

Diversity analysis of spontaneous populations of *Moraea sisyrinchium* (Iridaceae) in different bioclimates of Tunisia

Hanen Ferjani and Zohra Bencheikh

Department of horticoles sciences, High institute of agronomy, Chott Mariem Sousse-Tunisia R L. Biodiversity and Ecotoxicology

Corresponding Author email: [*f.banen@hotmail.fr](mailto:f.banen@hotmail.fr)

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1 ABSTRACT

The survey of the north and the Sahel region of Tunisia enabled the collection of five spontaneous populations of the *Moraea sisyrinchium* (*Iris sisyrinchium* L.) plant. This North Africa endemic plant species is present in various plants associations from the humid to the arid bioclimatic and colonizes diverse habitats from high altitude to lagoons. This article intends to analyse the morphological diversity of these populations. For preserving their biodiversity, the study of the ornamental spontaneous species becomes essential. The results displayed a large diversity ($p = 1\%$) among the different *Moraea sisyrinchium* populations for the parameters: leaf length, stalk length, perianth tube length, ovary length, anther length and seed diameter. Important intra-population diversity was demonstrated. The Shannon-Weaver index is high (> 0.8) for the most of studied parameters.