

B-54 Studies on seasonal and genetic variation during clonal selection in durian (*Durio zibethinus*)

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Durian seedling trees have a high degree of self incompatibility and flowers must be cross-pollinated from other trees in order to set fruit. This would add to the genetic diversity.

Since there are no true cultivars in Sri Lanka, the clonal selection of Durian was initiated during Yala 1991 through official and private sources. Information was also obtained on distribution of the crop, seasonal variation in bearing and the availability of trees bearing fruits with the desirable characters.

Studies to-date have revealed that flowering usually occurs during the months of January and February followed by harvest of mature fruits in July and August. However, occasionally, owing to climatic variations, a second crop could be obtained during the months February-March. In addition in the Uva Province covering Koswatta, Bidunuwawa, Passara, Haldummulla, Nikapotha, Badulla, the trees bear only during the months of February and March providing an off-season crop.

Mother plants of 83 accessions were identified and these could be broadly divided into 2 groups: soft and hard flesh types (Wala, Waraka). The other variations that were observed are as follows: (1) Colour of rind-(green to yellowish green); (2) Fruit shape -(Round, ovoid or irregular); (3) Spines-(Raised spines along the carpal wall); (4) Flesh colour - (Creamy white, yellow and deep yellow); (5) Odour-(An accession was identified where the odour was less; (6) Aborted seed-(In some accessions more aborted seeds were found; in such cases the flesh to seed ratio is high).