continued 

CITY OF TRENTON (Prentice-Dahliadel 86), ge, Bloom $10 \times 4$, Bush 6 ft . This wonderful new decorative has all the qualifications of a first-class exhibition dahlia. It is impossible to portray the sheen and luster or the brightness in the color reproduction, but it will give you a general idea. The bush grows strong and robust, producing flowers with perfectly full centres on long, erect stems. A dahlia that will go beyond your expectation. D. S. of N. J. Cert.

Roots, $\$ 3.00$; Plants, $\$ 1.50$
CLANSMAN (Diggle 82), c g, Bloom $7 \times 3$, Bush $41 / 2 \mathrm{ft}$. An attractive and useful cut flower. Blooms early and profusely on good stems and is of very good substance. Color, orange apricot with a golden sheen brightened by a pink suffusion.

Roots, \$3.00; Plants, $\$ 1.50$
ELIZA LONDON SHEPARD (Peacock 86), 1930, c ge, Bloom $9 \times 4$, Bush $51 / 2 \mathrm{ft}$. Informal Decorative of a bright golden orange apricot so blended, making a one-tone spectacular flower. Blooms of good substance with full centres are borne on long, stiff stems. Strong, upright grower and free bloomer.

Roots, $\$ 10.00 ;$ Plants, $\$ 5.00$
JERSEY'S DAYBREAK (Waite 84), ge, Bloom $8 \times 4$, Bush 6 ft . This much-admired dahlia is Hermosa pink, shading to creamy yellow in the centre. Flowers of good size with high pointed centres; hold their splendid form throughout the season. The stems are rigid and the foliage is of a leathery texture.

Roots, $\$ 3.00$; Plants, $\$ 1.50$

## ALL THE ABOVE VARIETIES ARE THE SAME FORM AS ILLUSTRATION


#### Abstract

This catalog is going to forty foreign countries, and we shipped Potash Fed Dahlias into seventeen of these. We have had glowing reports of The World and Treasure Island from different parts of Europe the past season and have been informed that The World has been selezted for the Royal Gardens of London, England.


We have been supplying the stock that has been doing more than its share of winning in the Eastern Shows in the past, but this last season we received some of the big stakes ourselves, winning two Gold Medals and three Silver Medals in Trade Exhibits of four of the largest Eastern Shows, besides several trophies.


## DAHLIADEL NURSERIES

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GLORY OF MONMOUTH (Kemp 85), ge, Bloom $8 \times 5$, Bush 5 ft. A beautiful salmon pink with light orange at the base of petals. The bush is of rather compact branching habit, literally covered with hlooms, making it a beautiful specimen. Flowers are of a heavy texture produced on long, sturdv stems. Good substance and artistic coloring make it a wonderful dahlia.

Roots, $\$ 1.50 ;$ Plants, $\$ 1.00$
CHAMPAGNE (Boston 83), ge, Bloom $8 \times 4$, Bush 6 ft. A popular dahlia in the autumn shades. Color, golden champagne with chamois shadings. A good grower and free bloomer on erect stems.
.75
ELSIE JANE (Schmidt 82), g, Bloom $8 \times 4$, Bush 6 ft . Flowers are of good size with full centres. It is a healthy, vigorous grower and prolific bloomer. Color, pale lilac rose, shading to white at the centre and distinctly tipped with bright violet mauve. A beautiful flower. Stems at times are a little weak. $\$ 1.00$
HARRY MAYER (Reed 87), ge, Bloom $9 \times 4$, Bush 4 ft. A fine exhibition dahlia that holds an even full centre, has size, depth and strong stem. Bush grows sturdy but rather compact. Color, beautiful silvery pink with a rose pink reverse. An attractive and satisfactory dahlia.

Roots, $\$ 1.50 ;$ Plants, .75

## FORMAL DECORATIVE DAHLIAS-Continued

JANE HALL (Peacock 83), c g, Bloom $6 \times 4$, Bush $41 / 2 f t$. A full, high-centred decorative with petals reflexing to stem and keeping well when cut. Blooms well above the foliage on stout stems. Color, buff yellow with bronzy suffusion.
JUDGE LEON McCORD (Boston), 1929, $g e$. An enormous, regular-formed dahlia of the deepest shade of gold, with a reverse of old gold. Stems are upright, long and stiff, holding blooms well above foliage. It keeps well on the bush or when cut. Profuse bloomer.

Roots, $\$ 10.00$; Plants, $\$ 5.00$
KEMP'S LAVENDER (Kemp 83), ge,Bloom $7 \frac{1}{2} x$ 4, Bush 5 ft. Another free-blooming variety of regular form and good substance. The violet mauve flowers are large with full centres.
$\$ 1.00$
MORDELLA (Kemp 75), ge, Bloom $9 x$ 4, Bush 7 ft . Apricot buff, beautiful under artificial light. Flowers are large and gracefully formed on long stems.
.75
ROMAN EAGLE (F. \& M. 87), c ge, Bloom $10 \times 3$, Bush 5 ft. This popular dahlia is an uncoinmon autumn shade decorative of a brilliant burnished copper. A dahlia that does exceptionally well in medium to light soil. D. S. of N. J. Cert. A real winner on the exhibition table.

Roots, $\$ 1.00 ;$ Plants, .50
WATCHUNG SUNRISE (Smith 86), ge, Bloom $9 \times 5$, Bush 6 ft. This fine variety differs from the accompanying illustration, as the petals are longer and somewhat curled or twisted. In color it is a golden amber, with the reverse of petals showing rose pink and each petal distinctly edged rose pink, making it very distinctive. Flowers are massive on strong, erect stems.

Roots, $\$ 3.00$; Plants, $\$ 1.50$
WHITE GLORY (Alling 80), c $g$, Bloom $8 \times 31 / 2$, Bush $4 f$. This fine, large white is an early and continuous bloomer. Flowers well formed, full centred on long, erect stems. A. D. S. Certificate. . 75
W. H. T. (McCarrol Schling 85), 1930, ge, Bloom $10 \times 5$, Bush 6 ft. This pleasing variety is a shade not common in big dahlias, rich old rose or begonia rose with mauve shadings on the reverse of petals. It is a tall robust grower with strong stems. Petals are thick and of great substance, opening back to the stem, which is a very desirable feature in a dahlia of this type.

Plants, $\$ 5.00$

## ALL THE ABOVE VARIETIES ARE THE SAME FORM AS ILLUSTRATION



Dahliadel Display at the First National Flower and Garden Pageant, Atlantic City, 1930, winning in the Largest Trade Exhibit Class the First Prize, Dahlia Society of New Jersey Silver Medal and $\$ 300$, the Largest Cash Prize ever awarded to a commercial dahlia display, as far as we know. Also winning Dahlia Society of New Jersey Gold Medal for the Finest Exhibit in the Dahlia Division of the Show.


EASTERN STAR (Dahliadel 85), c ge,Bloom 9 x 4, Bush 5 ft. The color reproduction cannot portray the lively tones of this wonderful dahlia, but does give you a general idea. Color, a saffron yellow with old gold shadings. Flowers of great substance and good keeping qualities, with full centres held on strong, erect stems. Excellent bush growth and free flowering. Eastern Star has a wonderful prize-winning record and is one of the finest exhibition dahlias you can grow. D. S. of N. J. Cert.

Roots, \$1.00; Plants, 50

## FORMAL DECORATIVE DAHLIAS-Continued

EL DORADO (Boston 80), c $g e$, Bloom $8 \times 4$, Bush $41 / 2 f t$. An all-purpose dahlia. Pure gold, deepening at the centre. Large, well-formed flowers held well above the foliage on good stems. A profuse and early bloomer.
$\$ 1.00$
ELIZA CLARKE BULL (Boston 82), ge, Bloom $8 \times 4$, Bush $41 / 2 \mathrm{ft}$. The largest white decorative from the West. A free bloomer, of perfect form and good substance that does not burn in extreme heat. Bush of medium height. A desirable variety with light green foliage.

Roots, $\$ 1.50$; Plants, $\$ 1.00$
GRACE RICORDS (Ricords-Dahliadel), Bloom $7 \times 4 \frac{1}{2}$, Bush 5 ft . This is a temperamental dahlia and will only give good results when conditions are right. Color, white tipped and suffused lavender; petals numerous and cleft. We have seen this dahlia when it came through beautifully and then again not so well. If you would like to try it, we will send you one free of charge if you will ask for it when ordering other varieties.

HELEN IVINS (F. \& M.), 1930, ge, Bloom $9 \times 5$. This attractive Formal Decorative is a lively orchid lavender or deep orchid, holding its color throughout the season. It is a very free bloomer on good stems with tough leathery foliage. Roots, \$5.00; Plants, \$2.50

JERSEY'S BEACON (Waite 85), ge, Bloom $9 \times 4$, Bush $41 / 2 f t$. The most spectacular of the Jersey family. Color, bright scarlet with a buff reflex, giving a two-tone effect. A free, early bloomer of extremely massive proportions with sturdy stems.

