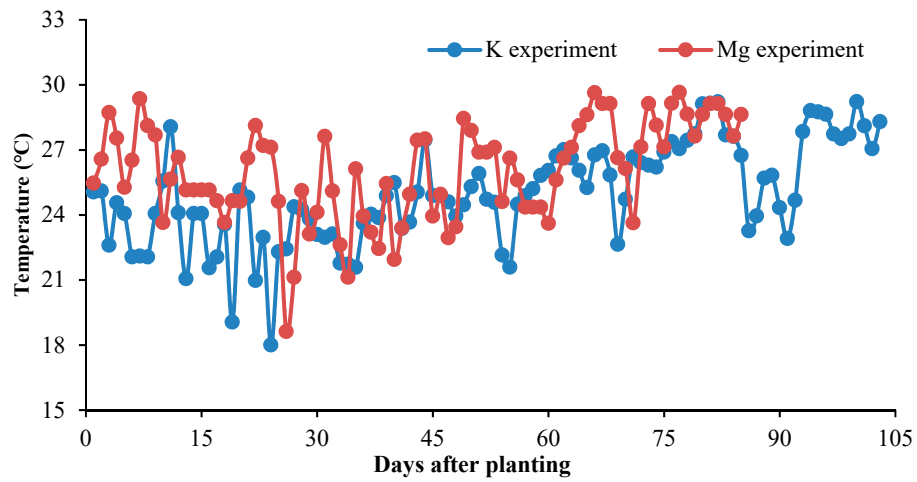
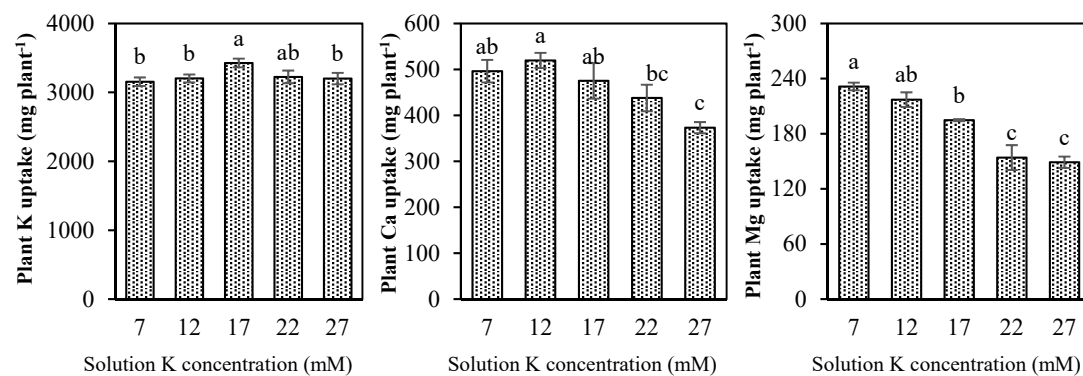


## *Supplementary Material*



**Supplementary Figure S1** Mean daily temperatures (recorded every two hours) in the vegetation period during the Mg and K experiments in the greenhouse.



**Supplementary Figure S2** Effects of K concentrations in solution on plant potassium (K), calcium (Ca), and magnesium (Mg) uptake by cherry tomato plants. Values are means  $\pm$  standard error (SE) among three replicates. For each nutrient, means with the same letters did not differ significantly at  $P < 0.05$ .

**Table S1.** Critical leaf Mg concentrations for tomato growth in different substrates.

Substrate type	Growth period	Critical leaf Mg concentration	Evaluation indicator	References
Soils	Anthesis	4.0 g kg <sup>-1</sup>	Plant growth	Reuter et al., 1986
Soils	First harvest	3.0 g kg <sup>-1</sup>	Plant growth	Reuter et al., 1986
Soils	Second harvest	4.0 g kg <sup>-1</sup>	Plant growth	Piggott,1970
Soils	First harvest	3.2 g kg <sup>-1</sup>	Plant growth	Davidescu et al.,1982
Soils	Harvest	3.9 g kg <sup>-1</sup>	Dry matter accumulation	Hauer-Jákli and Tränkner (2019)
Coconut coir	First harvest	4.38 g kg <sup>-1</sup>	Dry matter formation	This study
Coconut coir	Second harvest	4.50 g kg <sup>-1</sup>	Dry matter formation	This study