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WORAWEE WAIYAWUTH : A STUDY ON THE SHORT TANDEM  
REPEAT SYSTEM (STRs) LOCUS DYS385 IN THAI POPULATION. THESIS  
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The Y-chromosomal short tandem repeat (STR) locus DYS385 can be typed using PCR amplification and separation of the resulting polymorphic fragments by non denaturing high resolution in polyacrylamide gel electrophoresis followed by silver staining. The PCR primers amplified a duplicated repeat sequence on the Y chromosome revealing a two-band pattern in male individuals. To determine the internal repeat structure as a basis for a consensus nomenclature, DNA sequence analysis was carried out after subcloning of PCR-amplified fragment revealing the uniform 4-bp repeat structure 'GAAA'. The shortest allele observed consists of 10 repeat units thus providing the basis of designation 'allele 10'. Except for isolated point mutations, no systematic differences could be observed either in the repeat sequence or in the flanking regions between the two fragments of a given individual. Thus was not possible to discriminate between the two loci of the DYS385 system.

From the population data in Thai showed that, the DYS385 is a highly polymorphic STR system with population-specific genotype distributions. Thus DyS385 is a robust investigation in forensic science.