



### Student

Mikaela May, Crowley, TX

### Summary

For this high school student, applying the scientific method to an area of interest has been a rose-filled experience!

### Scientific Inquiry in Full Bloom

Mikaela May's world is one full of flowers—flowers at the florist shop where she works part time. For her 10<sup>th</sup> and 11<sup>th</sup> grade science projects, Mikaela combined her growing interest in science with her passion for the floral industry and asked, "What solution most effectively helps preserve the life of roses?"



Mikaela, a student at Crowley High School in Crowley, TX, first got interested in plant biology after signing up for her high school's Ag-Science program and taking an Introduction to Agriculture class. She began participating in the school's successful Floriculture team and joined Future Farmers of America (FFA), a national organization that encourages and empowers students interested in agriculture.

Developing her first agriscience project from scratch was a challenge. "I had little knowledge about the scientific method or how to conduct an award-winning project from start to finish," says Mikaela. Her focus, however, was in full bloom. "I was intrigued by the contents of floral preservative packets," she recalls. "I wanted to know *what* was in them and *how* and *why* they worked." Mikaela was particularly interested in researching the effectiveness of various natural and artificial sugars. Using the Science Buddies Project Guide as a checklist, she successfully moved from early stages of designing her experimental study to running her trials and documenting her results.

Mikaela entered her initial project in the Texas FFA Convention Science Competition and in the 2010 San Antonio Livestock Show, where she received a Reserve Champion in Botany award and scholarship. Excited by both her research and the experience of exhibiting her project, she continued her study, investigating the effectiveness of combining additives like citric acid with sweeteners to help prolong the life of roses. Her Phase II project garnered her additional success, including being named an American Museum of Natural History's Young Naturalist Science Competition Semi-Finalist.

As she approaches her senior year of high school, Mikaela has moved on to Phase III of her research. She continues to be active in FFA and is working toward her Texas Certified Master Florist License. She hopes to attend a Texas university to pursue her interest in horticulture.