

*1967-68*

flower  
varietal  
trials

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report 129

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Annual flower trials have been conducted at the V.P.I. Trial Gardens maintained by the Department of Horticulture on the Virginia Polytechnic Institute campus at Blacksburg since the summer of 1961. These trials are of considerable value in maintaining and improving the quality of varieties available to the gardening public. Characteristics such as habit and uniformity of growth, trueness and uniformity of color, flower productivity, and general garden value are considered. Donors of seed each year check the performances of their own and other samples. Bedding plant producers, florists, garden center operators, nurserymen, and home gardeners visit the gardens to select varieties to grow the following year.

This publication contains reports for both 1967 and 1968 trials. The report for 1968 starts on page 19. Suggested annual flowers for 1969 are listed on pages 20-22.

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## 1967 ANNUAL FLOWER VARIETAL TRIALS

The 1967 annual flower varietal trials and the evaluation of flower entries for the All-America Selections were conducted at the V.P.I. Trial Gardens, Virginia Polytechnic Institute, Blacksburg.

All seeds were sown the last week of March. The small seeded varieties were sown in metal flats containing a commercially prepared medium known as "Jiffy-Mix." The large seeded varieties were sown directly in 2 1/4" peat pots containing a steam-sterilized medium of equal parts of loam soil and peat moss.

After the seeds were sown, the containers were placed in a greenhouse at 70° F. under a low pressure, intermittent mist system, set to mist for intervals of 8 seconds per minute from 8 a.m. to 5 p.m. As the seeds germinated, the containers were removed to a 60° F. greenhouse. Seedlings of the small seeded varieties were transplanted to 2 1/4" peat pots, containing equal parts soil and peat moss, after they developed the second set of true leaves. Seedlings of the large seeded varieties were roughed to allow only one plant per peat pot.

Starting on May 22, 1967, the plants were transplanted to outside beds previously fumigated with methyl bromide at the rate of 1 lb. per 100 sq. ft. to control weeds, diseases, insects, and nematodes. The plot for each variety was 6' x 4 1/2', with 15 plants spaced at 1 1/2' intervals. The beds were irrigated as needed during the growing season.

Preliminary evaluations were made during the growing season, with final measurements recorded the first 2 weeks of August. This period was considered optimum in regard to growth responses and esthetic characteristics for most varieties. The varieties were evaluated objectively by height and width, and by a rating system. Width and height measurements in the tables represent

averages in inches. In some instances where the plants had grown together forming thick mats or carpets, the width was recorded as "massed".

The rating system was based on 1 to 5, with 1 a very poor rating, and 5 excellent. Floriferous rating included flower, color, size, number, and uniformity. "N/A" means not applicable, with respect to plants grown for their attractive foliage, not flowers. Growth habit included growth characteristics such as branching habits, disease resistance, and uniformity of each plant size within a given varietal plot, since there was considerable variation in some varieties.

The overall rating was given in an attempt to combine all factors of floriferous and other growth characteristics into one evaluation. In all instances, the varieties evaluated in the garden were compared with similar varieties and types. Therefore, there may be other varieties not present here that would be better types than those represented. Frequent rainfall helped prevent many of the annuals from producing growth and flowers as good as in previous seasons. Seed sources are identified on page 18.

The following varieties were outstanding in growth for 1967.

AGERATUM. Blue Beauty, Blue Chip, Blue Danube and Blue Fox all had uniform growth and flowering habit.

ALYSSUM. Carpet of Snow produced continuous bloom throughout the summer until frost.

ASTER. Super Sinensis, Giant Mixed was the best of all the asters. It did not suffer as severely from aster wilt or yellows as the other varieties.

BALSAM. Camellia Flowered Double and Color Parade provided large quantities of flowers and had the best compact growth.

- BEGONIA. Plants were grown in full sun. Merville Rouge, Red Trionphe and Red Triumph provided high flower production with uniform growth.
- CELOSIA. Forest Fire Improved, Plumosa Golden Triumph, Sunburst Gold, and Golden Gem were outstanding, with Pampas Plume, Sunburst Red, and Orange Feather producing excellent flowers and growth.
- CHRYSANTHEMUM. Eastern Star Improved provided an abundance of flowers and was most attractive in mid-summer.
- CLEOME. There was very vigorous growth in Helen Campbell, and in Rose Queen, which has attractive pink flowers.
- CINERARIA. Condidissima had attractive foliage and compact habit of growth.
- COLEUS. Flaming Foliage, Select Mixture, and Salmon Flame were outstanding in their foliage coloration and were vigorous growers.
- COSMOS. Her Majesty and Sunset bloomed continuously throughout the summer and had attractive foliage.
- DAHLIA. Coltness Hybrids Mixture and Double Bedding Mixed were compact growers with small flowers over a long blooming period.
- DIANTHUS. Double Mixed and Single Charms had attractive flowers, and bloomed throughout the summer.
- DIGITALIS. Foxy is the first biennial to bloom the first season. It had most attractive flowers.
- GERANIUM. Several geraniums grown from seed flowered true to color and had good compact growth. Varieties formerly grown under a number designation are now available as Carefree Bright Pink, Carefree Scarlet, Carefree Deep Salmon, and Carefree White.
- IMPATIENS. Sixteen varieties were grown under full sun. A Go-Go, Dwarf Orange, Pink and Rose, Imp Hybrids Formula Blend, Red Herald, Shade

Glow Series, Orange, and Red had dwarf growth with many flowers.

MARIGOLD. Of the 21 varieties grown, these appeared to be superior; Dwarf Sparky, First Lady Marigold, Gold Coins Mixed, Golden Treasure, Golden Jubilee, King Tut, Orange Jubilee, Spanish Brocade, Sparkler, and the Tiger.

PANSY. Butterfly Hybrids, Giant Majestic Mixed , Masquerade, Super Giant Yellow with Eye, and Westland Giants, were of vigorous growth and produced flowers throughout the summer.

PETUNIA. The F. Grandiflora petunias have larger, somewhat more attractive blooms, usually ruffled or fringed. The outstanding F. Grandifloras were Bright Red, Grand Prix, King of Diamonds, Maytime, Peach Blossom, Pink, and Spring Song Improved.

The F. Multiflora petunias have smaller but earlier flowers and are profuse bloomers all season, especially during the hottest part of the summer. Excellent F. Multifloras were Blue Ribbon, Brass Band, Coral Salmon, Cover Girl, Festival, Pink Satin, Plum Blue, Plum Pink, Plum Pudding, Plum Purple, Polar Cap, Popeye, Purple Plum, Snowdrift, Starfire, Victory, White Avalanche, and White Harmony.

The F. Multiflora Doubles are more vigorous, more rain-and-wind-proof, and better suited for bedding purposes than the other large-flowered kinds. The outstanding double multifloras were Blue Jay, Cardinal, Cherry Tart, Honey Bunch, Lavender Delight, Pink Delight, Pink Riches, Red and White Delight, and White Delight.

PHLOX. Cecily Mixtures Globe Scarlet Ball and Twinkles of Red and Salmon Shades bloomed profusely and were of compact growth.

SALVIA. Outstanding varieties with compact growth and brilliant flower color

were Bonfire, Flash, Little Red Riding Hood, Magic Fire, Pompeii, (Hot Jazz), Purple Blaze, Scarlet Midget, and St. John's Fire.

SNAPDRAGON. Carioca Mixed, Cherry Rocket, Frontier Strain, Mixed Colors, Forest Pink, Garden Type Double Mix, Rocket Mixed, Rocket Strain, Mixed Colors, and Sprite Mixture all produced an abundance of flowers with excellent growth.

ZINNIA. Thirty-five varieties of zinnias were grown with several duplications. Carousel Giant, Violet Queen, Dahlia Flowered-Illumination, Firelight, Lilliput-Crimson Gem, Lilliput-Golden Gem, Lilliput-Mahogany Gem, Lilliput-Scarlet Gem, Mini-Pink, Pink Buttons, Pink X Cactus, Senorita, and State Fair were outstanding in flower production and dark green, vigorous growth.

