Selection Criteria for Jackfruit (*Artocarpus heterophyllus* Lam.) Improvement and It's Further Utilization

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Jackfruit (Artocarpus heterophyllus Lam.) is a multipurpose tree and one of the most common tree species in Sri Lanka that plays an important role in livelihood of rural and urban people of the country. Even though there are vast numbers of benefits, Jackfruit is still considered as an underutilized fruit species in Sri Lanka, mainly due to unavailability of quality planting materials in the county. This experiment was conducted to evaluate jackfruit local genotypes, with respect to their morphological and physiological characters. One hundred Jackfruit trees were selected in *Dehideniya* (G.N. Division 284) area in Kandy district. These genotypes were evaluated using "(IPGRI) 2000 -Descriptors for Jackfruit". Tree characters and fruit characters such as variety, age, height, diameter at breast height, first flowering, fruit bearing pattern and position, number of fruits per tree, fruit clustering habit, leaf blade shape, flesh type, stalk attachment, fruit shape, fruit diameter, fruit length, weight of the fruit, skin (rind) color and texture, number of flakes in the fruit, weight of flakes, shape of flake, color of flake, taste, amount of latex, time of latex flow and uses of fruits (suitability as fresh fruit, as staple food or as polos curry or mallum) were evaluated under the experiment. Results were analyzed pair wise, using Chi-square test in order to find an association between characters to develop the morphological index. Amount of latex, time of latex flow, taste, color of flakes indicated an association (at p<0.05 significant level) with its relevant variable and those characters were used to develop the morphological index.

Key words: Artocarpus heterophyllus Lam, Jackfruit, Morphological index, Selection, Tree Improvement

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