

## PHYSIOLOGICAL ASPECTS OF SHOOT-ROOT INTERACTION IN TEA RECOVERING FROM PRUNING

**S. Kandiah**

*(Department of Botany, University of Jaffna)*

**D. T. Wettasinghe and G. Wadasinghe**

*(Tea Research Institute, Talawakelle)*

The nature of shoot and root factors essential for the sprouting and development of new shoot buds following pruning of tea is investigated. The functional importance of mature leaves, feeder roots and, root and stem carbohydrate reserves is examined.

Results indicate that buds sprout on the pruned stems of the bush, utilising mainly stem bark reserves, but further growth of bud-sprouts is dependent on the transport of metabolites, originating in the feeder roots, to these buds. The need for maintaining at least a proportion of feeder root alive is indicated, and the role of mature leaves on 'lung' shoots, and root carbohydrate reserves in this respect is evaluated.

The pattern of shoot-root interaction in tea recovering from pruning is schematised incorporating the more important findings of investigations on pruning of tea providing a rational basis for adopting a pruning system that would ensure minimum casualties during recovery of the bush after this most critical cultural operation in tea plantations.