B-08: Performance of some introduced *Gliricidia* provenances in the nursery in mid country wet zone

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An experiment was conducted to study the growth performance of 6 Gliricidia *(Gliricidia sepium)* provenances (4 native Central American populations (124/91, 125/91, 126/91, 32/92; 1 land race from Africa (4/92) and local cultivar from Sri Lanka) in the nursery, before planting in the field in the mid country wet zone of Sri Lanka. Seeds were sown in polyethylene bags in a temporary nursery. Bags were filled with a mixture of sand : goat manure: soil at the rate of 2 : 2 : 4. Seeds were sown in polyethylene bags where 200 bags from each provenance were seeded at the given location. Twenty plants from each provenance were selected and labelled for the growth study. Plant height, number of leaves per plant and number of branches per plant were measured weekly starting from the 7th week after germination, upto the 16th week for 20 plants from each provenance before planting in the field.

The local cultivar performed well compared to other provenances under local conditions. Average height of the local variety at the 16th week was 64 cm compared to other provenances (57, 55, 55 49 and 45 cm for provenance 126/91, 4/92, 125/91, 32/92 and 124/91 respectively). Number of branches per plant also followed a similar pattern (9, 8, 7, 7 and 7 respectively) whereas, number of leaves per plant was highest in the local variety followed by provenances 125/91, 126/91, 4/92, 32/92 and 124/91 (46, 44, 42, 40, 39 and 34 respectively).

The growth of local provenances was better compared to the other provenances in the nursery. If plants have more leaves, then these plants are more suitable as animal feed and as shade trees.