

## **A study on modelling early growth of some Hevea clones**

Rubber is one of the major plantation crops in Sri Lanka and has contributed to country's economy over a long period. Recent figures indicate a decline in the land available for rubber palntation. Thus, it is essential to find out ways of increasing productivity (yield per unit area). One alternative is to introduce high yielding rubber clones. Among different methods available for that, one way is to investigate new such clones and compare them with standard ones. This study consists of some statistical aspects fo this comparison.

Growth data from a genotype-environment interaction study of Hevea consisting of ten clones of which some are new and some are standard, planted in seven different sites are used. The main focus is on the interaction between sites and clones with respect to the growth. Earlier studies indicate the existence of this interaction. Thus, a modeling approach is adopted to describe to describe growth of cones at different sites.

Logistic growth curves are used to describe the early growth, as they seem to be more appropriate. An attempt is also made to find any natural groupings of clones with respect to growth.