

# Seasonal Prevalence of Mosquitoes and Factors Influencing Their Population Sizes in Busan, Korea (1996~1999)

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The result of adult mosquito collection on Ihgok-ri, Cheolma-myun, Gijang-gun, Busan located at south-east of the Korean peninsula from 1996 to 1999 are presented. A light trap was operated for adult collection from May to October each year. This surveillance was performed to determine when to recommend insecticide spraying or other mosquito control in Busan. Average numbers of female mosquitoes per trap per night (TI) were 366.5, 751.6, 406.0 and 468.7 adults in 1996, 1997, 1998 and 1999, respectively. The total 10 species comprising 4 genera were identified in the area including *Aedes albopictus*, *Ae. vexans*, *Ae. togoi*, *Anopheles sinensis*, *An. sineroides*, *Armigeres subalbatus*, *Culex orientalis*, *Cx. tritaeniorhynchus*, *Cx. pipiens* and *Cx. hayashii*. Among those species, *Anopheles sinensis* (60.9%) showed the highest population, followed by *Culex tritaeniorhynchus* (21.4%) and *Cx. pipiens pallens* (8.7%) during the four years. A population density of 1999 decreased 3.2 and 1.9 folds of the *An. sinensis* and *Cx. tritaeniorhynchus* proportions than those of 1997, respectively. However, The densities of those species in 1999 were not much changed compare with those in 1996 and 1998. It was assumed that major factors to influence reproduction of the two species of mosquitoes were temperatures and frequency of mosquito control.