

**Title** Pre-harvest citric acid increased the vase life of cut tuberose (*Polianthes tuberosa* L.)

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#### **Abstract**

Effect of foliar application of 3 levels of citric acid (0, 0.05, and 0.1 percent v/v) and three levels of Iron Sulphate (0, 0.5 and 2 percent w/v) and four levels of nitrogen fertigation (0, 100, 150, and 200 ppm) on vase life of Tuberose was investigated. The experiment consisted of a factorial arrangement (3x3x4), carried out in a randomized block design, with three replications. Results show that Citric Acid application increased average tuberose vase life significantly. There is also a significant correlation between the applied Citric Acid concentrations and vase life of cut flowers. Nitrogen fertigation of 150 ppm yielded significantly improved mean vase life compared with other nitrogen level. Iron application was effective on increasing the average vase life even though not significant statistically. The highest vase life was observed in treatment with combination of 150 ppm nitrogen, 2% Iron Sulphate and 0.1 % Citric Acid. Some possible physiological bases for such a response are put forward.