

CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)	Project Number
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	22783
Project Title	2
Removing Water Pollution with Plants	
Abstract	
Objectives/Goals	
The purpose of my project was to find out which of three water plants al phosphates in water. The three plants I used were: Ceratophyllum deme	sum (Norrwort), Elodep
phosphates in water. The three plants I used were: Ceratophyllum dome canadensis (Elodea), and Cabomba aquatica (Purple Cabomba). I thous	ht that Elodea will absorb the
most pollutants, Hornwort the second most, and Purple Cabombartle lea Methods/Materials	ast.
I purchased 36 bundles of Hornwort, Elodea, Purple Cub mba, and 12 3 the aquariums with 30 liters of water, 4 bunches of each plant, and a difference of the second	8 liter aquariums. I filled each of
the aquariums with 30 liters of water, 4 bunches of each plant, and a difference of the second secon	For mixture of nitrates or
phosphates (10 ppm 20 ppm or 40 ppm) and placed them in a greenhous temperature and lights. Before I put the plants in with the pollutants has	ad a tissue analysis taken at Fruit
Growers Laboratories of each species of plant from each advarium Xke	nt the water plants in the
greenhouse for three weeks. Then I had a second tissue analasis made for and compared the results of both tests.	or each species in each aquarium
Results (
I found out that Hornwort absorbed the most nitrates, Elodea absorbed the	he most phosphates, and Purple
Cabomba consistently absorbed the least of the 3 plants.	
My conclusion is that water plants could help remove of some types of w	water pollution problems.
Hornwort and Elodea could help reduce phosphates and patrates.	
Summary Statement	
My project is about removing water pollution using water plants.	
Help Received	
Darrell Nelson, President of Fruit Growers Laboratory, advised me on n	
Laboratory did plant tissue analysis; my mother purchased materials; my gave me building advice and help build the greenhouse.	y father purchased materials and