

**‘SISSI’ - COLOUR AND PERFUME INTO THE ROSES  
COLLECTION FROM UASVM IAȘI, ROMANIA**

**‘SISSI’ - CULOARE ȘI PARFUM ÎN COLECȚIA DE TRANDAFIRI DE  
LA USAMV IAȘI, ROMÂNIA**

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**Abstract.** *In the current paper are presented the results regarding behaviour of ‘Sissi’ roses in cropping conditions of roses collection from UASVM Iași, Romania. During vegetation period were monitoring the following features: bush form, bush vigour, aspect of leafage, resistance at pathogen agents attack, rod and floral peduncle, flowering intensity, rosebud shape, shape of opened flowers, flower’s durability, colour of petals at opening, colour of petals at flowering, falling mode of petals, flowers’ perfume, other aspects (adaptability at cropping conditions). At the end of research was observed that ‘Sissi’ roses had a very good adaptation at cropping conditions from the NE area of Romania, decorating from spring till late in autumn with flowers which had a delicate and tender perfume.*

**Key words:** adaptation, roses, ‘Sissi’

**Rezumat.** *În această lucrare sunt prezentate rezultatele privind comportarea trandafirilor ‘Sissi’ în condițiile de cultură din colecția de trandafiri a USAMV Iași, Romania. Pe parcursul perioadei de vegetație s-au monitorizat următoarele însușiri: forma tufei, vigoarea tufei, aspectul frunzișului, rezistența la atacul agenților patogeni, tija și pedunculul floral, intensitatea înfloritului, forma bobocului, forma florilor deschise, durabilitatea florii, culoarea petalelor la deschidere, culoarea petalelor la înflorire, modul de cădere al petalelor, parfumul florilor, alte aspecte (adaptarea la condițiile de cultură). În urma cercetărilor s-a constatat că trandafirii ‘Sissi’ s-au adaptat foarte bine la condițiile de cultură din zona de NE a României, decorând din primăvară până toamna târziu, cu florile suav parfumate.*

**Cuvinte cheie:** adaptare, trandafiri, ‘Sissi’

## INTRODUCTION

*Rosa hybrida* L. (rose) is one of those 200 species of *Rosa* genus from Rosaceae family. Genus *Rosa* have numerous ornamental cultivars with utilization as cut flowers in floral art (Kras, 1999; Gudín, 2000; Buta and Cantor, 2015; Chelariu *et al.*, 2017) as well as in landscape designs (Wagner, 2002; Cantor and Buta 2010; Chelariu *et al.*, 2017).

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Rose is considered a symbol of elegance, affection, spirituality, inspiration and source of aesthetic satisfaction for man (Gudin, 2000). It is known from the ancient times. In Crete was discovered a drawing with roses which was dated from 1500-1600 B.C. (Al-Zwelef, 2015). Roses are cultivated from Europe to Asia, America and Australia (Wagner, 2002; Viraraghavan Girija and Viraraghavan, 2015; McNamara, 2015; Mattock, 2015) and are involved in every each event from human life (Gudin, 2000; Iftikhar Ahmad *et al.*, 2010).

During time, due to breeding processes, were obtained numerous roses' cultivars which can adapt function of ecological demands of plants (Wagner, 2002; Chakrabarti, 2015; Chelariu *et al.*, 2017).

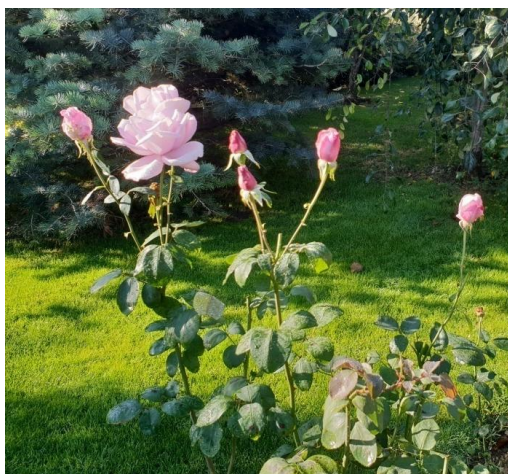
The current study aimed to present the behaviour of 'Sissi' roses in cropping condition from Iași City, Romania.