Thanks are extended to the many seed companies and to the All-American Selections Organization for the generous cooperation received in the Virginia Polytechnic Institute Trial Garden Project.

AGERATUM

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Blue Beauty	11	14	3	2	3	GE
Blue Blazer	6	10	3	1	1	FL,VA
Blue Chip	9	18	4	3	3	BA,NK
Blue Danube	7	16	3	3	3	GL
Blue Fox	9	12	3	2	3	PK
Blue Mist	12	18	3	2	2	PA
Blue Surf	5	10	1	1	1	BO
Capri	10	19	2	3	2	GE

ALYSSUM

Carpet of Snow	5	20	4	4	4	VA
Compactum, White	4	11	3	3	3	GL
Violet King, Improved	5	11	3	3	3	GE

AMARANTHUS

Blaze	29	24	N/A	3	3	GL
Early Splendor	17	17	N/A	1	2	NK

AQUILEGIA

Dwarf Alpine	9	11	N/A	3	3	BO
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ARCTOTIS

Pastel	11	22	1	4	2	GR
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ASTER

Burpee's Dwarf Blue	8	12	3	2	3	BU
Cutting Strain, Light Blue						GL
Duchess	22	8	3	2	2	GL
Dwarf Carpet, Bright Scarlet	8	12	1	3	1	GL
Dwarf Carpet, Rose Red	8	10	1	3	1	GL
Dwarf Bedding Mixed	8	12	2	3	1	GL
Flashing Lights, Dark Blue	20	16	3	2	2	GL
Flashing Lights, Light Blue	5	7	1	1	1	GL
Flashing Lights Salmon	16	11	2	2	2	GL
Fluffy Blue	25	13	2	2	2	BU
Little Beauties	8	13	2	2	2	GL
Pale Yellow #97	20	13	2	1	2	GL
Pink Flamingo	20	18	2	2	2	BA,PK
Pink Lady	27	15	2	2	2	GL
Remo, Finest Mixed #65	13	10	2	1	1	GL
Super Chinensis, Mixture #3	27	22	2	3	3	GL
Super Sinensis, Giant Mixed #101	21	21	3	4	4	GL
Thousand Wonders, Rose	8	13	2	2	2	GL
White King #97	20	10	2	2	2	GL



BALSAM

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Camellia Flowered Double	21	10	4	2	3	HA
Color Parade	10	12	4	3	2	GE,VA
Dwarf Double Bush/Flowered Mix.	23	16	2	2	2	GE
Improved Double Camellia/ Flowered Mixture	19	11	1	1	1	GE
Improved Rose Flowered Extra Double Mixture	10	10	2	2	2	GE

BEGONIA

(Semperflorens)

Flamingo	4	3	2	2	2	GE
Merville Rouge	6	7	4	4	4	GR
Pink Pearl	3	5	3	3	3	VA
Red Trionphe #95	9	8	4	4	4	GL
Red Triumph	5	6	4	4	4	GL
Rose Wonder	4	4	3	3	3	VA

BROWALLIA

Blue Bells Improved	6	11	1	1	1	BA, GL, PA
Silver Bells	8	9	1	1	1	PA

CALENDULA

Flash	23	30	2	4	3	GL
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CANDYTUFT

(Coronaria)

White Giant	13	7	3	3	3	GL
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CARNATION

Claudia	10	8	2	3	3	GE
Dwarf fragrance Mixture	8	13	2	2	2	FL
Dwarf fragrance, Double Mixture	10	11	2	3	3	GE

CELOSIA

Dwarf Feather Mixture No. 1	11	10	3	2	2	GE
Dwarf Feather Mixture No. 2	8	9	3	3	3	GE
Dwarf Golden Sovereign	10	18	1	3	2	GL
Floradale	9	20	2	3	2	BU
Forest Fire Improved	23	22	5	5	5	NK
Old Gold	28	20	1	4	3	GL
Pampas Plume	24	18	3	4	4	FL
Plumosa Golden Triumph	23	21	5	5	5	GR
Sunburst Gold, Golden Gem	13	18	5	5	5	NK
Sunburst Red, Orange Feather	8	7	4	4	4	NK

CHRYSANTHEMUM

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Eastern Star Improved	21	24	5	5	5	GE
Gold Rush	15	13	2	3	3	GL
Rainbow Merry Mixture	14	13	2	3	3	GE

CLEOME

Helen Campbell	40	34	5	5	5	HA
Rose Queen	39	38	5	5	5	HA

CINERARIA  
(Maritima)

Candidissima #46	11	16	N/A	5	5	GL
Dwarf Silver #6	7	11	N/A	4	4	GL
Dwarf Silver #94	7	11	N/A	3	3	GL
Silvery White #6	8	9	N/A	3	3	GL

COLEUS

Cronton Leaved Mixture	11	9	N/A	2	2	GR
Dondo Prize Mixture	12	18	N/A	2	2	GE
Firelight	5	7	N/A	2	2	GL
Flaming Foliage	10	18	N/A	4	4	GR
Formula Mixture	13	13	N/A	2	2	GL, PA
German's Rainbow Mixture	9	12	N/A	3	3	GR
Select Mixture	14	13	N/A	4	4	GE
Red with Gold Rim	8	10	N/A	3	3	GL
Red Maple	8	11	N/A	3	3	GR
Red Monarch	17	10	N/A	3	3	GR
Salmon Flame	9	10	N/A	4	4	GR

COSMOS

Goldcrest	17	20	4	4	4	GE
Her Majesty #65	34	30	4	5	5	GL
Sunset	21	27	4	5	5	GE

DAHLIA

Coltness Hybrids Mixture	15	15	2	4	4	GE
Double Bedding Mixed #100	10	13	3	4	4	GL
Dwarf Hybrids #101	13	13	3	3	3	GL
Early Bird	16	13	3	2	3	GL
Extra Dwarf Double Mixture	15	15	3	3	3	VA
Fleck's Extra Dwarf Hybrids	10	11	2	2	2	FL

DIANTHUS

Carioca	7	10	3	3	3	GL
Double Mixed #3	12	13	3	4	4	GL
Single Charms	10	16	3	4	4	GL

DIGITALIS

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Foxy	25	14	4	5	4	FL, GL, VA

DUSTY MILLER

Hoar Frost	8	15	N/A	4	4	GE, GR
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ESCHSCHOLTZIA

Mission Bells	16	22	5	5	5	GE
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FLOWERING CABBAGE

Mixed Colors	11	17	N/A	4	4	GE
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GAZANIA

Gay Charms	12	15	3	3	3	GL
Splendens Grand Mixed	15	15	3	3	3	NK
Splendens Grandiflora Mix	8	12	3	2	2	GR

GERANIUM

Bright Pink 5-2B-5f	13	13	4	5	5	PA
Bright Red 5-2A-2f	18	12	3	5	4	PA
Dark Salmon 5-2D-3f	13	11	4	5	5	PA
White 5-2D-1f	9	12	4	5	5	PA
Hybrid Red GP #6	13	10	4	5	5	HA
Moreton Series, Deep Salmon	13	12	4	4	4	HA
Moreton Series, Orange Scarlet	13	14	3	4	4	HA
Moreton Series, White	13	11	3	4	4	HA

GODETIA

Dwarf Compact Mixed #3	9	15	3	3	3	GL
Dwarf Double Prize Mixture	9	7	3	3	3	GE

GYPSOPHILA

Covent Garden Market	13	17	3	3	3	GE
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HELIOPSIS

Sunlight	26	15	4	4	4	GL
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HELIOTROPE

