

# [Chili and garlic proposal essay sample](https://assignbuster.com/chili-and-garlic-proposal-essay-sample/)

In common Filipino households, ipis or cockroaches are very common. Cockroaches can cause a lot of health hazards. Roaches themselves do not have diseases, but can transmit germs with their hairy legs and sticky feet. An another health hazard is that cockroach feces can cause allergen sensitive individuals, especially children asthma. If you have hundreds of cockroaches in your walls, the feces will build up and become airborne. Maintaining a clean household is essential but cockroaches will appear from time to time. Using pesticides to eliminate these pests might be one of our solutions. But pesticides contain harmful chemicals that can severely harm the human nervous system. To avoid harmful effects of pesticides, using a safe and non-toxic remedy to exterminate cockroaches would be the best option.

Objectives:

The project seeks to carry out the following:   
1. Produce a cockroach repellent that is cheap, accessible, and harmless to the human nervous system. 2. Test the improvised repellent to a number of cockroaches to see the repellent’s effectiveness. 3. Compare effectivity of garlic and chili cockroach repellent to a commercial repellent.

Review of Related Literature:   
Pesticides are used to kill pests in most cases, because of this exposure to pesticides may pose risk to human health. The health effects of pesticides depend on the type of pesticide and the likelihood of exposure. Organophosphates and carbamates, affect the nervous system and others may irritate the skin or eyes. Some pesticides may be carcinogens while others may affect the hormone or endocrine system in the body (http://www. epa. gov/ opp00001/health/human. htm , August 12, 2012). Garlic (Allium sativum) and chilli (Capsicum annuum) are spices that are usually seen in the kitchen used as condiments. Both spices have potential repellent characteristics according to past researches. Garlic originated in Central Asia and has now spread across the world. Chemical fertilizers should not be used when cultivating garlic, because it may reduce the effective substances in the garlic.

It has anti-feedant, bacterial, fungicidal, insecticidal, nematicidal and repellent properties. Garlic has been proven to be effective against insects and pests like ants, caterpillars, moths, mice and moles, just to name a few (http://www. gardenorganic. org. uk/pdfs/international programme/TNP3-Garlic. pdf , August 12, 2012). Chili pepper is a natural bug deterrent due to its harsh smell and spicy taste. In chilies Capsican is an active ingredient which can burn leaves and kill young plants. It is advisable to run attest patch before applying the spray to the plant entirely (http://www. ehow. com/info\_8562789\_homemade-insect-repellent-vegetables. html, August 12, 2012).

Methodology:   
Materials:   
•3 heads of Garlic   
•1 pack of Chilli Powder   
•Water   
• Jar   
•Dishwashing Soap   
• Spray Bottle   
•Knife   
•Cutting board   
•Pestle and Mortar   
•Strainer   
•Shoe Box (2)   
•Video Camera   
Specimen: Cockroach (Blattaria)   
Procedure:   
1. Crush a whole head of garlic. Place the crushed garlic in a quart jar and fill the jar with water. 2. Next add a good amount of chilli powder to the jar. 3. Add a couple of Tbsp’s of dish washing soap and shake well. 4. Let this mixture settle and keep it covered for three days. At the end of that time strain the mixture. Keeping only the liquid. 5. Pour into a spray bottle and test its effectiveness on repelling cockroaches. 6. Collect cockroaches.

7. Place one cockroach on each shoe box and spray the garlic and chili repellent at the same time. (test the repellent with the same number of cockroaches tested with the commercial cockroach repellent) Record each trial with a video camera. 8. Conduct numerous trials for accuracy.