Roots, \$1.00; Plants, . 50
NANAQUAKET (Richards 77), 1929, c g, Bloom $8 \times 4$, Bush $41 / 2 \mathrm{ft}$. This variety adds an orchid pink to this type of Decoratives and certainly is a free bloomer, with flowers well above the foliage. A good garden variety.
$\$ 2.00$
PEACOCK (Peacock 80), g, Bloom $6 \times 4$, Bush $31 / 2 f t$. One of the finest variegated dark red and white dahlias grown. Flowers are borne erect, well above the foliage, even form with full, deep centres and evenly marked with as much white as reddish purple, a characteristic uncommon in variegated dahlias.
$\$ 1.00$
QUEEN OF THE GARDEN BEAUTIFUL (Burns 82), $\boldsymbol{g} \boldsymbol{e}$, Bloom $10 x 4$, Bush $41 / 2 \mathrm{ft}$. This distinctive and interesting dahlia originated in the famous garden of the San Quentin Prison. An immense primrose yellow, facing upward on strong stems. An occasional bloom has a green centre, but it is so massive that we easily overlook the imperfection.

Roots, \$1.50; Plants, . 75
ROBERT TREAT (Muehler 80), ge, Bloom $9 \times 4$, Bush $51 / 2 \mathrm{ft}$. This dahlia, similar in color to the American Beauty Rose, is different from any other dahlia in shade or color. Plants are strong, healthy growers of spreading habit. Flowers produced freely on long, erect stems.
$\$ 1.00$

## COMING EVENTS

Within the next year we hope to have a consolidated bulletin, and through this to organize the affiliated societies in such a way that the A. D. S. will act as the hub of a large wheel, with state and regional organizations forming the spokes and the smaller societies, functioning through the state and regional societies, forming the rim or felly of the wheel. Local societies would have uniform dues, which would automatically include affiliation with state or national organizations and subscription to the national bulletin, which would contain local news of affiliated societies.

Societies participating would have representation on the Executive Board either through state or regional societies, and be allotted space in the bulletin according to their membership. They would be required to furnish news through their own appointed associate editor or publicity committee, to be used at the discretion of the editor-in-chief according to its value. No free advertising of stock or business, of course, would be allowed.

As societies coming into the bulletin would be automatically affiliated, instead of receiving a medal for their fee they would be allowed to purchase medals at cost in either gold, silver, or bronze. A new medal for affiliated societies would be made for this purpose.

Another issue well worth considering is the use of a universal score card in Judging. It should not be at all complicated, so that the exhibitor as well as the Judge will fully understand it and one that can be used rapidly. No Judge is proficient until his mind is so organized to give each quality its right value. The score card should be kept in mind in all Judging and used in all close competition. Before installing this system be sure you have Judges who can use it.


CASPER G. WARE (Bowen-Dahliadel 85), c ge, Bloom $8 \times 4$, Bush $4 f$. This is truly a dahlia of many uses. When grown naturally without disbudding, you have an ideal flower for bedding or hedge effect with a mass of blooms throughout the season. For exhibition or cut flowers, prune out, leaving only four to eight shoots, and by disbudding you will have blooms up to 10 inches in diameter with full centres until frost. It is one of the best and outstanding varieties, especially for its keeping qualities. Color, a pleasing shade of bright silvery violet rose. D. S. of N. J. Cert.

Roots, $\$ 1.00 ;$ Plants, 50
A. H. S. '23 (Peacock 79), ge, Bloom $8 \times 4$, Bush $41 / 2 f t$. A very attractive and well-formed deep sulphur yellow dahlia with rather short stems, but good when disbudded. Bush growth stocky and healthy. $\$ 2.00$

BUCKEYE BRIDE (Roberts Peck 87), c ge, Bloom $8 \times 5$, Bush 6 ft. This impressive flower was one of the favorites in our trial grounds. The bush is a tall, upright grower. It is an early and continuous bloomer on long, erect stems. Color, a distinctive even shade of salmon pink. In all, it is a wonderful dahlia.

## FORMAL DECORATIVE DAHLIAS—Continued

DR. JOHN CARMAN (Dixon 88), 1929, ge,Blooms $11 \times 5$, Bush 5 ft. A dahlia you will have to admire, as it is large and attractive, but not coarse. Color, Tyrian rose, tipped silver, similar to Robert Treat, and greatly improved if grown in partial shade, as this softens the coloring. Its score denotes a dahlia of exceptional growing and blooming qualities and general habits.

Roots, \$5.00; Plants, \$2.50
ELLINOR VANDERVEER (Seal 81), ge, Bloom $8 \times 4$, Bush $51 / 2 \mathrm{ft}$. A universal favorite of great size, depth and substance, on excellent stems. Glowing rose-pink with darker shadings.
.75
FORT WASHINGTON (Rindfleisch-Jost 85), ge, Bloom $10 x 4, B u s h 7 f t$. This is at present the best and largest dark red exhibition decorative. The bushes as well as the flowers are giants with long, strong stems. A dark mahogany red which does not fade.

Roots, $\$ 1.50$; Plants, 75
KATHERINE COLE (McDowell-Waite). In ' 29 won the Dartnell Cup for the best keeping variety. The tips of the petals are a beautiful pink, shading to cream, with a pink centre. It is a free-blooming variety with healthy foliage. Stems are long and strong.

Plants, $\$ 5.00$
MONMOUTH JEWEL (Kemp 81), ge, Bloom $8 \times 3$, Bush $61 / 2 \mathrm{ft}$. A seedling of Amun Ra. Color, bittersweet orange, shading lemon chrome at base of petals. Large, well-formed flowers held well above the foliage on strong, stiff stems. Plants are strong and healthy growers, resistant to leaf-hoppers.

Roots, $\$ 2.00$; Plants, $\$ 1.00$
MR. CROWLEY (Broomall 77), g, Bloom $61 / 2 x$ 3, Bush $41 / 2 \mathrm{ft}$. A bright-colored garden dahlia of glowing salmon pink with base of petals yellow. Although a compact grower, good stems can be produced by disbudding. Fine for color effect when grown naturally.

75
MRS. I. DE VER WARNER (Marean 84), cge, Bloom $10 \times 3$, Bush 6 ft. No dahlia planting should be without this universal favorite. Color, a clear, bright lilac rose. The plant is a strong open grower, and the giant flowers can be produced on stems up to 5 feet in length by pruning and disbudding.
SNOWDRIFT (Broomall 75), g, Bloom $9 \times 3$, Bush $41 / 2 f$. Large pure white with broad, rather flat waxy petals. Has a good stem by disbudding. A good bloomer and easy to grow.
.50
SPOTSWOOD BEAUTY (Rigler 85), c ge, Bloom $8 \times 4$, Bush 5 ft. A beautiful, soft combination of Chatenay pink with yellow shadings at the base of petals. Flowers are of good form on long, erect stems well above the foliage. Plants are strong, healthy growers of gond branching habits.

Roots, $\$ 3.00 ;$ Plants, $\$ 1.50$
TREASURE ISLAND (Dahliadel 88), cae, Bloom $9 \times 5$, Bush 6 ft. One of the brightest autumn shade dahlias we have seen. Color, bright apricot with gold and rose suffusion and shadings. Bush growth is strong, branches readily from the ground, giving 5-foot stems. Reports credit Treasure Island with so many winnings that we cannot list them. It was not only successful in one section, but wherever grown, especially where most varieties fail in a dry season this variety withstands all tests.

Roots, $\$ 5.00$; Plants, $\$ 2.50$
UNCLE TOM (Reed-Adams 83), ge, Bloom $7 \frac{1}{2} \times 3$, Bush $51 / 2 \mathrm{ft}$. A deep garnet, almost black, yet rich and artistic. Flowers are good keepers, held erect on strong stems. A color needed in your collection.
$\$ 1.00$
YELLOW BEAUTY (Wood), 1929, c ge, Bloom $7 \times 4$, Bush 6 ft . A yellow dahlia resembling Jersey's Beauty, with similar characteristics of growth. Good commercial and exhibition dahlias with slender, but stiff stems, always holding flowers erect.

Roots, $\$ 5.00 ;$ Plants, $\$ 2.50$

## IRRIGATION versus CULTIVATION

We have always contended and recommended that the hoe was mightier than the hose, but the past year we thanked our lucky stars we had both. With over seventeen acres of irrigation for green plants and a big two-row power cultivator to take care of root stock through the drought, the dry weather did not affect us. We not only had nice flowers, but also a normal root crop of well-developed and ripened clumps, even better than last season, when the drought was not as severe.

