



California Science Center
CALIFORNIA STATE SCIENCE FAIR
2001 PROJECT SUMMARY

Your Name (List all student names if multiple authors.) Matthew D. Olson	Science Fair Use Only <h1 style="margin: 0;">J1623</h1>
Project Title (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9) Germination of Radiated Seeds	Division J Junior (6-8) J Senior (9-12)
Preferred Category (See page 5 for descriptions.) 16 - Plant Biology	
Abstract (Include Objective, Methods, Results, Conclusion. See samples on page 14.) Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges. <p style="margin-top: 10px;">My objective was to find out how microwaving various seeds affects their rates of germination and growth. I chose this project because I am interested in plants and genetic engineering. I wanted to learn how things done to a seed before it is planted affects the plant.</p> <p>First, I gathered soil, trays, and five types of seed. I had a microwave, and a window for sunlight. With each type of seed, I microwaved 10 seeds for 1 minute, 10 seeds for 30 seconds, and 10 seeds were left alone. I planted these seeds and studied their progress.</p> <p>Upon completion of my project, 40% of the seed groups that went into the microwave for 1 minute had failed to germinate. None of the seeds in the 1 minute groups did better than seeds, of the same type, that were microwaved for shorter periods. Seeds that got 30 seconds of microwave time seemed to sprout earlier than the control, but in the end, both groups had equal amounts of seeds that had sprouted.</p> <p>In conclusion, a little bit of radiation can be good if you want crops to come up early, but too much is bad everyone, the farmer, and the crops.</p>	
Summary Statement (In one sentence, state what your project is about.) My project is about how microwaving various seeds affects their rates of germination and growth.	
Help Received in Doing Project (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4. My mother taught me how to set up my data in spreadsheets so I could make graphs.	