Review of Organic Fertilizers Impacts on Agriculture of Saffron (*Crocus sativus* L.)

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Abstract

Saffron (Crocus sativus L.) is the most expensive spice and nutrient balance availability plays important role in the flower induction and its corms growth improvement. Besides consumption of organic fertilizers in reducing environmental contamination and soil biodiversity conservation, due to gradual release of nutrients play a positive role in improving the growth characteristics and yield of this plant. Considering the importance of soil fertility management effects on flower yield of this valuable plant, numerous studies have been done on fertilizer and nutritional issues. In this article we have tried to look at the fertilizer and nutrition researches of saffron in the past and present, a comprehensive study done on short-term and long-term effects of different levels of organic fertilizers and manure on yield and corms growth of saffron. What this study, we have tried to achieve the conclusion of appropriate fertilizer recommendations of new and conventional types of fertilizer sources based on researches carried out in order to enforce sustainable management of biological and economic resources in Iran. The fact that in saffron cultivation areas, particularly in Iran usually soil moisture storage content is relatively low and water stress occurs, via manure consumption can be increased soil moisture storage content and inputs consumption efficiency. Consequently, through producing healthy and organic saffron Iran's share in the global market will be increased.

Keywords: Saffron, Water stress, Manure fertilizers, Sustainable agriculture, Nutritional management.

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