

B- 101: A survey of rice-field weeds in Hambantota District

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The weed problems are one of the major factors depressing the rice yields in Hambantota District. The present survey was carried out to improve the status of knowledge regarding rice-field weed flora in Hambantota District and to make an evaluation of the relative abundance of each species, in order to rank them according to importance. A total of 102 rice-fields were selected at random and each 1 km distance apart. In each field, weed species present in the field and bund habitats were recorded. Weeds growing in the above or among rice canopy were scored for infestation level by scanning the whole field. Those occurring below the canopy of rice were scored by examining a minimum of four 1m² areas selected at random.

A total of 103 species of weeds belonging to 61 genera and 26 plant families were recorded indicating a very rich diversity in the weed flora.

The commonest and problematic weeds were monocotyledons of the family Poaceae and Cyperaceae. The grass species *Echinochloa crus-galli*, *Echinochloa colona* and *Ischaemum rugosum* emerged as most abundant species in Hambantota District in terms of frequency of occurrence and levels of infestation. Dicotyledonous weeds, although common in occurrence, generally did not present major problems to farmers except *Ludwigia hyssopifolia*. The commonest weeds of the bund habitats were *Isachne globosa* and *Eragrostis unioides*. No major differences in the weed flora during two seasons were observed.

The present study was carried out in fields when rice was at heading to flowering and after the farmers had manually weeded or had applied herbicides for weed control. Hence the majority of the species recorded in the survey were those which had resistance to weed control practices.