

6 F U H H Q L Q J R I Z I A C I S G R I E N S I S S E D O P A Elucidation of Genetic Diversity in Oil Palm for lipase activity

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A total of 148 E. guineensis palms originating from Angola, Cameroon, Guinea Conarky, Nigeria, Senagal, Sierra Leone, Tanzania and Zaire were then screened for lipase activity using the non-radioactive titration method. The analysis revealed genotypes with significantly different lipase activities, indicating that the activity is genotype dependent. Quantitative polymerase chain reaction (PCR) indicated similarity in pattern between gene expression and lipase activity determined by the novel assay. Several low and high lipase genotypes were identified. ANOVA results from this data showed significant differences between countries, populations and families. Heritability for lipase activity was estimated by the variance component of 33 families. The heritability estimate for lipase activity was high, indicating the possibility of selecting for lipase activity at the family level. The findings pave the way for selection and breeding for low lipase genotypes. They are also relevant to genetic marker development for oil quality.

Biography

Wong Yun Teng has completed her PhD from National University of Malaysia and has been working in molecular genetics for ten years, particularly in the oil palm
J H Q R P H 6 K H L V F X U U H Q W O \ D 5 H V H D U F K 2 I 2 F H U L Q 0 D O D \ V L D Q 3 D O P 2 L O % R D U G 0 D O D \ V L D % H V L G H V
L Q P D J D J L Q H V D Q G Q H Z V S D S H U V + H U 2 U V W Q R Y H O Z D V S X E O L V K H G L Q \ H D U

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