

**Rose Variety Evaluation Project
North Dakota State University
Dickinson Research Extension Center**

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INTRODUCTION:

Roses are long-time favorite plants in home landscapes throughout southwest North Dakota. Hybrid Roses have unique flower colors, fragrances, different sizes, growth forms, and foliage characteristics. Shrub roses are used the most in local yards because they have an advantage in winter hardiness and require less maintenance.

Avid gardeners like to experiment with new and different plant materials so there is more interest in Hybrid Teas, Floribunda, Grandiflora, and other types of roses. A new rose evaluation study was initiated to provide local data on the performance of different rose types.

METHODS:

A total of 23 varieties – 5- Floribunda, 5- Grandiflora, and 13- Hybrid Tea Rose varieties were included in this project. Two bushes were planted in each of 25 raised beds. Each bed contained a soil mixture of 50% top soil and 50% compost material. Roses were randomly planted and each variety was replicated from 1-5 times. All plant materials were in very good condition at planting and transplant shock was minimal.

Roses were planted on June 6 and June 14, 2006. All bushes were hand watered after planting. Drip irrigation was the watering method used during the rest of the year. Different fertilizer products were used including: 1.) Miracle Gro – Shake N Feed, slow release rose plant food – 9-18-9 + sulphur and 2.) once, plant food – 10-18-10. Products were applied according to label recommendations. The rose bushes made good growth and there were no visual symptoms of major nutrient deficiencies. Weeds were hand picked. Additional weed emergence control was obtained from the addition of a 3-4” layer of wood chip mulch.

Dead-heading of plants was conducted on a regular or on an as needed basis. Spent flower were removed to encourage additional blooms. Minor pruning to remove weak and damaged branches was done on a very limited basis.

Special attention was given to the roses for winter protection. Plants were given a good soaking of water in the fall to assure that bushes were in a good vigor and thrifty condition. A mixture of topsoil and potting soil was mounded around the base of plants to further protect the rose graft. Additional wood chips were spread around the plants. Styrofoam cones were placed over the top of the roses. Some plants were slightly cut-back and some branches were loosely tied together to help with the addition of cones. Three holes were added around the top of the cone to allow for increased air movement. More wood chips were added around the outside of the cone base. Cones were put in place in mid-December and will be removed in mid-late April. As of early April 2007, the winter weather would be classified as above normal temperatures and below normal precipitation. Snowfall was limited so open/no snow conditions prevailed through most of the winter. Temperatures were again extremely variable with 70° F in late January and single digit low temperatures in early April.

RESULTS AND DISCUSSION:

Extensive evaluations were conducted with this rose study. Visual evaluations and data collections took place on almost a daily basis and definitely on a weekly basis. Written evaluation and data info. were completed on: June 5-6, June 14, June 29, July 11, July 21, July 27, August 4, August 10, August 18, Sept. 5, and Sept 21, 2006. Evaluations focused on:

- 1.) Plant growth and development, plant size measurements were collected June 21, Mid-July and September 21
- 2.) Transplant shock and plant vigor
- 3.) Bloom characteristics such as, flower color, number, length of bloom periods and size of blooms
- 4.) Foliage color and ornamental value
- 5.) Plant shape and growth form
- 6.) Presence of insects, disease and physiological disorders and
- 7.) Misc. field notes

In most situations evaluation results was determined by using a rating system of 1-5, with 1 being poor

and 5 is excellent. Varieties were ranked by this system.

RESULTS OF THE 2006 EVALUATIONS—TOP PREFORMERS IN THE FOLLOWING CATAGORIES:

>Plant Vigor - 1.) Queen Elizabeth, 2.) Cabana, 3.) Mister Lincoln, 4.) About Face and 5.) John F. Kennedy

>Prolific Bloomers - 1.)Ingrid Bergman, 2.) Cabana, 3.)Voluptuous, 4.) Lover's Lane and 5.)Cherry Parfait

>Unique/Eye Catching Flower Color – 1.)Peace, 2.)Sundance, 3.)Purple Tiger, 4.)Melody Parfumee' and 5.) Rainbow Sorbet

>Attractive Foliage – 1.)Sundance 2.)Chrysler Imperial, 3.)Midas Touch, 4.)Queen Elizabeth and 5.) Mister Lincoln

>Disease Present – 1.)Rose Black Spot – Rainbow Sorbet (serious infection), and About Face, 2.) Misc. Leaf Spot Disease – John F Kennedy, Intrigue and Melody Parfumee'

>Frost Tolerance – 1.)Midas Touch, 2.)Radiant Perfume, 3.)Chrysler Imperial, 4.)Peace and 5.)Intrigue

>Top Overall Performers – 1.) Ingrid Bergman, 2.) Sundance, 3.) Cabana, 4.) Peace, and 5.) Chrysler Imperial

See Table #1 for additional variety information. Source of information is from Jackson & Perkins Company.

ADDITIONAL COMMENTS:

All varieties survived the first growing season which was ended by killing frosts on September 17-19. Evaluations of the roses will continue in 2007. Hardiness and winter survival will be determined in spring of 2007. Winter survival will be the most important trait in determining the potential in growing these varieties in Southwest North Dakota.

Rose Evaluation Project - 2006
Variety Descriptions (Jackson & Perkins)
Dickinson Research Extension Center

Table # 1 Evaluated by Jerry Larson

HT - HYBRID TEA
FLOR - FLORIBUNDA
GRAN - GRANDIFLORA

1111VARIETY	TYPE	# OF PLANTS	FLOWER COLOR	BLOOM SIZE	FRAGRANCE	FOLIAGE	PLANT SIZE
Chicago Peace	HT	1	Pink/Yellow	5" - 5.5"	Light	Glossy Green	4'
About Face	Flor	1	Bronze/Orange/Yellow	3.5"	Light	Rich Green	4'
Whisper	HT	3	Ivory White	5"	Light Musk	Dk. Green	5.5'
Ingrid Bergman	HT	5	Deep Red	5" - 5.5"	Sweet	DK. Green	3' - 4'
Cabana	HT	2	Rose/Pink, Lt. Yellow stripes	4.5"	Spicy	Semi - Glossy DK. Green	5.5'
JFK	HT	3	White	5" - 6"	Strong Fruity	Med. Green	4'
Wild Blue Yonder	Gran	1	Red, Purple, w/Lavender	4.5"	Citrus & Rose	Glossy Green	4' - 5'
Sundance	HT	3	Bright Gold/Orange edge	4.5"	Light Sweet	Dark Green	5' - 5.5'
Peace	HT	4	Yellow edge Pink	5" - 6"	Sweet	Glossy DK. Green	4'
Melody Parfumee'	Gran	5	Plum	4.5"	Heavy old Rose	Dk. Green	5'
Midas Touch	HT	2	Yellow	4"	Rick Musk	Semi-Glossy DK Green	4'

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Purple Tiger	Flor	2	Purple /White Stripes	4"	Old Rose	Matte Green	4'
Intrique	Flor	1	Red Purple	3"	Strong Citrus	Glossy Dk. Green	3' - 4'
Cherry Parfait	Gran	1	White edged with Red	4"	Light Sweet	Glossy Dk. Green	5'
Queen Elizabeth	Gran	2	Med. Pink	3.5" - 4"	Light Tea Rose	Glossy Dk. Green	4'