## North Dakota State University \* Dickinson Research Extension Center

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### 1995 CULTIVAR TRIALS OF BEDDING PLANTS

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# **SUMMARY** Introduction

Performance trials on over 300 annual bedding plants were conducted during the 1995 growing season by the Plant Sciences Department at North Dakota State University. In Fargo, the main trials were located on the plots on the west side of campus while a small evaluation bed was added at the research station in the western part of the state at Dickinson, ND. Both the weather and soil types in Dickinson are considerably different than the Fargo site. The Fargo plots consist of a heavy clay soil while Dickinson has a much lighter soil and typically a drier climate. We plan to expand our trials in Dickinson in 1996.

#### Culture

Cultivars evaluated at both sites were seeded in Jiffy Mix in the Horticulture and Forestry greenhouses on the NDSU campus in March, April and May. The only exception was geraniums from Oglevee which were received as rooted cuttings. When at the proper stage, seedlings were transplanted into cell packs containing Sunshine Mix #1. Six plants of each cultivar (12 plants of mixes) were transplanted in to the field at the Fargo site June 2 - June 6, 1995. Plants were immediately watered in with Miracle-Gro (15-30-15) liquid fertilizer. Plants were fertilized twice during the growing season. In Dickinson, plants were set out the week of May 15, 1995. Unfortunately, a light frost followed planting in Dickinson and a few salvia and verbena were lost and the geraniums were slowed quite a bit. At both stations, overhead irrigation was applied as needed and weeding was done by hand.

#### Weather

The weather at the Fargo station was warmer and drier than last summer. Rainfall for June, July and August was 2.36 inches less than last year but only .38 inches above average. Temperatures in June, July, and August averaged 2.0 F higher than normal but were 3.5 F warmer than in 1994. In July, two severe storms hit Fargo two days in a row which resulted in some water damage to the trial beds. The snapdragons were completely lost and the verbena were slowed substantially. In Dickinson the weather was warmer and wetter than normal. Rainfall for June, July and August exceeded the average by 3.7 inches and temperature for the same period was 1.3F above normal.

#### **Evaluations**

Plants in Fargo were evaluated twice over the season for height, spread, and qualities such as vigor, bloom quality, and overall appearance. The first evaluation was July 28, 1995 and the second was done on August 31, 1995. The Dickinson trials were evaluated on August 15, 1995 by Dr. Ron Smith.

At the Dickinson trials, the **top five** were:

- 1. Petunia 'Purple Wave'
- 2. Rudbeckia hirta 'Indian Summer'
- 3. Marigold 'Perfection Gold'
- 4. Statice 'Friendly Yellow'
- 5. Vinca 'Pretty in Rose'

The trial garden at NDSU is an official All-America Selections display garden and is open to the public throughout the growing season. Also on display are over 300 perennials that are evaluated over the season for bloom, vigor, winter hardiness and general overall quality.

## **Acknowledgements**

We would like to thank official supporters of our trial gardens: American Takii, Inc., Daehnfeldt, Inc., Ernst Benary of America, Inc., and Oglevee Ltd.. We hope the results from our trial gardens are beneficial in their research for new

and improved cultivars.

Disclaimer: Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by NDSU or the North Dakota Agricultural Experiment Station is implied..

1995 BEDDING PLANT TRIAL RESULTS NDSU Agriculture Experiment Station, Dickinson, North Dakota			
Cultivar	Height" (8-15-95	Spread" (8-15-95)	Flower Color/Comments
AGERATUM			
Neptune Blue (GS)	9-12	4-6	Blue - Good density of flowers
Think Pink (Gri)	6	12-16	Pale lavender - Flowers dense but faded
ALYSSUM			
Cheers Mix (Gri)	6	12-16	Pink, white, lavendar - Dense flowers, faded
АММОВІИМ			
Bikini (Ben)	18	4	White - Dried plants, faded flowers
COREOPSIS			
C. tinctoria (AHS)	24-30	12-18	Gold with bronze - 50/50 flowers to seeds on plant
COSMOS			