## MATERIAL AND METHOD

Research took place during 2016-2018, in rose's collection of Floriculture Discipline, Faculty of Horticulture from USAMV Iași, Romania. The studied material was represented by 'Sissi' hybrid tea roses, which were planted into collection in autumn of 2015.

Created by Mathias Tantau Jr. (Germany) in 1964 from a combination between Sterling Silver (Hybrid Tea, obtained by Fisher in 1957) and an unknown, these variety was recorded under the name of MainzerFastnacht (TANacht), and as commercial name Blue Moon, but also have numerous synonyms (Sissi, Blue Moon, Blue Monday, NavoRose, Mainzer Rad, TANSi, TANSi0343), the most frequent one being synonym Sissi.

Rose 'MainzerFastnacht' or 'Sissi' (fig. 1) is a very popular variety. It received different awards such as: ADR test 1964, MA Rome 1964, CM England 1964.



**Fig. 1** 'Sissi' – plant (original)

The shape is as a vigorous bush (80-110/45 cm), with an erect growing and thin branches which present few thorns. Leaves are medium, with a dark green colour, semi-glossy, and with a rare disposal on sprouts. From this reason plants have few

leaves, and in autumn those ones seems a little bit barren.

Flowers appear, usually, solitary on stem, rarely two – three. Flowers are characterized by a remarkable combination between shapes; perfume and colour make a nice contrast with the dark green coloured leaves.

Literature mention that 'Sissi' rose flowers have a blue colour (<http://www.helpmefind.com/rose/l.php?l=2.757.5>; Wagner, 2002, 2010; Mikolajski, 2007), but in reality those ones are a mixture of silver-violet or mauve lavender with silver reflections, pearl-scent. At a high luminous intensity, flowers' nuance is lighter, turning slightly too pink. Rosebuds are long, sharpened, with a noble shape and opened into large flowers (10-12 cm), abundant, with 20-25 petals slightly outward-facing and extremely perfumed. The perfume of this rose is characterized as being fresh, intense, fruity, spicy and sometimes sweetish.

Those roses had a long period of flowering, from the beginning of summer till late in autumn.

It is a variety which demand short cuts, because present vigorous young spouts. 'Sissi' roses need protection over winter against very low temperatures. 'Sissi' presents sensibility at black spot. Could be cultivated in fields for cut flowers or in diverse vegetal composition from landscape designs (<http://www.helpmefind.com/rose/l.php?l=2.757.5>; Wagner, 2002, 2010; Mikolajski, 2007)

Research were carried out from May to October, on the basis of a special sheet in which were noted the aimed characters and features: bush form (5 points), bush vigour (8 points), aspect of leafage (8 points), resistance at pathogen agents attack (8 points), rod and floral peduncle (5 points), flowering intensity (10 points), rosebud shape (10 points), shape of opened flowers (7 points), flower's durability (5 points), colour of petals at opening (6 points), colour of petals at flowering (6 points), falling mode of petals (5 points), flowers' perfume (7 points), other aspects (adaptability at cropping conditions) (10 points), (Wagner, 2002). The obtained mean values during research period were recorded into a centralizing table. Based on the obtained results was appreciated the behaviour of 'Sissi' roses in cropping conditions from Iași City, Romania.

## RESULTS AND DISCUSSIONS

During research period, 'Sissi' roses formed vigorous bushes, appreciated with 7.8 points from a maximum of 8 points (tab. 1). On sprouts were formed leaves with a medium size, having a dark green colour, semi-glossy. Foliage aspect was appreciated with 7.1 points from a maximum of 8 (tab. 1).

On floriferous rods were formed long, sharp conical rosebuds (fig. 2), which opened in large flowers, abundant with petals outward-facing, having a violet-lavender colour (fig. 3a-b), strongly perfumed.

Floriferous rods and floral peduncle are vigorous (4.8 points). Rosebuds presented the characteristic shape of variety and were appreciated with 9.8 points from a maximum of 10 points (tab. 1).

