INSTITUTUM AGRONOMICUM "DR.PETRU GROZA" CLUJ-NAPOCA/ROMANIA/
NOTULAE BOTANICAE HORTI AGROBOTANICI 1981, XI.

NEW ROSE VARIETIES CREATED AT THE FRUIT-GROWING RESEARCH STATION OF CLUJ-NAPOCA

Șt. WAGNER

Abstract:
WAGNER Șt., 1981, New rose varieties created at the fruit-growing research station of Cluj-Napoca, Not. Bot. Hort. Agrobot. Cluj, XI, 5 - 8. There are presented the morpho-physiological and ornamental characteristics of two new varieties of roses, as follows: 1. "Simfonia" (Th) has vigorous bushes, upright stems, good resistance to mildew, well-shaped and large, shining-white petalled buds. Suitable for cut flowers. Introduced 1978. 2. "Rosabunda" (Fl.) has vigorous bushes, good resistance to mildew, early and very abundant bloom, with shining-pink coloure and fragrant petals. Suitable to bedding. Introduced 1979.

Index words: Rosa sp., breeding, varieties

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Two new rose varieties created within the Fruit-Growing Research and Production Station Cluj-Napoca were introduced in 1978-1979. There follows a sketchy description of them:

(1) Cv. 'Simfonia' (Symphony) has been obtained through the crossbreeding of "Mount Shasta" and "Pascali" by the author in 1971.

The new variety belongs to the group of "Thea-hybrida" and was introduced in 1978. The plant is vigorous with bushes of 100-120 cm tall, either erect or slightly inversely conical. The stems are average thick, erect, green-yellowish in colour with reddish tips, and few thorns. The leaves possess 3-7 ovate, coriaceous, dark-green folioles, of average size. The flower-bearing stems are long (60-70 cm), erect, bearing inflorescences with 1-5 flowers; in the first flowering about 50-60% of the stems bear a single flower. The flowering is abundant, the average intensity is 6-7, presenting two main flowering periods (June 6 - July 20 and August 12 - late September). The flowering epoch is midseasonal. The cold hardiness of the cultivar is average. The basis of the bush should be protected in winter. The drought resistance is fair and it was tested without watering, in natural conditions of about 600 mm annual rainfall. The disease resistance is very good to powdery mildew (caused by Sphaerotheca pannosa var. rosae) and average to rose black spot (caused by Marssonina rosae), mostly in cold and rainy seasons. The flowers are large and the length of buds is 5,3 cm. The diameter of the open flower is 9,8 cm. The petals are shining-white with a slight cream hue in the centre. The average petal number per flower is 29 (24-40). The bud is elongated, its opening is slow; the flower has a suave, pleasant but not too penetrating odour. After cutting, the flowers keep well in vases for 4-5 days at room temperature.

The decorating value of the variety has been determined by grading, in 1974-1977 (Tab. 1); the average number of points obtained was 83,8 out of 100 possible. This merit was proved by the Certificate of Merit and a third place obtained with the Rose-novelty Competion held at Hradek Kralove in Czechoslovakia in 1978.

The variety is suitable for cut flowers and to bedding, i.e. for decorating parks.

(2) Cv 'Rosabunda' has been created by hybridization of "Frankfurt am Main" x "Maria Callas", in 1972. It belongs to 'Floribunda' group of varieties, and was introduced in 1979.

The plant has a vigour beyond average; midtallness of bushes is 90 cm.; of obpyramidal shape. The stems are average thick (8,8 mm), green in colour, reddish at the tip. The leaves posses 5-7 oval folioles, of midsize (5,1 x 3.2 cm), dark-green in colour, thick and shiny.

The floral stems are of 60-70 cm in length, slightly winding,

Tab. 1.

