

CALIFORNIA STATE SCIENCE FAIR 2013 PROJECT SUMMARY

Name(s)

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Project Number

J2016

Project Title

Luscious Lips! Testing Lip Care Products for Moisture Retention

hiectives/Coals Abstract

Objectives/Goals

This science experiment tests what lip care product would preserve the most moisture in humans# lips over a two hour period. There are so many different types of lip care products, but this experiment narrowed the products down to the three most recognizable types of lip care products: lip balm, lip gloss, and lip butter. I believed that applying lip butter to ficus leaves would result in the longest preservation of moisture rather than lip balm, lip-gloss, or lip wax because the lip butter has a larger amount of oil compared to the other products.

Methods/Materials

Lip Balm, Lip Gloss, and Lip Butter are the lip products used in this experiment. Lip wax was also included in this project because it acted as a constant lip protectant since all the lip care products in the experiment use beeswax as an ingredient. Ficus leaves acted as lips in this experiment because research found that both human lips and the leaves contain several different branching veins and require constant care and attention. Place the measured amount of lip balm into the desired measurer. Scoop the lip product out of the measurer and onto the correct leaf. Spread the product evenly around the leaf. Take the measurement of moisture percentage for each leaf by placing both pins of a moisture meter directly left of the leaf#s primary vein. Each measurement must be taken directly in the same holes that the meter#s two pins originally pierced during the first measurement. Set a timer every ten minutes and repeat taking measurements until 120 minutes have been obtained. Repeat trial twice more for a total of three trials using three intensities: .63 milliliters, 1.25 milliliters, and 2.5 milliliters of each lip care product.

Results

For the first intensity, each lip care product#s total lost moisture was: lip balm lost 5.7%, lip-gloss lost 3.6%, lip butter lost 4.5%, lip wax lost 5.7%, and the control lost 6.8%. In the second intensity, each lip care product#s total lost moisture was: lip balm lost 4.3%, lip-gloss lost 1.8%, lip butter lost 2.9%, lip wax lost 6.2%, and the control lost 5.7%. For the final intensity, each lip care product#s total lost moisture was: lip balm lost 4.7%, lip-gloss lost 2.8%, lip butter lost 3.7%, lip wax lost 4.7%, and the control lost 4.3%. Overall, lip-gloss preserved the most moisture while lip wax preserved the least moisture. In conclusion, my hypothesis was not supported.

Summary Statement

My science fair project tests four different types of lip care product to see which one will retain the most moisture over a two-hour period.

Help Received