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M. V. Sidorenko, Ye. M. Tyrina
Belarusian State Technological University

**THE PROBLEMS OF MODERN APPROACHES
TO CREATION OF THE LANDSCAPE FLOWER GARDENS
IN THE MODERN URBAN SPACE (MINSK)**

The article concerns the main prerequisites for creation landscape flower gardens in the modern urban space. A research of current trends in landscape improvement of urban areas showed that the flower decoration is an integral tool in creating aesthetically pleasing, comfortable and sustainable spaces in the city. In the flower design of Minsk plain composition using annual ornamental plants is dominated. The analysis of the experience of urban gardening in foreign countries has shown that perennial flowers allow you to create decorative natural plant compositions that do not require significant maintenance during the growing season, as well as more economical to use. Special attention is given to such type of gardening, as a flower garden, which is widespread in the modern tendency landscape design “New wave”. Generally, the results of the research show that landscaped flower gardens are the most promising floral-decorative design of various landscape objects in Minsk. It based on the knowledge of the ecological requirements of perennial plants, peculiarities of growing certain crops in an urban setting.

Key words: flower garden, perennial plants, assortment, ecological conditions, natural association, decorative effect.

Introduction. The conceptual design of modern urbanized area consists of many elements, which are a fundamental principle of natural features, as well as urban solutions, architectural ensembles, buildings and structures, types and methods of formation of living environment. Among the vast variety of means for formation of urban city feel, flowers are the most fragile and at the same time, the closest element to human beings, making the living of people beautiful and comfortable. Flowers can contain information about the natural features and historical traditions of the region; form an emotional environment for town dwellers. Being a symbol of aesthetic improvement, they are also a sign of social stability. Gardening is an integral part of the modern landscaping and performs ecological, aesthetic, educational functions, causing human positive emotions. It is not coincidentally in recent years there has been steadily increasing interest of the city residents and visitors to the flower gardens. At the same time, city flower gardens should be “anti-vandal” and economical [1].

Main part. The development of city gardening, including the city of Minsk, is accompanied by the obvious negative factors such as the deteriorating environmental situation in the city, the presence of numerous communications, lack of free land-governmental areas, and high recreational load on existing green spaces. This increases the requirements of city residents not only to the number of flower gardens, as to their quality: formulae and color composition, culture, design and content. The responsible enterprises for gardening in Minsk are “Minskzelenstroy” UE “Zelenstroy” in administrative districts of Minsk. Currently, when creating flower gardens the main emphasis is on floral arrangement comprising non-perennial flower crops

and carpet plants. Examples of arrangements are given in Fig. 1–3. The use of non-perennial flowers seedlings in landscaping is fairly expensive option of urban landscaping, especially when you consider the fact that some flower gardens require complete replacement of plants in a single season. In the ornamental compositions of annuals expensive materials are often used, such as curb tape, granite screenings, etc., which increase the cost of landscaping.



Fig. 1. Floral decorative arrangement.
Nezavisimosty Square, Minsk, autumn 2014



Fig. 2. Floral decorative arrangement.
Grekova Park, Minsk, autumn 2014



Fig. 3. Floral arrangement. Pobediteley Avenue, Minsk, autumn 2015

The compositions created from annuals and carpet plants are presented by complex ornaments and pictures, which should be perceived entirely from special panorama points. From the height of human growth very often it is not possible evaluate designs of landscape architects. Is difficult for town dwellers to see the shape of flower gardens in the whole plane, and therefore, it is impossible to understand their idea.

One of the problems of urban floral decoration is quite monotonous range of plants used, both in composition and color. Currently, in city flower gardens there have been used primarily the same kinds of non-perennials (marigolds, petunias, begonias, ageratum, cineraria). There are also perennial crops can be used in landscaping, but their existing compositions are characterized by a low level of a composite design, lack of correspondence with their environment, violation of rules for color combinations and low literacy when choosing plants range (“gaps” in the decorative composition during the growing season). An example of urban flower garden with perennial crops is shown in Fig. 4.



Fig. 4. Urban flower garden with perennial crops. Grekova Park, Minsk, autumn 2014

In turn, the current economic conditions dictate a shift to more rational methods of urban landscaping and determine the need for renovation of the approaches to complex flower decoration of urban environment.

Analysis of landscaping organizations of native and foreign cities shows that currently the

focus is done on perennial flower culture. Unlike non-perennials, perennials require more investment in that year, of the composition, but do not require annual planting and can exist in the same place for a long time, which is economically justified in a few years.

