Spatial and Temporal Aspects of Evapotranspiration in Tanjung Karang Paddy Field, Peninsular Malaysia.

ABSTRACT

Evapotranspiration ET c of rice was measuredusing microlysimeter in TAKRIS, Malaysia. Values of ETobtained are from 4.8 to 6.2 mm/d from all sectors of theirrigation scheme and irrespective of the season. Normality of data distribution was tested using descriptive statisticalparameters. Mean, standard deviation, variance skewness andkurtosis were calculated. The skewness is in the range of 0.22 to-0.96, -1.79 to -0.80 and -1.59 to -0.45 for three seasonsrespectively. The values were within the conventionalacceptable limit of ± 2. The results of one-way ANOVAindicates that ET data for the three seasons was significantlydifferent at the $p< 0.05$ level ($F = 4.65$ and $p = 0.011$). ThePost-hoc comparison using Tukey HSD, Scheffe and Bonferronitest indicated that the mean ET values for wet season ($M = 5.05$mm/d, $SD = 0.84$) and mid-season ($M = 5.47$ mm/d, $SD = 0.85$)are significantly different, whereas off season ($M = 5.24$ mm/d,$SD = 0.90$) did not differ significantly from either wet ormid-season. The study shows a good water management in the TAKRIS.

Keyword: Evapotranspiration; Growth Stage; Irrigation; Microlysimeter; Normality Test