Blue Bonnet	22	20	3	4	4	GE
First Snow	26	11	3	3	3	GE

IMPATIENS

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
A'Go-Go	6	20	3	4	4	PK
Carmine Baby	10	21	3	3	3	GE
Dwarf Orange	8	18	4	4	4	SK
Dwarf Pink	6	15	3	4	4	SK
Dwarf Rose	6	17	3	4	4	SK
Dwarf Scarlet	6	12	3	3	3	SK
Imp Formula Mixture	8	17	3	4	3	FL
Imp Hybrids Formula Blend	6	17	4	4	4	VA
Red Herald	7	15	3	4	4	GE
Shade Glow Series, Carmine	6	15	2	3	3	HA
Shade Glow Series, Mixed Colors	11	21	4	4	4	HA
Shade Glow Series, Orange	11	24	5	5	5	HA
Shade Glow Series, Red	10	17	4	4	4	HA
Shade Glow Series, Rose	5	17	4	3	3	HA
Shade Glow Series, Salmon	8	21	3	2	3	HA
Shade Glow Series, White	7	21	3	3	3	HA

KALANCHOE

Violacca	5	6	N/A	2	2	GL
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KOCHIA

Childsii	29	17	N/A	5	5	GE
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LEPTOSIPHON

French Hybrids Mixture	6	13	4	3	3	GE
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LINARIA

Norhtern Lights	15	24	4	4	4	GL
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LOBELIA

String of Pearls	5	12	4	4	4	GL
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MARIGOLD

Brittany	11	16	4	3	3	GE
Crackerjack "B"	20	22	3	3	3	GL
Cupid Golden	9	13	3	3	3	GE
Cupid Orange	11	12	4	3	3	GE
Cupid Yellow	9	15	3	3	3	GE
Dwarf Sparky	11	15	4	4	4	VA
First Lady Marigold	13	16	4	5	5	BU
French Master Blend	8	10	3	3	3	VA
Gold Coins Mixed	25	21	4	5	4	VA
Golden Treasure	11	11	4	4	4	BO

MARIGOLD

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Golden Jubilee	14	18	4	5	5	NK
King Tut	10	16	5	5	5	BA,GR,PK
Nugget	8	15	4	3	3	BU
Orange Jubilee	14	24	4	4	4	BO
Pot o' Gold	13	11	3	2	3	GE
Spanish Brocade	11	15	4	4	4	BO
Sparkler	11	17	3	4	4	GL
Sparky	13	13	3	3	3	GL,NK
Spun Yellow	9	10	3	2	3	FL,VA
Tiger	8	13	4	4	4	PK
Yellow Supreme	23	27	3	3	3	GE

MATRICARIA

Gold Stars	12	13	3	4	4	PK
White Stars	9	10	3	4	4	BO

NEMESIA

Dwarf Carnival Mixture	13	15	3	3	3	GE
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ORNAMENTAL PEPPER

Cheers	12	17	3	5	4	GL
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PANSY

Butterfly Hybrids	8	13	4	4	4	GL
Colossal Giants	8	9	3	3	3	GE
Early Flowered Super Swiss Giants	8	9	3	2	3	GE
Giant Majestic Mixed	8	15	5	5	5	VA
Masquerade	8	14	4	4	4	GE
Super Giant Yellow with Eye	6	9	4	4	4	GE
Swiss Giants, Mixed #3	6	8	3	2	3	GL
Swiss Giants, Rheingold #3	6	5	3	3	3	GL
Westland Giants	6	10	4	4	4	GL

PERILLA

Crinkled Coleus	26	19	N/A	4	4	GE
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PETUNIA  
(Grandiflora)

Ace of Hearts	11	Masses	2	2	2	HA
Appleblossom	8	Massed	2	2	2	PA,VA
Ballerina	11	Massed	3	4	3	PA
Beacon	13	Massed	3	4	3	GP,PK
Bingo Improved	18	Massed	2	3	3	PA
Blue Jeans	15	Massed	3	3	3	PA
Blue Magic	14	Massed	3	3	3	PA
Blue Mantle	13	Massed	3	3	3	SK
Blue Sea	16	Massed	3	3	3	HA

PETUNIA  
(Grandiflora)

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Bridesmaid	15	Massed	3	2	2	GO,PK
Bright Red #N-13	15	Massed	4	4	4	GL
Buccaneer	10	Massed	4	3	3	HA
Calypso	11	Massed	3	3	3	PA,VA
Candy Apple	12	Massed	3	3	3	GO,VA
Capri	12	Massed	3	3	3	PA
Cavalier	15	Massed	3	2	3	PA
Cherry Blossom	14	Massed	2	2	2	GL,PA
Coral Cascade	9	13	2	1	2	FL
Coral Magic	9	Massed	3	3	3	PA
Crusader	14	Massed	3	3	3	PA
Dream Parade	11	Massed	2	1	2	SK
Fiesta	13	Massed	2	2	2	GO,PK,VA
Fringed White #66-548	12	Massed	3	3	3	SK
Happiness	14	Massed	2	2	2	GO
Gay Paris	13	Massed	3	3	3	GO,VA
Gaytime	10	Massed	2	2	2	HA
Glacier	17	Massed	3	3	3	GO,PK,VA
Grand Prix (Grand Prize)	17	Massed	4	4	4	GE
King of Diamonds	13	Massed	4	4	4	HA
La Paloma	14	Massed	3	3	3	PA
Majestic Rose Pink	15	Massed	3	3	2	SK
Mariner	13	Massed	3	3	3	GO,VA
Maytime	16	Massed	3	4	4	PA
Peach Blossom	18	Massed	4	4	4	PA
Pink Cascade	19	Massed	3	3	3	PA
Pink Cameo	14	Massed	3	3	3	HA
Pink Desire	15	Massed	3	3	3	VA
Pink Magic	15	Massed	3	3	3	PA
Pink Mascot	19	Massed	3	4	4	SK
Pink Ripple	10	Massed	2	2	2	GR
Razzle-Dazzle	12	Massed	2	3	3	GO,VA
Red Cascade	13	Massed	3	3	3	PA
Red Ensign	12	Massed	3	3	3	SK
Red Magic	15	Massed	3	3	3	PA
Rose Perfection	13	Massed	4	4	4	HA
Roulette	15	Massed	3	3	3	HA
Salmon Pink #66-377	14	Massed	4	4	4	SK
Scarlet #66-277	11	Massed	3	3	3	SK
Snow Cap Improved	16	Massed	2	3	3	SK
Snow Giant	17	Massed	2	3	3	GE
Soft Salmon Pink #66-386	11	Massed	3	3	3	SK
Spectrum	16	Massed	2	2	2	GO
Spring Song Improved	14	Massed	4	4	4	SK
Sunburst	15	Massed	2	1	2	PA
Sungleam	17	Massed	3	3	3	SK
Super White	11	Massed	3	2	3	GO
Tango	13	Massed	3	3	3	PA
Tropicana	14	Massed	3	3	3	HA

PETUNIA  
(Grandiflora)

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Vesuvius	13	Massed	3	4	3	SK
Warrior	16	Massed	3	3	3	HA
White #13	11	Massed	3	2	3	GL
White Ensign	16	Massed	3	3	3	SK
White Frills	19	Massed	3	3	3	HA
White Sails	15	Massed	2	2	2	HA
Zig Zag	18	Massed	3	3	3	HA

PETUNIA  
(Multiflora)

