

## Mapping of Arenga Pinnata Tree Using Remote Sensing

**Authors :** Zulkiflee Abd Latif, Sitinor Atikah Nordin, Alawi Sulaiman

**Abstract :** Different tree species possess different and various benefits. Arenga Pinnata tree species own several potential uses that is valuable for the economy and the country. Mapping vegetation using remote sensing technique involves various process, techniques and consideration. Using satellite imagery, this method enables the access of inaccessible area and with the availability of near infra-red band; it is useful in vegetation analysis, especially in identifying tree species. Pixel-based and object-based classification technique is used as a method in this study. Pixel-based classification technique used in this study divided into unsupervised and supervised classification. Object based classification technique becomes more popular another alternative method in classification process. Using spectral, texture, color and other information, to classify the target make object-based classification is a promising technique for classification. Classification of Arenga Pinnata trees is overlaid with elevation, slope and aspect, soil and river data and several other data to give information regarding the tree character and living environment. This paper will present the utilization of remote sensing technique in order to map Arenga Pinnata tree species

**Keywords :** Arenga Pinnata, pixel-based classification, object-based classification, remote sensing

**Conference Title :** ICRS 2014 : International Conference on Remote Sensing

**Conference Location :** Osaka, Japan

**Conference Dates :** October 12-13, 2014