N E W S
OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF KAZAKHSTAN
SERIES OF AGRICULTURAL SCIENCES
ISSN 2224-526X
Volume 1, Number 43 (2018), 45 – 51

UDC 712.5; 635.39

M. G. Eskendirov, S. M. Seilgazina, E. V. Borisenko,
A. E. Koigeldina, S. D.Tusupov, G. I. Dzhamanova, A. A. Zakiyeva

Shakarim State University of Semey, Kazakhstan.
E-mail: saulemunkanovna@mail.ru

VERTICAL GARDENING OF THE BOKEYKHAN CAMPUS

Abstract. The environmental situation is the subject of special attention of social movements, mass media and general publicfor cities of the Republic of Kazakhstan. The ecological situation of cities is a «mirror» which reflects the level of the socio-economic situation of the country, therefore it is no accident that information on the environmental situation in Kazakhstan is widely available and occupies one of the leading places in the political and public life of the society.

Key words: vertical gardening, thuja, juniper, parthenocissus, piestany.

Introduction. The environmental situation is the subject of special attention of social movements, mass media and general publicfor cities of the Republic of Kazakhstan. The ecological situation of cities is a «mirror» which reflects the level of the socio-economic situation of the country, therefore it is no accident that information on the environmental situation in Kazakhstan is widely available and occupies one of the leading places in the political and public life of the society.

The problem of protecting the environment, creating normal conditions for life and human activity becomes increasingly difficultwith the growth of the city of Semey and the development of its industry. In recent decades, the negative impact of human on the environment and, in particular, on green plantations has increased. The problem of green massifs (city parks, forests, gardens, meadows) is one of the most important environmental problems in the city. The relevance of the topic being developed is also conditioned by the fact that landscaping and gardening is the most important area of activity of the city Local Administration. It is in this sphere that those conditions are created for the population which ensures a high standard of living. Thus, conditions are created for a healthy, comfortable and convenient life as for an individual in the place of residence.

Work objective: is to generalize the theoretical foundations on organizing the management of landscaping and gardening of the city of Semey, to study the experience of foreign countries in this area, and to develop recommendations for improving the management of landscaping and gardening at the city level.

The authors set the following tasks to achieve this purpose:

– todetermine the role of city landscaping in the formation of the urban environment;

– to study the main directions of gardening and landscaping of the city of Semey;

– todevelop proposals for improving the management organization of landscaping and gardening of urban areas.

The *object* of study is the Bokeykhan Campus of the Shakarim State University of Semey.

The *subject* of study is measures for the landscaping and gardening of the territory of the Bokeykhan Campus of the Shakarim University of Semey.

The *scientific novelty* of this study is, first of all, the analysis of the management organization of the system of landscaping and gardening of urban areas.

Features and problems of the management organization of gardening and landscaping are investigated on an example of the city of Semey. In this work, the materials of sociological research obtained as a result of the survey of Semey residents are involved in the scientific circulation. Also the specific

recommendations on management optimization of landscaping and gardening of Semey are offeredin the work.

Methods. Consists in the possibility of using the results and conclusions in improving the management system of landscaping and gardening of the city.

The work is based on a systematic approach in which the following methods were used: historical that examined the history of the centuries-old experience of urban development, landscaping and gardening, comparative.

Gardening system of a modern city. It is very important in modern conditions to preserve and improve the environment surrounding the person in the city, to create conditions in the city that have a beneficial effect on the person's psychophysical state which is especially important in the period of intensive urban growth, development of all kinds of transport, increase of tone of urban life every year. Green plantations affect the temperature and humidity regime: even a small green massif reduces the temperature in the summer by several degrees, not only inside itself, but also in the surrounding areas. Green plantations affect the ionization of air, and plantations have a large evaporation capacity [21]. Green plantations play important role during the gas exchange: they absorb carbon dioxide and release oxygen. Their this property is used in urban conditions. Green plantations participate in this process in different ways. For example, a poplar almost 7 times larger than a common tree, it absorbs carbon dioxide and releases oxygen, the oak leaves 4,5 times, the large-leafed linden 2,5 times. We should take into account the activity of green plantations in this process when selecting trees and shrubs for urban conditions.

Management of landscaping and gardening in the city of Semey. Issues of local importance include organization of landscaping and gardening of the settlement, use, protection, prevention, reproduction of urban forests, forests of specially protected natural areas located within the population locality of settlements.

Currently, the areas of green plantations in almost all large cities and other population localities of the Republic of Kazakhstando not correspond to urban planning standards. In connection with the intensive construction, development of outdoor advertising, street trade, as well as in the absence of planned materials for urban development, the areas of greenery are being reduced everywhere leading to a deterioration in the quality of the environment. At the same time, it is the green plantations that are one of the perfect and relatively cheap methods of optimizing the urban environment. Gardening of cities and other population localities was carried out and continues to be carried out by outdated methods, without taking into account the state of the environment and the environmental protection properties of green plantations.

Considering the management of landscaping and gardening of the city of Semey.

The city of Semey is an industrial and cultural center of the Republic of Kazakhstan. The population of the city on January 1, 2017 was 298,1 thousand people.

Some of the main indicators and criteria are:

– implementation of programs of social and economic development of the city (district center, village, rural area);

– implementation of the housing and communal services reform program;

– implementation of the energy conservation program;

– implementation of a program to adapt social and industrial infrastructure for access to disabled people;

– the amount of funds from all sources of financing for improving the city's amenities (district center, village, rural area);

– level of provision of the population with green plantations;

– level of provision of children's and sports playgrounds;

– state of sanitary maintenance of the city (village, rural area);

– volume of completed housing and communal construction;

– level of improvement of the housing stock by the main types of engineering equipment;

– state of transport services for the population and road safety;

– architectural appearance and preservation of historical heritage and other indicators and criteria that determine the qualitative level of improvement and the state of the infrastructure of the city (village, rural area), etc.