

## **ANALYSIS OF VARIANCE OF MORPHOLOGICAL AND PHYTOCHEMICAL TRAITS OF FIFTEEN ECOTYPES OF SPEARMINT (*MENTHA SPICATA* L.)**

M. J. Adelpoor<sup>1</sup>, A. R. Golparvar<sup>2</sup>, H. Zeinali<sup>3</sup>, M. Golabadi<sup>4</sup>

1-M.Sc. student of Plant Breeding, Islamic Azad University, Isfahan (Khorasgan) Branch, Isfahan, Iran.

2- Associate Prof. of Plant Breeding, Faculty of Agriculture, Islamic Azad University, Isfahan (Khorasgan) Branch, Isfahan, Iran.

3- Assist. Prof. of Plant Breeding, Isfahan Agriculture Research center.

4- Assist. Prof. of Plant Breeding, Faculty of Agriculture, Islamic Azad University, Isfahan (Khorasgan) Branch, Isfahan, Iran.

Mohamadelpoor\_am\_2203@yahoo.com

### **A b s t r a c t :**

This experiment was done on the basis of phytochemical and morphological traits on the different ecotypes of *Mentha spicata*. Studied ecotypes collected from different regions of Iran and planted in randomized completely block design with three replications during 2013. Measured traits were including morphological and phytochemical. Compositions of essential oil identified by gas chromatographic on the basis of retention indices and standards of composition. Analysis of variance showed significant difference between ecotypes for all the studied traits. Comparison means showed that ecotype of Islamabad (Behbahan) had the highest dry biomass yield and ecotypes Yasooj, C. Sakht and Bahrambeigy had the highest essential oil.

**Keywords:** mint, phytochemical, ecotype and essential oils.



The 1st International Conference on New Ideas in Agriculture  
Islamic Azad University Khorasgan Branch  
26-27 Jan. 2014, Isfahan, Iran

