

Seasonal Prevalence of Mosquitoes and Feeding Activity of *Anopheles sinensis* (Diptera, Culicidae) in the Southwestern Part of Republic of Korea

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The results of Anopheline mosquito collections on Sincheon-ri and Manhwa-ri, Cheolma-myun, Gijang-gun, Busan located at south-east of the Korean peninsula in 2004 are presented. A light trap was operated for adult collection in each site from May to October. The human biting collection was conducted at Sincheon-ri during the period. This study is useful for basic information which should influence the time of insecticide application based on appropriate time by investigating the them of night of peak feeding activity of *Anophele sinensis*. The mosquitoes that were collected by light traps at 2 sites represented 8 species in 5 genera. Of 621.8 female mosquitoes per trap per night, 496.4 (79.8%) were the malaria vector, *An. sinensis*. Other common species were *Culex tritaeniorhynchus* (9.3%), *Cx. pipiens* (6.5%) and *Aedes albopictus* (3.0%). The seasonal occurrence of *An. sinensis* population was highest during the 3rd weeks of June and July in 2004, with 147 and 2,114 females/trap night at Manhwa-ri and Sincheon-ri, respectively. Numbers of females were much low in Manhwa-ri. Averaging the density of female *An. sinensis* in 2 sites, the population started to increase on the 4th week of June and had its 1st peak on the 3rd week of July, after which numbers decreased sharply. Density increased on the 1st week of August (2nd peak). The southern area experienced slow increases of vector species density on the 4th week of June (439.0 females/trap/night) and gradual increases in numbers until the 3rd week of July (1080.5 females/trap night). Weekly human-biting collections were performed to determine the hourly pattern of feeding by mosquitoes on humans at Sincheon-ri from 10 June to 22 September, 2004. Among the total of 9 species in 5 genera collected by human. Throughout this survey *Armigeres subalbatus* was the most abundant accounting for 30.4% of biting mosquitoes. *An. sinensis*, *Cx. pipiens* and *Aedes albopictus* were the 2nd, the 3rd and the 4th most abundant, with 28.6%, 19.3% and 14.0%, respectively. The rest showed very little feeding activity comprising less than 5%. *Cx. tritaeniorhynchus*, which is the vector of Japanese encephalitis, made up only 4.4% of biting mosquitoes.