

Evaluation of SPAD Chlorophyll Meter in Two Different Rice Growth Stages and its Temporal Variability

ABSTRACT

Recently, agriculture production systems have benefited from incorporation of technological advances primarily developed for other industries. Site-specific crop management, well-established in some developed countries, is now being considered in other places such as Malaysia. The application of site-specific management principles and techniques to diverse crops and small-scale farming systems in Malaysia will present new challenges. Describing within-field variability in typical Malaysian production settings is a fundamental first step toward determining the size of management zones and the interrelationships between limiting factors, for establishment of site-specific management strategies. Measurements of rice (*Oryza Sativa* L.) SPAD readings was obtained in a Malaysian rice paddy field those were manually collected on 2 different rice growth stages(55 DAT and 80 DAT) and measured using a Minolta SPAD 502. Analysis of variance, variogram and kriging were conducted to determine the variability of the measured parameter. Finally, SPAD reading maps were created on the interpretation of the data was investigated.

Keyword: Temporal variability, Chlorophyll meter, Paddy field, Site-specific