



## Executive Summary

The shoo!TAG Field Test Study conducted in Austin, Texas on June 15<sup>th</sup>, 2011 was intended to improve the conclusions of previous studies conducted by Dr. Rainer Fink of Texas A&M University on August 18<sup>th</sup>, 2010 and myself on May 31<sup>st</sup>, 2011. The June 2011 study was more precise and controlled. This trial was conducted in two separate steps:

1. Participants were segregated by tag activation and placed in into tents with mosquitoes (*Aedes aegypti*) at which time only the left arm was exposed
2. Participants were readmitted to tents with mixed tag activation at which time only the right arm was exposed.

Participants for this study were screened for a multitude of variables that could affect the test outcomes. It also allowed for a more precise analysis of the efficacy of shoo!TAG's mosquito repellent properties. Most importantly, it provided for 2 studies to be conducted in the same evening with the same subjects. Specifically, the objectives of the study were to:

1. Determine the level of shoo!TAG's ability to repel mosquitoes from male or female humans wearing active shoo!TAG in a controlled environment when compared to subjects wearing inactive shoo!TAGs in a similar environment.
2. Determine if wearers of inactive shoo!TAGs present a more appealing host opportunity when given a choice of subjects wearing both active and inactive shoo!TAGs.

The analysis strongly indicates shoo!TAG is effective. There is significant difference in the mean number of bites incurred by male subjects (the majority population of the 54 participants) particularly when segregated. Those with inactive shoo!TAGs had a mean number of bites approximately 4 times that of the wearers of active shoo!TAGs . Participants with active shoo!TAGs had a average of 2.94 bites per participant compared an average of 13.1 bites for those without active shoo!TAGs. The study results are an 80% reduction in bites for active shoo!TAGs.

There also appears to be a transferred effect when the populations were mixed. Males that wore inactive shoo!TAGs received a mean number of bites only 2 times that of active shoo!TAG wearers when in mixed tents. The analysis does indicate mosquitoes preferentially chose wearers with inactive shoo!TAGs. Specifically, wearers of inactive shoo!TAGs had approximately 2-3 times fewer bites when associated with wearers of active shoo!TAGs.

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