The study of ornamental potential of five wild Achillea species cultivated in Mashhad climate conditions

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Achillea is one of the most impotent medicinal genuses belonging to Asteraceae family. Nowadays due to shortage of water in most places in the world and specially urban area, selecting low maintenance plants including plants with quick growth, resistant to unfavorable environment conditions with easy propagation and culture is the main strategy. In regard of importance of using native plant in urban green space as resistant plants to unfavorable environment conditions and no study on wild species of Achillea in Iran, this research for evaluation of ornamental potential of five wild species of Achillea has been conducted. The results showed that different species have special traits that could be used depend on our goal. *A. millefolium* has the highest flowering period (100 day) and plant height (nearly 1 meter). *A. biebersteinii* was better than other species in respect of inflorescence number, flower diameter and flower height. *A. wilhelmsii* and *A. eriophora* had the highest lateral inflorescence number and early flowering. This species because of good acclimation, tolerant to unfavorable conditions, long flowering period, perennial habit and bearing beautiful and big flowers, seems to be suitable plants for use in green space. Different species of Achillea have gain most characteristics of a resistant plant to unfavorable conditions and some species of this plant such as *A. millefolium*, *A. tomentosa* and *A. filipendula* are used as ornamental, cut flower, dry flower and groundcover in some countries.

**Keywords**: Achillea, Domestication, Morphological characteristic, Native plants, Ornamental plants.