

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

A dissertation submitted to the  
Faculty of Animal Science and Export Agriculture  
Uva Wellassa University  
In partial fulfillment of the requirements for the award of  
Bachelor of Science in Export Agriculture

By  
**RANAWEERA ARACHCHILAGE THIWANKA BUDDIKA  
KUMARA RANAWEERA**

**Export Agriculture Degree Programme  
Faculty of Animal Science and Export Agriculture  
Uva Wellassa University of Sri Lanka**

**2014**

## ABSTRACT

A study was carried out at Dehiaththakandiya, Sri Lanka to investigate the effect of different fertilizer mixtures on vegetative growth of flue cured tobacco. The most widely grown tobacco variety, K326, was used for the experiment. Three fertilizer mixtures, *Yara Mila* and K fertilizer, *Yara Mila* and P fertilizer, *Yara Mila* with both K and P fertilizer, in 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, leaf number, average inter nodal length and the yield of first two green leaves. Data were analyzed by using SAS statistical software 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 different fertilizer mixtures. Though the obtained results are statistically in par, observed numerical variations between them explains that the highest leaf number was recorded in *Yara Mila* + Nutrifol which was used at 7, 18 and 21 days after transplanting, maximum plant height, maximum inter nodal length, highest green leaf yield and leaf area were recorded in *Yara Mila* + Nutrifol+ Potassium nitrate which were used at 7, 18, 28 and 35 days after transplanting.

According to the results obtained from the present study, it can be concluded that the vegetative parameters of the Tobacco variety K326 grown in Dehiattakandiya area do not vary significantly in response to used four fertiliser treatments.

**Key words:** - Flue Cured Tobacco, Vegetative growth, *Yara Mila*, P fertilizer, K fertilizer