

REVISION OF THE GENUS *BELLEVALIA* FROM 1808 TO 2018 BASED ON MORPHOLOGICAL AND MOLECULAR ANALYSIS

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Bellevalia was established in 1808 by Lapeyrous. The first revision was made by Kunth in 1843, Boissier 1884 divided *Bellevalia* into sections *Eubellevalia* and *Hyacinthella*. Losina- Losinskaya 1935 distinguished sections *Eubellevalia* and *Oxydon*. In a perfect work, Feinbrun 1938, presented a monograph for *Bellevalia* including 45 species belonging to the four sections: *Nutans*, *Patens*, *Conica* and *Muscarioides*. She explained shape and color of flowering and fruiting raceme, form of leaf, nutation movements of flowering and fruiting pedicles are sectional and subsectional characteristics. Besides above features, color of anther, cilia at the margin leaf were specific characteristics. Then Persson and Wendelbo 1979, added section *Strangweja* and Wendelbo 1980, modified section *Oxydon* to section *Oxydonta*. He studied Iranian *Bellevalia* species belonging to sections *Conica*, *Nutans*, *Bellevalia* and *Oxydonta* that led to introducing new species *B. wendelboi*. According to the world checklist of monocotyledons report, there are 75 accepted species name for *Bellevalia*. Due to interference sectional and specific characteristics and color change in dried specimens (mostly light brown), It seems these features cannot be recognized by section and species circumscription. So, molecular analysis was performed based on four plastid DNA regions. The results showed some species of one section were transferred to another section. So, the current infrageneric classification of *Bellevalia* is not supported by our molecular evidence, which suggests a fundamental distinction between species with glabrous leaf margins and those with pubescent margins and anther color. However, this should be further investigated with increased sampling.

Biography

Azarnoosh Jafari has completed her PhD from Research and Sciences of Tehran Branch, Islamic Azad University. She is the Director of above project design. She has published more than 50 papers in English and Persian journals.

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