



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

Name(s) Michael A. Alves	Project Number J2402
Project Title The Mating Game: Red Worm Reproduction	
Abstract Objectives/Goals My objective was to determine if the diet of a red worm affect its reproduction. Methods/Materials Method: I labeled the metal trays A(produce)and B(newspaper). I placed sliced produce on the bottom of tray A and shredded newspaper on the bottom of tray B. I mixed 4 cups of potting soil with worm castings and the soil the worms were purchased in together and put it in each tray. I moistened the soil with 1 ounce of water. I added 60 worms to each tray, using the remaining 2 trays as covers. I set each tray under the kitchen window. I checked each tray every 5 days for new offspring. I counted each worm found. I documented any worms that were dead. I inspected the soil for any castings, cocoons or visible changes to the soil. I noted the worms behavior looking for signs of reproduction such as worms that were laying side by side possibly mating. I returned only the original worms to their trays and placed all new offspring into a new habitat. I did this to ensure that I documented the reproduction rate of the original worm populations. I checked the kitchen thermostat to be sure the room temperature was between 68-71 degrees. Materials: Azalia potting soil with worm castings, red worms(120 count),4 metal disposable trays, measuring cup, metal spoon, newspaper, produce (apples, lettuce, potatoes), spray bottle filled with one ounce of water, kitchen thermostat and camera Results After reviewing my journal entries and data tables I found that my results supports my hypothesis, that diet does affect the reproduction of a red worm. I found that over the course of 6 weeks the worms being fed produce reproduced at a faster rate than the paper fed worms. The produce fed worms generated 33 new offspring and the paper fed only 12. The results showed that when the proper nutrients are given to red worms they thrive. Conclusions/Discussion It is my conclusion that after maintaining two habitats for 45 days that the diet of a red worm has an affect on its reproduction of offspring. The results of the data support my hypothesis that diet will affect the reproduction of an red worm. The worms being fed produce reproduced at a faster rate than the worms being fed paper. Tray A produced 33 offspring and tray B produced 12 offspring. I believe the lack of nutrients in the paper fed tray affected the reproduction of those worms causing them to reproduce at a much slower rate.	
Summary Statement My project is about how the diet of a red worm affects its reproduction.	
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