

Title Effect of chlorophenol and 8-hydroxyquinoline sulphate on vase life of cut rose (*Rosa hybrida* L.)

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Abstract

Cut roses cv. American Gala were purchased from a wholesale market of cut flower in Bangkok area. The flowers were selected for uniformity of size, color and free from any defects. After re-cutting the stem under water, the flowers were pulsed with deionized water (DW) or with 5 and 10 mM of chlorophenol for 4 hr. The flowers pulsed with DW were divided into 2 groups and then individually placed in vials with 10 ml of DW (control) or 10 ml of vase solution containing 250 mg L⁻¹ HQS + 4% sucrose. The flowers pulsed with chlorophenol at both concentrations were individually placed in vials with 10 ml of vase solution containing 250 mg L⁻¹ HQS + 4% sucrose. All treated flowers stood in the climate controlled room at 20±2°C with 90% RH. Pulsing with chlorophenol at both concentrations induced the water uptake and bud opening, maintained a higher fresh weight and reduced the blueing symptom compared with the control and the flowers pulsed with DW and placed in vase solution. Pulsed cut rose with 10 mM of chlorophenol was the best treatment for keeping the quality. However, there was no significant difference of vase life between pulsed flowers with 5 and 10 mM of chlorophenol that was about 10 days, while the vase life of the control was 7 days.