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DNA Fingerprinting of DxP Planting Materials – An Exploratory Start

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In this study, DNA markers were used to identify different commercial DxP planting materials. The planting materials were from Sime Darby (SD), MPOB (M), and Felda (F) plus two novel DxP from MPOB coded Porim Series, PS1 and PS2. Six out of the 11 primers tested gave distinct DNA profiles for different materials. Primer A31 gave a unique profile for each of the different types of DxP but there was more similarity between the profiles of the main stream DxP than with the PS type. With primer A36, samples with the same breeding history showed similar DNA profiles. Sime Darby DxP had an almost identical DNA profile to that of MPOB, both of which had much similarity with the profile of Felda DxP. Likewise PS1 and PS2 shared the same DNA profile compared to the other DxP. Five primers did not distinguish the different types of planting materials, generating only 1-2 bands each.

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