

# [Citrus extract](https://assignbuster.com/citrus-extract/)

Citrus Extract as Dog Flea and Lice Preventer Researcher: Louise Joyce A. Naguiat Research Adviser: Mrs. Melba A. Agravante June- Septemper 2013 Solano High School Introduction/Rationale Pets such as dogs needs to be treated with proper nourishment and needs to be walked, exercise and to be played outside. Dogs need a natural environment. They cannot always stay in the house so they need to go outside to breathe fresh air and get socialized with other dogs. But by providing them so, they can pick up insects and other diseases. Fleas and Lice are often health problems of dogs and this may also affect the host family where the dog lives by spreading fleas around the house and might cause allergies and infection. Fleas feed on the blood of dogs, they also sometimes bite humans. They can live without food for several months, but females must have a blood meal before they can produce eggs. They can deliver about 4000 eggs on the host's fur. Since Nueva Vizcaya is known to be the citrus capital of the Philippines. That is, there are plenty of Vitamin C rich fruits growing in these areas which can be proven and used as a subject to prevent fleas and lice for dogs given that vitamin C is known as an acid. I, the researcher have decided to formulate an investigatory project to prove if citrus is effective as flea and lice preventer with the titled: Citrus Extract as Dog Flea and Lice Preventer wherein the citrus fruit will be cut into pieces, be extracted through boiling and then sprayed directly to dog fur. Statement of the Problem: This investigatory project is made to determine whether the extract of citrus fruit will be an effective Flea and lice preventer. Specifically, it seeks to find out: \* Are there significant differences on the prevention time of Fleas and Lice using citrus extract with various amounts? Statement of the Hypothesis: The following statements will be investigated Ha: There are significant differences on the prevention time of fleas and lice using citrus extract with various amounts. Ho: There are no significant differences on the prevention time of fleas and lice using citrus extract with various amounts. Scope and Delimitation: This research study entitled “ Citrus Extract as Dog Flea and Lice Preventer" will be conducted on June-September 2013 at Solano High School. It will only investigate on how effective the citrus fruit extract on preventing fleas and lice by comparing the prevention time of fleas and lice with various amounts of citrus extract by decoction. It will not focus on killing fleas and lice, the chemical analysis of citrus fruits, Other parts of the citrus plant (only the fruit) and the life cycle stage of the fleas and lice (egg, pupa, and adult) Significance of the Study: This study may be beneficial to the following: \* Flea and Lice Preventer Manufacturers- there might be a possibility of using cheaper yet effective raw materials that could prevent them from spreading too much. \* Consumers of Flea and lice Preventer- they can now make homemade flea and lice preventer for their pet dog \* Community- it will lessen flea infected dogs easily without spending money on expensive commercial flea and lice preventer and by using a nature-friendly one. \* Economy- to find a way of producing cheaper and more nature-friendly flea and lice preventer. Definition of Terms: The following terms are defined according to their use in the study: \* Decoction- it is a process of extracting though boiling. -refers to the process of boiling the citrus fruit. It will be used as the flea and lice preventer. \* Preventer- refers to the substance which prevents fleas and lice from going in the dog’s fur. \* Flea and Lice- insects that bites in the dog’s fur for blood. \* Citrus- a fruit rich in citric acid. \* Dog-  a domesticated canine mammal commonly kept as house pets Flea and Lice Independent Variable 1. Citrus fruit extract concentration. Research Paradigm: Dependent Variable 1. Time for the extract to last its ability to prevent fleas and lice. Expected Outcome: 1. The dog given with citrus extract will not contract with Fleas and/or Lice. 2. The citrus extract flea and lice preventer can compete with other commercial flea and lice preventers. Explanation: In this study, the researchers will only make one flea and lice preventer spray which is made from boiled citrus extract. I’ll also be also using a commercial flea and lice preventer as the control variable. The effectiveness of the citrus extract will be measured by observing the time for the fleas and lice prevented from the dog in each set-up. The expected outcome is that the citrus extract flea and lice preventer can be as effective as the commercial flea and lice preventer.