Apricot Orange #66-681	15	Massed	3	3	3	SK
Blue Ribbon	18	Massed	4	4	4	GE
Brass Band	13	Massed	4	4	4	GE
Commanche	8	Massed	3	3	3	PA
Coral Salmon #66-713	9	Massed	4	4	4	SK
Cover Girl	12	Massed	5	5	5	HA
Festival	15	Masses	5	5	5	HA
Jack Frost	7	Massed	3	3	3	GE
Jet Fire	10	Massed	3	3	3	HA
Kewpie	12	Massed	5	5	5	PA
Meteor	15	Massed	3	3	3	PA
Pink #66-797	9	Massed	4	4	4	SK
Pink Bountiful	8	Massed	4	4	4	HA
Pink Foam	13	Massed	5	5	5	SK
Pink Satin	13	Massed	5	5	5	VA
Plum Blue	15	Massed	4	4	4	GO
Plum Pink	19	Massed	5	5	5	GO
Plum Pudding	15	Massed	4	4	4	GO,VA
Plum Purple	14	Massed	5	5	5	GO
Polar Cap	16	Massed	4	4	4	NK,SK
Popeye	12	Massed	4	4	4	HA
Purple Plum	15	Massed	4	3	4	PA
Red Avalanche	18	Massed	3	3	3	HA
Red Cap	14	Massed	3	3	3	HA
Red Coronet	14	Massed	2	2	2	SK
Red Dandy	11	Massed	3	2	2	GE
Rose #N-13	15	Massed	3	3	3	GL
Rose Star	9	Massed	3	2	3	PA
Salmon Coronet	13	Massed	4	3	3	SK
Scarlet Satin	11	Massed	2	2	2	VA
Snowdrift	15	Massed	5	5	5	HA
Starfire	10	Massed	4	4	4	GO,VA
Star Trophy	14	Massed	2	2	2	SK
Sugar Blues	12	Massed	2	2	2	NK,PA
Sugar Pink	14	Massed	3	3	3	PA
Sundance	11	Massed	3	3	3	HA

PETUNIA  
(Multiflora)

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Victory	14	Massed	4	4	4	HA
White #13	14	Massed	4	4	4	GL
White Avalanche	17	Massed	5	5	5	HA
White Harmony	21	Massed	4	4	4	GE
57B2	14	Massed	3	3	3	GL, PA

PETUNIA  
(Double Grandiflora)

Allegro	16	Massed	2	3	3	PA
Blue Danube	15	Massed	3	3	3	PA
Blue Ripple	18	Massed	3	3	3	GE
Fanfare	18	Massed	2	3	3	GL, GO
Princess	15	Massed	3	2	3	GO
Sonata	15	Massed	2	2	2	PA
Valentine	12	Massed	2	2	2	PA

PETUNIA  
(Double Multiflora)

Blue Jay	16	Massed	5	5	5	GL, PA
Cardinal	9	Massed	4	4	4	PA
Cherry Tart	15	Massed	5	5	5	PA
Delight Mix	15	Massed	3	3	3	GO, VA
Honey Bunch	17	Massed	4	4	4	PA
Lavender Delight	19	Massed	4	5	5	GO
Pink Delight	16	Massed	4	4	4	GO
Pink Riches	12	Massed	4	4	4	PA
Red & White Delight	13	Massed	4	4	4	GO
Strawberry Tart	10	Massed	2	2	2	PA
White Delight	16	Massed	4	4	4	GO

PETUNIA

All Double Dwarf Master Blend	17	Massed	2	2	2	VA
All Double Giant Victorious Shell Pink #66-256A	21	Massed	3	3	3	SK

PHLOX

Cecily Mixture #3	11	16	4	4	4	GL
Dwarf Beauty Mixed	9	15	3	3	3	GL
Dwarf Ideal Master Blend	11	19	3	2	3	VA
Globe Scarlet Ball	7	17	4	4	4	GR
Mixed #3	13	Massed	4	3	3	GL
Red #95	13	Massed	2	2	2	GL
Twinkles, Red Shades	9	17	5	5	5	GR
Twinkles, Salmon Shades	9	17	5	5	5	GR



POLYGONUM

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Capitatum	5	Massed	5	5	5	NK

PORTULACA

Extra Double Mixed #94	7	Massed	4	4	4	GL
Double Mixed	10	Massed	4	4	4	VA
Duplex Mixed	8	Massed	3	3	3	GL

QUEEN ANNE'S LACE

Queen Anne's Lace Flower	16	10	3	3	3	GE
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SALVIA

Bonfire	19	21	5	5	5	GE
Flash	26	20	4	4	4	GL
Little Red Riding Hood	14	18	4	4	4	GL
Magic Fire	11	17	3	4	4	GE
Pompeii (Hot Jazz)	16	16	4	4	4	VA
Purple Blaze	18	18	4	4	4	GE
Red #3	17	18	4	4	4	GL
Red #46	11	12	2	1	2	GL
Red Pillar	20	15	2	2	2	HA
Rocket #95	17	17	3	3	3	GL
Royal Mountie	15	14	3	3	3	BO
Salmon Pygmy	13	14	2	2	2	GE
Scarlet #95	21	14	2	2	2	GL
Scarlet Midget	15	17	3	4	4	GL
Scarlet Pygmy	15	17	3	4	3	GL, GE
St. John's Fire	16	20	4	4	4	GL, VA
Swan of the Rhine	13	17	3	3	3	PK

SEMPERVIVUM

Little Beauties, Mixed	2	2	4	4	4	GL
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SCHIZANTHUS

Blazer #88	14	13	2	2	2	GL
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SNAPDRAGON

Bright Butterflies	23	15	3	3	3	GO, VA
Carioca Mixed	18	15	4	4	4	GE, VA
Cherry Rocket	24	12	3	4	4	GL
Finest Mixture	14	13	2	2	2	GL
Floral Carpet Mixed	10	15	3	3	3	VA
Frontier Strain, Mixed Colors	20	16	4	4	4	HA
Frosty Pink	25	15	4	4	4	PK

SNAPDRAGON

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Frosty Rocket	28	17	3	3	3	GL
Garden Type Double Mix	24	14	5	5	5	GR
Golden Rose #13	17	11	2	2	2	GL
Love Letters	17	15	2	3	3	GE
Pink Starsnap	30	11	3	3	3	PK
Promenade Mix	15	15	3	3	3	GL,PK
Rocket Mixed	30	15	5	5	5	VA
Rocket Strain, Mixed Colors	25	25	5	5	5	HA
Sprite Mixture	20	14	5	5	5	GE
Sundown 3 #13	13	9	2	3	3	GL
Super Tetra Snaps, Mixed	23	17	3	3	3	BU

STATIC

Dwarf Mixed Colors	11	11	4	4	4	GL
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SUNFLOWER

Teddy Bear	5	3	1	1	1	NK
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TAHONKA DAISY

Tahonka Daisy	19	17	3	3	3	GE
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TITHONIA

Torch	56	Massed	5	5	5	GE
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VERBENA

Torrid	11	15	5	5	5	GE
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VINCA

Alba Oculata	16	16	4	4	4	GE
Alba Pura	10	5	1	1	1	GE

ZINNIA

Aztec	18	20	3	3	3	BU
Burpee Rose	4	5	1	1	1	BU
California Giant, Brightness	17	25	3	3	3	KI
California Giant, Cherry Queen	26	22	3	3	3	KI
California Giant, Orange King	22	18	2	2	2	KI
California Giant, Violet Queen	28	20	3	3	3	KI
Carousel Giant, Violet Queen						
"B"	21	18	5	5	5	GL
Dahlia Flowered, Canary Bird	28	25	3	3	3	KI
Dahlia Flowered, Canary Bird "B"	28	25	3	3	3	GL
Dahlia Flowered, Crimson						
Monarch "B"	24	18	3	2	2	GL

