Thesis Title	Study on Genetic Variation of Fruit Fly Parasitoids (*Diachasmimorpha sp.*) in Thailand by Electrophoretic Techniques
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Abstract

Horizontal polyacrylamide gel electrophoresis of nine enzyme systems are used to study genetic variations of *Diachasmimorpha sp.* in natural population of Thailand, which are Nakornpathom, Saraburi, Petchabun, Nakornratchasima, Chiang Mai, Ranong and Chumporn. Data analysis is performed using pooled data of genotype frequencies from all population and analyzed by computer program BIOSYS-1. Intrapopulation and interpopulation genetic variability estimates such as mean heterozygosity, genetic identity and

genetic distance estimates for genetic differentiation among groups of population and dendrograms showing possible phylogenetic relationship among groups of population are presented.

From data analysis, mean heterozygosity of all population is quite low (0.024-0.094) because of pathenogenesis and other factor effecting. From cluster analysis, the population of species C and species B diverged at the identity value of 0.43472. In population of species C, clustering level between Nakornpathom versus Saraburi is separated at the identity value of 0.939 and in population of species B, clustering level between Chiang Mai versus Chumporn is separated at the identity value of 0.923. These values show that the relationship between these groups of population are closely related.

However, this study is the first attempt to study the genetic variation of this parasitoid. It is better to confirm the result with other methods to obtain the complete result.