

Efficacy of Barrier Treatments on Natural populations of Mosquitoes and Sand Flies - Ken Linthicum

- a) Geared towards protecting military on deployment
 - i) Hot/dry environments
 - ii) Sparse vegetation
- b) Mosquitoes and flies
 - i) Study areas
 - (1) California desert
 - (a) Artificial enclosure study
 - (i) Barrier treatment
 - (ii) Procedure
 - 1. Several different types of equipment
 - 2. Monitored weather stations
 - 3. Collected mosquitoes using light traps
 - 4. Bioassay using *Cx tarsalis*
 - (iii) Results
 - 1. Significant reductions in mosquito populations after treatment
 - 2. Control for about a month
 - (iv) Conclusions - barrier treatment on netted enclosures successfully reduced mosquito populations
 - (b) Treating vegetation showed similar results
 - (2) Camp Blanding, FL
 - (a) Similar results seen with treated netting
 - (b) Very different environment
 - ii) Conclusions
 - (1) Good mosquito reduction of target species
 - (2) Treating either fabric and vegetation will reduce mosquito numbers
 - (3) Also useful in fly control
- c) Sand flies
 - i) Material treated prior to shipping to site
 - ii) Significant reduction of sand flies up to 196 days after treatment