

# Research Update

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# Hydrangea Vase Life Effects with Postharvest Treatment

## **Background**

The Hydrangea is a popular cut flower used in floral designs, vases, and flower arrangements for special occasions such as weddings. This large, round flower head is what is a called an "inflorescence," made up of several clusters of individual flowers. This beautiful, showy flower comes in a range of colors consisting of blue, red, pink, light purple, dark purple, and white. The flower has a unique smooth, soft texture, making it attractive for floral arrangements.

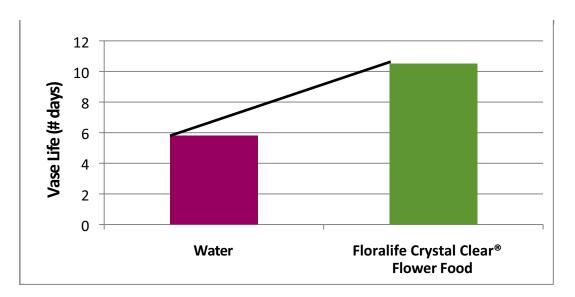
Although Hydrangea flowers have the potential vase life of more than two weeks, they are very sensitive to poor care and handling. The large flowers can easily become dehydrated, losing substantial water, causing them to quickly wilt and the petals turn brown. Keeping the flowers hydrated and providing proper nutrition are key factors of obtaining good vase life for hydrangeas.

#### Research

An experiment was conducted in the Floralife, Inc. Walterboro, S.C. laboratory to test the effectiveness of postharvest treatments on the vase life of Hydrangeas. Cut hydrangea stems (light blue variety) were obtained from a commercial flower source for the experiment. The ends of the stems were recut 1 inch (3 cm) from the bottom with a clean knife, leaves that would be below any solution level were removed, and the stems were then placed in buckets containing Floralife® Hydraflor® 100 Hydration Postharvest Treatment. Flowers were treated in this solution for 20 hours inside a cooler (34 - 36° F / 2 - 3° C). At the end of this hydration phase, flowers were placed in vases containing either plain water or Floralife Crystal Clear® Flower Food and held in an interior postharvest evaluation room (68 - 70° F / 20 - 21° C, 12 hrs. light) to monitor vase life performance.

#### **Results**

The following graph shows the vase life recorded during the evaluation phase.



# Photos on Day 7 of Vase Life Experiment



Flowers in Plain Water



Flowers in Floralife Crystal Clear® Flower Food

### **Conclusions**

Hydrangeas treated with flower food performed better than ones placed in plain water during the vase evaluation phase. Flower food helped the flowers to maintain the turgidity and color for a longer duration. Overnight hydration with Floralife® Hydraflor® 100 Hydration Postharvest Treatment followed by a Floralife Crystal Clear® Flower Food treatment resulted in 11 days of vase life of the hydrangeas tested.

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