Morphological variation among five *Kuru Wee* traditional rice accessions

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Five *Kuru Wee* rice accessions collected from plant genetic resources center, Gannoruwa, Peradeniya were characterized on the basis of 12 agronomic traits in a field experiment in *Maha* season 2013/2014. The aim of the study was to understand whether the selected *Kuru Wee* traditional rice accessions are significantly differed in their morphological traits from each other or not since they were distinguished with different accession numbers in PGRC catalogue. Ten days old seedlings of all the accessions were transplanted in rows with 15 x 20 cm gaps, according to a randomized complete block design, in triplicates, having 3 rows per replicate and 20 plants per each row. Plant height, days to flowering, number of tillers/plant, number of fertile tillers/plant, panicle length, panicle weight, filled grains/panicle, total grains/panicle, filled grain percentage, 100 grain weight, total grain weight/plant and biomass/plant were recorded according to the Standard Evaluation System for Rice. Harvest index was also calculated considering the biomass and grain yield. The data were analysed by principle component analysis followed by factor analysis using SPSS. Three principal components exhibited more than one Eigen value showed about 95 % of the cumulative variance. The PC 1, 2 and 3 showed 40 %, 29.1 % and 25.8 % variance for the traits respectively. Five *Kuru Wee* accessions were grouped into 4 clusters at 18 minimum distances. *Kuru Wee* accessions 3465 and 3982 were morphologically similar while three other accessions were significantly differed from each other. Existence of four rice accessions in *Kuru Wee* group is confirmed in the present study while accession numbers would be duplicated in 3465 and 3982. This must be confirmed by SSR markers.

Keywords: Accessions, Morphological characters, Principal component analysis, Traditional rice

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