



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) Aleah J. DenBoer	Project Number 34647
Project Title Glow-in-the-Dark Silk Production through the Diet Manipulation of Bombyx mori	
Abstract Objectives/Goals My goal is to produce glow-in-the-dark silk by manipulating the diet of Bombyx mori. Methods/Materials Four separate batches of eggs were ordered. The first two never hatched due to the temperature. The third and fourth batches of eggs hatched successfully in a specially designed incubator using a cardboard box, 35 watt bulb, heat lamp, glass, and thermometer that blocked light and maintained a temperature of 75-80 degrees Fahrenheit. The Bombyx mori were fed silkworm mulberry chow. Experimental glow-in-the-dark food was fed to experimental Bombyx mori and observed. The experiment was repeated numerous times and is still ongoing. Results Glow-in-the-dark silk can be produced through feeding Bombyx mori an original recipe of glow-in-the-dark food. Conclusions/Discussion The glow-in-the-dark powder gradually harms Bombyx mori, but still produces glow-in-the-dark silk. I have ongoing research varying the recipe and feeding schedule to have healthier Bombyx mori that will produce more glow-in-the-dark silk.	
Summary Statement Glow-in-the-dark silk can be produced through feeding Bombyx mori glow-in-the-dark food.	
Help Received My father cut the cardboard for the incubator and typed out the report I wrote	