

CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)	Project Number
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Project Title	
The Redgum Lerp Psyllid: Threat to the Eucalyptus Tree	
Abstract	
Objectives/Goals What is the most cost effective and environmentally safe way	to aradicate to religuid arm psyllid? The
redgum lerp psyllid is a parasitic insect that causes extensive	defoliation and weakens the eucalyptus tree.
My objective is to try different solutions and note the effects in eliminating the redgum lerp psyllid.	
It is hypothesized that antibacterial soap and water will be the most effective and least hazardous. The antibacterial soap and water will wash away the honeydew and lerps on the leaves.	
Methods/Materials O	
Five solutions were formulated: antibacterial soap and water and water.	water, pesticide, oil and water and betadine
V	
Cut down branches of a eucalyptus tree that have infestation 30% oil/70% water, 10% antibacterial soap/90% water and	on its leaves. Make the following mixtures:
lerps, honeydew spots and crystallized lerps. Spray each of the solutions on each branch. After spraying	
one solution, change the set of leaves and use another spray. Spray for five minutes and use 25 ml of each solution on each branch. Wait for 1 hour and ther count and record how many black soot like lerpt	
honeydew spots, and crystallized lerps are remaining on each	leaf. Cut off all remaining lerps to see if the
nymph is still alive. Examine the lere under a microscope and	look for movement.
Results Antibacterial scap was most effective in removing the large among all the applications. The antibacterial	
Antibacterial soap was most effective in removing the larges among all the applications. The antibacterial soap removed 33% of the lerps that were on the leaves tested. The betadine was most effective int	
removing the honeydew spots among an the applications. The betadine solution removed 52% of thet	
honeydew spots that were on the leaves tested. Pesticides had a minor effect on removing the honeydew spots and no effect on removing the lerps. The all and water mixture removed some of the honeydet	
spots and stayed on the leaf for more than 24 hours. The oil and water was detrimental because it	
suffocated the leaves. Conclusions/Discussion	
My conclusion is that the redgemeer psylled is a dangerous predator and parasite. By using thet	
different solutions on euclipotus trees we can be sure to extirpate this hazardous pest. Antibacterial soap and betadine were consistently the most effective ways to treat the eucalyptus by removing the	
crystallized lerges and honeydew spots, respectively.	at the eucalyptus by removing the
Summary Statement	
I plan to demonstrate what is the most cost effective and environmentally safe way to exterminate the redgum lerp psyllid	
Help Received	
Mother and father helped paste items on board.	