California Science Center



CALIFORNIA STATE SCIENCE FAIR 2001 PROJECT SUMMARY

Your Name (List all student names if multiple authors.)

Gina L Stassinos

Science Fair Use Only

 $Project\ Title\ \ \hbox{(Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9)}$

Agrochemical Leaching

J0720

Division X Junior (6-8) _ **Senior** (9-12)

Preferred Category (See page 5 for descriptions.)

7 - Environmental 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.

Objective: Determine the chemical changes in water resources near farming areas and the impact on aquatic ecosystems resulting from agricultural practices.

Methods: Over a period of time, conduct 132 chemical tests on water samples containing rain water, river water, and water with different farm soils and fertilizer samples. Soil samples were collected from area farms and chemical indicators were used to measure changes. Samples were in jars, exposed to air, but screened against contaminants, to simulate conditions in nature.

Resluts: The Santa Ynez river supports an abundance of fish and wildlife species. Soil samples containing fertilizers, which enhance crop yields, made the river water samples toxic to the ecosystems the river normally supports.

Conclusion: The overuse of nitrogen enhanced fertilizers contaminates water resources and damages ecosystems.

Summary Statement (In one sentence, state what your project is about.)

This project is about chemicals leaching from farm soils into surrounding environments.

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 father provided transportation, financial backing, and some suggestions.