

## GROWTH AND YIELD PERFORMANCE OF MUKUNUWENNA (*Alternanthera sessilis*) ACCESSIONS

W.G.L.M. Siriwardhana<sup>1</sup>, P. Malathy<sup>2</sup> and D.A.U.D. Devasinghe<sup>1</sup>

<sup>1</sup>Department of Plant Sciences, Faculty of Agriculture, Rajarata University of Sri Lanka, Puliyankulama, Anuradhapura.

<sup>2</sup>Vegetable Division, Horticultural Crops Research and Development Institute, Gannoruwa.

*Mukunuwenna* (*Alternanthera sessilis*) is a popular leafy vegetable, due to its nutritional and medicinal values, and widely cultivated in Sri Lanka. Identification of high yielding *Mukunuwenna* varieties with desirable qualities is a timely need to fulfill the local demand. This study evaluated the growth and yield performance of four *Mukunuwenna* accessions namely; *Colombo selection*, *Erawwawala selection*, *Selection-1* and *Selection-2* compared to the recommended variety of *Piliyandala*, to identify the superior accessions. The experiment was arranged in Randomized Complete Block Design with three replicates in the research field of the Horticultural Crops Research and Development Institute at Gannoruwa during April to August, 2012. Growth and yield parameters of accessions were recorded during the cropping period. *Selection-1* showed significantly higher growth performance in leaf length, leaf width, leaf area, stem length, internodal length and canopy area than the other accessions. This accession also exhibited a significantly high yield, followed by *Colombo selection* and *Erawwawala selection*. The leaf to stem ratio was not significantly different among accessions. Data concluded that the *Selection-1* could be selected as a superior accession. Further evaluations are needed for *Selection-1* for its quality and yield stability in order to release for general cultivation.

**Key words:** Accessions, *Alternanthera sessilis*, *Mukunuwenna*, Yield