ZINNIA

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Dahlia Flowered, El Dorado	26	24	3	3	3	KI
Dahlia Flowered, El Dorado "B"	24	26	3	3	3	GL
Dahlia Flowered, Illumination	26	23	4	4	4	KI
Dahlia Flowered, Luminosa	23	22	3	3	3	KI
Dahlia Flowered, Luminosa "B"	23	22	3	3	3	GL
Dahlia Flowered, Monarch	20	16	3	3	3	KI
Dahlia Flowered, Scarlet Flame	23	28	4	3	3	KI
Firelight	17	16	4	4	4	GL
Giant Cactus, Blaze	20	18	4	3	3	KI
Giant Cactus, Floradale Scarlet	13	20	2	2	2	KI
Giant Cactus, Floradale Scarlet "B"	13	20	2	2	2	GL
Lilliput, Crimson Gem	26	21	4	4	4	KI
Lilliput, Dainty Gem	23	16	5	5	5	KI
Lilliput, Golden Gem	22	29	5	5	5	KI
Lilliput, Golden Gem	22	29	5	5	5	GL
Lilliput, Mahogany Gem	20	22	5	5	5	KI
Lilliput, Mahogany Gem "B"	20	22	5	5	5	GL
Lilliput, Scarlet Gem	24	25	5	5	5	KI
Lilliput, Scarlet Gem "B"	22	24	5	5	5	GE
Merry Go Round	17	25	3	3	3	GE
Mini-Pink	5	8	5	5	5	PK
Pink Buttons	18	23	5	5	5	FL
Pink X Cactus	22	23	5	5	5	GE
Senorita	16	18	5	5	5	BU
State Fair	20	23	4	4	4	NK
Thumbelina	8	12	5	5	5	VA
Thumbelina Coral	4	6	4	4	4	BA,BO
Treasure Island	10	20	3	3	3	GE
Whirligig	27	20	4	4	4	NK
Zenith Mixed	26	14	3	3	3	VA

## SOURCE OF SEEDS

- AAS - All-America Selections, P. O. Box 1341, 4331 N. Front Street, Harrisburg, Pennsylvania 17105.
- BA - George J. Ball, Inc., West Chicago, Illinois 60185.
- BO - Bodger Seeds, Ltd., Box 390, El Monte, California 91734.
- BU - W. Atlee Burpee Co., Philadelphia, Pennsylvania 19132.
- FM - Ferry-Morse Seed Co., San Juan Bautista, California.
- FL - Raymond A. Fleck Company, Southampton, Pennsylvania.
- GE - Germania Seed Co., 6952 N. California Ave., Chicago, Illinois 60645.
- GL - Fred C. Gloeckner & Co., Inc., 15 East 26th Street, New York, N. Y. 10010.
- GO - Goldsmith Seeds, Inc., P. O. Box 1347, Gilroy, California 95020.
- GR - H. G. German Seeds, 130 Bank Street, Smethport, Pennsylvania 16749.
- HA - Joseph Harris Co., Inc., Moreton Farm, Rochester, New York 14624.
- HE - Herbst Bros. Seedsmen, Inc., Box 96, 1000 N. Main Street, Brewster, New York 10509.
- KI - Kirchhoff's East Africa, Ltd. (Sent by Herbst Brothers).
- NK - Northrup, King & Co., 1500 Jackson Street, N. E. Minneapolis, Minnesota 55413.
- PA - Pan-American Seed Co., West Chicago, Illinois 60185.
- PK - George W. Park Seed Co., Inc., Greenwood, South Carolina 29647.
- SK - T. Sakata & Co., 2, Kiribatake, Kanagawa-Ku, P. O. Box Kanagawa No. 11, Yokohama, Japan.
- VA - Vaughan's Seed Co., 5300 S. Katrine Ave. Downers Grove, Illinois 60515.

Trade and brand names are used only for the purpose of information and the V.P.I. Research Division does not guarantee nor warrant the standard of the product, nor does it imply approval of the product to the exclusion of others which may also be suitable.

## 1968 ANNUAL FLOWER VARIETAL TRIALS

The 1968 annual flower varietal trials and the evaluation of flower entries for the All-America Selections were conducted at the V.P.I. Trial Gardens on the Virginia Polytechnic Institute campus at Blacksburg.

The small seeded varieties were sown the last week in March in metal flats containing a commercially prepared medim known as "Jiffy-Mix." The large seeded varieties were sown the third week in **April** directly in 2¼" peat pots containing a steam sterilized medim of equal parts loam soil and peat moss.

After the seeds were sown, the containers were placed in a greenhouse at 70°F. under a low pressure, intermittent mist system, set to mist for intervals of 8 seconds per minute from 8 a.m. to 5 p.m. As the seeds germinated, the containers were removed to a 60°F. greenhouse. Seedlings of the small seeded varieties were transplanted after they developed the second set of true leaves into 2½" peat pots, containing equal parts soil and peat moss. Seedlings of the large seeded varieties were roughed to allow only one plant per peat pot.

Starting May 27, 1968, the plants were transplanted to outside beds previously fumigated with methyl bromide at the rate of 1 lb. per 100 sq. ft. to control weeds, diseases, insects and nematodes. The plot for each variety was 6' x 3', with 8 plants spaced at 1½' intervals. The beds were irrigated as needed during the growing season.

Preliminary evaluations were made during the growing season with final measurements recorded the first two weeks of August. This period was considered optimum as regards to growth responses and esthetic characteristics for most varieties.

The varieties were evaluated objectively by height and width, and by a rating system. Width and height measurements in the tables represent averages in inches. In some instances where the plants had grown together forming thick mats

of carpets, the width was recorded as "massed."

The rating system was based on 1 to 5, with 1 a very poor rating and 5, excellent. Floriferous rating included: flower, color, size, number, and uniformity. N/A means not applicable, with respect to plants grown for their attractive foliage and not flowers. Growth habit included: growth characteristics and uniformity of each plant size within a given varietal plot, since there was considerable variation in some varieties. The overall rating was given in attempt to combine all factors of floriferous and other growth characteristics into one evaluation.

In all instances the varieties evaluated in the garden were compared with similar varieties and types. Therefore, there may be other varieties not present here that would be better types than those represented. Frequent rainfall and severe high temperatures prevented many of the varieties from producing the growth and quality of/or quantity of flowers present in previous trials. Seed sources are identified on page

#### Suggested Annual Flowers for 1969

The following varieties were outstanding for 1968.

AGERATUM. Blue Beauty, Blue Carpet, Blue Mist and Snow Carpet had uniform growth and flowering.

ALYSSUM. Extra Early-Extra Dwarf, New Carpet of Snow and Pastel Carpet had similar growth habits.

BALSAM. Double Flowered Dwarf Mixture was outstanding.

CELOSIA. Formulated Mixture, Golden Triumph and Prairie Fire produced excellent flowers and growth.

CLEOME. Helen Campbell, Pink Queen and Rose Queen had very vigorous growth and attractive flowers.

COLEUS. Croton Leaved Dark Shades, Croton Leaved Mixture, Multicolor Rainbow and

Rainbow, Chartreuse had outstanding foliage coloration and were vigorous growers.

DAHLIA. Border Jewels, Coltness Hybrids Mix, Elite Dwarf Hybrids, Fleck's Extra Dwarf Hybrids were compact growers with small flowers.

DUSTY MILLER. Hoar Frost and Maritima Diamond had attractive foliage and compact growth.

GERANIUM. Moreton Series of Deep Salmon and Picotee Scarlet were vigorous growers with a profusion of bloom.

IMPATIENS. Elfin Pink, Elfin Purple, Elfin Scarlet and Shade Glow Series - Mixed Colors had compact growth and many flowers.

MARIGOLD. Early Gold, King Tut, Lemondrop, Petite Orange and Red-and-Gold were superior to all the marigold varieties grown.

PETUNIA. The  $F_1$  Grandiflora petunias have larger, somewhat more attractive blooms, usually ruffled or fringed. The outstanding  $F_1$  Grandifloras were: Grand Prize, Harvest Moon, King of Diamonds, Maytime, Mid Blue, Peach Blossom, Pink Magic, Pink Mascot, Red Magic, Rose Perfection, Tickled Pink, and Vesuvius.

The  $F_1$  Multiflora petunias have smaller but earlier flowers and are profuse bloomers all season, especially during the hottest part of the summer. Excellent  $F_1$  Multifloras were: Blue Mist, Cover Girl, Deep Blue, Festival Kewpie, Orange Bells, Pacesetter, Pink Bountiful, Pink Foam, Pink Profusion, Plum Blue, Plum Pink, Plum Pudding, Plum Purple, Polar Cap, Popeye, Purple Plum, Rose Magic, Salmon Coronet, Snowdrift, Starfire Improved, Starkist Victory, and White Avalanche.

