

Characterization of vector DNA microsatellite Dengue Hemorrhagic Fever (DHF) *Aedes aegypti* with Enrichment Method

Hasmiwati¹, Djong Hon Tjong² and Dessy Arisanty³

¹ Parasitology Division, Medical Faculty, Andalas University, Padang

Email: hasmiwati65@gmail.com

² Biology Departement, Mathematics and Science Faculty,
Andalas University, Padang

³Biochemistry Division, Medical Faculty, Andalas University, Padang

ABSTRACT

This study aimed to characterize DNA microsatellite of *Aedes aegypti* with enrichment method. DNA was extracted and then, DNA was digested with restricted enzyme simultaneously with Alu I, RsaI and Hinc II. DNA was adhered with MluI adaptor (consist of 21 - mer: 5' CTC TTG CTT ACG CGT GGA CTA3' and phosphorilated with 25-mer in end of 5': 3'ACA CGA GAA CGA A TG GCA CCT GATp 5'). Six oligonucleotides have (AT)₂₀, (CT)₂₀ (GT)₂₀ (AC)₂₀ (AG)₂₀ and (GC)₂₀ microsatellite motifs, and hybrid by using Hybon membrane. Result fragments from hybridization were eluted and amplified (PCR) with 21-mer primer. Result of study showed there were 700 bp, 610 bp, 550 bp, 490 bp dan 450 bp products of amplification from eluted DNA. They were DNA fragment candidates² which contained motif of microsatellite. We concluded that enrichment method could result DNA microsatellite fragment candidates² of DHF *Aedes aegypti* vector in West Sumatera.

Key Word: *Aedes aegypti*, DNA extract enrichment, hybridization, and DNA microsatellite