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Preliminary RAPD- PCR studies on six Sri Lankan traditional varieties of *Oryza sativa* L.

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Rice is the staple food in Sri Lanka and in many South Asian countries. Abiotic and biotic stress conditions affect the final yield and the quality of the crop. Based on conventional studies the Rice Research and Development Institute (RRDI) has identified that traditional varieties of *Oryza sativa* L. have the capability of withstanding biotic and abiotic stresses. In this study six of these Sri Lankan traditional varieties of rice [Devereddari-(moderately tolerant to flood), Kalu Heenati-(moderately resistant to brown planthopper), Murungakayan-(resistant to blast), Pokkali-(tolerant to salinity), Rathdal-(high quality) and Suwadal (high quality and aromatic)] were selected. The genomic DNA was extracted from six rice varieties and was amplified by five Operon primers (OPA02, OPA12, OPB11, OPB12 and OPE17). Amplified products were separated by using 1% agarose gels and visualized by staining with ethidium bromide. The primers OPB11 and OPB12 did not amplify for Suwadal and Rathdal respectively. It was interesting to observe primers OPA02 and OPE 17 that gave rise to similar size products. These primers also gave rise to differentiating polymorphic products, clearly indicating the presence of polymorphism. The OPA12, OPB11 and OPB12 primers also gave differentiated polymorphic profiles.