

# Seasonal Prevalence of Mosquitoes Collected from Light Traps in the Republic of Korea, 2003

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Adult mosquito surveillance was conducted during 2003 at 29 US military installations and training sites located in five provinces in the Republic of Korea (ROK). Adult mosquitoes were collected in New Jersey light traps from 1 May through 15 October. Mosquito surveillance was conducted to determine threshold levels to initiate pesticide applications and identify malaria infection rates at selected Army installations and training sites. A total of 42,020 adults [32,594(77.5%) females and 9,426(25.5%) males] comprising 16 species and 7 genera were collected during 2003. The most common species collected were *Anopheles sinensis* Wiedemann (53.9%), *Aedes vexans nipponii* (Theobald) (19.0%), *Culex pipiens* Coquillett (14.3%) and *Culex tritaeniorhynchus* Giles (10.5%). Trap indices (TIs) varied widely for species over their range, due in part, to geographical distribution and degree of association with urban communities. Overall, mosquito populations during 2002 were only 41.7% of those captured during 2003, due in part to very high populations of *Cx. tritaeniorhynchus*. For the Munsan area, the TI for *An. sinensis* was very low (34.5 females/trap night) when compared to a TI of 44.5 females/trap night during 2002. The weekly population densities for some species varied for each of the years as a result of variable annual weather conditions, such as, long rainy season during 2003.