Evaluating the Effectiveness of Permethrin and Deltamethrin in the Northern Peruvian Amazon

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This project sought to evaluate the effectiveness of two of the most commonly used insecticides, permethrin and deltamethrin, in treating bed nets against *Anopheles* mosquitos, the malaria vector. Insects were collected in homes with bed nets treated with one of the two insecticides used.

OBJECTIVES

- Determine if permethrin and deltamethrin are effective against *Anopheles* in the northern Peruvian Amazon
- Determine if one of these two insecticides is more effective against *Anopheles*
- Determine the effect of temperature and humidity on these insecticides

HANGING TRAPS TO COLLECT INSECTS FOR BASELINE

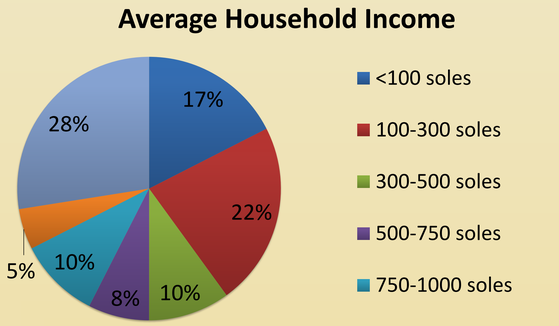
HEALTH POST NEAR THE STUDY SITE IN THE COMMUNITY OF SANTA LUCIA

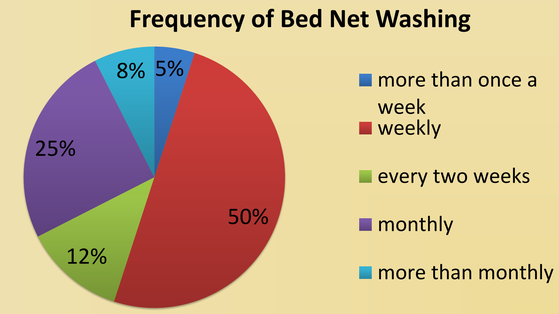
METHODOLOGY

- Insects were trapped for four consecutive nights in 40 homes.
- Untreated bed nets were hung in the homes for the first two nights, and a treated bed net was hung in the homes for the second two nights.
- Half of the homes received a bed net treated with permethrin, and the other half received a bednet treated with deltamethrin.
- Insects were identified and sorted into the following categories: *Anopheles*, total mosquitos, and other insects
- A short survey was administered for demographic purposes and to collect information on bednet usage in the area

INFORMATION ABOUT STUDY PARTICIPANTS

- At least one person in each home had contracted malaria at least once during the previous twelve months.
- All study participants reported sleeping under a bed net every night.
- 27.5% said their bed net had been treated with an insecticides, but none had been treated within the last year.
- 62.5% of homes had been fumigated, but of those homes only 44% percent had been fumigated in the last six months.





Results Pending

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