



Malays. Appl. Biol. (2015) 44(3): 11-15

### **Haplotype Analyses of Orang Asli Population in Taman Negara Pahang Using Y-STR Markers**

Sofia, S. M. Y. <sup>1</sup>, Badrul M. M. Z. <sup>2</sup> and Farida Z. M. Y.<sup>1\*</sup>

<sup>1</sup> *Faculty of Applied Sciences, Universiti Teknologi MARA (UiTM), 40450 Shah Alam, Selangor, Malaysia*

<sup>2</sup> *Faculty of Science and Technology, Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor*

\*Email: [fzuraina@salam.uitm.edu.my](mailto:fzuraina@salam.uitm.edu.my)

**ABSTRACT**

There are many maternal line studies conducted for *Orang Asli* using mitochondrial DNA. This study focuses on the paternal line, specifically Y-STR and three markers were considered, namely DYS19, DYS390 and DYS391. These markers were used to compare 21 subjects comprising of 7 from Senoi tribes and 14 from Negrito tribes. The samples were collected from Kampung Kuala Atok, Kg. Sungai Tiang, Kg. Dedari, Kg. Krom, Kg. Teresek and Kg. Gam located in Taman Negara Pahang and villages nearby. From these, 14 haplotypes were gained with one of it shared by both tribes while the rest were unique to the tribe. The analyses conducted from the haplotype were gene diversity (GD), locus diversity (DL), haplotype diversity (HD) and discrimination capacity (DC). From the analysis, the GD values range from 0.2480 to 0.7108 whilst the DL values range from 0.2500 to 0.7446. The haplotype diversity and discrimination capacity values were 0.8875 and 0.6364, respectively. Since this work only studied the comparison between Senoi and Negrito, further analysis is going to include the other sub tribes of *Orang Asli*.

**Key words:** *Orang Asli*, Y-STR, DYS19, DYS390, DYS391, Senoi, Negrito