

Preliminary investigation on the occurrence of *Panicum trichocladum* K. Schum.

in Sri Lanka

P. L. C. U. S. B. Lekamge and D. S. A. Wijesundara

National Institute of Fundamental Studies, Hantana Road, Kandy

Panicum trichocladum K. Schum., a grass native to Tropical East Africa, was first reported in Sri Lanka from the Hanguranketha area around 2002. The distribution of this grass appears to have expanded in the country during the last decade. It is mostly seen along the roadsides forming a dense mat covering the ground. In some areas, it is found inhabiting coconut estates, home gardens, cultivated areas, and wastelands. Up to now, there are no serious investigations carried out to find out its distribution and invasive potential in Sri Lanka. Therefore, the main focus of this preliminary study is to find out the occurrence of this grass in relation to different climatic regions of Sri Lanka. In this study, the natural distribution of *P. trichocladum* was measured by conducting an island wide field survey. The map of Sri Lanka was divided into 2 km x 2 km grids laid over agro-ecological regions using Arc GIS software. The field survey was conducted starting from Hanguranketha along cardinal directions, North, South, East and West. Occurrences of *P. trichocladum* along the main roadsides of each direction were monitored and the presence and absence of the grass species were marked and recorded on the 2 x 2 km grids. Agro-ecological regions visited during the field survey are: Low-country Intermediate zone: (IL1), Mid-country Intermediate zone: (IM1, IM3), Up-country Intermediate zone: (IU2, IU3), Low-country Wet zone: (WL1, WL2, WL3), Mid-country Wet zone: (WM1, WM2, WM3), Up-country Wet zone: (WU1, WU2, WU3) and Low-country Dry zone: (DL1, DL3, DL5). No occurrence of *P. trichocladum* was observed in the agro-ecological regions DL1, DL3, DL5, and WU3. *P. trichocladum* was present in all other agro-ecological regions visited. Among those agro-ecological regions where this grass is present, IM1, IM3, WM3 and WL1 showed the highest density compared to the other regions. It appears that this grass prefers wet areas in the low and mid country and the dry and cold areas are not invaded.

Key words: *Agro-ecological regions, Sri Lanka, invasive grass, Panicum trichocladum*