THE EFFECT OF MYCORRHIZAL ON SOME IONIC CONTENT IN IMPATIENS WALLEIANA PLANT GROWN UNDER REDUCTION THE AMOUNT OF IRRIGATION CONDITION

Introduction
Iran almost is a arid and semi-arid part of the world and drought stress is one of the important abiotic stress that limits plant’s growth. Ornamental plants in urban green space are important, Impatiens walleriana is seasonal ornamental plants. The aim of this investigation is the various aspects of mycorrhizal on Impatiens walleiana in order to save water and increase the plants tolerance against drought stress.

Materials and Methods
This experiment was carried out in complete randomized design with 3 replications. Plants were treated with different levels of mycorrhizal and drought (control, drought stress, mycorrhizal, mycorrhizal & drought stress). Concentration of Ca, Mg, K and Fe in plant’s roots and shoots was determined by using atomic absorbtoin method.

Results and Discussion
Results indicated in both roots and shoots, plants treated with mycorrhizal & drought, have significant increase in Ca and Fe content more than plants treated with drought. Root’s Mg content increased in plants treated by mycorrhizal & drought, significantly more than plants treated with drought but there is not increase in shoots. Root’s K content is decreased in plants treated with mycorrhizal & drought, significantly more than plants treated with drought. Increase in shoots’ K content in plants treated with mycorrhizal & drought is significantly more than other treatments.

Key words: mycorrhizal, drought, root, shoot, ionic content.

References