Thesis Title	Effect of Citric Acid, 8-Hydroxyquinoline Sulphate Solution and Sucrose on Vaselife of Patumma Hybrid (*Curcuma spangnifolia*) Inflorescences.
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Degree	Master of Science
Program	Horticulture
Year	2007
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ABSTRACT

The problem of holding patumma (*Curcuma spangnifolia*) in the vase was short vaselife. The purpose of this study was to solve this problem. Two experiments were carried out using solution of citric acid,8-hydroxyquinoline sulphate (HQS) and sucrose as holding solutions.In the first experiment, the effect of holding the patumma *(Curcuma spangnifolia)* rose *(Rosa hybrida)* carnation *(Dianthus caryophyllus* L.*)* gerbera *(Gerbera jamesonii* Hook*)* and lotus *(Nelumbo nucifera* Gaertn*)* in filtered water acidified with citric acid to pH 3 was studied by comparison with the control (filtered water, pH 7). The result showed that citric acid affected the cleanliness of liquid of stem vascular bundle cross section differently. Citric acid gave the heavy cloudness of liquid of patumma peduncle vascular bundle while the filtered water gave the clearest liquid. No different effect between citric acid and filtered water to the other flower was observed. However, the carnation in citric acid had longer vaselife than the others. The second experiment was carried out in three sets of sub experiment. In the first set, patumma inflorescences were held in HQS with concentration ranging from 50 ppm to 250 ppm and compared with the control. The second set was to compare the effect of 0.5 to 2% sucrose with the control. In the third set, the best solutions of the first and the second set ware mixed as a new preservative. This mixed solution of 50 ppm HQS and 2% sucrose was acidified with citric acid to pH 3,4,5 and 6 and the effect of each solution was compared with the control. The results showed that the best holding solution of patumma inflorescences was the mixture of 50 ppm HQS and 2% sucrose at pH 5.It exhibited the longest vase life of 8.16 days compared with 6.06 days of the control.