Green plants need irrigation a season like we have just gone through, for with no root reserve to draw on when the bush suffers for water, root development is at a standstill, and this materially hampers the making of clumps as well as ripening them. Stock that has suffered from drought the past two seasons will most likely not have the vitality that a dahlia should have when grown normally.


OLD HICKORY (Dahliadel 85), c ge, Bloom $7 \times 5$, Bush $31 / 2 f t$. The dahlia that is easy to grow. A rough-and-ready, rugged plant, semi-dwarf with each branch bearing a large bloom
which is almost a ball with centers always full. Stems are ideal for basket arrangement, and grow. A rough-and-ready, rugged plant, semi-dwarf with each branch bearing a large bloom
which is almost a ball with centers always full. Stems are ideal for basket arrangement, and the blooms are wonderful keepers. Color, madder red with apricot suffusions.

Roots, $\$ 3.00 ;$ Plants, $\$ 1.50$
a setting sun. Outer petals are
AMUN RA (Seal 79), g, Bloom $9 \times 3$, Bush 6 ft. Described as resembling a setting sun. Outer petals are a gorgeous shade of copper and orange, shading to gold and amber and deepening in the centre to a reddish bronze. Some flowers show green at centre.

CHEMAR'S EUREKA (Chemar 88), 1929, c ge, Blooms $8 \times 3, B u s h 6 f t$. A dahlia that is decidedly outstanding. The average blooms are 95 per cent white, with a touch of lavender pink disappearing as the flower becomes fully open. A strong, healthy grower with long, stiff stems. One of the best whites on the market today.

Roots, $\$ 5.00$; Plants, $\$ 2.50$

## FORMAL DECORATIVE DAHLIAS-Continued

ELITE GLORY (Kennedy 85), $g$ e, Bloom $10 \times 4$, Bush $41 / 2$ ft. Sensational rich red decorative, which is usually found on the exhibition table. Blooms are unquestionably massive with good substance on strong stems.

Roots, $\$ 1.50 ;$ Plants, $\$ 1.00$
FAITH GARIBALDI (Boston 85), ge, Bloom $9 \times 3$, Bush 5 ft. This large exhibition dahlia is deep rose, shading lighter on outer petals held on good stems. A strong grower and free bloomer.
$\$ 1.00$
FORDHOOK ERECTA (Burpee 83), ge, Bloom $8 \times 5$, Bush 6 ft . As suggested by its name, stems are strong and erect. Bright amaranth pink blossoms, shading lighter at the base of petals; produced freely on ideal bush.

FORDHOOK MARVEL (Burpee 80), 1929, ge, Bloom $8 \times 4$, Bush $51 / 2$ ft. Lovely salmon shading to reddish copper. This dahlia is a strong, healthy grower with large, heavy foliage.

Roots, $\$ 5.00$; Plants, $\$ 2.50$
F. T. D. (F. \& M. 83), c ge, Bloom $7 \times 4$, Bush 6 ft . A sport of Trentoniąn and an exact counterpart of its parent except in color, which is a rich Tyrian rose. This variety was named for the Florists' Telegraph Delivery. Flowers are held well above the foliage on rigid stems. Reacts well on severe pruning. D. S. of N. J. Certificate.
$\$ 1.00$
GOLD IMPERIAL (Hall), 1930, ge. This Formal Decorative is a rich gold color with just a tint of lavender on reverse. Petals heavy with a waxy appearance. Deep, graceful flowers with high, perfect centres. Vigorous grower. Won gold medal at Camden for best Undisseminated Seedling.

Roots, $\$ 7.50$; Plants, $\$ 3.75$
GRACE (Bibbs 87), 1929, cge,Bloom $6 \times 21 / 2$, Bush 6 ft . This dahlia will remind you a lot of Jersey's Beauty in form, not quite as deep a flower, but will give you twice as many blooms. It might be called a blooming fool, from early to late with centres perfectly full, stems long and stiff, but not clumsy. Color, pure white tipped and suffused lavender. As a cut flower it is going to be a money-maker.

Roots, $\$ 5.00 ;$ Plants, $\$ 2.50$
IDA PERKINS (Montrose 88), $g$ e, Bloom $8 \times 4$, Bush $51 / 2 f t$. One of the finest large white dahlias grown, of fine form and full centres, on strong and erect stems. Blooms early and continuous. Dark, leathery foliage. A coming prize winner. Roots, $\$ 3.00$; Plants, $\$ 1.50$
JERSEY'S BEAUTY (Waite 89), c $g$ e, Bloom $6 \times 4$, Bush $61 / 2 f t$. Probably the most popular of any dahlia especially as a cut flower. The ideal pink for exhibition or florist use. Large, deep flowers of perfect form on long stems. Free, early bloomer with exceptional keeping qualities.

Roots, .75; Plants, 50
JERSEY'S GEM (Waite 84), c $g e$, Bloom $8 \times 3$, Bush $6 f t$. Large, well-formed flowers of lavender pink on long, erect stems. A good grower and bloomer. A. D. S. Cert.
. 75
KENTUCKY (Castlewood 87), 1929, c ge,Bloom $7 \times 5$, Bush 6 ft. This dahlia has the same ideal characteristics as Jersey's Beauty, of which it is a sport, and apparently a stronger grower. Its color is the Jersey Beauty's pink, with a lot of yellow and gold blended in, making it more of a salmon pink. Good for cutting.

Roots, $\$ 5.00$; Plants, $\$ 2.50$
MARDI GRAS (Diggle 80), 1929, ge, Bloom $9 \times 4$, Bush 7 ft. A bold flower of the American Beauty shade. Blooms are held on long stems well above the foliage. Bush tall and rugged and stands good culture.

Roots, $\$ 5.00$; Plants, $\$ 2.50$
MARGARET MASSON (F. \& M. 83), $g e$, Bloom $8 \times 31 / 2$, Bush $41 / 2 f t$. Wonderful exhibition variety of a beautiful silvery pink of regular form. It is an excellent keeper, and flowers are produced abundantly on stiff stems.
$\$ 1.00$
M. H. DE YOUNG (Boston 86), c ge, Bloom $7 \times 3$, Bush 5 ft. Pure gold with the centre illuminated with a brighter shade. Large blooms are held high on stiff stems well above the foliage. An excellent autumn shade cut flower or exhibition variety.
$\$ 1.00$
MR. C. H. DRESSELHUYS (Sluis \& Groot 79), c g, Bloom $6 \times 21 / 2$, Bush 5 ft. Popular with the commercial grower because of its productiveness and keeping qualities. Medium-sized blooms on long stems. Similar to Delice in color. Soft rose pink shading lighter.
PRES. WILSON (Jones 84), g, Bloom $71 / 2 \times 31 / 2$, Bush $41 / 2 f t$. One of the most striking variegated dahlias. Crimson carmine tipped white; a few flowers all red. Bush dwarf; flowers numerous on good stems. Its one fault-a poor root maker. Roots, $\$ 1.50$; Plants, $\$ 1.00$
SAGAMORE (Kirby 84), cge, Bloom $7 \times 31 / 2$, Bush $51 / 2 f t$. This dahlia is a wonderful commercial and exhibition variety. Color, amber gold, elusively shaded with a warm salmon rose and orange buff. An open, strong grower with good stems, of uniform large size.

Roots, $\$ 1.00 ;$ Plants, .50

## FORMAL DECORATIVE DAHLIAS-Continued

SALBACH'S WHITE (Salbach 83), c ge, Bloom $8 \times 3, B u s h ~ 6 f t$. We have in this variety an ivory white dahlia of good substance and keeping qualities, borne on long, stiff stems. Roots, $\$ 1.50$; Plants, .75

SALEM PRIDE (Sickler 83), 1929, ge,Bloom $10 \times 5, B u s h 4 f$. A rather spectacular dahlia. Color, reddish violet suffused, streaked and lightly tipped white. Blooms are large and deep on good stems when disbudded. Bush rather compact and of nice growth for the front of your garden.

Roots, $\$ 5.00 ;$ Plants, $\$ 2.50$
SANHICAN'S PRINCESS (F. \& M. 83), c g, Bloom $61 / 2 \times 31 / 2$, Bush $51 / 2 \mathrm{ft}$. This fine dahlia is for those of artistic temperament, beauty rather than size, specially suited for cutting and indoor decorating. Color, true shrimp pink. An early and profuse bloomer on stiff stems.

