

TEST RESULTS

Ultra outcatches Mosquito Magnet Liberty, Flowtron, Dragon Fly, Lentek, Mosquito Deleto and Sonic Web

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ABSTRACT: The Mosquito Mega-Catch™ and the Mosquito Magnet Liberty collected 2.5X-6X more mosquitoes and species than the other traps tested. The Sonic Web collected several magnitudes fewer.

INTRODUCTION: Mosquito control moved to the forefront with the recent emergence of West Nile virus. The public was bombarded weekly with health advisories concerning mosquitoes. Combined with on-going anti-pesticide sentiment, the opportunity was ripe for marketing mosquito traps. The number of companies manufacturing mosquito traps has increased dramatically in the last few years. All of this has led to a need for evaluating these traps. The purpose of this study was to compare the mosquito-trapping prowess of eight traps, seven commercial and one under development. Results on the trap under development will be reported after the non-disclosure period expires in January, 2004. NOTE: This study was NOT designed to answer the question, "Can mosquito traps effectively control mosquitoes?" The objective was simply to conduct a comparison of the numbers and species caught by each trap. We propose to examine the question above next year, after having identified the trap(s) that collect the most.

MATERIALS & METHODS: The study was conducted in the summer and fall of 2002 on the campus of the John A. Mulrennan Sr., Public Health Entomology Research & Education Center (PHEREC) of Florida A&M University. PHEREC resides on a 10-acre peninsula surrounded by salt marsh on the St. Andrews Bay in NW Florida. The eight test traps (Fig. 1-7; excludes the trap under development) were positioned one trap per location at eight sites separated by at least 100 meters and operated continuously from 3:30 p.m. to 7:00 a.m. C.T. Traps were rotated clockwise to the next site after each night run. The traps were operated daily (except on weekends and days when weather was unsuitable) until each trap had occupied all eight positions. The study was repeated three times so each trap ran a total of 24 days, three times at eight locations. Traps were rerun in the same location when mechanical failures were encountered.

RESULTS: Total mosquito count and variance for each trap is presented in Figure 9 (excludes trap under development). Species composition is shown in Figures 10-16. There were significant differences in the numbers and species caught among the eight traps. The Mosquito Mega-Catch™ and the Mosquito Magnet Liberty captured 2.5X to almost 3X more mosquitoes than the next best trap, the Lentek Mosquito Trap, and 4X to 6X more than the Mosquito Deleto, Mosquito PowerTrap and The DragonFly. The Sonic Web collected considerably fewer mosquitoes than any of the other traps. The Mosquito Magnet Liberty sampled the greatest species diversity with sixteen collected. The Mosquito Mega-Catch™ and Mosquito Power Trap tied with twelve species.

Fig. 1. Mosquito MegaCatch
(Envirosafe Technologies N.Z. Ltd.)



Fig. 2. Mosquito Magnet Liberty
(American Biophysics Corporation)



Fig. 3. Flowtron PowerTrap
(Flowtron Outdoor Products)

