# Comparison of High Performing Seedlings and Vegetatively Propagated Tea Cultivars in Selected Tea Estates in Badulla.

M.M.N.T. Bandara[1], L.M.H.R. Alwis[1*]

*'Department of Export Agriculture, Uva Wellassa University, Badulla, Sri Lanka*

Prolonged drought is a major problem that prevails in Badulla. There are well adapted seedling teas in estates which also gives a higher yield like TRI recommended cultivars. This study was conducted for comparison of morphological characters of high performing seedling teas and extensively usedvegetatively propagated tea cultivars in selected tea estates of Badulla. Three estates were selected based on the climatic conditions and the recommendation by the Balangoda Plantations PLC. Fifteen morphological characters were considered for the cluster analysis such as number of pluckable shoots, shoot weight, banji shoots, internodal length, leaf angle and pose, leaf length, leaf width, young leaf pubescence, leaf waxiness, greenness, waviness of leaf lamina, leaf blade attitude, pigmentation of leaf petiole and stomatal density. Measurements were taken from five seedling teas as S 1, S2, 53, S4 and S5 and three recommended vegetatively propagated cultivars from each estate. Mean comparison was conducted for the characters which were significantly different. Selected teas were clustered separately without overlapping and showed each as a specific genotype. S2 seedling clustered with TRI 3015 and showed the highest mean value for considered characters in Uryestate. S3 seedling showed the highest mean values but none of the TRI recommended cultivars were clustered with S3 in Thelbedda estate. In Spring Valley mean values of S5 was the highest andclustered with CY9. Therefore S2 from Ury, S3 from Thelbedda and S5 from Spring Valley can be recommended as potential mother bushes to obtain cuttings for nurseries.

*Keywords:* Morphological characterization, Seedling teas, Vegetatively propagated cultivars, Mother bushes