

Crop performance of *Amaranthus* (Diyapalagoda accession) produced by reaping and regrowth system

S. Iqbal^a, T. H. Seran^a, P. Malathy^b and *L. Lavanya^b

^aDepartment of Crop Science, Faculty of Agriculture,
Eastern University, Chenkalady.

^bHorticultural Crop Research and Development Institute, Sri Lanka.

*l.lavanya08@yahoo.com

ABSTRACT

This experiment was conducted at the Horticultural Crop Research and Development Institute (HORDI), Sri Lanka to study the growth and yield of amaranthus accession Diyapalagoda. In this experiment, seeds were obtained from main crop and ratoon crop and sown separately at a spacing of 15 cm within row and 30 cm between rows. The experiment was laid out in a Completely Randomized Design (CRD) with eight replications. Seedling and plant growths were measured at regular intervals and statistically analyzed. The present study revealed that plant performance was better in ratoon crop and there was significant differences ($P < 0.05$) between plant yield. Yield of crop raised from ratoon was 48.20 tons/ha and it was high as compared to crop raised from main seeds. Other seedling and plant growth parameters were statistically similar between treatments. However, seedling and plant growth parameters were slightly high in plant produced from ratoon seeds compared to plant produced from main crop seeds. From this study it could be concluded that the high yield benefit can be obtained by plant produced from ratoon seeds of Diyapalagoda accession of amaranthus as an important leafy vegetable for human nutrition in Sri Lanka.

Key words- Amaranthus, plant growth, ratoon crop, seed, yield.