The grading list of Cv 'Simfonia' (Symphony)

Nr.	Traits and properties	Points possible	Average number of points obtained				Average 1974--1977
			1974	1975	1976	1977	
1.	Bush shape	5	4	4	5	4	4.0
2.	Vigour	10	8	9	8.6	8.3	8.7
3.	Foliage	10	9	10	8.7	9.4	9.3
4.	Resistance to disease	8	8	7.5	7.8	8	7.8
5.	Stem and floral peduncle	5	5	5	5	5	5.0
6.	Flowering intensity	10	7.3	7.5	6.8	6.4	7.0
7.	Bud shape	10	8	8	9	9.3	8.6
8.	Shape of open flower	9	8	8	7.3	8	7.8
9.	Flower life	9	7.5	5.7	5	4.7	5.5
10.	Colour at opening	6	6	6	6	6	6.0
11.	Colour at flowering	6	6	6	6	6	6.0
12.	Fall of petals	5	4	4	4	3.7	3.9
13.	Odour	7	4	3.7	4.7	4.4	4.2
	Total	100	84.8	84.4	82.9	83.2	83.8

with 3-5 inflorescences. It is an early-flowering cultivar. The flowering is abundant, with an average intensity of 6 - 7.5 and two distinct epochs of flowering, the second one lasting till the first frost.

Its cold-hardiness is very good; a loose moulding will suffice for winter protection.

It can be cultivated without irrigatinn in zones with annual rainfalls of 550-600 mm.

The resistance of leaves to powdery mildew is good and fair to black spot but in rainy seasons the base part of the bushes is more strongly attacked.

The flowers are midsized to large; the diameter is 9.8 cm and the hight of bud 3.4 cm; the shape of the flower, when open, reminds that of a goblet large at mouth. The petal colour is wild rosy, shining; the average number of petals is 29 (18-39) per flower. One in-

Tab. 2.

The grading list of Cv 'Rosabunda'

Nr.	Traits and properties	Points possible	Average number of points obtained			Average 1976-1977
			1976	1977	1978	
1.	The shape of bush	5	4.0	4.0	4.0	4.0
2.	Vigour	10	8.8	8.7	8.0	8.5
3.	Foliage	10	9.0	9.0	9.0	9.0
4.	Resistance to disease	8	7.6	8.0	7.8	7.8
5.	Stem and flower-bearing peduncle	5	4.5	5.0	5.0	4.8
6.	Intensity in flowering	10	6.0	7.6	7.5	7.0
7.	Inflorescence	5	4.0	5.0	3.8	4.3
8.	Bud shape	5	4.2	4.0	4.8	4.3
9.	The shape of flower when open	9	7.1	8.0	8.0	7.7
10.	Flower life	9	5.7	5.7	5.8	5.7
11.	Petal falling	5	4.0	4.0	3.5	3.8
12.	Colour at flowering	6	5.1	5.7	6.0	5.6
13.	Colour at opening	6	6.0	6.0	6.0	6.0
14.	Odour	7	4.2	5.2	4.6	4.7
	Total	100	80.2	83,2	83.8	85,9

florescence comprises 3-13 flowers, with a pleasant odour of average intensity.

The decorating value has been determined by means of grading, in 1976-1978 (Tab. 2) when it obtained an average number of points of 83.2, from 100 possible.

This new variety fits well for decorating parks and allows for plantation on lawns or smaller group of beds.

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VARIABILITY OF THE CHLOROPHYLL CONTENT IN WHITE CLOVER (TRIFOLIUM REPENS L.)

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Abstract:
PUIA I., SZABÓ T.A., ILLYÉS Gh., 1981, Variability of the chlorophyll content in white clover (Trifolium repens L.).Not. Bot. Hort. Agrobot. Cluj, XI., 9 - 15. White clover cultivars from the "gigenteum", "intermedium" and "nanum" cultivar groups have been tested for the variability of chlorophyll content in leaflets according to Mackinney spectrophotometric method. The chlorophyll content (a, b, a+b, a/b mg/100 mgDM) was studied in relation to certain morphological characteristics of the leaflets (length, width, surface,weight,weight/surface). The method seems to be useful for the screening of strains for high chlorophyll content.Cultivars from the nanum group had generaly lower values; calculated for the dry wight of the assimilatory tissue under the same leaf surface this tendency dissapears.

Index words: Trifolium repens, variability, cultivars; chlorophyll a, b;

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Variability of the chlorophyll content (a and b) by different cultivars of Trifolium repens L.may be of considerable importance for