

## **A survey on weed diversity in coastal rice fields of Sebarang Perak in Peninsular Malaysia**

### **ABSTRACT**

A survey was conducted at 32 different rice fields in coastal zone of Sebarang Perak in 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 quadrat with 20 samples from each field. Weeds present in each field were identified and the data were used to calculate frequency, field uniformity, density and relative abundance values for each species. A total of 40 different weed species belong to 16 families were identified of which 22 annual and 18 perennial; 12 grassy weeds, 10 sedges and 18 broadleaved weeds. On the basis of relative abundance the 13 most prevalent and abundant weed species were selected to determine their salt tolerance level as well as control method in the rice field. Among the 13 most abundant weed species, there were five grasses viz. *Echinochloa crus-galli*, *Leptochloa chinensis*, *E. colona*, *Oryza sativa* L (weedy rice) and *Ischaemum regosum*; four sedges viz. *Fimbristylis miliacea*, *Cyperus. iria*, *C. difformi* and *Scirpus grossus* and four broadleaved weeds viz. *Sphenoclea zeylanica*, *Jussiaea linifolia*, *Monocharia hastata* and *Sagitaria guyanensis*. Based on relative abundance indicates that, annuals were more dominant than perennial.

**Keyword:** Coastal zone; Malaysia; Relative abundance; Rice; Weed community