



# CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

<b>Name(s)</b> <b>Kristin M. Renkei</b>	<b>Project Number</b>  22174
<b>Project Title</b> <b>Eradicating Redgum Lerp Psyllid Larvea using Different Lady Beetle Species</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b>  If testing the Multicolored Asian Lady Beetle and the Convergent Lady Beetle on a eucalyptus tree that has been infected with the Redgum Lerp Psyllid#s larva. Then, the Convergent Lady Beetles will be the most likely to eat the larva the quickest, with the least harm to the eucalyptus tree. The Multicolored Asian Lady beetle was proven, when first released, to be less adaptive. Though they do live, as adults, up to three years, and produce seven hundred eggs monthly, they are not willing to change. Therefore, the Convergent Lady Beetle will change its eating habits and adapt easier. Though it only lives from weeks to months depending on food sources available, and produces two hundred to one thousand eggs per one to three months, it is able to adapt. Which is necessary for this experiment.</p> <p><b>Methods/Materials</b>  * 2 Canning Jars  * Sunlight  * 2 rocks, about the same size, able to fit in canning jar  * 2 Branches (with 50 larva on them each)  * Water  * 4 Sheets of Webbing  * 2 Rubber Bands  * 6 Convergent Lady Beetles  * 6 Multicolored Asian Lady Beetles</p> <p>Six lady beetles from each specie were put in a canning jar. In the canning jar, among the lady beetles, is a branch with fifty larva on it, and water in a plastic container. Over the top of the canning jar is webbing that is held by a rubber band. Larva was counted each day, along with observations to show how well each specie would adapt. The species were compared to each other to see which one would be the best candidate if put into a live situation.</p> <p><b>Results</b>  After the fifteen day trial, with a start of fifty larvea in each jar, only thirty larvea were left in the Multicolored Asian Lady Beetle jar and only 28 larvea remained in the Convergent Lady Beetle jar.</p> <p><b>Conclusions/Discussion</b>  My hypothesis proved to be correct. Though the Multicolored Asian Lady Beetle did not have a hard time adapting in the first place, as I thought, it had eaten two less larvea than the Convergent Lady Beetle had. Scince the Multicolored Asian Lady Beetle did not have a hard time adapting and it lives a longer life,</p>	
<b>Summary Statement</b> Which lady beetle specie is the best natural predator in lowering the population of the Redgum Lerp Psyllid.	
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