THE WORLD (Dahliadel 90), 1929, c $g e$, Bloom $9 \times 41 / 2$, Bush 5 ft. This wonderful new dahlia was selected at the A. D. S. Show in New York to bear the name of the New York World. The coloring is an unusually rich, deep, rosy magenta overlaid garnet with silver shadings on edges of petals. A rich and beautiful combination of colors. Perfect, full centres. Stems are strong and erect. Foliage leathery and repellent to insect injury. A good, sturdy grower and a real prize winner that has gone far ahead of expectations all over the country. This dahlia has more substance than any other dahlia we have. Roots, $\$ \mathbf{5} .00$; Plants, $\mathbf{\$ 2 . 5 0}$

TRENTONIAN (F. \& M. 81), ge, Bloom $7 \times 31 / 2, B u s h 6 f t$. A blending of old gold, amber and coppery bronze, with a centre zone of reddish bronze. Petals are well placed, making a flower of good lasting qualities. D. S. of N. J. Cert.


LITTLE JEWEL (Papendricht 86), c g, Bloom $2 \times 1$, Bush 3 ft. A miniature decorative. Popular as a cut flower, especially for decorations. Color, a pleasing peach blossom pink. This dahlia is not a seedling, but a sport of Delice and very similar in color.


JAYSEEDEE (Draude 86), ge, Bloom $41 / 2 \times 31 / 2$, Bush $41 / 2 f t$. A beautiful ball-shaped dahlia of soft reddish violet striped and speckled rich deep red. A perfect ball. Bush compact, but fine stems can be produced by disbudding. A winner on the exhibition table.
$\$ 1.00$
CARL OWEN (Dahliadel 85), ge, Bloom $5 \times 31 / 2$, Bush 5 ft . The best red show we have found. Rich, non-fading carmine red. Flowers of perfect form on erect stems. Good with disbudding.
.50
DRAUDE (Draude 79), ge, Bloom $5 \times 4$, Bush $41 / 2 f t$. The finest dark red ball dahlia of perfect form. Bush rather dwarf with nodes very close; requires disbudding to produce long stems.
.50
GOLD MEDAL (Keynes 87), c $g e$, Bloom $41 / 2 \times 3$, Bush $41 / 2$ ft. (Improved Gold Medal.) Sunflower yellow tipped and suffused Oriental red; very striking and becoming more popular each year, both in the cut flower market and on the exhibition table.


DAHLIADEL GLORY (Dahliadel 82), ge, Bloom $8 \times 3$, Bush $41 / 2 f t$. This fine dahlia has a very artistic formation of broad, heavy petals, with a beautiful whirl centre, on long, erect stems. A wonderful color blending of scarlet tipped reddish apricot, giving a henna effect.

Roots, $\$ 1.00 ;$ Plants, 50
CANADA (Peacock 78), g, Bloom $7 \times 3$, Bush $41 / 2 f t$. One of the best and hardiest pure white peonies. Bush dwarf but produces an abundance of blooms on erect stems well above the foliage.
CITY OF PORTLAND (Chamberlain 80), ge, Bloom $8 \times 5$, Bush $51 / 2 \mathrm{ft}$. The best and largest clear yellow peony dahlia we have found, producing exhibition blooms from early to late on erect stems.
DRUM MAJOR (Derre 82), ge, Bloom $8 \times 21 / 2$, Bush 4 ft. A rich, fiery red with a lemon yellow centre and petals more or less tipped and marked yellow. A bright and showy variety in the garden.
$\$ 1.00$
MRS. FRANCES E. BULLARD (Broomall 83), $g$ e, Bloom $9 \times 4$, Bush $41 / 2 \mathrm{ft}$. This is the largest peony in our list. The petals are long, pointed and gracefully twisted, forming a very distinct flower of a clear silver or pastel pink, shading lighter at the centre. First blooms usually come with full centres. Free, early and profuse bloomer on strong stems. $\mathbf{\$ 1 . 0 0}$
THE U. S. A. (Stillman 80), ge, Bloom $8 \times 4$, Bush 5 ft. An old dahlia but a good seller. It is a peony dahlia, but in general form it resembles the picture of Jane Cowl. Color, a vivid orange. An early, free bloomer.


## Anemone Dahlias

ADA FINCH (Wouters 83), g, Bloom $31 / 2$, Bush $21 / 2 f t$. A fine bedding or border dahlia, free, early and profuse. This creamy white flower differs from the Century type by having small quilled petals of the same color covering the entire centre.

## Single Dahlias

AUTUMN CENTURY (Bassett 76), g, Bloom $41 / 2$, Bush 5 ft. A beautiful autumn tint, delicate madder lake, shading yellow at centre.
DAHLIADEL CENTURY (Dahliadel 80), g, Bloom 5, Bush 5 ft . It is all that can be asked for in a white single dahlia. Its size, form, habit of growth, productiveness and clear, pure white color put it far ahead of anything else.
GARNET POINSETTIA (Peacock 84), 1929, ge, Bloom 7, Bush 6 ft. Rich, glowing garnet with a brilliant, glistening sheen. Large blooms of poinsettia form are held on long, stiff stems on strong plants, producing profusely.
JAMES WELLER (Peacock 82), ge, Bloom 6, Bush $5 \frac{1}{2} \mathrm{ft}$. Effective because of its color combination of rich golden yellow with central zone of each petal soft rosy red. Large, wellformed blooms are held erect on long, stiff stems. Early and continuous blooms. dahlia. Petals pointed and slightly twisted. Color, rose pink with a gold suffusion. . 75
PURITY (Peacock 84), ge, Bloom 7, Bush 6 ft. Pure white, perfectly formed, on long, stiff stems. Petals are broad and heavy and slightly recurved. A good grower and bloomer. . 50
SCARLET CENTURY (Peacock 80), g e, Bloom 5, Bush 5 ft. Bright, glowing scarlet on erect stems. Good grower, free bloomer, with petals evenly placed.
.25
TANGO (Dahliadel 79), g, Bloom $51 / 2$, Bush 6 ft. A lively autumn tint, cadmium yellow, shaded scarlet orange.

## Collarette Dahlias

GEANT DE LYON (Vilmore 89), ge, Bloom 5, Bush 4 ft. Rich, velvety carmine maroon, with long, cream color petals. Free, early flowering on erect stems. The prettiest of all collarette dahlias.

Plants, $\$ 1.00$

## POMPON DAHLIAS

## 1930 INTRODUCTIONS

BOB WHITE (Dahliadel 89), 1930, c ge, Bloom $11 / 2$, Bush 2 ft. This dahlia can best be described as a white Johnny. It is milk white, having just a cast of yellow when opening. Bush is low and spreading, with blooms on long stems, literally all over the bush, making it ideal for bedding as well as the right form for exhibiting, for it is as deep as its diameter.

Roots, .75; Plants, . 50
DOT (Dahliadel 89), 1930, c ge, Bloom 11/2, Bush 3 ft. We have here a pure white pom on perfect stems, a strong grower, early bloomer and a beautiful bush in bloom. This is the best all-around white Pompon you can grow. Bob White will probably win on the exhibition table, where the smallest perfect bloom reigns supreme, but as a cut flower for decorating or in the garden, Dot is the best so far introduced.

Roots, .75; Plants, 50

## GENERAL LIST

AIMEE (Boston 85), c ge, Bloom $11 / 4$, Bush $21 / 2 f t$. A popular tiny orange cadmium shaded apricot, on long stems
ATOM (Edymel 88), cge,Bloom 11/4, Bush 2 ft. One of the best early and profuse bloomers
Roots, .75; Plants, 50
BELLE OF SPRINGFIELD (83), c ge, Bloom $11 / 4$, Bush 2 ft. One of the smallest and most popular on the exhibition table. Soft red. good for cutting.
DARKSOME (Alexander 80), ge, Bloom $13 / 4$, Bush $41 / 2 \mathrm{ft}$. One of the best real dark red or maroon.
DEE DEE (Estes 85), c ge, Bloom $11 / 4$, Bush $31 / 2 f t$. One of the daintiest and smallest. Pale lilac, fine for exhibition.

