



## Effect of organic and chemical fertilizers application on some agronomical properties of burley tobacco

Mahmoud Reza Tadayon<sup>1</sup>, Zeynab Reisi<sup>2</sup>

Received: 6/3/2016

Accepted: 10/8/2016

### Abstract

In order to study the effect of organic and chemical fertilizers on some agronomical properties of burley tobacco, an experiment was carried out in a randomized complete block design with six fertilizer treatment and three replications at the research field of Shahrekord University in 2013. Fertilizer treatments were including of: control, chemical fertilizer equal 100 percent of tobacco needs, compost, vermicompost, compost equal 50 percent + chemical fertilizer equal 50 percent and vermicompost equal 50 percent + chemical fertilizer equal 50 percent. The results showed that the fertilizer treatments were increased width of leaf and length of leaf, priming fresh weight and priming dry weight and biological yield of tobacco compared to the control treatment. Maximum leaf length, leaf width and biological yield were belonged to chemical fertilizer treatments and after that was obtained from compost treatment. Integrated treatments and vermicompost treatment had not significant difference on above traits. The highest priming fresh weight yield and priming dry weight yield were obtained from compost fertilizer but, there was no significant difference between chemical fertilizer treatments and chemical fertilizer treatments compared to control treatment showed 85 and 97 percent increasing respectively. Maximum harvest index of tobacco related to vermicompost fertilizer treatment.

**keywords:** Chemical fertilizer, Compost, Leaf of tobacco, Vermicompost.

1. Associate Professor of Agronomy Department, Shahrekord University; Corresponding author, Email: mrtadayon@yahoo.com  
2. M.Sc. Student of Agroecology, Shahrekord University