2-3. Biological Control of *Culex pipiens pallens* (Diptera, Culicidae) by the Release of Fish, *Misgurnus mizolepis* in Ponds

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An assessment on the biological control potential with the fish muddy loaches (*Misgurnus mizolepis*) was conducted against naturally bred *Culex pipiens pallens* larvae in four ponds (A, B, C and D) in Busan from July through September, 2001. Predation of the fish at 3 different release rates of 4, 5, and 6 fish/m^2 resulted in mostly over 90% mosquito control from the first week after treatment through the end of the survey period for 11 weeks. There were not significantly different among release rates of fish at the 5% level of probability. However, substantial controls of 43.0% and 25.9% were obtained from pond C on period at 3rd and 7th weeks after the fish introduction, respectively. The results of those two weeks showed rather lower biological control by the introduced larvivorous fishes. It might be due to the presence of heavy organic matters including aquatic weeds and/or severely contaminated water from sewage in pond C. The aquatic weeds were covered over the pond water surface which might affect deterioration of mosquito preying in favor of aquatic weeds. Also, the fishes were observed to avoid severely contaminated sewage water in some parts of A and C ponds where more mosquito larvae were found.