

Suphatchaya Klibngern 2007: Effects of Paclobutrazol and Silver Thiosulfate on Display Life of 5 Flowering Pot Plant Species. Master of Science (Agriculture), Major Field: Horticulture, Department of Horticulture. Thesis Advisor: Associate Professor Alisara Menakanit, Ph.D. 87 pages.

Effects of paclobutrazol and silver thiosulfate on display life of 5 flowering pot plant species were studied. The selected plants were; *Melampodium diraricatm*, *Dianthus chinesis*, *Tagetes spp.*, *Zinnia angustifolia* Kunth. and *Catharanthus roseus* (L.) G. Don. These plants were moved into a room with $25 \pm 2^{\circ}\text{C}$ temperature and $65 \pm 2\%$ relative humidity, an environment similar to those in exhibition halls. Artificial light from fluorescent lamps with $0.5\text{-}2.0\ \mu\text{mol m}^{-2}\text{ s}^{-1}$ was applied for 8 hours daily. The effectiveness of display life extension was compared between paclobutrazol solution of 0 50 100 and 200 ppm and silver thiosulfate of 0 0.2 0.4 and 0.8 mM. The results showed that paclobutrazol and silver thiosulfate had no effect on display life of *Melampodium diraricat* and *Zinnia angustifolia* Kunth. Their display life periods were 13 and 11 days respectively. Silver thiosulfate prolonged the display life of *Dianthus chinesis*, *Tagetes spp.* and *Catharanthus roseus* (L.) G. Don. The 0.4 mM solution extended the display life of *Dianthus chinesis* and *Tagetes spp.* to 11 and 7 days. The 0.2 mM solution extended the display life of *Catharanthus roseus* (L.) G. Don. to 7 days.

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Thesis Advisor's signature

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