

Nusa Kambangan Land Preliminary Observation for Abaca (*Musa textilis* Nee) Development

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ABSTRACT

The need for abaca (*Musa textilis* Nee) dry fiber from abaca to the world today are quite a lot. The largest supplier of abaca are Philippines and Ecuador. Actually, Indonesia is a tropical country suitable for abaca development. The main requirement in abaca cultivation is water availability and soil fertility. While climatic factors required are temperature, humidity and duration of irradiation. Based on that, it is not too difficult for developers to develop and produce abaca fiber. Nusa Kambangan is located at the coordinates of 08° 35' 24,63" south latitude and 116° 0,6' 46,42" east longitude, while the height varies from 4 m- 12 m above sea level, and B2 climate classification where it starts raining from November to May (only 8 months of wet season and the remaining 4 months are dry season). In wet season the rainfall are > 100 mm / month (Oldeman et al., 1980). The air humidity is 64.8%, ambient temperature 28,8°C, with 1.011 m bar air pressure and 10 knots wind speed (BMKG Cilacap). The soil types are a complex Red-Yellow Podzolic Soils, Latosol and Litosol from the hill up to the mountain using RYP / L / Li- (H-M /) (S-I) as code. The land survey location condition reviewed in soil terms, especially the Carbon content, pH and C / N ratio is good enough for abaca plants. The preliminary observations result show that Nusakambangan area have low minerals in P and K form and needed an additional fertilization that comes from TSP and KCl fertilizer. The rainfall based on climate classification is classified into B2 category which means that water availability is enough for abaca plants, however there is a dry season so there is a need for wells and water container basin to meet water shortage in dry season. Organic matter needs to be added even if the C organic content is high, considering organic matter could bind water that could be used by abaca plants. The area to be used for abaca development is a former forests. Therefore, in clearing the development area, some trees should not be felled to shade the abaca plant, because young abaca plants are still in needs of shade. At the time of field visit there are many cavendish banana plants that attacked by Fusarium, for that there should be a disease awareness so that the disease does not develop any further and does not interfere with abaca plants development.

Keywords : Nusa Kambangan, abaca, Red-Yellow Podzolic Soil, latosol, litosol.