



Phase I Laboratory Evaluation of New Minimum Risk Mosquito Repellent Products

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Objective

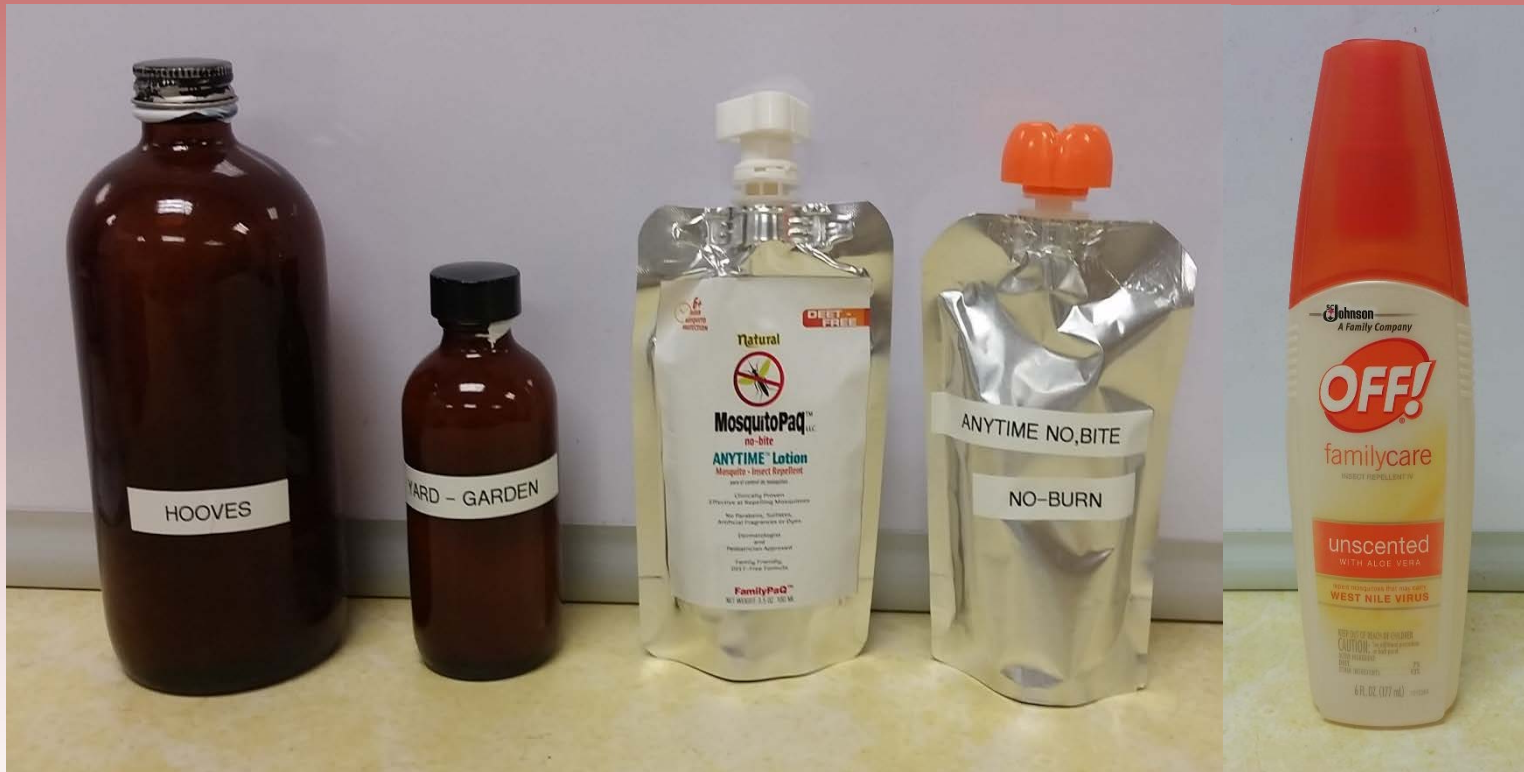
Quantify and compare repellency of 4 MosquitoPaQ™ formulations to a DEET standard and a non-treated control



