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RESPONSE OF SUCCARY MANGO TREES TO FOLIAR APPLICATION OF GLUTATHIONE AND BORIC ACID

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ABSTRACT

This study was carried out during 2015 and 2016 seasons to study the effect of single and combined foliar application of both the antioxidant glutathione and boric acid each at 0.025 to 0.1% three times (at growth start, just after fruit setting and at one month later) on growth, trees nutritional status , yield and fruit quality of Succary mango trees grown under Aswan environmental conditions.

Carrying out three sprays of the antioxidant glutathione and/ or boric acid each at 0.025 to 0.1% was very effective in enhancing all growth characteristics, leaf pigments, N, P, K, Mg, flowering aspects, initial fruit setting %, fruit retention %, yield and both physical and chemical characteristics of the fruits over the check treatment. All the investigated parameters were unaffected by increasing concentrations of glutathione and boric acid from 0.05 to 0.1%.

For promoting yield and fruit quality of Succary mango trees grown under Aswan environmental conditions, it is suggested to spray a mixture of the antioxidant glutathione and boric acid each at 0.05% three times at growth start, just after fruit setting and at one month later.

Key words: boric acid ,fruit quality, Glutathione, growth, yield.