

Assessment of ornamental features and prospects of using small-flowered clematises for city greening

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Expanding the range of plants for greening settlements of Ukraine and Kyiv in particular, is a key issue nowadays and requires constant analysis cultivars suitable for cultivation in specific soil and climatic conditions. Previous studies of ornamental climbing plants assortment in Kyiv plantations demonstrated their high diversity in botanical gardens and low in public places, despite the topicality of vertical gardening elements using in the urban environment.

The aim of the research was to study the prospects and feasibility of using climbing small-flowered clematises in Kyiv green spaces according to their ornamental features compared to other vines.

For the evaluation of decorativeness the comprehensive assessment scale of ornamental woody plants developed by O.G. Horoshyh, O.V. Horoshyh and modified by O.M. Bagatska for woody vines was used. We've evaluated such features as branches color, crown density, vines size, the method of attachment to the support structures, the size, shape and color of leaves, length of growing season, shape, size, color and fragrance of flowers, time and duration of blooming, shape, size and color of fruits, abundance and duration of fruiting.

We studied species and cultivars, belonging to the small-flowered clematis group: *Clematis alpina* L. 'Pamela Jackman', *C. fargesii* Franch. 'Paul Farges', *C. integrifolia* L. 'Aljonushka', *C. ispahanica* Boiss. 'Zvezdograd', *C. macropetala* Ladeb. 'Maidwell Hall', *C. taxensis* Buckl. 'Princess Diana', *C. tibetana* Kuntze and *C. viticella* L.

According to the modified assessment scale studied clematises relate to group of sufficient decorative vines. According to research Bagatskaya O.M. this group includes such species as *Akebia quinata* Decne., *Actinidia kolomikta* (Rupr.) Maxim., *Aristolochia manshuriensis* Kom., *Vitis vinifera* L. etc.

The value of clematises, like other ornamental vines, for cities greening is the ability to form numerous shoots densely covered with leaves and dynamic decorative

effect, occupying a small area for planting. In addition, small-flowered clematises are undemanding to growing conditions and can beautify unsightly building facades, outbuildings, sheds, fences, trunks of old trees, etc.. They can make a shadow above outdoor terraces, balconies, giving these structures a clear distinctive look. Small-flowered clematises can also be used as groundcover plants on the slopes, banks of ponds, sides along highways and railways, because resistance to pollution is inherent for many of them.

Clematis range is selected depending on the biological characteristics of plants and gardening tasks. For large buildings (facades, pavilions, parking, etc.) should be used vigorous drought-tolerant species and cultivars (*C. ispahanica* 'Zvezdograd', *C. fargesii* 'Paul Farges', *C. tibetana*, *C. viticella*). *C. taxensis* 'Princess Diana', *C. macropetala* 'Maidwell Hall', *C. alpina* 'Pamela Jackman' fit for relatively small objects decoration. For low fences greening *C. integrifolia* 'Aljonushka' can be used, as it is compact and slightly clings to the supporting constructions.

The combination of a variety of morphological and ornamental features shows a wide range of small-flowered clematises using in settlements greening.