

The Evaluation of Land Suitability for Tobacco (*Nicotiana Tabacum L.*) and Red Chili (*Capsicum Annuum L.*) Plants in Selopamioro Village, Imogiri Sub-District, Bantul Regency

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ABSTRACT

Selopamioro Village is located in Imogiri Sub-District, Bantul Regency. One of the leading agricultural and plantation commodities in this area is tobacco and red chili. This research aims to determine the characteristics of the land in Selopamioro Village and the land suitability for tobacco (*Nicotiana tabacum L.*) and red chili (*Capsicum annuum L.*) plants. The method used survey. Soil sampling was carried out through purposive sampling. The data analysis was carried out by matching land. The research parameters were soil texture, soil CEC (me%), Base Saturation (%), H₂O pH, C-organic (%), total N (%), P₂O₅ (mg/100 g), and K₂O (mg /100g). The results of the research that land area of 2.275 Ha have the actual land's suitability for tobacco includes S3na (marginally appropriate) covering an area of 231 Ha (10.16%) the limiting factor is nutrients available and S3na,eh (marginally appropriate) covering an area of 1.169 Ha (51.38%) the limiting factor is nutrients available and erosion. Potential land suitability classes for tobacco plants are S1 (highly suitable) covering an area of around 862 Ha (37,89%), and S2lp (quite suitable) covering an area of around 538 Ha (23,65%) the limiting factor is land preparation. The actual land's suitability for red chili includes S3wa,na (marginally appropriate) covering an area of 231 Ha (10.15%) the limiting factor is water availability and nutrients available, S3wa,eh (marginally appropriate) covering an area of 381 Ha (16.75%) the limiting factor is water availability and erosion, and S3wa,na,eh (marginally appropriate) covering an area of around 788 Ha (34.64%) the limiting factor is water availability, nutrients available, and erosion. Potential land suitability classes for red chili plants are S1 (highly suitable) covering an area of around 1.56 Km² (6.86%), S2rc (quite suitable) covering an area of 862 Ha (37,89%), and S2lp (quite suitable) covering an area of around 538 Ha (23,65%) the limiting factor is land preparation.

Keywords: Land Suitability, Red Chili, Selopamioro, Tobacco