

P-152 (261)**EVALUATION OF MORPHOLOGICAL DIFFERENCES BETWEEN WILD AND DOMESTICATED ERYNGIUM BILLARDIERI IN IRAN**

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Eryngium billardieri from the Apiaceae family is a native plant of Asia and widely grows in several provinces of Iran. *E. billardieri* (commonly known as “booghnağh”) has been used in traditional Iranian medicine for the treatment of diabetes, gastrointestinal problems and etc. The aerial parts of seven populations of *E. billardieri* were collected from different provinces of Iran (Tehran, Qazvin, Markazi and Semnan). One population from Tehran province also was cultivated during 2015-2016 in research field of faculty of Agriculture in Tarbiat Modares University, Tehran, on the basis of randomized complete block design with three replications. In order to evaluate morphological diversity between different wild populations and cultivated one, some of important morphological characteristics were measured. The results showed that the amount of plant height (62.2 ± 7.5 cm), the number of lateral branches (16.3 ± 1.1), the number of flowers per plant (246 ± 20.2), stem diameter (1 ± 0.2 cm) and inflorescence height and diameter (10.1 ± 1.1 and 12.6 ± 1.2 cm), were observed in domesticated population while, the amounts of plant height (58.5-80.7 cm), the number of lateral branches (9.7-11.3), the number of flowers per plant (43-94), stem diameter (3.7-6.3 cm) and inflorescence height and diameter (8.1-11.2 and 9-11.9 cm), were measured in wild populations. On the basis of our results, *E. billardieri* had good potential for cultivation in Tehran province climate.

Keywords: *Eryngium billardieri*, morphological characteristics, populations, domestication