## DAHLIADEL NURSERIES

## POMPON DAHLIAS-Continued

ELIZABETH (82), ge, Bloom $11 / 2$, Bush $21 / 2$ ft. Lemon yellow, heavily tipped carmine. Fine form and good stems.
.50
EUREKA ( 82 ), $g$ e, Bloom $13 / 4$, Bush 3 ft . Yellow cadmium with carmine shadings at tips with occasional white petals. Some flowers all-white. Can be rightly called variegated. . 35
GERTRUDE (Salbach 85), c $g e$, Bloom 11/2, Bush $3 f t$. One of the brightest dahlias grown. Color, glowing carmine, of good form on good stems.
.50
HAZEL, c g, Bloom 1112, Bush 3 ft . A buff, deepening to brown. Fine form and small. . 50
KATHLEEN, cge, Bloom 13/4, Bush 3 ft. A soft Tyrian rose. Good bloomer. . 50
KLEINE DOMITEA (78), c ge, Bloom $13 / 4$, Bush 3 ft. Bright orange buff. A good grower and early bloomer.
LITTLE BELLE (78), c g, Bloom $11 / 2$, Bush $41 / 2 f t$. Very fine mauve pink with long and erect stems.
.25
LITTLE DAVID (Twitchett 85), c $g e$, Bloom $11 / 4$, Bush 2 ft. A small, perfectly formed russet orange pom. Free bloomer and fine for cutting and exhibiting.
.35
LITTLE EDITH (90), c ge, Bloom $11 / 4$, Bush $21 / 2 f$. As perfect a pom as you can wish for. Color, primrose yellow, tipped bright carmine. . . 50
MIDGET (West 80), c ge, Bloom $11 / 2$, Bush 3 ft. Salmon suffused with violet. Good form. . 50
MIKE (Boston), c ge, Bloom 11/2, Bush $21 / 2 \mathrm{ft}$. Color, burnt orange, shading lighter at the outer petals. Attractive and a profuse bloomer.
.50
NEATNESS (West 77), g, Bloom 13/4, Bush 2 ft. Light amber centre, shading to salmon pink.
.50
ROSEA (Keynes 84), c $g$ e, Bloom $13 / 4$, Bush $21 / 2 f$ t. Perfect form for exhibition. Rosy lavender. Small and distinctive.
.50
SNOWCLAD (80), c $g e$, Bloom $11 / 2, B u s h 3 f t$. One of the best all-around pure whites. Free, early bloomer.
.25
SUNNY DAYBREAK (Keynes 87), c $g$ e, Bloom $11 / 2$, Bush $21 / 2 f t$. Lemon yellow, heavily tipped cardinal. Flowers of good form.
.50
SUNSET (Keynes 84), c $g$ e, Bloom $11 / 4$, Bush $21 / 2$ ft. Fine small exhibition variety, bright orange. Very popular.50

YELLOW GEM (McWhirter 83), c $g$ e, Bloom $11 / 2$, Bush 3 ft. Clear canary yellow, of fine form.


# DAHLIA GROWERS' SUPPLIES 

DAHLIADEL PLANT FOOD-Made especially for dahlias, of the highest grade materials, for the production of fine flowers and strong roots, and so blended to have a balanced food available as needed by the plant. Good also for all outdoor flowers and vegetables. A very economical fertilizer.

Directions: Spring application, 3 to 6 lbs. to each 100 square feet. August application, 3 to 4 lbs. This may be divided into three applications, but not over 10 lbs . to ten hills should be applied during a season.

Price, F. O. B. factory in Philadelphia, 50 lbs., $\$ 3.00 ; 100$ lbs., $\$ 5.50 ; 200$ lbs., $\$ 10.00$; ton, $\$ 90.00$. We can ship in the States of New Jersey, Pennsylvania, Delaware, and Maryland only, owing to State regulations.

POTASH (Muriate). To use in making up your own mixture. Four lbs. postpaid up to 4th zone, $\$ .65$; add $\$ .10$ for each zone beyond 4 th; 8 lbs. for $\$ 1.20$ postpaid up to the 4th zone; add $\$ .20$ for each zone beyond 4th.

IMPORTED PRUNING SHEARS, $83 / 4$ inches. Double cut-
 ting blades make them especially desirable for dividing and trimming dahlia clumps. We have used these shears for years. Suitable for general pruning as well. Postpaid, \$4.00.

FORGED STEEL PRUNING SHEARS. Single cutter, 9 in.,
 works very well for all dahlia work. Will take larger stalks than the double cutter type and stands up in sand and grit as well as any shear we have found. Postpaid, $\$ 3.25$.

[^1]PLATZ GREEN HAND DUSTER. Capacity 2 to 4 lbs.
 This duster is so light and easy to operate that it is a real pleasure to use it. Equipped with a $30-\mathrm{in}$. extension and spreader for dusting from above or below. Postpaid, including the 4th zone, \$6.25; add $\$ .10$ for each zone beyond the 4th.

TREE LABELS. Painted wood labels, $5 / 8 \times 31 / 2$ ins., copper wired. $\$ .65$ per $100, \$ 4.00$ per 1,000, postpaid.

PLANT LABELS. Painted wood, 5/8 x 10 ins. $\$ 1.50$ per $100, \$ 3.00$ for $250, \$ 10.00$ per 1,000 , postpaid.
DAHLIA STAKES. White cedar pointed, 1 in . square, 4 ft . long, as they come from the saw. These stakes, not being real smooth, hold the twine from slipping with just one wrap, and are strong enough in ordinary culture. Bundle of $25, \$ 1.50$; per $100, \$ 5.00$, F. O. B. Vineland.

DAHLIA STAKES. California red wood, pointed, $11 / 4 \mathrm{ins}$. square, 6 ft . long, planed on 4 sides. Suitable for gardens where dahlias are grown tall. Bundle of $25, \$ 4.00$; per $100, \$ 12.50$, F. O. B. Vineland.

PEAT MOSS (Imported). granulated or horticultural grade. Very useful in dahlia culture, both in growing and storage. Large bale, 16 to 19 bus., $\$ 3.50$; $1 / 4$-size bale, 4 to 5 bus., $\$ 1.50, F$. O. B. Vineland. On order one month in advance of shipping date, F. O. B. cars in Philadelphia or Jersey City. Large bales $\$ 3.00$; 5-bale lots less $5 \%$; 10-bale lots, less $10 \%$.

MODERN DAHLIA CULTURE-By W. H. Waite. Written to meet the needs of the novice and to interest the expert. 126 pages of clear type, well illustrated. Cloth binding. The best book to date. $\$ 1.60$ postpaid.

## DAHLIADEL COLLECTIONS

## A-INTRODUCTORY COL. <br> $\$ 1.00 \quad$ Value $\$ 3.00-\$ 4.00$ <br> 6 roots tagged, all different and finenamed varieties. This collection is made up of a good assortment of colors, no singles and a wonderful value.

BEGINNERS' SURPRISE COLLECTION
$\$ 2.00$
Value $\$ 6.00$ to $\$ 8.00$
12 roots tagged, all different and fine-named varieties not used in Collection A. This collection is a good assortment of colors and types, no singles. A very popular Dahliadel collection, for each year it is better, as finer varieties find their way into it.

# DAHLIADEL TRIO 

Roots, $\$ 10.00-$ Value $\$ 13.00$
Plants, $\$ 5.00$-Value $\$ 6.50$
The World Treasure Island City of Trenton

## DAHLIADEL EIGHT <br> $\$ 3.50$-Value $\$ 7.50$

C. B. Githens

Jane Hall
Jersey's Beauty
Jersey's Sweetheart
Mrs. I. de Ver Warner
Mrs. F. A. C. Perrine
Nanaquaket
Roman Eagle

## C-COLLECTION

$\$ 10.00-V a l u e$ \$18.50
Barbara Wear
Edna Ferber
Fort Monmouth
Ida Perkins
Jane Cowl
North's Yellow

NEW DAHLIADEL DOZEN $\$ 6.00-V a l u e \quad \$ 13.00$

Avalon
Casper G. Ware
Eastern Star
Glory of Monmouth
Harry Mayer
Jersey's Sovereign

Kemp's Lavender Margaret W. Wilson Pride of Stratford Robert Scott Salbach's White Sagamore

## D-COLLECTION <br> $\$ 17.50$-Value $\$ 31.00$

Coquette
Dr. John Carman
Kemp's Violet Wonder
Mrs. Alfred B. Seal
Sanhican's Queen
Waldheim Sunshine

POSITIVELY NO CHANGES IN COLLECTIONS

CANADIAN CUSTOMERS. Please obtain your special permit from Secretary, Department of Agriculture, Ottawa, Ont., when ordering dahlias, as we must have the permit mentioned before we can ship your order.

JERSEY GROWN DAHLIA SEED. Our crop of seed is again short and fall orders will use all we have. We regret that we will therefore be unable to book any further orders for Jersey Grown Seed in double mixed. We can supply Pompon Seed of good varieties mixed at 50 c a packet of 35 seed, also single mixed at 50 c a packet of 50 seed.

# INDEX 

You will find some of your old friends listed in the index without page or folio. In most cases these varieties are so well known descriptions are omitted from the catalog.

ABBREVIATIONS USED IN INDEX.-A-Anemone. B-Ball. Coll-Collerette. C-Cactus, Incurved Recurved or Straight. S-C-Semi-Cactus, formerly Hybrid Cactus. FD-Formal Decorative, formerly Decorative. ID-Informal Decorative, formerly Hybrid Decorative. MD-Miniature Decorative. P-Peony. PomPompon. S-Single.

We are growing a number of varieties of current year introduction and will be glad to quote on your list, but we prefer to grow most of these varieties a year before cataloging them.

