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КӨГАЛДАНДЫРУ ҮШІН БАҚША РАУШАНДАРЫН ӨСІРУДІҢ БИОЛОГИЯЛЫҚ ЕРЕКШЕЛІКТЕРІ

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Аңдатпа

Мақалада көгалдандыру үшін Ақтөбе облысы жағдайында түрлі бақша раушандарының морфобиологиялық, фенологиялық және сәндік ерекшеліктері сипатталған. Раушан гүлдерінің сорттарына фенологиялық бақылау негізінде төмендегі критерийлер бойынша баға берілді: бұтаның морфологиялық ерекшеліктері, гүлдеу ұзақтығы, гүл мен бұтаның сәндік қасиеттері, аурулар мен зиянкестерге бейімділігі, гүлшоғыры, гүлі. Сонымен қатар гүлдің реңі және оның күн көзіне күйіп кетпеуге төзімділігі, гүлдің мөлшері, гүл пішіні мен гүлшоғыры, иісі, гүлдің қолайсыз жағдайға төзімділігі, бұта формасы, жапырақтары, сорттың түпнұсқалылығы, гүлдің көптігі, гүлдің жалпы жағдайы секілді белгілері ескеріледі.

Барлық критерий бойынша Red Magic раушаны басым болды. Раушан сорттарын интродукциялық талдау барысында мынадай қорытындыға келуге болады, ағылшын және шай-гибридті раушан сорттары Ақтөбе облысының климаты мен жағдайына төзімді.

Кілтті сөздер: бақша раушандары, морфобиологиялық сипат, фенологиялық сипат, интродукция.

БИОЛОГИЧЕСКИЕ ОСОБЕННОСТИ КУЛЬТИРОВАНИЯ САДОВЫХ РОЗ ДЛЯ ОЗЕЛЕНЕНИЯ ЛАНДШАФТА

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Аннотация

В статье представлено описание морфобиологических, фенологических, декоративных особенностей, сформированного на основании комплексной сортооценки нового сортимента садовых роз, перспективных для использования в различных видах озеленения, а также для селекции в условиях Актюбинской области. На основе фенологического контроля сортов цветов роз была дана оценка по следующим критериям: морфологические особенности куста, продолжительность цветения, декоративные свойства цветов и кустов, восприимчивость к болезням и вредителям, соцветие, цветы. А также учитывается окрас цветов, устойчивость к ожогам от солнечных лучей, величина цветов, форма и соцветие цветов, запах, форма куста, листья, оригинальность сорта, обилие цветов, общее состояние цветов и другие качества.

По всем критериям сорт роз Red Magic доминировал. В ходе интродукционного анализа можно сделать следующий вывод: сорта роз английская роза и чайно-гибридная роза устойчивы к климатическим условиям Актюбинской области.

Ключевые слова: садовые розы, морфологические и фенологические особенности, интродукция

BIOLOGICAL FEATURES OF GROWING GARDEN ROSES FOR LANDSCAPING

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Abstract

The article describes the morphobiological, phenological and decorative features of various garden roses for landscaping in the Aktobe region. Based on the phenological control of rose flower varieties, an assessment was made according to the following criteria: morphological features of the bush, flowering duration, decorative properties of flowers and bushes, susceptibility to diseases and pests, inflorescence, flowers. It also takes into account the color of flowers, resistance to sunburn, size of flowers, shape and inflorescence of flowers, smell, shape of a bush, leaves, originality of the variety, abundance of flowers, general condition of flowers and other qualities.

By all criteria, the Red Magic rose variety dominated. In the course of the introduction analysis, the following conclusion can be drawn: the English rose and hybrid tea rose varieties are resistant to the climatic conditions of Aktobe region.

Key words: garden roses, morphobiological properties, phenological properties, introduction, landscape.

Introduction

Currently, an urgent problem is the development of organizational and innovative foundations for the formation of modern competitive tourism and the country's industry as a whole. The organizational and innovative basis means the improvement of a beautiful landscaped landscaped with high taste. The concept of a garden or composition in landscape design means the correspondence of the garden and its components in space. By integrating several varieties of roses, a beautiful picture can be created. This can be used to improve the curbs, road or any building. The element of such landscaping of any flat area will be highly artistic.

One of the priority tasks of our time is the optimization of the human environment. An important role in the optimization and creation of comfortable conditions is played by the greening of the settlement zones of the population. In this regard, the main task is the introduction and selection of botanical control. As a result, the volume of local plants for landscaping, adapted to the local climate, is renewed and increased [1].

In this regard, through the introduction and introduction study in the "Park Zhubanov" ARSU named after Zhubanov, it is necessary to select, through a systematic assessment of varieties of garden roses, promising varieties for landscaping the city of Aktobe.

There are about 35 thousand varieties of roses all over the world. By their origin, biological and decorative features, they are united into 10 groups of garden roses [2].

