

Foliar potassium nitrate induced salt tolerance in bottle gourd

Salinity limits crop growth and development. Therefore a moderately salt tolerant crop

Lagenaria siceraria

(bottle gourd) was used to study the effect of foliar sprays on leaf area and fruit weight per plant. A foliar spray of 250 ppm KNO_3 increased the leaf area under non saline conditions by 16% and under 0,2% sea-salt dilution by 12% compared to the control (Table 1).

The plants sprayed with 250 ppm KNO_3 under saline conditions of 0,2% sea-salt dilution not only inhibited toxic effects of salt on fruit formation, but also increased the fruit weight per plant by 77%, whereas a foliar spray of 500 ppm KNO_3 increased the fruit weight per plant by 18% (Figure 1).

Table 1. The effect of a 250 ppm KNO_3 foliar spray on the total leaf area (cm^2) per plant compared to non-spray and non-saline conditions.

	Non-spray	Foliar spray of 250 ppm KNO_3
Non-saline	-	16%
0,2% sea-salt dilution	-1%	12%

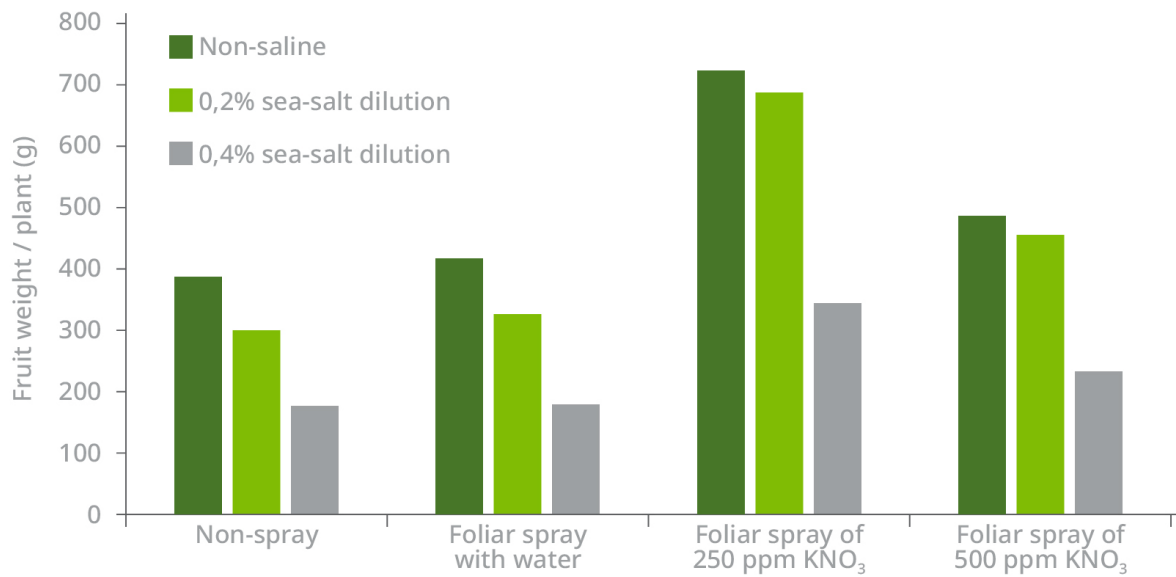


Figure 1. Effect of foliar spray of KNO₃ on fruit weight per plant (g) of *Lagenaria Siceraria* grown under various levels of saline water irrigation.