

# The Mosquito Whisperer

Llano Jorge, Laina (School: Centro Residencial de Oportunidades Educativas de Ceiba)

Nowadays, Puerto Rico and other countries have experienced outbreaks of various diseases due to the *Aedes aegypti* mosquito. There has been a significant increase of this organism population, due to the impact of Hurricane Maria on the island on September 2017. The *Aedes aegypti* mosquito, better known as dengue mosquito, is an insect from the Genus *Aedes*, carrier of various viruses such as dengue, yellow fever, chikungunya, and zika, among others. The present investigation was based to determine, if the combination of leaves extract from neem (*Azadirachta indica*), chaya (*Cnidoscolus aconitifolius*), moringa (*Moringa oleifera*), mint (*Mentha sativa*), lemon (*Citrus limon*), and soursop (*Annona muricata*) could create an effective homogenous solution to eradicate the mosquito larvae, *Aedes aegypti* from domestic areas. Natural extracts were prepared individually and homogeneously. Then, mosquito traps were built with recycled materials and 250 ml of rainwater were added. A predetermined number of 50 larvae were selected for each group (CG and EG). In the experimental group 250 ml of the extract solution were added to the larvae colony. No solution was added to the control group colony. Observations were made every 12 hours, for 60 hours and data was gathered. The extract solution removed 92% of the *Aedes aegypti* larva population. Therefore, The Mosquito Whisperer homogeneous solution has the ability to efficiently eradicate the *Aedes aegypti* larva population, due to its pesticide properties.

## Awards Won:

Air Force Research Laboratory on behalf of the United States Air Force: First Award of \$750 in each Intel ISEF Category