

**EFFECT OF FERTILIZER MIXTURES ON
VEGETATIVE GROWTH OF FLUE CURED
TOBACCO (*Nicotiana tabacum*) GROWN IN
DEHIYATTAKANDIYA AREA**

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ABSTRACT

A study was carried out in tobacco fields at Dehiaththakandiya, Sri Lanka to investigate the effect of fertilizer mixtures on the vegetative growth of flue cured Tobacco. Variety K326 which is the most widely grown tobacco variety in Sri Lanka was used for the experiment. Two fertilizer mixtures (*Yara Mila* and *Yara Mila* + Calcium ammoniums nitrate + Sulphate of potash) were evaluated and the experiment was designed as a strip plot arrangement. The performance of tobacco plant in response to fertilizer treatments were measured by growth parameters such as average leaf area at topping, plant height at topping, leaf number at topping, average Internodes length at topping, first two green leaf yield, first two cured leaf yield, conversion ratio and leaf area index. Data were analyzed by using SAS computer package and significant differences between treatments were identified using the Analysis of Variance (ANOVA) procedure at 5 % probability level. There were no significant differences in vegetative parameters in response to used fertilizer treatments. But the highest leaf number (22.4) was recorded in *Yara Mila* + Calcium ammoniums nitrate + Sulphate of potash was used at 7, and 21 days after transplanting, maximum plant height (80.4cm) highest ,maximum internode length (5.3cm), maximum green leaf yield (40.2kg) and cured leaf yield (5.2kg) were recorded in *Yara Mila* + Calcium ammoniums nitrate + Sulphate of potash was used at 7, and 28 days after transplanting, highest leaf area (663.2cm²) was recorded when *Yara Mila* was used at 7, 18 and 28 days after transplanting, highest conversion ratio (15.18%) was recorded in *Yara Mila* was used at 7, and 28 days after transplanting.

Key words: - Flue Cured Tobacco, Vegetative growth, *Yara Mila*, Calcium Ammonium Nitrate, Sulphate of Potash.