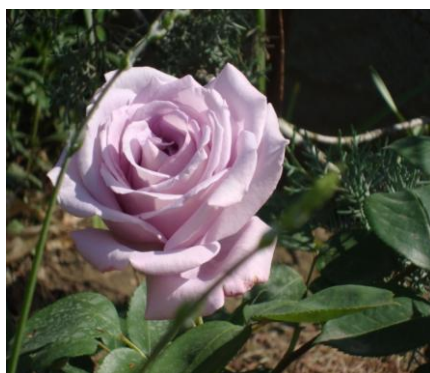
Flowers have an elegant and noble shape from their opening (6.8 points) till the ending of flowering. Flowers kept their colour from flowering till falling of petals, being appreciated with the maximum (6 points). Falling way of petals was appreciated with 3.7 points, this one being less highlighted (tab. 1).



**Fig. 2** 'Sissi' – buds (original)



a)



b)

**Fig. 3** 'Sissi' – a) semi-opened flower; b) complete flowering (original)

'Sissi' roses have a great flowering intensity (9.8 points), from May till late in autumn, with a flowers' durability appreciated with 4.8 points from a maximum of 5 points.

At roses, flowers perfume is one of the basic qualities, and its intensity is correlated with flowers colour. Generally, roses have a discreet perfume (Buta and Cantor, 2015), but are also roses with an intense perfume, and among them are 'Sissi' roses. From the point of view of perfume intensity, this rose variety was appreciated as being very perfumed, aspect noted with the maximum score (7 points) (tab. 1).

'Sissi' roses are sensitive to attack of some pathogen agents (6.8 points).

At the end of realised observations during research we could say that 'Sissi' roses had a very good adaptation at cropping conditions from Iași area, Romania, summing a total score of 94.9 points from a maximum of 100 possible points (tab. 1).

Based on the obtained results we could appreciate that 'Sissi' roses could be capitalized in vegetal compositions from landscape designs in Iași area, Romania, as well as in other areas with similar cropping conditions.

Table 1

**Evaluation of 'Sissi' variety in cropping conditions from Iași, Romania  
(mean values 2016-2018)**

Evaluated character	Maximum score	Decade/month										Mean score / character
		III. 05	II. 06	III. 06	II. 07	III. 07	II. 08	III. 08	II. 09	III. 09	II. 10	
bush form	5	5	5	5	5	5	5	5	5	4	4	4.8
bush vigour	8	8	8	8	8	8	8	8	8	7	7	7.8
aspect of leafage	8	8	8	8	8	7	7	7	6	6	6	7.1
resistance at pathogen agents	8	8	8	8	7	7	6	6	6	6	6	6.8
rod and floral peduncle	5	5	5	5	5	5	5	5	5	4	4	4.8
flowering intensity	10	10	10	10	10	10	10	10	10	9	9	9.8
rosebud shape	10	10	10	10	10	10	10	10	10	9	9	9.8
shape of opened flowers	7	7	7	7	7	7	7	7	7	6	6	6.8
flower durability	5	5	5	5	5	5	5	5	5	4	4	4.8
colour of petals at opening	6	6	6	6	6	6	6	6	6	6	6	6.0
colour of petals at flowering	6	6	6	6	6	6	6	6	6	6	6	6.0
falling mode of petals	5	4	4	4	4	4	4	4	3	3	3	3.7
flowers' perfume	7	7	7	7	7	7	7	7	7	7	7	7.0
adaptability at cropping conditions	10	10	10	10	10	10	10	9	9	9	9	9.7
TOTAL SCORE												94.9

## CONCLUSIONS

In conclusion, ‘Sissi’ roses had a good behaviour in cropping conditions from Iași area, Romania (94.9 points), forming vigorous bushes, with large flowers, perfumed, with a long period of flowering, being able to assure the décor during whole summer till autumn when frozen are coming.

These results sustain the capitalization of this rose’s in vegetal composition from landscape designs from Iași area, Romania as well as in other areas with similar cropping conditions.

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