Aedes aegypti



Experimental Treatments



Ingredients

No Burn

Soybean Oil
Geraniol
Cedarwood Oil
Peppermint Oil

Lotion

Soybean Oil
Geraniol
Cedarwood Oil
Peppermint Oil
Cinnamon Oil

Hooves

Soybean Oil
Geraniol
Cedarwood Oil
Cinnamon Oil

Yard & Garden

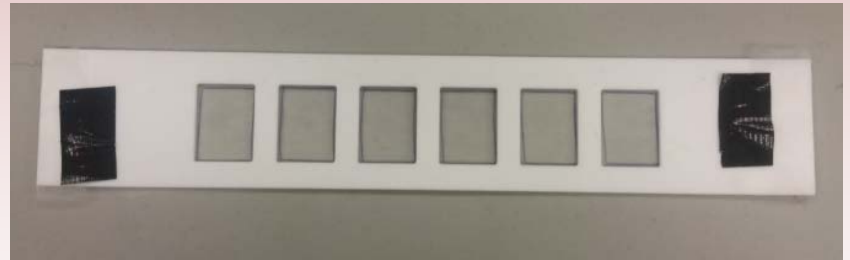
Soybean Oil
Geraniol
Cedarwood Oil
Cinnamon Oil
(Mixed with water 2:1)

Inerts

Sunflower Oil
Beeswax
Zinc Oxide
Vanillin
Water
Isopropyl Alcohol
Triethyl Citrate
Sodium Chloride
Lecithin



