

# Summary Report

## Life Extension of Flowers & Plants Using ABL 10 PPM Product

Report By Josh Yates  
Summary By Keith Moeller

### **Introduction**

Mr. Josh Yates theorized that cut flowers and plants were dying early because bacteria and other pathogens were growing inside the plants and causing a blockage, so that needed water was unable to reach the plant tissue to sustain life. Therefore the lack of water would cause the flower blossom and plant to wilt and die prematurely. It was his theory that if he could kill the bacteria inside the plant, without damaging the plant tissue, then the cut pants or flowers would have extended life.

### **Plan in Action**

In order to test his theory, Josh purchased a number of different types of cut roses. Josh then tested a number of substances to see if they would extend the life of the flowers. Among those substances were sugar, aspirin, flower saver packets from the flower shops, etc. Josh also tried American Biotech Labs® (ABL) 10 ppm SilverSol Technology™ product. Untreated controls were also run to establish what would be deemed as normal longevity of the flower blossoms. The flower stems were re-cut and put into individual sterilized containers filled with distilled water. The different additives were then added to the water and the life span of the individual flowers was measured as was the general look and health of, not only the flower, but also the stem. Josh found that the ABL product was the most effective flower blossom longevity treatment, of all the substances tested.

A second series of experiments were completed testing different levels of dilution of the ABL product to see if there was a level of product that would best treat the flowers for optimal longevity and blossom life extension. Different dilution levels from a fraction of a ppm to full strength (10 ppm) product were tested.

### **Conclusion**

Josh found that indeed the bacteria were causing the early demise of the cut flowers and plants. His testing also determined that the ABL product was the most effective treatment to kill the bacteria and enhance the longevity of the flowers. He found that a treatment of at least a 1/20 (0.5 ppm) dilution of the ABL product would generally extend the life of the cut flowers by 33%. Some types of cut roses were retaining their blossoms for as long as 3-4 weeks. Josh also found that the ABL treated flower stems were still alive and new leaves were forming and growing on the stems even after the blossom had failed. The untreated stems had dried and shriveled and no new growth had occurred. Josh also found that the degeneration and decay of the untreated flowers caused a pungent and offensive odor. The ABL product treated flowers had no such

odor. Josh also found that the same life extension found in the flowers also occurred in Christmas trees, using the ABL product.



**Figure 1** Top Row Roses Protected with ABL Product  
Bottom Row Unprotected Rose drying up



**Figure 2** ABL Protected Flower on Right  
Unprotected Flower on the Left  
(Part of the same lot of Flowers)



**Figure 3** Stem of ABL Protected Flower  
Alive even after the blossom falls



**Figure 4** Unprotected Stem Shriveled  
and dead



**Figure 5** Stem of ABL Protected Flower  
started to regenerate leaves. Unprotected  
Flowers did not.