



Foliar sprays containing potassium nitrate increased fruit number and fruit size in peach

Foliar application of nutrients and the interactive effect of NAA (auxin), KNO $_3$ and iron (as NaFeEDDHA) on nutrient status, shoot and yield characteristics of peach were investigated. This study was carried out on peach trees (Prunus persica L.) cv. Early Coronet in an orchard in Seiujh, Kurdistan Region, Iraq, in 2008. The soil was sandy clay loam with high pH and high calcium content. Each tree was sprayed till point of runoff with a solution containing KNO $_3$ (0%, 0,1% or 0,2%), combined with either NAA (0 or 5 mg/L) or iron (0, 30 or 60 mg NaFeEDDHA per liter). The surfactant agent Tween-80 was added to all the solutions at 0,01%. Two consecutive sprays were applied starting one month after fruit set: at April 24 and May 25. The experimental design was factorial in randomized complete blocks with three replicates. The best treatment - resulting in the highest average shoot dry weight, total chlorophyll, fruit number, fruit length, fruit diameter and total carotene - was the foliar spray with 5 mg/L NAA, 0,2% KNO $_3$ and 60 mg NaFeEDDHA per liter.