# THE EFFECT OF GRASS WEED MULCH AND GRADED LEVELS OF NITROGEN ON THE YIELD OF WHITE CABBAGE (*Brassica oleracea* var capitata) IN THE EASTERN REGION OF SRI LANKA

*BY*

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## ABSTRACT

Field experiment was conducted during the rainy season(maha) of 1994/95 at the Crops farm of the Eastern University, Sri Lanka to study the effect of grass weed mulch and graded levels of nitrogen on the yield of white cabbage (*Brassica oleracea*. var. capitata).

The experiment was laid out in a Randomized Complete Block Design replicated 3 times with four levels of nitrogen (0, 80, 160, 240 kg /ha) with or without grass weed mulch.

The results indicate nitrogen individually and in combination with mulching to increase heading efficiency, heading rate, root length, root weight,plant biomass, head volume, and finally the yield of white cabbage.

The combination of mulch with all the levels of nitrogen was found effective in increasing the harvest rate.

Nitrogen either at 160kg/ha or 240kg/ha with or without mulch had a definite influence on head volume, heading efficiency and mean head weight. Mulching was found more effective at 0 and 80kg N/ha on heading efficiency and mean head weight.

Nitrogen either at 160 or 240 kg/ha with the combination of mulching was found to give maximum hectare yield. Among nitrogen levels 160kg /ha could be considered most economical.

The study concludes that maximum economic yield of cabbage in the sandy regosols of the Eastern region of Sri Lanka during rainy (maha) seasons could be obtained by applying nitrogen at 160kg/ha along with grass weed mulching.

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