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Merida, 19 th July 2013

Prof. Graciela Muñoz-Riveros
Editor, Electronic Journal of Biotechnology

Dear Professor Graciela Muñoz-Riveros,

We would like to submit a research article entitled: **‘Single Nucleotide Polymorphism in partial sequences of large sub-units of the ADP-glucose pyrophosphorylase gene within a representative collection of 10 *Musa* genotypes’**

The authors are listed below:

Muhilan Mahendhiran, Jorge Humberto Ramirez-Prado, Rosa Maria Escobedo GM, Blondy Canto-Canché, Miguel Tzec-Simá, Rosa Grijalva-Arango, Andrew James-Kay.

Briefly, the work describes the amplification and bioinformatics analysis of exons 1—3 of the large sub unit of ADP-glucose pyrophosphorylase (AGPase) in 10 accessions of the genus *Musa* which are known to have differ in starch and sugar content and type. These accessions include wild ancestors (AA, BB genomes) dessert bananas (AA, AAA, AB and AAB), plantains (AAB), cooking and beer bananas (ABB and AAA) respectively. A total of 36 single nucleotide polymorphisms (SNPs) and insertions/deletions (indels) in the partial sequences of the large sub-unit of AGPase within the 10 accessions analysed. Phylogenetic analysis revealed that fifteen haplotypes could be distinguished which grouped into four variants. Analysis of SNPs in the 2nd exon in the LSU of AGPase showed that in seven places, five SNPs changed the amino acid group. This information may be useful for understanding the molecular basis of differences in starchy traits between these 10 *Musa* accessions.

Thank you for your kind attention and we hope to hear from you soon.

Yours most sincerely

Dr. Andrew James-Kay
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