

**Rancang Bangun Sistem Informasi Geografis Untuk Pemetaan Lahan  
Pisang Berbasis Web Di Kecamatan Senduro Kabupaten Lumajang**

*Design of Geographic Information System for Web-Based Banana Land Mapping  
in Senduro District, Lumajang Regency*

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***ABSTRACT***

*Lumajang is one of the cities known for the largest banana industry in East Java. Based on data (BPS) Lumajang Regency produced 1 040 966 tons of bananas as of 2018. With the abundance of bananas in Lumajang Regency, problems arise, one of which is not yet maximally produced bananas. This is because some farmers experience obstacles, namely, the bananas produced do not meet the quality criteria of bananas such as the slow duration of planting, the taste produced, and the physical appearance of the bananas. Researchers try to make a system that can recommend types of bananas that are planted on suitable land and can see the location of the land with the available geographic information system. Determination of recommendations for banana species is based on the parameters of altitude, temperature, rainfall. The results of the recommendation of banana species for suitable land using Fuzzy Mamdani with 100 data trials, the average value obtained for the system being developed is 84% from the Accuracy Test.*

**Key word:** *Lumajang, Banana Field, Banana Type, Fuzzy Mamdani*