

**Title** Role of soluble carbohydrate content on longevity of cut rose (*Rosa hybrida* L. cvs. Eldorado and Black magic) flowers

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**Keyword** Rose; flower; soluble carbohydrate

#### **Abstract**

Postharvest characteristics of *Rosa hybrida* between 2 cultivars (Eldorado & Black magic) were investigated. The vase life markedly varied life between cultivars, it was 5.6 days for 'Black Magic' and 13.3 days for 'Eldorado' in distilled water. Treatment with sucrose plus 8-hydroxyquinoline citrate (HQC) markedly increased vase life. Concentrations of fructose, glucose and sucrose in petals of 'Eldorado' were much higher than those of 'Black magic'. There was no difference between these cultivars in sugar concentrations in stems. In petals of both cultivars, concentrations of fructose were higher than glucose and sucrose but in stems sucrose were the main carbohydrate. There was little difference in ethylene production trends between 'Eldorado' and 'Black magic' flowers but Black magic produced higher ethylene concentrations at sixth day.