Sonata Mixed (RS)	24	18-20	Pink, white, lavender - About half seed heads
DIANTHUS			
Ideal Violet (AT, AAS)	6	4-6	Violet - Good Show
Princess Scarlet (GS)	4-6	9-12	Red - Flowers dense but faded
GERANIUM			
Manybloom Red (Gri)	6	4-6	Red - No vigor
Red Hots (Ogl)	6	6	Red - Flowers faded
Rose Orbit (GS)	4	6-9	Pink - Healthy plants
GRASSES			
Rhynchelitrum repens - Ruby Grass (Ben)	36-40	36-40	Wispy red seed heads, nice dense foliage
GYPSOPHILA			
Garden Bride (Da)	6-9	12	Pink - Dense, petite
MARIGOLD			
Perfection Gold (GS)	18-20	12	Golden orange - Clean, clear flowers, foliage - Looks good!
NIEREMBERGIA			
Mont Blanc (AAS, AT)	4-6	6-12	White - Good show of flowers
NIGELLA			
Nigella sp.	24-30	12-16	Was seed heads only at this time

PETUNIA			
Floribunda - Celebrity Blue (Bod)	6-9	6	Deep purple - no vigor, poor
Floribunda - Celebrity Red (Bod)	12-16	12-16	Red - Good flower show
Grandiflora - Ultra Crimson Star (GS)	12-16	12-16	Burgundy and white - Poor, not many flowers
Grandiflora - Ultra Sky Blue (GS)	12	12-16	Pale blue - Looks good
Milliflora - Fantasy Blue (GS)	9-12	12	Deep purple - Dense
Milliflora - Fantasy Crystal Red (GS)	6-9	9-12	Red veins, light edges - Faded small flowers, weak
Multiflora - Prime Time Blue (GS)	16-18	9-12	Deep purple - Flower color okay but plant is leggy
Mulitflora - Prime Time Rose Frost (GS)	12-16	9-12	Hot pink with white edge - Looks okay but flowers are faded
Procumbent - Purple Wave (AAS)	6-9	12-18	Bright pinkish purple - Fantastic flower show
PORTULACA			
Sunnyside mixture (CI)	6	12-18	Red, yellow, salmon, pink - Good double flower
RUDBECKIA			
R. hirta 'Indian Summer' (AAS)	36-40	18-24	Gold - Outstanding show!
SALVIA			
S. coccinea 'Lady in Red' (AAS)	24-36	24	Red - Flowers 98% gone at this time but plant is health

SHASTA DAISY			
Snow Bouquet (AT)	24-36	18-20	White - Nice flower show
SNAPDRAGON			
Royal Carpet Mixed (AT)	12	12	About half the flowers have gone to seed
STATICE			
Friendly Yellow (AT)	24-36	12-18	Yellow - Bright, clear, nice show!
Premium Blue (Gri)	24-36	10-12	Blue with white centers - deep color
VINCA			
Grape Cooler (Va)	6-9	9-12	Rose - Beautiful and healthy
Pretty in Rose (AAS)	6-9	9-12	Rose - Beautiful and healthy
VERBENA			
Imagination (AAS, Ben)	12	18-20	Dense foliage - very healthy but few flowers at this time

1995 BEDDING PLANT TRIAL RESULTS SEED SOURCE REFERENCE LIST*		
Code	Company Name and Address	
AAS	All America Selections 1311 Butterfield Road Suite 310 Downer's Grove, IL 60515	
	American Horticulture Society	

AHS	7931 East Boulevard Drive Alexandria, VA 22308
AT	American Takii, Inc. 301 Natividad Road Salinas, CA 93906
Ball	Ball Seed Co. 622 Town Road West Chicago, IL 60185-3500
Bod	Bodger Seeds, LTD PO Box 5090 El Monte, CA 91734-1090
Bur	W. Atlee Burpee Co. 300 Park Avenue Warminster, PA 18974
Cl	Clause Seed 100 Breen Road San Juan Bautista, CA 95045
Da	Daehnfeldt, Inc. P.O. Box 947 Albany OR 97321
Ben	Ernst Benary of America, Inc. 1444 Larson St. Sycamore, IL 60178
Gs	Goldsmith Seeds, Inc. P.O. Box 1349 Gilroy, CA 95021
Gri	G.S. Grimes Seeds 11335 Concord-Hambden Rd. Concord OH 44077

Ogl	Oglevee Ltd. 152 Oglevee Lane Connellsville PA 15425
Pk	Park Seed Co. P.O. Box 31 Greenwood, SC 29646
RS	Royal Sluis-America 910 Duncan Avenue San Juan Bautista, CA 95045
Va	Vaughn's Seed Co. 5300 Katrine Avenue Downers Grove IL 60515-4095

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