



كلية الزراعة
Faculty of Agriculture



قسم البساتين
Horticulture Department



جامعة الفيوم
Fayoum University

Second Article

Article title	Response of Multi-Stressed <i>Olea europaea</i> Trees to The Adjustment of Soil Ph by Acidifying Agents: Impacts On Nutrient Uptake and Productivity.
Participants	Beheiry, H.R. ¹ ; Awad, A.A.M. ² and Hussein, H.A.Z. ¹ ¹ Horticulture Department, Faculty of Agriculture, Fayoum University, Egypt. ² Soil and Natural Resources, Faculty of Agriculture and Natural Resources, Aswan University, Egypt
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Abstract

Soil pH is the most important factor in evaluating plant nutritional status due to its close association with nutrient availability. In the 2018 and 2019 seasons, two field experiments were conducted to evaluate the performance of olive trees (*Olea europaea*, Picual cv.) grown in sandy clay loam soil under multi-abiotic stresses with the application of three different acidifying agents (AAs), acetic (AC), citric (CA), and sulfuric (SA) acid, at two doses (25 and 50 cm³; AC1 and AC2, CA1 and CA2, and SA1 and SA2, respectively), as compared with a control treatment. This study was established according to a randomized complete block design. In general, our results showed that all the AAs applied surpassed the control treatment with respect to all the studied parameters except for the leaf iron content. Furthermore, the trees treated with CA yielded the best results in terms of the leaf nitrogen, calcium, and magnesium contents; the physiological and growth parameters (except for the performance index); the total fruit weight, flesh weight, and flesh dry matter; the fruit diameter; the oil content; and the total olive yield. Furthermore, the maximum leaf potassium, manganese, zinc, and copper contents were obtained in the trees growing in soil injected with AC. The correlation coefficient fluctuated between positive and negative among the studied characteristics.