A comparison of weed communities of coastal rice fields in Peninsular Malaysia

ABSTRACT

A survey was conducted at 100 different rice fields in coastal areas of West Malaysia to identify most common and prevalent weeds associated with rice. Fields surveyed were done according to the quantitative survey method by using 0.5m x 0.5m size quadrate with 20 samples from each field. A total of 53 different weed species belong to 18 families were identified of which 32 annual and 21 perennial; 12 grassy, 13 sedges and 28 broad leaved weeds. Based on relative abundance the most prevalent and abundant weed species were selected in the coastal rice field. Among the 10 most abundant weed species, there were four grasses viz. Echinochloa crusgalli, Leptochloa chinensis, Echinochloa colona, Oryza sativa L. (weedy rice).; four sedges viz. Fimbristylis miliacea, Cyperus iria, Cyperus difformis, Scirpus grossus and two broadleaved weeds viz. Sphenoclea zeylanica, Jussiaea linifolia. Leptochloa chinensis, E. crusgalli, F. miliacea, E. colona were more prevalent and abundant species out of the 10 most dominant weed species in the coastal rice field of Peninsular Malaysia.

Keyword: Coastal region; Malaysia; Rice field; Weed survey