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**Shoot growth and yield of tea (*Camellia sinensis* (L.) O. Kuntze) in response to foliar application of growth enhancer**

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A foliar growth enhancer composed of macro and micro nutrients including plant based cytokinin has recently been released in Indonesia as NOVELGRO ALPHA® for use on horticultural crops and tea. Many studies have been conducted by introducing high yielding cultivars and adapting good agricultural practices to enhance productivity of tea. However, there are few researches on use of growth enhancers to increase productivity of tea in Sri Lanka. This study was conducted to determine the effect of growth enhancer on the shoot growth and yield of tea cultivar (TRI 4042) which was grown in 2010 in the low country intermediate zone of Sri Lanka.

Growth enhancer (1 ml of Alpha in 1 L of water) was sprayed to tea bushes in treatment plots as a foliar application once in every 2 weeks. Shoot growth, number of plucking points per bush, height increment of plucking table, time taken for leaf unfolding were recorded at weekly intervals. Single leaf plucking style was practiced for harvesting and ten consecutive plucks were obtained to estimate the yield of made tea for the period from January to April 2013.

Comparatively high shoot growth, number of plucking points per bush and height increment of plucking table were recorded in growth enhancer treated tea bushes when compared to control tea bushes. Lesser number of days was required for unfolding of successive leaves in growth enhancer treated tea bushes than control tea bushes. Although not significant, there was a trend in increasing yield of tea in treatment plots (15%) compared to control plots.

Since this is short-term and area specific study, a further long-term study at different agro ecological zones of Sri Lanka on effect of growth enhancer on shoot growth and yield of different recommended tea cultivars and determination of MRL values of made tea produced from treated plots are needed.