NOTICE. The key letter just ahead of the price is our recommendation of the system to use in topping and disbudding for each variety listed. Drawings and explanation will be found on pages 28 and 29.

| Page |  | Roots | Plants | Page |  | Roots | Plants |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | A. A. Styvers-S-C . . . . . . . . . X | \$3.00 |  | 11 | Edna Ferber-S-C . . . . . . . . . . X | 2.00 | 1.00 |
| 49 | Ada Finch-A . . . . . . . . . . . V V | . 75 |  | 41 | El Dorado-FD . . . . . . . . . . . . ${ }^{\text {P }}$ | 1.00 |  |
| 8 | Adda Patterson- C. . . . . . . . $\mathbf{X}$ | 1.50 | \$1.00 |  | El Granada-ID . . . . . . . . . . $\boldsymbol{Z}$ | . 75 |  |
| 42 | A. H. S.-FD . . . . . . . . . . . . X | 2.00 |  | 4 | Eleanor Reed-FD . . . . . . . . . ${ }^{\text {d }}$ | 2.50 | 1.25 |
| 23 | Albert Vestal-ID.... . . . . . . Z | 7.50 | 3.75 | 45 | Elite Glory-FD. . . . . . . . . . $\boldsymbol{Z}$ | 1.50 | 1.00 |
| 11 | Alice Whittier-S-C . . . . . . . $\mathbf{X}$ | 1.50 | . 75 | 41 | Eliza Clarke Bull-FD. . . . . . X | 1.50 | 1.00 |
| 8 | A. Lincoln-C. . . . . . . . . . . X | 5.00 | 2.50 | 36 | Eliza London Shepard-ID . . . X | 10.00 | 5.00 |
| 23 | Altamont-ID. . . . . . . . . . . . . X | 1.50 | 1.00 | 8 | Ella May-C . . . . . . . . . . . . . ${ }^{\text {P }}$ | 2.00 | 1.00 |
| 24 | Amarillo Grande-ID . . . . . . . X | 1.00 |  | 43 | Ellinor Vanderveer-FD . . . . X | . 75 | . . . |
| 7 | Ambassador-C. . . . . . . . . . . X | . 75 |  | 12 | Elsie Daniels-S-C. . . . . . . . . $\mathbf{X}^{\text {X }}$ | . 75 |  |
| 6 | American Triumph-C...... X | 5.00 | 2.50 | 38 | Elsie Jane-FD. . . . . . . . . . . $\mathrm{X}^{\text {W }}$ | 1.00 |  |
| 44 | Amun Ra-FD. . . . . . . . . . . X | . 75 |  | 12 | Emma Marie-S-C. . . . . . . . W | 1.00 | . 50 |
| 3 | Andrea Ericson-ID. . . . . . . . X |  | 5.00 |  |  | 10.00 | 5.00 |
| 7 | Andreas Hofer-C. . . . . . . . . X | . 75 |  | 9 | Fair Elaine-C. . . . . . . . . . . ${ }_{\text {X }}$ | 5.00 | 2.50 |
| 24 | Anna Marie-ID. . . . . . . . . . . X | 1.50 | 1.00 | 45 | Faith Garibaldi-FD. . . . . . X X | 1.00 |  |
| 3 | Asbury Park-FD |  | 7.50 | 3 | F. A. Vendrell-ID......... ${ }_{\text {X }}$ |  | 5.00 |
| 49 | Autumn Century-S....... . V | . 25 |  | 23 | Flaming Meteor-ID . . . . . . . X | 1.00 |  |
| 21 | Avalon-ID. . . . . . . . . . . . . . X | . 75 |  |  | Florence Klein-ID....... . ${ }^{\text {X }}$ | 4.00 |  |
| 21 | Aztec Glory-ID . . . . . . . . . . X | 3.00 | 1.50 | 25 | Fordhook Bridesmaid-ID . . X X | 2.50 | 1.25 |
| 18 | Bagdad-ID... . . . . . . . . . . . $Z$ |  | 5.00 | 9 | Fordhook Crawfish-C... . . . . X | 1.00 |  |
| 6 | Ballet Girl-C. . . . . . . . . . . . X | . 75 |  | 19 | Fordhook Emperor-ID . . . . . . X | 5.00 | 2.50 |
| 23 | Barbara Redfern-ID . . . . . . . X | 2.00 | 1.00 | 45 | Fordhook Erecta-FD..... ${ }_{\text {X }}$ | 1.00 |  |
| 21 | Barbara Wear-ID . . . . . . . . . X | 2.50 | 1.25 |  | Fordhook Goldcrest-FD. . . . X X | 1.50 |  |
| 19 | Big Chief-ID........... X | 5.00 | 2.50 | 45 | Fordhook Marvel-FD . . . . . X | 5.00 | 2.50 |
| 15 | Break O'Day-ID or S-C. . . . X | . 50 |  | 21 | Fordhook Victory-ID. . . . . . $Z$ | 1.50 | . 75 |
| 42 | Buckeye Bride-FD. . . . . . . . X |  | 5.00 | 17 | Fort Monmouth-ID.... . . . X | 5.00 | 2.50 |
| 8 | California Beauty-C. . . . . . . X | . 50 |  | 43 | Fort Washington-FD. . . . . . X | 1.50 | . 75 |
| 48 | Canada-P . . . . . . . . . . . . . . . X | . 35 |  | 12 | Francis Lobdell-S-C. . . . . . . ${ }_{\text {X }}$ | . 75 |  |
| 3 | Captain Coste-ID |  | 7.50 | 3 | Frau O. Bracht-C. . . . . . . . . X |  | 2.50 |
| 34 | Cardinalis-FD. . . . . . . . . . . . X | 10.00 | 5.00 | 3 | Frazier-FD. . . . . . . . . . . . . ${ }^{\text {X }}$ | 5.00 | 2.50 |
| 47 | Carl Owen-B. . . . . . . . . . . . $Z$ | . 50 |  | 45 | F. T. D.-FD. . . . . . . . . . . . ${ }_{7}$ | 1.00 | . . . . |
| 42 | Casper G. Ware-FD. . . . . . . Y | 1.00 | . 50 | 6 | F. W. Fellows-C . . . . . . . . . $Z_{Z}$ | . 75 |  |
| 8 | C B. Githens-C. . . . . . . . . X | . 75 |  |  | Galli-Curci-ID. . . . . . . . . . $\boldsymbol{Z}$ | 5.00 | 2.50 |
| 38 | Champagne-FD. . . . . . . . . . X | . 75 |  | 49 | Garnet Poinsettia-S . . . . . . . V V | . 75 |  |
| 19 | Charlotte Lafrenz-ID . . . . . . X | 2.50 | 1.25 | 49 | Geant de Lyon-Coll . . . . . . . V |  | 1.00 |
| 23 | Chas. G. Reed-ID. . . . . . . . . X |  | 5.00 | 38 | Glory of Monmouth-FD. . . X | 1.50 | 1.00 |
|  | Chas. Stratton-ID......... X | 1.00 |  | 7 | Golden Sonne-C. . . . . . . . . X | 2.00 | 1.00 |
| 44 | Chemar's Eureka-FD . . . . . . X | 5.00 | 2.50 | 45 | Gold Imperial-FD . . . . . . . . X | 7.50 | 3.75 |
| 15 | Cigarette-ID or S-C. . . . . . . ${ }^{\text {d }}$ | . 75 |  | 47 | Gold Medal-B. . . . . . . . . . . $Z$ | . 50 |  |
| 13 | City of New York-S-C or ID X | 7.50 | 3.75 | 19 | Good Night-ID. . . . . . . . . . ${ }^{\text {S }}$ | 7.50 | 3.75 |
| 48 | City of Portland-P. . . . . . . . X | . 75 |  | 25 | Gov. Morgan F. Larson-ID. . ${ }_{\text {W }}$ | 7.50 | 3.75 |
| 36 | City of Trenton-ID . . . . . . . X | 3.00 | 1.50 | 45 |  | 5.00 | 2.50 |
| 36 | Clansman-ID . .... . . . . . . . . . $X$ | 3.00 | 1.50 | 41 | Grace Ricords-FD . . . . . . . . . $Z$ |  | . . . ${ }^{\text {a }}$ |
| 25 | Color Sergeant-ID . . . . . . . . X | 3.50 | 1.75 | 25 | Grandola-ID. . . . . . . . . . . . X | 1.00 |  |
| 3 | Congressman Wolverton-ID.X | 10.00 | 5.00 | 3 | Harriet Hoctor-ID | 10.00 | 5.00 |
| 8 | Conquistador-C . . . . . . . . . . $Z$ | 5.00 | 2.50 | 38 | Harry Mayer-FD. . . . . . . . . X | 1.50 | . 75 |
| 17 | Coquette-ID. . . . . . . . . . . . X | 3.00 | 1.50 | 19 | Hathor-ID . . . . . . . . . . . . . . X | 1.50 |  |
| 11 | Daddy Butler-S-C. . . . . . . . W | . 75 |  | 41 | Helen Ivins-FD | 5.00 | 2.50 |
| 49 | Dahliadel Century-S . . . . . . V V | . 25 |  | 9 | Ian-C.... | 1.00 |  |
| 48 | Dahliadel Glory-P . . . . . . . . X | 1.00 | . 50 | 45 | Ida Perkins-FD. . . . . . . . . . . ${ }^{\text {X }}$ | 3.00 | 1.50 |
| 15 | Dainty Maid-ID or S-C . . . W | 1.00 |  | 3 | Imperial Pink-ID . . . . . . . . . . $Z$ |  | 7.50 5.00 |
|  | Daylo-FD . . . . . . . . . . . . . . X | 5.00 |  | 23 | Ivory-ID . . . . . . . . . . . . . . . X $^{\text {d }}$ | 10.00 | 5.00 |
| 24 | Derrill W. Hart-ID. . . . . . . W | 5.00 | 2.50 | 23 | Jack O'Lantern-ID . . . . . . . X | 1.50 | . . . |
|  | D. M. Moore-FD . . . . . . . . . X | . 35 |  | 49 | James Weller-S . . . . . . . . . . V V | . 50 | 1.50 |
| 19 | Donna California-ID . . . . . . X |  | 5.00 | 16 | Jane Cowl-ID . . . . . . . . . . . $Z$ | 3.00 | 1.50 |
| 23 | Dorothy Stone-ID . . . . . . . . . $Z$ | 7.50 | 3.75 | 39 | Jane Hall-FD . . . . . . . . . . . . ${ }_{\text {X }}$ | . 75 | ... |
| 47 | Draude-B. . . . . . . . . . . . . . . X $^{\text {d }}$ | . 50 |  | 47 | Jayseedee-B. . . . . . . . . . . . . ${ }_{\text {X }}$ | 1.00 |  |
| 43 | Dr. John Carman-FD. . . . . . X | 5.00 | 2.50 | 4 | J. D. Torbert-ID . . . . . . . . . X |  | 5.00 |
| 48 | Drum Major-P . . . . . . . . . . X | 1.00 |  |  | Jean Chazot-C. . . . . . . . . . . . ${ }_{\text {X }}$ | .75 | . |
| 3 | Dwight W. Morrow-ID.... ${ }^{\text {W }}$ | 15.00 | 7.50 |  | Jean Kerr-FD. . . . . . . . . . . . ${ }_{\text {x }}$ | . 2.55 | 1.25 |
| 15 | Eagle Rock Beauty-ID orS-C.X | 2.50 | 1.25 |  | Jean Hare-S-C. . . . . . . . . . ${ }_{\text {K }}$ | 2.50 | 1.25 5.00 |
| 17 | Eagle Rock Jewel-C...... . ${ }^{\text {X }}$ | 2.50 | 1.25 | 4 | Jean Trimbee-S-C. . . . . . . . X |  | 1.00 .50 |
| 11 | Eagle Rock Wonder-S-C. . . . X | 15.00 | 7.50 | 41 | Jersey's Beacon-FD. . . . . . . W W | 100 2.00 | $\underline{.} 1.00$ |
| 25 | Earle Williams-ID. . . . . . . . X | 1.00 |  |  | Jersey's Beacon Ball-FD....W | .075 | 1.00 .50 |
| 40 | Eastern Star-FD . . . . . . . . . Z | 1.00 | . 50 | 45 | Jersey's Beauty-FD. . . . . . . W | . 75 | . 50 |

