2-9. Laboratory colonization of Anopheles sinensis (Korea strain)

Soo-Joon Park*¹, Wej Choochote², A. Jitpakdi², A. Junkum² Se-Joo Kim¹, Chai-Hyeck Yu¹, and Gi-Sik Min¹

¹Inha University, Dept of Biology, Korea ²Chiang Mai University, Department of Parasitology, Thailand

Many Korean entomologists have been tried to colonize the Korea *Anopheles sinensis* strain, an important malaria vector in Korea, their efforts, however, were not successful up to now. Recently we obtained a successful free-mating colony from this mosquito strain. The colony was established from 317 first stage larvae of F1-progenies, and was being maintained for 16 successive generations using artificial mating for adults. Human blood source was used for its first 5 generations, and it has been further colonization for 11 generations with white rat as a source of blood meal. At 9th generation, a free mating sub-colony was selected by co-habitating 200 and 300 newly emerged females and males in a 30 cm cube cage. The insemination rates of 6 selected generations of free mating sub-colony were 40.21% (39/97), 38% (19/50), 17% (17/100), 36% (36/100), 38% (38/100) and 34% (34/100), respectively. Comparisons on some biological aspect between artificial mating colony and selected free mating sub-colony also have been conducted.