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ROLE OF POTASSIUM ON GROWTH AND DROUGHT RESISTANCE IN YOUNG TEA

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ABSTRACT

Potassium (K) is an important plant nutrient which plays a vital role in the water economy of plants. Since during the drought months there are many casualties in young tea clearings in the low-country districts, studies were commenced under the CIDA Potash grant to investigate the effects of increased levels of K on growth and drought resistance of young tea plants in the Ratnapura district. Three clones were tested, of which two (TRI 2025 and S 106) were drought ~~resistant~~ tolerant and the other one (TRI 2023) markedly drought susceptible.

Studies have shown that at double the recommended K application the drought resistance properties of both nursery and young tea plants were improved. The beneficial effects of improved drought resistance were reflected on the plant performance during the drought experienced in 1987, the worst within the last five years. During this year a considerable

reduction in leaf scorch, defoliation and drought casualties was observed with increased application of K.

Though there was no growth improvement ~~for~~ not increased levels of Potash ~~over and~~ above the quantity recommended by TRI, significant growth increase was observed in one of the experiments where an increased quantity of Magnesium (Mg) was also used.