

P-116 (89)**FOLIAR APPLICATION OF ZNSO₄ AND KNO₃ ON QUANTITATIVE AND QUALITATIVE PROPERTIES OF PUNICA GRANATUM L. GROWN IN IRAN**

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Pomegranate is an important source of bioactive compounds and has been used for folk medicine for many centuries. The present study was conducted to investigate the effect of foliar application with zinc sulfate (ZnSO₄) and potassium nitrate (KNO₃) on pomegranate cv. 'Malase-Torsh Saveh'. The experiment was carried as randomized complete block design, with three replications. The applied treatments were K as KNO₃ at concentrations of 0%, 0.25%, and 0.5% and zinc as ZnSO₄ at concentrations of 0%, 0.5% and 1%. For this purpose, fruit weight, peel thickness, aril diameter, phenol of juice, pH, total soluble solids (TSS), titratable acidity (TA), and antioxidant capacity were measured. The results showed that foliar application of KNO₃ significantly increased fruit weight, 100 aril weight, peel weight, peel thickness, TSS, and antioxidant capacity. In contrast, pH, TA, TSS/TA, and phenol of juice were not influenced by foliar application of KNO₃. On the other hand, ZnSO₄ significantly increased fruit weight, aril diameter, and phenol of juice. KNO₃ 1% and ZnSO₄ 0.5% were identified as the most appropriate treatments in improving quality and quantity of pomegranate.

Keywords: Pomegranate, Aril, KNO₃, ZnSO₄