Introduction

Environment, Water

INTRODUCTION A. Rationale The researchers chose this issue because of the increasing incidents of dengue fever cases in the region & in the country. They believe that this study will greatly contribute to the prevention of insect bites especially in younger children. The researchers are aiming that it will help minimize the cases of dengue which is considered as a year round disease & is fatal. Health care in the Philippines has been a dilemma of many Filipinos especially those families that belong to low economic condition. One of the Department of Health's health maintenance promotion is to use alternative health care such as herbs as long as it is not contraindicated with other health care problems. Example of herbal alternative cure is eucalyptus, garlic etc. These herbs may be available at our very own backyards & is practical. B. Statement Of Problem - How can we make an All-Natural Insect Repellent which is affordable and environment-friendly? - Will this All-Natural Insect Repellent be effective? C. Significance Of The Study The researchers believe that this study is greatly significant in the lives of the Filipinos especially those who belong to the middle and lower classes. All-Natural Insect Repellent will greatly help in reducing cases of the disease and also in financial costs. In the Philippines today, money is very valuable and often times, very limited, which results to lesser budget for unexpected emergencies. One example of this emergency is: infection of children due to exposure to mosquito bites. This is why the researchers want to do this study. In times of these emergencies, there is an effective alternative to prevent these infections that is less expensive than laboratory made medicines. This study will also educate Filipinos to learn to use alternative materials that will work as well as lab-made medicine, but in a much cheaper

expense. D. Scope & Delimitation The study is focused on the prevention of dreaded disease through the All-Natural Insect Repellent. This study will teach the readers how to make an All-Natural Insect Repellent which is earth-friendly, cost efficient, and effective. E. Review of Related Literature RESEARCH METHODOLOGY Trial 1: The researchers gathered all the materials needed. They placed 10 whole Cacao leaves into a bowl with 420 cc of water. They boiled it until the water had a dark color. They distilled and chopped 5 pieces of garlic and added it into the mixture. They added in 5ml of Eucalyptus oil and 5 ml of cooking oil. They let the mixture of the insecticide settle down and then transferred it in to a spray bottle. When the researchers sprayed the insecticide on the ants, the ants died instantly. The cockroach also died but, the researchers do not consider it a success because they believe that the cockroach died because the solution was warm or because it had drowned in it. Trial 2: The researchers gathered all the materials needed. They have stripped 20 Cacao leaves in order for its oil to be extracted more. They have placed the leaves in a bowl with 300 cc of water. They boiled it until the water had turned brown. They distilled and chopped 10 pieces of garlic and added it to the mixture. They let the mixture cool down completely and transferred it in to a spray bottle. Again, they tested it on the ants. The spray worked well on the ants. This time, the researchers had 3 cockroaches. They sprayed the insecticide on the cockroaches but they did not die. Trial 3: The researchers gathered all materials needed. They have stripped 25 Cacao leaves and bounded it together with yarn so that it would be easier to dispose. They have placed the leaves in a bowl with 150 cc of water. They boiled it until the water had a

black brown color. They distilled and chopped 20 cloves of garlic. They separated and disposed the leaves from the bowl and added in the garlic. They added 15 ml of Eucalyptus oil and cooking oil into the mixture. They let the mixture cool down completely. They sprayed the insecticide on to the ants and the ants immediately died. The researchers had 2 cockroaches this time. They sprayed the cockroaches 10 times with the insecticide. Within 10 minutes, the cockroaches died.