Effect of Mulching on Cabbage *(Brassica oleracea* var *green coronet)* Cultivation in Welimada Area

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The present study was undertaken to determine the effect of mulching on cabbage (Brassica oleracea. var green coronet) cultivation. Cabbage seedlings (25 — 27 days old) were used as planting materials and mulching applications such as (i) no mulch (control,T1), (ii) white polythene (T2), (iii) silver polythene (T3), and (iv) weed slash (organic) (T4) were applied in a randomized complete block design (RCBD). Leaf area (length and width), head girth, fresh and dry mass, length of roots, no of roots, no of leaves and weed infestation were recorded. The results showed that there was a significant ($p>0.05$) difference in plant leaf area at two weeks after transplanting between the treatments, but there was no significant difference ($p>0.05$) between the treatments with respect to the number of leaves The mean head girth of all amended treatments increased over the control. However, the increase was significant ($p<0.05$) only at T2. There was a similar effect on both fresh and dry masses of cabbage by the four treatments. Accordingly, both the lowest fresh and dry masses were recorded in the control whereas the highest was given by the white polythene treatment. The treatments also significantly ($p<0.05$) affected the number and length of roots in cabbage. Six weeks after transplanting, the mean weed score for T 1, T2, T3 and T4 mulching applications were 4.0, 2.0, 2.0, and 3.0, respectively. White and silver mulches were the most effective mulch material for cabbage production. When growing green coronet cabbage in up country, it is recommended to mulch with white or silver polythene in order to realize near perfect growth and yield.

Keywords: Mulches, *Brassica oleracea,* Green coronet, Weed suppression, Growth and yield