Title	Effect of different holding solutions on post-harvest life of gladiolus (*Gladiolus hybridus*)
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Abstract

A study was conducted during 2006-07 to prolong the post-harvest life of gladiolus using different holding solutions. Six holding solutions, viz tap water (control), 4% sucrose, 4% sucrose + 8-HQC (250 ppm), 4% sucrose + acetyl salicylic acid (Aspirin) (200 ppm), 4% sucrose + Al2(SO4)3 (200 ppm) and 4% sucrose + 0.1% ZnSO4 were used to prolong the post-harvest life of "Pusa Jyotsana" gladiolus using completely randomized design with 7 replications. Holding solutions significantly affected the change in fresh weight over initial fresh weight. On 3rd day in vase, maximum increase in fresh weight (16.87 g and 15.07 g) respectively was recorded in tap water and 4% sucrose + 8-HQC (250ppm). On 5th day in vase, maximum increase in fresh weight (18.66 g and 18.07 g) respectively of spike was recorded in holding solution of 4% sucrose + acetyl salicylic acid (200 ppm) and 4% sucrose + 8-HQC (250 ppm). Minimum loss in fresh weight (_5.73 g) of spike at senescence was observed in holding solution of 4% sucrose + acetyl salicylic acid (200 ppm). Significantly, maximum solution uptake by the spike was observed in tap water (52.85 ml and 72.28 ml,respectively) on 3rd day and 5th day in vase while, maximum solution uptake (129.42 ml) was recorded in holding solution containing 4% sucrose + acetyl salicylic acid (200 ppm) followed by 4% sucrose + 8-HQC (250 ppm) at senescence stage. Holding solution of 4% sucrose + 8-HQC (250 ppm), significantly improved the diameter of 1st(10.14 cm) and 3rd (9.50 cm) floret, whereas, the longevity of first florets (4.43 days), effective useful life (10.14 days)and vase life (13.14 days) were recorded in 4% sucrose + 8-HQC (250 ppm). Number of fully opened florets was found maximum (4.57 and 5.00, respectively) with 4% sucrose + 8-HQC (250 ppm) on 5th and 7th day in vase.