 **ABSTRACT** 

Does caffeine influence the metabolism of plants?

Kyrylyuk, Kateryna

3620 Andrews Dr. #202, Pleasanton, CA 94588

Amador Valley High School, Pleasanton, CA

This project will show the influence of caffeine on certain plants. The initial idea was to see if caffeine would speed up the growth of plants by influencing its metabolism. Instead of regular water plants are being watered with caffeine solutions containing different percentages of caffeine in it.

Radish plants are being used as the test organisms. The effective caffeine concentrations are – 25%, 50%, 75%, and a 100%. The controlled samples are being watered with regular water.

The plants are growing in the greenhouse at school. The temperature increase in the recent days helped a lot – plants started to grow better, because the soil is not freezing any more.

The data for two weeks have been collected, and the whole project will take 6 weeks total. There wasn’t much change in the growth of plants yet. During the next 5 weeks I will be collecting data from the plants, compare it to the data collected from the same plants from the previous weeks and compare the data collected from the plants that grow in caffeine-free environment to the data collected from the plants that grow with caffeine in their soil. All the information will be recorded, analyzed, and described in the conclusion.