**Distribution patterns and priorities for conservation of Iranian crop wild relatives: A case study on Monocots**

**Abstract**

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The climatic dissimilarities, huge potential for diversification, vegetation history caused by the complex tectonic events as well as soil heterogeneity shaped diverse geo-botanical units that makes Iran an important area of endemism and a global center of diversity for plants. So, Iran contains approximately 7500-7800 plant taxa among which about 2200 taxa are considered to be endemics. Besides, the country is one of the most important origin centers of cultivated plants in the World. In Iran, little attention has been paid to centers of diversity and CWR hot spots in the selection of priority zones for conservation, therefore, it seems necessary to assess mentioned valuable taxa. A databank for analysis was taken from HSBU, and W, WU as well some basic flora (e.g. Flora Iranica and Flora of Iran) as well as some other numerous scientific literatures. Assessment of conservation status was based on the IUCN Red List at regional scale. The localities were marked using ArcView (ver. 3.2) using geo-referenced maps (1/106) with distribution points over 1° × 1° universal transverse mercator (UTM) grid cells. Our study was the primary step on the ecological assessment of the Iranian crop wild relatives. Primary gene pool or taxa groups I and II were identified from prior studies on the basis of phylogenetic affinity or taxonomic proximity. The Iranian monocot CWR includes 183 species belonging to 83 genera of 17 plant families mainly distributed in the Zagros and the Alborz regions, respectively. In this research, all the main threatened classes (CR, EN as well VU) as well assembly of them comprised four levels of important plant habitats established in the Alborz as well the Zagros regions indicating the highest areas in terms of important plant areas, respectively.

Key Words: CWR, conservation, Distribution patterns, Iran