The  $F_1$  Multiflora Doubles are more vigorous, and better suited for bedding purposes than the  $F_1$  Grandiflora Doubles. The outstanding double multifloras were: Cardinal, Cherry Tart, Honey Bunch, Lavender Delight Improved, Pink Delight, Pink Riches, Red-and-White Delight, Scarlet and White Delight.

SALVIA. Outstanding varieties with compact growth and brilliant flower color were: Bonfire Elite and Red Pillar.

SNAPDRAGON. Bright Butterflies, Frontier Strain - Crimson, Dainty Orchid, Orange and White produced an abundance of flowers with excellent growth.

VINCA. Alba Pura, Dwarf Little Delicata and Polka Dot were profuse bloomers with attractive glossy green foliage.

ZINNIA. Cherry Buttons and Torch were the best as the other varieties were more susceptible to leaf spot and mildew diseases.

Thanks are extended to the many seed companies and the All-American Selections Organization for the generous cooperation received in the Virginia Polytechnic Institute Trial Garden Project.



AGERATUM

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Blue Beauty	11	19	3	2	3	GE
Blue Carpet	12	16	3	2	3	GE
Blue Mist	10	21	3	2	3	PA
Blue Surf	9	11	1	1	1	PK
Fairy Pink	9	19	2	2	2	GE
Snow Carpet	9	17	3	2	3	GE

ALYSSUM

Extra Early - Extra Dwarf	4	11	3	3	3	GE
New Carpet of Snow	4	12	3	3	3	GR
Pastel Carpet	4	16	3	3	3	GR,PK

AMARANTHUS

Aurora	16	25	N/A	1	1	GE
Early Splendor	33	28	N/A	2	2	GE
Oeschberg	6	13	N/A	2	2	GE

ASTER

Dwarf Queen Mixture	8	11	2	1	1	GE
Dwarf Thousand Wonders	8	12	1	1	1	GE
Finesse	16	15	2	2	2	GL
Lotto	17	10	1	1	1	GL

BALSAM

Double Flwd. Dwarf Mixture	24	20	5	4	4	GE
Imp. Db1. Flwd. Camellia Mix	33	17	4	3	3	GE
Imp. Rose Flwd. Db1. Mix	29	17	3	2	2	GE
Tom Thumb, Formula Mixed Color	20	11	3	2	2	SK

BROWALLIA

Blue Bells Improved	9	14	1	1	1	GL,PA
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CALENDULA

Orange Coronet	14	20	4	3	3	BO
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CALLIOPSIS

Dwarf Mixture	13	13	5	4	4	GE
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CARNATION

Claudia	18	19	3	3	3	GE
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CELOSIA

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Coral Garden Mixture	8	11	3	3	3	SK
Empress	13	8	3	3	3	GE
Extra Dwarf Golden Gem	11	10	3	3	3	GE
Formulated Mixture	20	33	5	4	4	BO
Golden Triumph	25	21	5	5	5	SK
Meadow Glow	11	14	3	4	3	SK
Pampas Plume	29	35	3	3	3	GE
Prairie Fire	18	14	5	5	5	SK
President Thiers	13	16	3	3	3	GE

CHRYSANTHEMUM

Eastern Star	20	28	N/A	3	3	GE
Mixed Colors	13	19	N/A	2	2	SK

CLEOME

Helen Campbell	40	44	5	5	5	HA
Pink Queen	42	45	5	5	5	HA
Rose Queen	42	45	5	5	5	GE, HA

COLEUS

Croton Leaved Dark Shades	12	18	N/A	4	4	GR
Croton Leaved Mixture	14	19	N/A	4	4	GR
Fashion Model	11	12	N/A	3	3	SK
Flaming Foliage	14	15	N/A	3	3	GR
Formula Mixture	11	10	N/A	2	2	PA
Fringed Leaved Mixture	16	13	N/A	3	3	GR, PK, SK
Golden Rainbow	14	9	N/A	2	2	GL
Master Blends Rainbow	9	14	N/A	2	2	SK
Multicolor Rainbow	20	17	N/A	4	4	SK
Pink Rainbow	4	6	N/A	2	2	GL
Red Rainbow	11	15	N/A	3	3	GL
Rainbow, Buff	6	8	N/A	3	3	GL
Rainbow, Chartreuse	12	18	N/A	4	4	GL
Rainbow, Red Stem Candidum	4	7	N/A	2	2	GL
Rainbow, Tri-Color	9	7	N/A	2	2	GL
Tyrian Rose	6	9	N/A	2	2	SK

CORAL FLOWER

Coral Flower	36	45	5	5	5	GE
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COSMOS

Early Sensation Mixed	39	38	4	4	4	GE
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DAHLIA

Border Jewels	20	26	4	4	4	BA
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DAHLIA

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Coltness Hybrids Mix	25	17	4	4	4	GE
Elite Dwarf Hybrids	32	17	4	3	4	GE
Extra Double Cactus Mix	27	27	4	3	3	GE
Fleck's Extra Dwarf Hybrids	16	20	4	4	4	FL

DIANTHUS

Wee Willie	3	16	1	2	1	GE
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DIDIDUS

Coeruleus	28	15			2	GE
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DIMORPHOTHECA

Aurantiaca Orange Glory	10	24			2	GE
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DUSTY MILLER

Hoar Frost	10	14	4	4	4	GE
Maritima Diamond	10	10	4	4	4	GE
Silver Dust Imp.	9	10	3	3	3	GE
Silver Lace	4	5	2	3	2	GR

ESCHSCHOLTZIA

Mission Bells Mixture	16	20	2	2	2	GE
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FLOWERING CABBAGE

Flowering Mixture	18	18	N/A	3	3	GE
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FLOWERING KALE

Flowering Mixed Colors	19	16	N/A	3	3	GE
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GAILLARDIA

Indian Chief	21	22	4	4	4	GE
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GERANIUMS

Carefree Deep Salmon	9	12	3	3	3	PA
Carefree Light Pink	8	7	3	3	3	PA
Carefree White	7	7	1	2	1	PA
Moreton Series, Blush White	10	8	3	4	3	HA
Moreton Series, Bright Scarlet-Red	16	12	3	3	3	HA
Moreton Series, Deep Crimson	17	20	4	4	4	HA

GERANIUMS

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Moreton Series, Deep Salmon	15	19	4	5	5	HA
Moreton Series, Picotee Scarlet	18	17	4	5	5	HA

GILIA

Macrantha Compacta	28	31	3	3	3	GE
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GLORIOSA DAISY

Double Mixture	30	36	5	5	5	GE
Irish Eyes	19	23	4	4	4	BU

GOMPHRENA

Rubra	30	48	4	4	4	GE
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GREVILLEA

Robusta	22	12	2	3	2	GE
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HELIANTHUS

Sungold	48	36	3	4	3	GE
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HELICHRYSUM

Dwarf Mixture	14	16	3	4	4	GE
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HOLLYHOCK

Indian Spring	52	38	4	4	4	GE
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HUNNEMANIA

Sunlite	20	28	4	4	4	GE
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IMPATIENS

Dondo Scarlet	6	20	3	3	3	GE
Elfin Pink	8	22	3	4	4	GL, PA
Elfin Purple	15	19	3	4	4	PA
Elfin Red	11	22	3	3	3	GL
Elfin Rose	8	22	2	2	2	PA
Elfin Scarlet	9	19	3	4	4	GL, PA
Elfin White	10	25	3	3	3	PA
Finest Mixed Colors	6	15	2	2	2	SK
Red Herald	10	29	3	3	3	GE
Shade Glow Series, Mixed Col.	8	20	4	4	4	HA
Shady Lady	7	15	4	3	3	PK

IMPATIENS

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Tall Holsti Mix	14	21	3	3	3	GE
Treasure Mixture	10	19	2	2	2	BA
White Symphony	5	15	2	2	2	GE

KOCHIA

Childsii	17	13	N/A	2	2	GE
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LINARIA

Fairy Bouquet Mixture	15	16	3	3	3	GE
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MARIGOLD

