

## EFFECT OF LOW- COST FLORAL PRESERVATIVES ON POSTHARVEST QUALITY OF ANTHURIUM CUT FLOWERS

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Low-cost floral preservatives are important alternatives for commercial floral preservatives. Therefore, this study was conducted to evaluate the effect of low-cost preservative recipes on flower quality, shelf life, and sensory properties of anthurium cut flowers. Five treatments, well water (T<sub>1</sub>, control) and four preservative solutions of 25% 7up® (v/v) (3.9% sugar) (T<sub>2</sub>), 100 ml each of 5% (v/v) lime juice + 2% sugar (w/v) (T<sub>3</sub>), 100 ml each of 0.3% Aspirin (w/v) (99.6% Acetylsalicylic acid) + 2% sugar (w/v) (T<sub>4</sub>), and 100 ml each of 2% sugar (w/v) + 0.6% vinegar (v/v) (T<sub>5</sub>) were studied. One mL of Sodium hypochlorite (Clorox®) was added to all treatments as a biocide. The solutions were added into glass jars at 200 ml volume per jar and two flowers were placed in each jar. Treatments were replicated three times and arranged as a completely randomized design. Data of reduction of flower fresh weight, spathe length, spathe width, spadix length, spathe colour change, and vase life were recorded. Data were analysed using the analysis of variance in SAS statistical software. A sensory study was performed with 30 untrained panellists. Flowers kept in well water resulted the longest vase life (15 days) than the rest. Percentage reduction of flower weight, spathe length, and spadix length significantly decreased after 12 days of well water application. Fresh weight, spathe length, spathe width, spadix length, and spathe colour were decreased more rapidly in T<sub>4</sub> than the rest. According to the sensory evaluation data, T<sub>1</sub> and T<sub>3</sub> received the highest consumer preference. In conclusion, well water effectively extended shelf life and preserve the sensory properties of anthurium cut flowers. Further, the tested recipes of T<sub>2</sub>, T<sub>4</sub>, and T<sub>5</sub> were not affected significantly in enhancing flower quality.

**Keywords:** Flower quality, Sensory evaluation, Shelf life, Vase life, Well water