



Potassium nitrate turned out to be the preferred priming treatment for melon seedlings

The aim of the work was to evaluate the response of melon seedling in order to reduce post-transplant stress and thus maximize biomass production as a strategy for managing melon crops. Priming was performed in 150 mM of different solutions: KNO_3 , NH_4NO_3 , $(\text{NH}_4)_2\text{SO}_4$ and NaCl. Fertigation with NH_4NO_3 did not eliminate the effect of previous priming treatments. Seedlings primed with KNO_3 showed the highest total fresh and dry biomass, mainly due to their higher metabolic activity and their greater leaf area (Table 1). Potassium nitrate outperformed the other priming treatments in this experiment.

Table 1. Effect of priming on seedlings fertigated with NH_4NO_3 .

| Priming | Leaf area (cm ²) | Fresh weight (g) | Dry weight (g) |
|------------------------------|------------------------------|------------------|----------------|
| Control | 56,6 | 3,71 | 0,53 |
| KNO_3 | 80,2 | 5,74 | 0,81 |
| $(\text{NH}_4)_2\text{SO}_4$ | 69,4 | 5,17 | 0,71 |
| NaCl | 73,4 | 4,98 | 0,70 |
| NH_4NO_3 | 76,7 | 5,67 | 0,74 |
| Significance | * | * | * |

* Significant differences at $P < 0,05$