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| 19 | Jersey's Empress-ID | 2.00 | 1.00 |  | -FD. . . . . . . . . . . . . . . . . X | 1.50 | . 75 |
| 25 | Jersey's Fiancée-ID . . . . . . . ${ }^{\text {X }}$ | 1.00 |  | 23 | Regal-ID | 7.50 | 3.75 |
| 45 | Jersey's Gem-FD........... |  |  | 4 | Rising Sun-FD............ |  | 500 |
| 21 | Jersey's Ideal-ID. . . . . . . . . $\mathbf{X}^{\text {d }}$ | 1.75 | 75 | 14 | Robert E. Lee-S.C or ID.... Y | 10.00 | 5.00 |
| 21 | Jersey's Sovereign-ID....... ${ }_{\text {S }}$ | . 75 |  | 35 | Robert Scott-FD.......... X | 1.00 |  |
| 12 | Jersey's Sweetheart-S-C.... ${ }^{\text {Jim }}$ Weorge-ID........ | 1.00 1.00 | . 50 | 19 | Robert Treat-FD.......... ${ }_{\text {R }}$ | 1.00 1.50 | 1.00 |
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| 10 | Karl Bonawitz-S-C |  | 5.00 | 21 | Sanhican's Magnate-ID. . . . . X | 1.50 |  |
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|  | Lillian B. Lee-C. . . . . . . . . ${ }^{\text {X }}$ | 10.00 | 5.00 | 12 | Siskiyou-S-C | 1.50 | 1.00 |
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| 45 | Margaret Masson-FD . . . . . . X | 1.00 |  | 11 | Sunkiss-S-C . . . . . . . . . . . . . . X | 1.00 |  |
| 21 | Margaret W. Wilson-ID . . . . . X | 1.00 |  | 21 | Susan G. Tevis | 1.00 |  |
| 23 | Margaret Wylie-ID . . . . . . . X | 7.50 | 3.75 | 4 | Tang-ID |  | 7.50 |
|  | Marie-FD. | 2.00 | 1.00 | 49 | Tango-S | . 25 |  |
| 7 | Marion Broomall-C. . . . . . . . X | 1.50 | . 75 | 4 | Tarrytown-ID | 7.50 | 3.75 |
|  | Mariposa-S-C. . . . . . . . . . . ${ }^{\text {x }}$ | . 75 |  | 19 | The Grizzly-ID ........... ${ }^{\text {X }}$ | . 75 |  |
| 23 | Marmion-ID. . . . . . . . . . . . . X | 1.50 | . 75 | 21 | The Lemonade-ID . . . . . . . . X | 1.50 | . 75 |
| 21 | Martha Kemp-ID . . . . . . . . . . X | 3.00 | 1.50 | 48 | The U. S. A.-P. . . . . . . . . . . X | . 75 |  |
|  | Mary Ellen-ID |  | 5.00 | 46 | The World-FD........... X | 5.00 | 2.50 |
|  | May Trower-ID. . . . . . . X | 2.50 |  | 5 | Thomas A. Edison-FD | 10.00 | 5.00 |
| 14 | Meta Scammel-S-C or ID . . X | 3.00 | 1.50 | 43 | Treasure Island-FD . . . . . . . X | 5.00 | 2.50 |
|  | M. F. Heaphy-FD. . . . . . ${ }^{\text {X }}$ | . 75 |  | 46 | Trentonian-FD. . . . . . . . . . $\mathbf{X}$ | 75 |  |
|  | M. H. De Young-FD. . . . . ${ }^{\text {X }}$ | 1.00 |  | 19 | Ty Cobb-ID . . . . . . . . . . . ${ }^{\text {x }}$ |  | 2.50 |
| 16 | Mildred Brooks Hoover-ID. . $Z$ | 5.00 | 2.50 | 43 | Uncle Tom-FD | 1.00 |  |
|  | Minnie Eastman-S-C...... ${ }^{\text {X }}$ | 5.00 | 2.50 | 35 | Valentino-FD |  | ${ }^{2} .50$ |
|  | Miraflora-C............. ${ }^{\text {X }}$ | . 75 |  | 17 | Valeska-ID |  | 1.75 |
|  | Miss Delaware-FD.-...... ${ }^{\text {Y }}$ | 7.50 | 3.75 | 18 | Waldheim Sunshine-ID..... Z | 5.00 | 2.50 |
|  | Miss San Francisco-FD..... ${ }_{\text {Z }}$ | 1.50 |  | 39 25 | Watchung Sunrise-FD...... ${ }^{\text {Watchung Wonder-ID }}$ | 3.00 7.50 | 1.50 |
| 43 | Monmouth Jewel-FD....... ${ }^{\text {x }}$ | 2.00 | 1.00 | 19 | White Empress-ID. . . . . . . . . . Z | 5.00 | 2.50 |
| 39 | Mordella-FD. . . . . . . . . . . . ${ }^{\text {W }}$ | . 75 |  | 39 | White Glory-FD | . 75 |  |
| 45 | Mr. C. H. Dresselhuys-FD.. W | . 35 |  | 39 | W. H. T-FD |  | 5.00 |
| 43 | Mr. Crowley-FD . . . . . . . . . X | . 75 |  | 19 | Wonderland-ID. . . . . . . . . . $Z$ | 1.50 |  |
| 21 | Mrs. Alfred B. Seal ID | 10.00 | 5.00 | 21 | World's Best White-ID...... ${ }^{\text {x }}$ | 1.00 |  |
|  | Mrs. Carl Salbach-FD . . . . . X | . 50 |  | 43 | Yellow Beauty-FD . . . . . . . . X | 5.00 | 2.50 |
| 25 | Mrs. Eleanor Martin-ID.... X | 1.00 |  | 11 | Yosemite-S-C.............. X | 7.50 | 3.75 |
| 25 | Mrs. F.A.C. Perrine-ID. . . X | . 75 |  |  |  |  |  |
|  | Mrs. Frances E. Bullard-P... |  |  |  | POMPON DAHLIAS |  |  |
|  | Mrs. G. W. Elkins, Jr.-ID....X | 1.00 |  |  |  |  |  |
| 43 | Mrs. I. De Ver Warner-FD. .X | . 50 |  | 50 | Aimee-Pom. . . . . . . . . . . . . . . V | \$0.50 |  |
| 16 | Mrs. Kenyon-ID........... X | 5.00 | 2.50 | 50 | Atom-Pom. . . . . . . . . . . . . . V V | . 75 | \$0.50 |
| 15 | My Maryland-ID or S-C.... ${ }^{\text {X }}$ | 5.00 | 2.50 | 50 | Belle of Springfield-Po | . 35 |  |
| 41 | Nanaquaket-FD | 2.00 |  | 50 | Bob White-Pom | . 75 | . 50 |
|  | New Glory-S-C. . . . . . . . . . $\mathrm{X}^{\text {d }}$ | 4.00 | 2.00 | 50 | Bronze Beauty-P | . 25 |  |
| 49 | Newport Wonder-S. . . . . . . . V V | . 75 |  | 50 | Darksome-Pom | . 35 |  |
| 22 | North's Yellow-ID..........W W | 3.00 | 1.50 | 50 | Dee Dee-Po | . 50 |  |
| 21 | Nottingham Beauty-ID . . . . X | 1.50 | . 75 | 50 | Dot-Pom | . 75 | . 50 |
| 44 | Old Hickory-FD......... ${ }_{\text {W }}$ | 3.00 | 1.50 | 51 | Elizabeth-Pom | . 50 |  |
| 4 | Omar Khayyam-FD . . . . . . . X |  | 5.00 | 51 | Eureka-Pom | . 35 |  |
| 4 | Oriental Beauty-C |  | 2.50 | 51 | Gertrude-Pom | . 50 |  |
|  | Papillon-ID. . . . . . . . . . . . . ${ }^{\text {X }}$ | 75 |  | 51 | Hazel-Pom | . 50 |  |
| 11 | Paulina-S-C. . . . . . . . . . . . . W | 1.00 |  | 51 | Kathleen-Por | . 50 |  |
|  | Paul Revere-D . . . . . . . . . . . . X | 1.00 |  | 51 | Kleine Domitea-Pom | . 25 |  |
| 41 | Peacock-FD | 1.00 |  | 51 | Little Belle-Pom | . 25 |  |
| 34 | Penn Charter | 7.50 | 3.75 | 51 | Little David-Pom | . 35 |  |
|  | Peter Pan-FD. . . . . . . . . . Z |  | 5.00 | 51 | Little Edith-Pom | . 50 |  |
|  | Pink Flamingo-FD . . . . . . . . W | . 25 |  | 51 | Midget-Pom | . 50 |  |
| 21 | Pop Stewart-ID . . . . . . . . . . X | 1.00 |  | 51 | Mike-Pom. | . 50 |  |
| 23 | Pres. Hoover-ID. . . . . . . . . . ${ }^{\text {X }}$ | 7.50 | 3.75 | 51 | Neatness-Pom | . 50 |  |
| 45 | Pres. Wilson-FD | 1.50 | 1.00 | 51 | Rosea-Pom | . 50 |  |
| 35 | Pride of California-FD | . 35 |  | 51 | Snowclad-Pom............. V | . 25 |  |
| 23 | Pride of Stratford-ID | 1.00 |  | 51 | Sunny Daybreak-P | . 50 |  |
|  | Prince Regent-ID . . . . . . . . . Purity $_{\text {V }}^{\text {V }}$ |  | 5.00 | 51 | Sunset-Pom............. ${ }^{\text {V }}$ | . 50 |  |
| 49 | Purity-S.... . . . . . . . . . . . . . $V$ | . 50 |  | 51 | Yellow Gem-Pom. . . . . . . . . V $V$ | . 50 | $\ldots$ |