In ornamental horticulture, known and production groups of roses for flower gardens are determined: hybrid tea, grandiflora, ascending and semi-ascending, polyanth, small, rugoses, English roses, soil-covered species [3, 4].

The aim of the study is to select rose hybrids that grow well in the conditions of the Aktobe region.

The object of the study was 3 varieties of garden roses belonging to the English and hybrid tea group (Red magic, Gloria Dei, Graham Thomas).

Research methods

The assessment of promising groups of rose varieties is carried out on the basis of a general methodology [5, 6].

The decorative properties are assessed according to a 100-point system. Based on the phenological control of rose flower varieties, an assessment was made according to the following criteria: morphological features of the bush, flowering duration, decorative properties of flowers and bushes, susceptibility to diseases and pests, inflorescence, flowers. It also takes into account the color of flowers, resistance to sunburn, size of flowers, shape and inflorescence of flowers, smell, shape of a bush, leaves, originality of the variety, abundance of flowers, general condition of flowers and other qualities [7].

Thanks to a comparative comprehensive assessment of rose flowers, we were able to give an introduction description and put forward a proposal to grow in the conditions of Aktobe region 1 variety of English rose and 2 varieties of tea rose hybrid.

Main part

In the conditions of the city of Aktobe, a tea rose hybrid is a widespread crossing.

Tea hybrid (Chg.). Today, the most widespread rose variety is the result of crossing a tea and remontant rose. The first variety of tea-hybrid rose La France was received by Guillot in 1867 in France. Currently, the assortment is constantly being improved. The varieties Gloria Day, Super-Star, Baccarat are widespread. Over the past 20 years, rose flowers of the original color have been obtained. Among them are bluish-lilac (Mainzer Fastnacht, Intermezzo, Silver Star), two-color "multi-colored" (Rose Gojar, Piccadilly, Brazil, Bayazzo Saopenz), dark red (Oklahoma, Meiland), fiery red (Allegra, Orange Delbar, Red magic), golden yellow and brown-bronze (Krone, Winner Charm), a wide range of hybrid tea roses (Virgo, Pascali, John F. Kennedy, Athena). The flowering of hybrid tea roses begins at the end of June and continues intermittently until the very frost. The height of the bushes reaches 60-80 cm. They are often used to decorate the open area with flowers. In the climatic conditions of the city of Aktobe, they require careful shelter in cold weather, since at a temperature of -8-10 ° C they can freeze. Roses are usually propagated by cuttings [8].

'Gloria Dei' (F. Meiland, 1945). The variety of roses is distinguished by a yellowish tone, with a characteristic delicate scent and long flowering. Resistant to adverse weather conditions and winters well. And this variety is especially appreciated due to the diameter of flowers up to 15 cm. And the height of the bushes reaches 1.2 m.

'Red Magic' (Tantau, 1997). Red magic has a deep red color, villi and a faint smell of rose oil. The central node of the flower opens late, thereby increasing the flowering period. The height of the bush is 100 cm, and the diameter of the flower is 8-10 cm, the variety is resistant to frosty, cold weather and various phytopathogenic diseases. Grows in semi-dark and open spaces [9].

English rose group. (English Rose) A relatively new variety. The English rose is used in the forefront of perennial landscaping worldwide. It arose from a cross between Rosa galica (Frenchman Raushany), Rosa damascene (Damascus rose) and floribunda Rosa bourbon (Bourbon rose), which belongs to the hybrid tea variety of roses. The height of the bushes reaches 250 cm. Differs in a variety of inflorescences. The diameter of the flower is 12 cm. The advantage of these flowers is the scent of flowers.

'Graham Thomas' (English Rose, 1983). In England, a yellow rose is a symbol of love. Each bush has 6-8 flowers with a delicate aroma. They are tolerant to viruses and

diseases. This variety must be constantly trimmed and shortened, otherwise it can grow up to 200 cm [10, 11].

Research results

On 06/05/2020, 3 varieties of hybrid tea and English garden roses were grown in a private garden plot in the village of Marzhanbulak, Aktobe region. These varieties were planted in land plots using seedlings. During the planting, agrotechnical measures were taken into account. As a result, the indicators were average (Table 1).

Table 1 Comparative morphological indicators of rose varieties.

	'Red Magic'	'Gloria Dei'	'Graham Thomas'
Seedling length	9	10	8
Bush height	54	47	45
True leaf length	4	2	3
Flowers diameter	7	6	6

The flowering time of roses is taken into account. For example, if Red Magic released the first flower on 04.07., And Gloria Dei - 16.07., Graham Thomas - 12.07. Starting from the beginning of flowering of roses, the duration of their flowering is calculated: Red Magic - 56 days, Gloria Dei - 24 days, Graham Thomas - 30 days. In the Red Magic flower variety, the flower knot opens late and the flowering frequency is fast, so the flowering time of this variety is as long as possible.

