



Potassium nitrate sprays enhanced fresh and dried fig quality

The effect of foliar applied potassium nitrate and calcium nitrate on fruit quality of Sarilop figs was studied in a 15 years old orchard in Aydin province in Turkey. Treatments consisted of: control, 1,5% $\text{Ca}(\text{NO}_3)_2$, 3% $\text{Ca}(\text{NO}_3)_2$, 3% KNO_3 and 2% $\text{KNO}_3 + 2\% \text{Ca}(\text{NO}_3)_2$. Foliar sprays were conducted twice on July 10 and July 25. The trial was set up as a randomized block design with three replicates and three trees per replicate. The fruit size of fig fruits was highly affected by the foliar applications (Table 1). Lowest average fresh fruit weight was found for the control, all foliar treatments increased the fresh fruit weight compared to the control. Neck length was increased for the foliar treatments, this is important in terms of harvesting since longer necks may ease hand picking. Another benefit of the foliar sprays was a closed or narrower opening compared to the control, because the ostiole opening is the entrance for pathogens and their vectors. Smaller openings together with bigger fruit sizes are beneficial effects of foliar sprays on fresh figs. KNO_3 sprays also enhanced dried fig quality through its positive effects on colour, texture, total sugar and fructose contents.

Table 1. Effect of KNO_3 and $\text{Ca}(\text{NO}_3)_2$ applications on fresh fruit quality parameters of fig.

Treatment	Width (mm)	Weight (g)	Neck length (mm)	Ostiole width (mm)
Control	47,8 b	92,1	7,91	8,44 a
3% KNO_3	53,7 a	99,4	9,92	7,14 b
2% $\text{KNO}_3 + 2\% \text{Ca}(\text{NO}_3)_2$	53,9 a	97,5	10,45	7,35 b
LSD (5%)	3,82	ns	ns	0,871