## FREE

YOU MAY SELECT YOUR OWN COMPLIMENTARY ROOTS from the following list on orders for DAHLIA ROOTS AND PLANTS from this catalog, except on collections. On each dollar you are allowed $25 c$ toward any variety in this list. For example, on an order of $\$ 6.00$ worth of roots or plants you may select $\$ 1.50$ worth from the following list free, or a $\$ 2.00$ variety by paying 50 c additional.

| Avalon | \$ . 75 | Miraflora | . 75 | Sanhican's Peach | 2.00 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Big Chief | 5.00 | Mrs. Carl Salbach | . 50 | Sanhican's Queen | 3.00 |
| Edna Ferber | 2.00 | Nanaquaket | 2.00 | Silverado | 1.50 |
| Harry Mayer | 1.50 | Pink Flamingo | . 25 | White Glory | . 75 |
| Jean Hare | 2.50 | Pride of California | . 35 | Bronze Beauty | . 25 |
| Jersey's Fiancee | 1.00 | Robert Scott | 1.00 | Eureka-Pom. | . 35 |
| Mardi Gras | 5.00 | Roman Eagle | 1.00 | Snowclad-Pom. | . 25 |

## POSITIVELY NO FREE ROOTS ON COLLECTIONS OR SPECIAL OFFERS

## OUR GUARANTEE

All dahlia roots and plants are guaranteed healthy and true to name to the extent of replacement with true stock. Roots that fail to start in three weeks will be replaced upon their return. POTASH FED DAHLIAS give such universal satisfaction that we guarantee this year's Dahliadel Introductions to prove entirely satisfactory to the extent of replacement with the same variety or one of any other of equal value from the following season's catalog. Satisfaction and safe delivery guaranteed.

Orders will be filled with strong, field-grown root divisions unless green plants are specified. We will notify you if unable to supply any variety, as we do not substitute. Six of one variety for the price of five.

## TERMS AND DELIVERY

CASH WITH ORDER. Stamps accepted up to $\$ 3.00$; above that amount, check, money order or cash by registered mail. Roots will be sent April 15th to May 15th by parcel post prepaid, unless shipment is C. O. D., in which case the customer pays the C. O. D. charges. Shipments to sections where plantings are at a different time will be made accordingly.

WARNING. Do not send cash by mail unless you have it registered.
NOTICE ON GREEN PLANT SHIPMENTS. Plants will be shipped from April 15th to June 15th, but cannot be sent C. O. D., as this causes delay. When roots and plants are ordered together, roots will be held and shipped with the plants unless otherwise specified. For shipments of 200 miles or over, we recommend plants should travel parcel post, "Special Delivery." For this please add 25 c to your remittance. We pay all regular postage.

We guarantee plants as well as roots to arrive in good condition, but cannot guarantee plants if shipped over 200 miles unless sent "Special Delivery."

## DAHLIADEL NURSERIES





[^0]:    If you have never had the pleasure of visiting our trial grounds, you should see them during September or October, when a wealth of blooms and a riot of color beckon a welcome at Dahliadel Nurseries. Old and new friends always welcome.

[^1]:    PYRETHRUM SOAP. A non-poisonous insecticide effective on all insect life and not injurious to animals or plants. Will not burn foliage or buds. A desirable spray for thrips, leafhoppers or aphids. We believe this to be an even better product than we offered last year. Four ounces make 5 gallons of spray. Postpaid, including the 4 th zone; 4 oz., $\$ .50$, quart $\$ 1.75$, gallon $\$ 6.00$.

    HAND SPRAYER (Brass). Continuous spray, 1 quart size. Suitable for spraying pyrethrum and nicotine soap sprays, but not for sprays containing lime or solids. Postpaid, including 4th zone, $\$ 2.15$.

    DAHLIADEL NICOTONE-A $3 \%$ nicotine dust. 5 lbs., $\$ 1.50 ; 25 \mathrm{lbs} ., \$ 5.75$ by express, collect. By parcel post, prepaid, including the fourth zone, $1 \mathrm{lb} ., \$ .50 ; 2 \mathrm{lbs} ., \$ .90 ; 5 \mathrm{lbs} ., \$ 1.75$. For distant shipments, include additional postage.

    DAHLIADEL DUSTING OUTFIT-Consisting of one pump-type duster with extension spout for dusting small plants without stooping, and 1 lb . Dahliadel Nicotone. Postpaid, including the fourth zone, $\$ 2.10$, with 2 lbs. of nicotine, $\$ 2.50$. For distant shipments, include additional postage.