As the results show, the variety 'Red Magic' has proven its advantage in all respects (Figure 1).

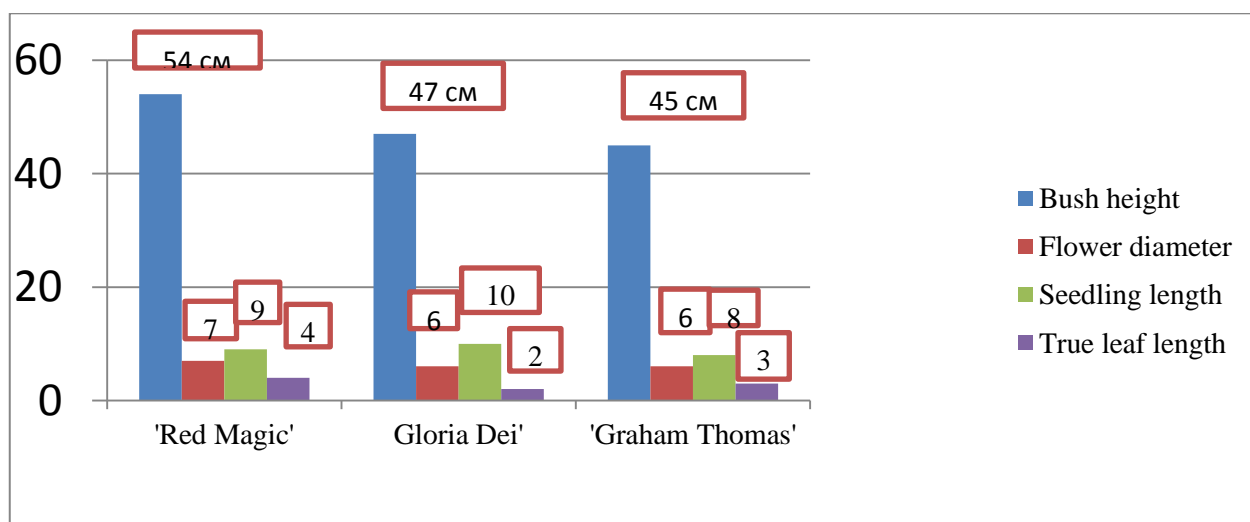


Figure 1 Indicators of different varieties of roses by the height of the bush and the diameter of the flower.

According to the level of adaptation of different varieties of roses in the conditions of the Aktobe region (Table 2), the duration of flowering, tone, shape, flower smell,

resistance to adverse conditions, high resistance to phytopathogenic diseases and pests, adaptability to the winter period, the Red Magic variety was highly appreciated (Figure 2).

Table 2 Integral assessment of varieties of English roses and tea hybrid.

Criteria for evaluation	Rose varieties		
	'Red Magic'	'Gloria Dei'	'Graham Thomas'
Flowering duration	96	82	85
Morphological and decorative properties of flowers / decorative properties:			
- tone of colors;	100	100	100
-the form of flowers;	100	100	100
- smell of flowers;	100	100	100
- inflorescence;	92	90	88
- color fastness to adverse conditions;	96	94	60
- flower size;	52	50	50
-An abundance of flowers.	88	86	48
Morphological properties of bushes / decorative properties:			
- the shape of the bush;	88	86	82
- bush height	50	48	46
Morphological properties of leaves:			
- the shape of the leaves;	90	90	90
- leaf size	90	90	90
Susceptibility to diseases and pests.	100	90	86
Inflorescence	100	100	100
The authenticity of the variety	100	100	100
Winter resistance	100	100	100
Reproductive ability	50	50	50
Promising group	I	II	II

* Note: the assessment system is based on a 100-point system.



'Red Magic'



'Gloria Dei'



'Graham Thomas'

Figure 2 The varieties of roses English and tea hybrid.

Conclusion

Based on phenological control of rose flowers, an assessment was made according to the following criteria: morphological characteristics of the bush, flower tone, flower diameter, flowering duration. By all criteria, the Red Magic rose variety dominated.

In the course of the introduction analysis, the following conclusion can be drawn: the English rose and hybrid tea rose varieties are resistant to the climatic conditions of Aktobe region. This means that the main advantage of these varieties of roses is early flowering, pleasant and delicate smell, hairiness, multi-colored petals, duration of flowering. However, under normal conditions, the height of English and hybrid tea rose bushes should be higher than 100 cm. Under the conditions of the study, the average height of flowers was 50 cm. Along with the introduction analysis, agrotechnical measures will be continued. In the month of May 2021 in the "Zhubanov Park" Zhubanov, promising varieties of roses will be planted in the landscape for landscaping the city of Aktobe through introduction and introduction studies and systematic assessment of garden varieties of roses.

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