

## Performance of Selected Leafy Vegetables Under Different Shade Levels

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Cultivation of leafy vegetables under shade houses could be used to improve the quantity and quality of the yield. Performance of leafy vegetables under different shade levels was studied from March to May 2016 at Integrated Farm and Training Centre, Kanakarayan Kulam, Vavuniya, Sri Lanka. The experiment was arranged in a Randomized Complete Design with three replicates. Four types of leafy vegetables; *Centella asiatica* (Vallari), *Amaranthus tricolor* (Keerai), *Ipomoea aquatic* (Water spinach) and *Lactuca sativa* (Lettuce) were cultivated under 0, 50 and 75 % shade levels with three replicates. Growth, yield parameters and sensory attributes were evaluated. Growth and yield data were analyzed by ANOVA procedure in SAS and *Kruskal-Wallis* test was performed for sensory data. Result revealed that the 50 % shade level significantly ( $P < 0.05$ ) increased the growth and yield of *C. asiatica*, *A. tricolor*, and *L. sativa*, while 0 % shade level enhanced the growth and yield of *I. aquatic*. Similarly, sensory characters of leaf colour, leaf size and overall appearances of the crop were evaluated showed the same results. Therefore, it can be concluded that the growth and yield of leafy vegetables were greatly influenced by a 50 % shade level except *I. aquatic*. The present study suggests that the adoption of 50 % of shade house technique for leafy vegetable cultivation could improve the overall growth and total yield to the farmers in Vavuniya district.

**Keywords:** Growth, Leafy vegetables, Sensory evaluation, Shade level, Yield