Bright Yellow P-288	14	13	3	4	3	HA
Brittany	10	14	4	4	4	GE
Dolly	9	11	2	3	3	GR
Early Gold	16	22	3	4	4	BO
Eliza	14	24	3	3	3	GE
Fantastic	29	24	2	2	2	BU
Fluffy Ruffles	20	18	3	3	3	GE
Golden Orange	12	8	3	3	3	GR
King Tut	8	12	3	4	4	BA,GR
Lemondrop	6	14	5	5	5	GR
Lulu	9	16	3	4	3	GE
Man In the Moon	19	25	2	2	2	GE
Petite Gold	10	16	2	2	2	GR
Petite Orange	7	13	4	4	4	GR
Red and Gold	20	31	4	5	4	FL
Spanish Brocade	10	18	4	4	4	BA,BO
Sparky	12	19	3	3	3	GR

MIGNONETTE

True Machet	9	12	3	3	3	GE
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MORNING GLORY

Rosie O'Grady	9	Massed	3	5	4	SK
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NEMESIA

Dwarf Carnival Mix	9	10	2	2	2	GE
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NICOTIANA

Affinis Mixed	29	32	4	4	4	GE
Daylight Sensation Mixed	28	22	4	4	4	GE

PANSY

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Blue Dream	7	12	3	3	3	FL
Colossal Giants	9	12	3	4	3	GE
Felix	9	18	3	3	3	GE
Giant Forerunner Mix	8	12	3	3	3	GE
Golden Rapture	7	15	3	3	3	GE
Majestic Giants Mixed	9	12	2	3	2	SK

PENTSTEMON

Jupiter	17	12	2	3	3	GE
Rainbow Mix	16	10	2	3	3	GE

PERILLA

Crispa Compacta	41	26	N/A	5	5	GE
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PETUNIA  
(Grandiflora)

Ace of Hearts	14	Massed	2	2	2	HA
Albatross	20	"	3	3	3	HA
Appleblossom	15	"	2	3	3	PA
Ballerina	17	"	3	4	3	PA
Beacon	16	"	3	4	3	GO
Bingo Improved	19	"	2	3	3	PA
Blue Jeans	14	"	3	3	3	PA
Blue Magic	13	"	3	3	3	PA
Blue Mantle	19	"	3	3	3	SK
Bravo	15	"	3	3	3	GO, GR
Bridesmaid	12	"	2	3	2	GO
Candy Apple	8	"	3	3	3	GO
Calypso	15	"	3	3	3	PA
Capri	14	"	3	3	3	PA
Cavalier	18	"	3	2	3	PA
Cherry Blossom	18	"	2	2	2	GL, PA
Color Parade	17	"	3	3	3	SK
Coral Cascade	15	"	2	2	2	PA
Coral Magic	15	"	3	3	3	PA
Crusader	10	"	3	3	3	PA
Dark Blue	14	"	3	4	3	SK
Domino	12	"	3	3	3	HA
Exquisite Imp.	11	"	3	3	3	SK
Fiesta	17	"	2	3	3	Go
Fringed White	19	"	3	3	3	SK
Gay Paris	12	"	3	3	3	GO
Glacier	23	"	3	3	3	GO
Grand Prize	24	"	3	4	4	GE
Grand Slam	18	"	3	3	3	HA
Happiness	17	"	3	3	3	GO, PK
Harvest Moon	16	"	3	4	4	GO, GR, PK

PETUNIA  
(Grandiflora)

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Highlight	20	Massed	3	3	3	SK
Kandy Kane	14	"	3	3	3	HA
King of Diamonds	19	"	4	4	4	HA
La Paloma	18	"	3	3	3	PA
Lilac Time	20	"	3	4	3	HA
Lollipop	20	"	3	3	3	PA
Malibu	15	"	3	3	3	GO
Marines	12	"	3	3	3	GO
Maytime	10	"	3	4	4	PA
Mid Blue	10	"	3	4	4	SK
Parti-Pink	11	"	3	3	4	BA
Peach Blossom	15	"	4	4	4	PA
Pink Bells	12	"	3	3	3	PA
Pink Cameo	16	"	3	3	3	HA
Pink Cascade	18	"	3	3	3	PA
Pink Cloud	12	"	3	3	3	GO,GR
Pink Magic	13	"	4	4	4	PA
Pink Mascot	12	"	3	4	4	SK
Pink Ripple	10	"	2	3	3	GR
Razzle Dazzle	12	"	2	3	3	FL,GO
Red Cascade	8	"	3	3	3	PA
Red Ensign	8	"	3	3	3	SK
Red Magic	18	"	3	4	4	PA
Rose Magic	18	"	3	3	3	GL
Rose Perfection	12	"	4	4	4	HA
Roulette	15	"	3	3	3	HA
Scarlet Ensign	12	"	2	3	3	SK
Snow Giant	11	"	2	3	3	GE
Star Satin	10	"	3	3	3	BO
Sunburst	13	"	2	2	2	PA
Sungleam	15	"	3	3	3	SK
Super White	13	"	3	3	3	GO,PK
Tango	11	"	3	3	3	PA
Tickled Pink	9	"	3	4	4	HA
Touche	12	"	3	3	3	BA
Velvet Queen	15	"	3	3	3	GE,SK
Vesuvius	16	"	3	4	4	SK
Warrior	14	"	3	3	3	HA
White Cascade	17	"	3	3	3	PA
White Ensign	9	"	3	3	3	SK
White Frills	20	"	3	3	3	HA
White Sails	15	"	2	2	2	HA
Zig Zag	22	"	3	3	3	HA

PETUNIA  
(Multiflora)

Blue Lagoon	18	"	3	3	3	HA
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PETUNIA  
(Multiflora)

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Blue Mist	20	Massed	3	4	4	HA
Blue Star	16	"	3	3	3	SK
Bright Rose	12	"	3	3	3	SK
Comanche	15	"	3	3	3	PA
Cover Girl	14	"	4	4	4	HA
Deep Blue	13	"	3	4	4	SK
Festival	16	"	4	4	4	HA
Glitter Imp.	15	"	3	3	3	SK
Gypsy	13	"	3	3	3	HA
Kewpie	14	"	4	4	4	PA
Lavender Lady	7	"	3	3	3	GL,PA
Orange Bells	8	"	4	4	4	PA
Orange 5 B-10	10	"	3	3	3	GL,PA
Orange 5 B-25	9	"	3	3	3	GL,PA
Pacesetter	9	"	3	4	4	HA
Pale Moon	15	"	3	3	3	HA
Pink Bountiful	12	"	4	4	4	HA
Pink Foam	12	"	5	5	5	SK
Pink Joy	9	"	3	3	3	GO
Pink Profusion	12	"	3	4	4	SK
Plum Blue	9	"	4	4	4	GO,PK
Plum Pink	10	"	4	5	5	GO
Plum Pudding	8	"	4	4	4	GO
Plum Purple	13	"	5	5	5	GO
Polar Cap	12	"	4	4	4	SK
Popeye	12	"	4	4	4	HA
Purple Joy	13	"	3	3	3	GO
Purple Plum	14	"	4	4	4	PA
Purple Waters	15	"	3	3	3	HA
Red Coronet Imp.	15	"	3	3	3	SK
Red Joy	16	"	3	3	3	GO
Rose Joy	14	"	3	3	3	GO
Rose Magic	23	"	3	4	4	PA
Rose Pink	15	"	3	3	3	SK
Rose Star	15	"	2	2	2	PA
Rose & White	21	"	3	3	3	SK
Rose w/white Throat	20	"	3	3	3	SK
Royal Ruby	20	"	3	3	3	HA
Salmon	18	"	3	3	2	SK
Salmon Coronet	12	"	4	4	4	SK
Scarlet Gem Imp.	15	"	3	3	3	SK
Scarlet Magic	13	"	3	3	3	PA
Snowdrift	21	"	5	5	5	HA
Star Joy	16	"	3	3	3	GO
Star Trophy	15	"	2	2	2	SK
Starfire Improved	14	"	4	4	4	GO
Starkist	13	"	3	4	4	HA
Sugar Blues	13	"	2	2	2	PA
Sugar Pink	15	"	3	3	3	PA



