

Numerical taxonomy of some annual species of *Astragalus* from Iran. (Poster)

Maryam [Arefi](#), Vahideh Nazeri, Mansour Mirtajaddini

Department of Biology, Faculty of Science, Shahid Bahonar University of Kerman, Iran

Introduction

Astragalus, the largest genus of flowering plants, contains upwards 2500 species and 245 sections. Distributed mainly in cool arid and semiarid continental regions of the Northern Hemisphere and South America (1). Large number of species, species diversity and similarity of species have been blurring the species delimitation. The infrageneric classification of the more than 2500 species has continuously revised by Bunge (1868,1869), Podlech (1991,1999) and Kasempour et al (2003).(2)

Objectives

The purposes of this study are to use numerical taxonomy to better understanding the phenetic relationships between species within sections, and also the comparison of our results with traditional infrageneric classification.

Methods

A total of 57 morphological characters were measured on 82 specimen belong to 20 taxa of annual Astragali, comprising 21 quantitative and 36 qualitative characters. Cluster analysis was performed by UPGA method using STATISTICA software and results were illustrated in a dendrogram.

Results

1. Combination of *Ophiocarpus* Podlech in genus *Astragalus* is confirmed
2. Isolation of section *Bucerates* from other species is distinctive.
3. Section *Sesamei*, is considered as a heterogeneous section.
4. Reconstruction of section *Oxyglotis* is suggested.

Conclusion

The results obtained from this study support Bunge's (1968) infrageneric classification of annual species of *Astragalus*.

Keywords: Numerical taxonomy, Annual astragalus, *Astragalus*

Selected References

1. Kazempour Osaloo S., Maassoumi, A. A. and Muralcami, N. 2003. Molecular systematics of the genus *Astragalus* L. (Fabaceae): Phylogenetic analyses of nuclear gene *ndhf* sequences. *Plant Systematic and Evolution*. 242:1-32.
2. Podlech, D. 1991. The systematics of the annual species of the genus *Astragalus* L. (Leguminosae). *Flora et Vegetatio Mundi*. IX: 1-8.

Presenting Author: Maryam Arefi, m_arefi82@yahoo.com
