

Genome Relationship among Nine Species of Millettieae (Leguminosae: Papilionoideae) Based on Random Amplified Polymorphic DNA (RAPD)

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Random amplified polymorphic DNA (RAPD) marker was used to establish intergeneric classification and phylogeny of the tribe Millettieae sensu Geesink (1984) (Leguminosae: Papilionoideae) and to assess genetic relationship between 9 constituent species belonging to 5 traditionally recognized genera under the tribe. DNA from pooled leaf samples was isolated and RAPD analysis performed using 25 decamer primers. The genetic similarities were derived from the dendrogram constructed by the pooled RAPD data using a similarity index, which supported clear grouping of species under their respective genera, inter- and intra-generic classification and phylogeny and also merger of *Pongamia* with *Millettia*. Elevation of *Tephrosia purpurea* var. *pumila* to the rank of a species (*T. pumila*) based on morphological characteristics is also supported through this study of molecular markers.

Key words: Genome Relationship, RAPD, Millettieae