

THE SPECIES OF MOSQUITOES IN THE URBAN AREA OF YOKOHAMA

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Abstract Mosquitoes in several species are well known to be serious vectors of epidemic diseases in the world. As a part of the basic survey to watch possible invasion of West Nile virus into Yokohama, one of the city with a big international port in Japan, mosquitoes were collected to elucidate their geographic and seasonal distribution in the urban area of Yokohama, where dry ice light traps were settled to gather adult mosquitoes in four residential districts and one park during the period from April to December in 2003, and in three residential districts and two parks in 2004. During the same period, breeding sites of mosquito larvae were searched in the surrounding area of the settled traps. Concerning adult male *C. pipiens* complex, *Culex pipiens pallens* was distinguished from *C. pipiens molestus* by using the method to measure the D/V ratio of the genitalia. The total numbers of adult mosquitoes collected in 2003, 2004 were 3,392, 3445 respectively and they were divided into four genera, six species in 2003 and six genera, ten species in 2004. The principal species identified were *Culex pipiens* complex (52.7%) and *Aedes albopictus* (41.7%) in 2003 and *Aedes albopictus* (47.7%), *Culex pipiens* complex (39.7%) in 2004. *Culex pipiens* complex was observed at each point throughout the research period, but the number of individuals was larger in the residential districts than that in the park. A large number of the larvae of *Culex pipiens* complex and *A. albopictus* were collected from the rainwater basin at the roadside reflecting the results of adult mosquitoes. The rate of adult males got from total observation points was as small as 22.7% because of the collection method (light trap) engaged in this research, and among 202 males of *C. pipiens* complex gathered at the residential districts, 17 (8.4%) were determined to be *C. pipiens molestus* by measuring the D/V ratio in 2003. A similar measuring of D/V ratio was carried out in 2004.