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**EVALUATION OF FOLIAR APPLICATIONS OF IRON AND MANGANESE
ON CORM AND LEAF YIELD OF SAFFRON (*CROCUS SATIVUS L.*)**

Mansoureh Mahlouji Rad,* Fatemeh Hassanzadeh Aval, Parviz Rezvani Moghaddam

*Agronomy Department, Ferdowsi University of Mashhad, Mashhad, Iran
E-mail: ma_ma843@stu-mail.um.ac.ir*

Foliar application is one of the most effective methods to rectify the nutritional needs of plants to microelements [1]. In order to investigate the suitable concentration of foliar applications of iron and manganese on corm and leaf yield of saffron (*Crocus sativus L.*) on 9-11 g maternal corms weights, a pot experiment was conducted in Qom conditions during years of 2012- 2013. For this purpose a factorial experiment based on completely randomized design with three replications and 9 treatments was used. Treatments included three levels of foliar iron and manganese applications (0, 0.05% and 0.1% solutions) with 2% Fe and 0.1% Mn chelates. Results of variance analysis showed that the total replacement corm number and weight per maternal corm, mean replacement corm weight and fresh and dry leaf weight were not insignificant ($P \leq 0.05$) as affected by foliar applications of iron and manganese. In spite of widespread use of foliar, foliar applying micronutrients such as iron and manganese did not have significant effects on corm yield of saffron. Results of this experiment in contrast with other researches on foliar applications showed that total replacement corm number and weight per maternal corm, mean replacement corm weight and fresh and dry leaf weight were not affected by micronutrients foliar applications. Hasanzadeh and Mahlouji Rad showed the same results [2].

References

- [1] Bybordy, A. J. *Pajouhesh & Sazandegi*. 2006, 74, 153-160.
- [2] Hasanzadeh Aval, F. M.; Mahlouji Rad. In *second national conference of recent scientific research of saffron*. 2013, 30 october, Torbat-e- Heidarieh, Iran.