PETUNIA  
(Multiflora)

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Sundance	14	Massed	3	3	3	HA
Sunset	11	"	3	3	3	SK
Victory	9	"	4	4	4	HA
White Avalanche	11	"	5	5	5	HA
White Bountiful	15	"	3	3	3	HA
White Joy	11	"	3	3	3	GO
57 B-2	12	"	3	3	3	GL

PETUNIA  
(Double Grandiflora)

Allegro	10	"	2	3	3	PA
Blue Danube	7	"	3	3	3	PA
Bridal Bouquet	10	"	3	4	4	GO, GR, PK
Fanfare Mixture	12	"	2	3	3	GO, PK
Princess	10	"	3	3	3	GO
Salmon Delia	8	"	2	2	2	GE
Sonata	14	"	2	2	2	PA
Think Pink	11	"	3	3	3	PK
Valentine	12	"	2	2	2	PA

PETUNIA  
(Double Multiflora)

Bonanza Mixture	14	"	3	3	3	PA
Cardinal	14	"	4	4	4	PA
Cherry Tart	15	"	5	5	5	PA
Delight Mix	15	"	3	3	3	GO
Honey Bunch	15	"	4	4	4	PA
Lavender Delight Imp.	14	"	5	5	5	GO
Miss Blue	21	"	3	3	3	GL, PA
Orchid Blue	14	"	3	3	3	GO
Pink Delight	9	"	4	4	4	GO
Pink Riches	10	"	4	4	4	PA
Red & White Delight	14	"	4	4	4	GO
Red & White	18	"	3	3	3	SK
Rose	11	"	3	3	3	SK
Rose & White	12	"	3	3	3	SK
Salmon	9	"	3	3	3	SK
Scarlet	12	"	3	4	4	SK
Strawberry Tart	10	"	2	2	2	PA
White Delight	12	"	4	4	4	GO

PETUNIA  
(All Double Victorious)

Blue	12	"	3	3	3	SK
Blue & White	10	"	3	3	3	SK
Dorothy Favorite	12	"	3	3	3	SK

PETUNIA  
(All Double Victorious)

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Rose & Salmon, Striped White	10	Massed	3	3	3	SK

PHLOX

Scarlet Globe	11	12	3	3	3	GR
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RUDBECKIA

Gold Flame	27	23	3	3	3	GE
Harmony Double	29	24	3	3	3	GE

SALPIGLOSSIS

Splash	21	13	1	2	1	FL
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SALVIA

Bonfire Elite	26	20	5	5	5	HA
Grenadier	17	21	3	3	3	HA
Hot Jazz	15	19	3	4	3	GE
Magic Fire	18	20	3	4	3	GE
Red Pillar	13	18	4	4	4	HA
St. John's Fire	26	24	3	3	3	FL

SALVIA FARINACEA

Royal Blue	37	24	3	4	4	GE
Royal Purple	29	29	4	5	5	GE

SANVITALIA

Procumbens	12	Massed	4	4	4	GE
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SNAPDRAGON

Bright Butterflies	23	22	3	4	4	GO
Carioca Mixture	24	20	3	3	3	GE
Crescendo Mixed	21	17	3	3	3	PK
Floral Carpet Mixed	8	13	3	3	3	SK
Floral Carpet Rose	7	13	3	3	3	SK
Frontier Strain, Crimson	21	20	4	4	4	HA
Frontier Strain, Dainty Orch.	22	20	4	4	4	HA
Frontier Strain, Mixed Colors	20	25	3	3	3	HA
Frontier Strain, Orange	28	24	4	4	4	HA
Frontier Strain, Rose	27	30	3	3	3	HA
Frontier Strain, Yellow	28	20	3	3	3	HA
Frontier Strain, White	26	24	4	4	4	HA
Little Duffer Mixed Colors	11	14	3	3	3	HA
Pinnacle Mixture	19	16	3	3	3	BA

SNAPDRAGON

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Promenade Crimson	13	18	3	3	3	PA
Promenade Lavender	10	15	2	3	3	PA
Promenade White	16	16	2	3	3	PA
Rocket Strain, Flame Rocket	20	15	3	3	3	HA
Rocket Strain, Mixed Colors	25	18	3	3	3	HA
Spring Giant	24	18	3	3	3	GO
Supreme Double	23	15	2	2	2	BU

STATICE

Petite Bouquet	14	11	4	4	4	PK
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STOCKS

Dwd. Ten Week Mix	10	9	1	1	1	GE
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SWEET WILLIAM

Red Empress	10	13	2	2	2	SK
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TORENIA

Fournieri Alba	8	17	3	3	3	GE
Fournieri Grandiflora	12	16	3	4	4	GE

VERBENA

Dwarf Rainbow Mix	9	17	3	3	3	GE
Fleck's Early Dwarf Upright	11	13	3	3	3	FL
Ideal Florist Mix	10	20	4	4	4	GE
Sparkle	10	13	3	3	3	GE
Venosa	14	20	3	3	3	GE
Venosa Lilacina	13	21	3	3	3	GE

VINCA

Alba Oculata	17	18	3	3	3	GE
Alba Pura	20	16	4	4	4	GE
Dwarf Little Delicata	11	10	4	4	4	SK
Polka Dot	9	15	4	4	4	PK

WALLFLOWER

Double Early Wonder	14	15	3	3	3	GE
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ZINNIA

Blaze Imp.	17	20	1	1	1	GE
Cherry Buttons	15	18	4	4	4	BO

ZINNIA

<u>Variety</u>	<u>Height</u> <u>in.</u>	<u>Width</u> <u>in.</u>	<u>Florifer-</u> <u>ous</u>	<u>Growth</u> <u>Habit</u>	<u>Overall</u> <u>Rating</u>	<u>Seed</u> <u>Source</u>
Cherry Time	24	29	1	1	1	GE
Colossal Mix	20	33	1	1	1	GE
Mini-Pink	5	7	3	3	3	PK
Plus x Cactus	25	20	1	1	1	GE
Pride	25	28	3	3	3	GE
Rosy Future	27	36	3	3	3	BU
Sombrero	9	12	3	3	3	BO
Thumbelina Rose	7	12	2	2	2	BO
Torch	31	38	4	4	4	BU
Treasure Island	17	22	3	3	3	GE
Zipasee Mixed	21	26	3	3	3	PK

## SOURCE OF SEEDS

- AAS - All-America Selections, P. O. Box 1341, 4331 N. Front Street, Harrisburg, Pennsylvania 17105.
- BA - George J. Ball, Inc., West Chicago, Illinois 60185.
- BO - Bodger Seeds, Ltd., Box 390, El Monte, California 91734.
- BU - W. Atlee Burpee Co., Philadelphia, Pennsylvania 19132.
- FL - Raymond A. Fleck Company, Southampton, Pennsylvania.
- GE - Germania Seed Co., 6952 N. California Avenue, Chicago, Illinois 60645.
- GL - Fred C. Gloeckner & Co., Inc., 15 East 26th Street, New York, N. Y. 10010.
- GO - Goldsmith Seeds, Inc., P. O.Box 1347, Gilroy, California 95020.
- GR - H. G. German Seeds, 130 Bank Streets, Smethport, Pa. 16749.
- HA - Joseph Harris Co., Inc., Moreton Farm, Rochester, New York 14624.
- HE - Herbst Bros. Seedsmen, Inc., Box 96, 1000 N. Main Street, Brewster, New York 10509.
- PA - Pan-American Seed Co., Paonia, Colorado.
- PK - Geo. W. Park Seed Co., Inc., Greenwood, South Carolina 29647.
- SK - T. Sakata & Co., 2, Kiribatake, Kanagawa-Ki, P. O. Box Kanagawa No. 11, Yokohama, Japan.

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