

Identification of pasture/forage varieties for water logged saline lands in Sri Lanka

G G C Premalal², Sujatha Premaratne^{1*} and H M S S C H Thundeniya¹

¹Department of Animal Science, Faculty of Agriculture, University of Peradeniya, Peradeniya

²Pasture and Fodder Division, Veterinary Research Institute, Gannoruwa

The main objective of the present study was to evaluate suitable varieties of pastures/forages for water logged saline lands in Sri Lanka. In addition, feeding value of these selected varieties was also evaluated. A plant house experiment was conducted using forages and soils collected from Kalutara, Ambalangoda, Matara and Tangalle areas. Following measurements were taken weekly: number of leaves per pot, number of shoots per pot, leaf area. Plants were harvested after eight weeks and dried samples were subjected to proximate analysis. Data were statistically analysed and means were separated using Duncan's New Multiple Range Test.

Eleocharis actangula had the highest ($P<0.05$) leaf area whereas *Sacciolepis interrupta* (Beru) had the highest ($P<0.05$) number of shoots and leaves during the first two weeks of growth. In contrast, *Panicum repens* had the highest ($P<0.05$) number of leaves and shoots after two weeks compared to other grasses. Dry matter yield of *Cynodon dactylon* was much higher compared to other grasses. *Eleocharis actangula* had the highest crude protein content while *Panicum psilopodium* had the lowest. Energy content was much higher ($P<0.05$) in *Panicum psilopodium* as compared with other grasses. According to the results, *Eleocharis actangula* can be considered as a grass performing well in saline lands due to high crude protein and energy content. However, animal feeding trials have to be conducted before recommendation.

*suep@pdn.ac.lk

Tel: 081-2387179