Particular attention should be paid to this kind of landscape flower design with perennial flowering plants, like flower garden (garden of continuous bloom). Garden of continuous bloom may be a city garden, and a small area in the park or on the boulevard. For this type of gardens they select plants providing a decorative effect for the longest period. When perennials are selected carefully flower gardens are in blooming since early spring till late autumn as well as having decorative winter effect due to architectural features used by flowering plants (their structure and form).

We can consider a mixborder to be a separate element of the landscape flower garden, which is used very seldom in the city due to its regular geometrically correct lines. In this case, in city landscaping, it makes sense not to use the classic English mixborder requiring continuous care, but natural mixborder, where the selection of plant species will reduce the work for plants handling and make possible for a flower garden to exist as a full of plant community [2]. In general, a separate line in a modern landscape design emphasizing the use of perennial herbaceous plants, their shapes and textures is called “New Wave”. The landscaping is also based on the principles of garden cultivation as a sustainable and self-perpetuating system with its landscape naturally evolving from season to season.

A great contribution into the use of perennials and ornamental grasses in city flower gardens has been made by such landscape designers as Karl Forester Pete Rudolf, Noel Kingsbury, James Van Sweden and others. They pay a particular attention to nature-styled flower gardens when landscaper imitates any natural by-plant society – a meadow, prairie, forest, swampy area. But it does not mean copying nature and digging up plants from the meadows, it involves the use of plants with similar natural appearance, selected for complex urban environment [2].

Every landscape designer has his own understanding of the “New Wave”, but the success of their flower arrangements is obvious. Ideas for flower gardens in urban landscaping can be seen on such famous sites as the Lurie Garden in Millennium Park in Chicago (Pete Udolf) (Fig 5); Maksimilian park in Hamm, Germany (Pete Udolf) (Fig 6); Atlantic Garden located on the roof of the Montparnasse train station in Paris (architectures François Brun and Michael Pena) (Fig. 7), and others [3, 4].



Fig. 5. Lurie Garden in Millennium Park in Chicago



Fig. 6. Maximilianpark in Humm, Germany



Fig. 7. Atlantic Garden located on the roof of the Montparnasse train station in Paris (F. Brun and M. Pena)

In the post-Soviet space the most prominent representative of a new trend in creating urban landscape of flower is a landscape architect Anna Andreeva, known for such Moscow objects as Muzeon Park (Fig. 8), the Crimean embankment (Fig. 9) and others [5].

Moscow experience of landscape flower gardens creating shows that “New Wave” can find its application not only in Western Europe, but also in the environments closed to our capital. All of the objects are vivid illustrations of the fact that the use of perennial flowering plants is a promis-

ing direction in the floral decoration of the city and an excellent replacement for outdated planar compositions.



Fig. 8. Flower gardens near pavilion “Shkola”. Muzeon Park, Moscow



Fig. 9. The Crimean embankment, Moscow

Conclusion. Many years of isolation and the lack of necessary practice predetermined our gap from the world of innovative process in the field of urban floral decoration. With regard to the city of Minsk, firstly it is necessary to choose the assortment of perennial plants that are resistant to weeds, difficult environmental conditions of the city, convenient to handle and meet the necessary aesthetic requirements. Regarding the landscape of flower gardens, it is important to understand where they can find their particular use in the urban environment; how to ensure optimal conditions for the perception of such a garden by people; what are the optimal parameters for the garden to exist independently as a self-sustaining system with the minimal human interference.

Also, when creating a landscape of flower gardens it is important to present proper idea of natural plant community, as a surprisingly versatile style of garden design. After all, if we are lucky to harmonize man’s work and nature, it is possible to create modern floral compositions of unique beauty and comfort that improve not only the aesthetic appearance of the city, but also its environment.

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Information about the authors

Sidorenko Marina Vyacheslavovna – PhD (Architecture), Assistant Professor, the Department of Landscape Design and Architecture. Belarusian State Technological University (13a, Sverdlova str., 220006, Minsk, Republic of Belarus). E-mail: marinawave@yandex.ru

Tyrina Yekaterina Mikhaylovna – Master's degree student, the Department of Landscape Design and Architecture. Belarusian State Technological University (13a, Sverdlova str., 220006, Minsk, Republic of Belarus). E-mail: tyrina381994@mail.ru

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