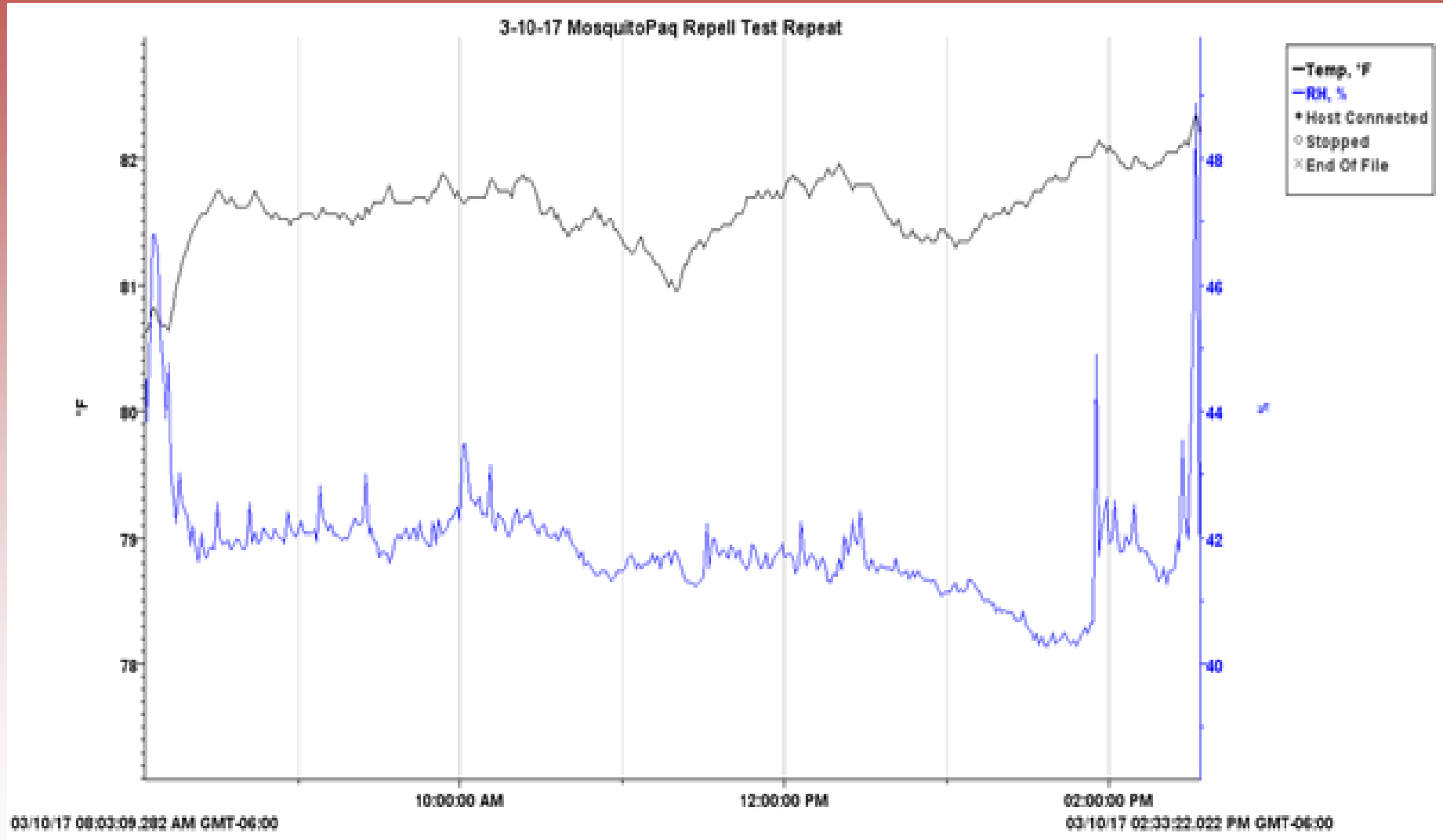
K&D *In vitro* Bioassay



K&D *In vitro* Bioassay

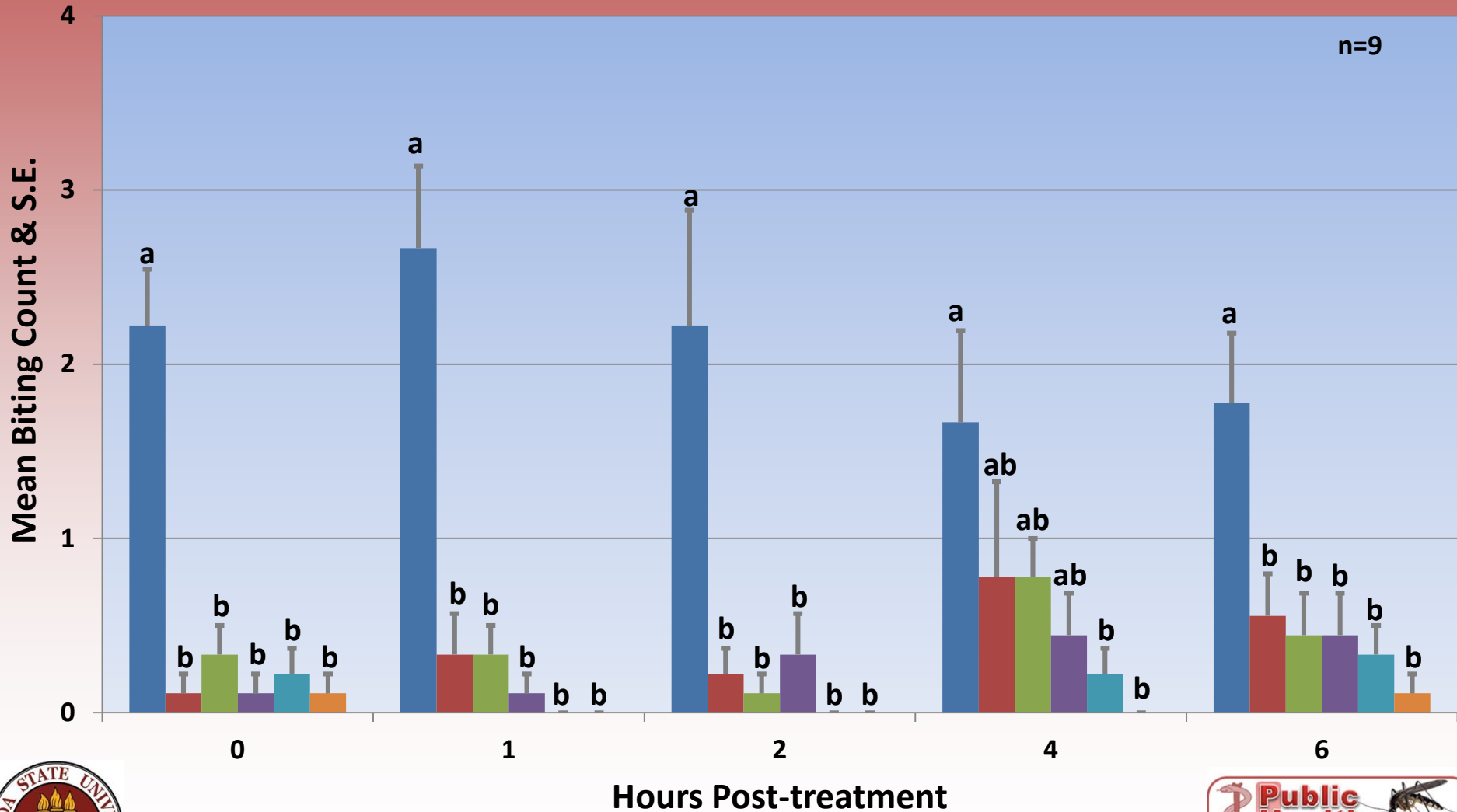


Environmental Data



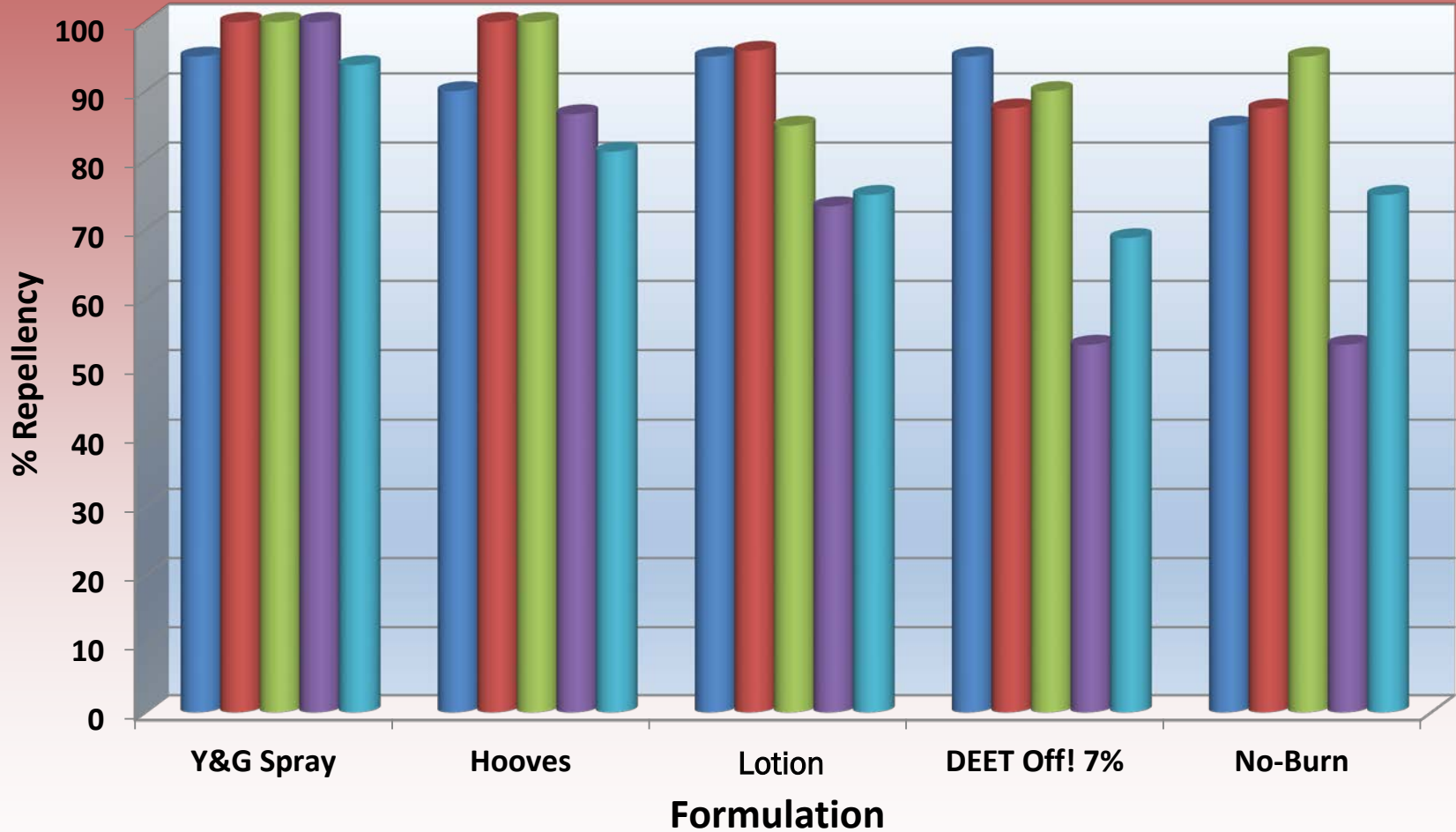
Biting Count Data

Control DEET Off! 7% No-Burn Lotion Hooves Y&G Spray



Repellency

Hours Post-treatment 0 1 2 4 6



Conclusions

- All MosquitoPaq formulations provided repellency equivalent to 7% DEET (Off!)
- Y&G Spray was the only product that produced 90-100% repellency throughout 6 hrs.
- All other products dropped well below 90% repellency at 4 and 6 hrs.
- Human subject and field testing needs to be performed to support these findings.



Thanks for your attention!

Questions?

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