

Study on Cocoa Crop Stress Due To Pest & Diseases and Water Deficit

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Abstract: South Sulawesi is a major producer of cocoa bean in Indonesia. In recent years coco production have declined for most of the cocoa farm and mostly due to pest and diseases as well as the water stress of plant. This study try to find out the geographical dispersions of cocoa plant stress due to plant and diseases as well as the water induced stress on the cocoa plant. The multi temporal image analysis performed to trace the spread of the crop stress and field survey conducted to observe existence of the plant stress via interview with coco farmers. The result shows that the crop productivity have decline up to 40 % of the potential yield due to the plant stress that occurred mainly in the dry period of the year.

Keywords: Plant stress, Cocoa, remote sensing