

## PRUNING AS A MEANS OF OVERCOMING SENILITY IN TEA PLANTATIONS

**S. Kandiah**

*(Department of Botany, University of Jaffna)*

Senility or aging of the tea plant in tea plantations of Sri Lanka, most of which are over 70-80 years old, is an important factor that determines yield. Results of a four year trial that tested the efficiency of a cultural operation claimed to rejuvenate old tea plantations is reported. Rejuvenation pruning (RP) was carried out in a seventy to eighty year old tea field in the Dimbula area and its effect on plant growth was assessed by shoot growth analysis.

There was a net crop loss of 26% during the three year period following RP. The changes in shoot/root ratio and leaf weight ratio was not significant and was found to be markedly different from vigorously growing young clonal plants, established in the same field by "infilling" following RP. The perennating mass of tissue in the aging tea plant, which is a major factor retarding its growth, is shown to be 70% of the plant weight, 2/3 of which was found in the root system not affected by RP. However, RP is shown to enable successful "infilling", thereby increasing proportion of young plants in the stand, and plant density by 20-30% which could lead to increase in yield in successive cycles.

The results indicate that replanting could be the only cultural operation that could have significant effect on tea yields in Sri Lanka.