MINERAL ELEMENTS AND CARBOHYDRATES IN AVOCADO PLANTLETS "CARMEN" INOCULATED WITH ARBUSCULAR MYCORRHIZAE

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The goal of this work was to evaluate the influence of the inoculation with six fungal species forming arbuscular mycorrhizae (HMA) (*Glomus clarum, G. etunicatum*, *G. manihotis, Acaulospora scrobiculata, Scutellospora heterogama, Gigaspora margarita*) on the mineral nutrition and carbohydrate content in avocado plantlets 'Carmen' (*Persea* sp.). A significant increment in the absorption of mineral elements induced by the HMA was observed, but there were variations in relation to the fungal species and the mineral elements considered. In the aerial part of the plant, and when compared with the controls, plants inoculated with *S. heterogama* showed higher contents (mg/plant) of N, P, K, Mg, Cu and Zn; plants inoculated with *G. etunicatum* showed higher contents of N, P, K, Ca, Mg, Cu and Zn; plants inoculated with *A. scrobiculata* showed higher contents of P, Cu and Zn; and plants inoculated with *G. clarum* showed higher contents of K, Ca, Cu, and Zn. In roots, plants inoculated with *S. heterogama*, *G. etunicatum, G. clarum* and *A. scrobiculata* showed contents of P, Cu, and Zn significantly higher than those obtained in the controls. The species *G. margarita* and *G. manihotis* did not affect the mineral content in the evaluated plants. All the HMA species increased the amount of carbohydrates in the aerial part of the plants. Species such as *S. heterogama*, *G. etunicatum, G. clarum* and *A. scrobiculata* that, in general, increased the mineral element contents in avocado plants, induced, as a consequence, a higher vegetative development. The species *G. margarita* and *G. manihotis* did not affect the nutritional contents or increase the vegetative development of the plants.