

## **Penaksiran Potensi Durian (*Durio zhibetinus* Murr.) Berdasarkan Bentuk dan Naungan Tajuk Pada Agroforestri Campur di Desa Salam, Kecamatan Patuk, Kabupaten Gunung Kidul**

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### **INTISARI**

Agroforestri campur merupakan salah satu bentuk pengelolaan lahan berbasis tanaman buah buahan salah satunya durian yang berada di Daerah Istimewa Yogyakarta, salah satunya berada di Desa Salam, Kecamatan Patuk, Kabupaten Gunung Kidul. Penelitian dilakukan dengan menguji variabel terduga yang memungkinkan pengaruhnya terhadap produktivitas durian, sehingga penelitian ini penting dilakukan sebagai informasi dan bahan pertimbangan pemerintah dan masyarakat setempat dalam pengambilan keputusan pengelolaan agroforestri berbasis durian. Metode yang digunakan dalam penelitian ini adalah deskriptif kuantitatif dengan menggunakan data primer dan sekunder. Analisis yang digunakan berupa pengukuran individual dan dimensional pohon, analisis regresi linier berganda, analisis ANOVA, dilanjutkan analisis *Post Hoc* LSD/Tukey, perhitungan keanekaragaman berupa INP pada tiap tingkat pertumbuhan dan perhitungan Indeks Shannon dan Simpson pada setiap lokasi petak ukur, serta visualisasi struktur vertikal-horizotal menggunakan SExI-FS. Berdasarkan analisis yang dilakukan, didapatkan nilai korelasi antara diameter dengan produksi buah durian sebesar 0,445 atau sebesar 44,5% yang berarti diameter batang memberikan pengaruh 44,5 % terhadap produksi buah, dilanjutkan analisis regresi linier berganda yang menguji hubungan diameter batang, naungan tajuk, dan bentuk tajuk sehingga memperoleh nilai koefisien korelasi (R) 0,733 atau 73,3 % dan nilai koefisien determinasi (R<sup>2</sup>) 0,752 atau 75,2 %, sehingga kesimpulan penelitian ini menyatakan bahwa bentuk tajuk, naungan tajuk, diameter batang menunjukkan pengaruh secara simultan sebesar 73,3- 75,2 % terhadap produksi buah durian.

*Kata kunci : Durian, Agroforestri campur, produksi buah durian, bentuk tajuk durian, naungan tajuk durian*

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## **Assessment of the Potential of Durian (*Durio zhibetinus* Murr.) Based on Shape and Canopy Position in Mixed Agroforestry in Salam Village, Patuk District, Gunung Kidul Regency**

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### **ABSTRACT**

Mixed agroforestry is a form of land management based on fruit crops, one of which is durian, located in the Special Region of Yogyakarta, one of which is in Salam Village, Patuk District, Gunung Kidul Regency. The study was conducted by examining the predictable variables that may have an effect on durian productivity, so this research is important as information and consideration for the government and local communities in making durian-based agroforestry management decisions. The method used in this research is descriptive quantitative using primary and secondary data. The analysis used in the form of individual measurements and tree dimensions, multiple linear regression analysis, ANOVA analysis, followed by Post Hoc LSD/Tukey analysis, calculation of diversity in the form of INP at each growth level and calculation of diversity using the Shannon and Simpson, visualization of the vertical-horizotal structure using SExI-FS. Based on the analysis carried out, the correlation value between diameter and durian fruit production was 0.445 or 44.5%, which means that stem diameter had an effect of 44.5% on fruit production, followed by multiple linear regression analysis that tested the relationship between stem diameter, canopy shade, and the shape of the crown so that the correlation coefficient value (R) is 0.733 or 73.3% and the coefficient of determination (R<sup>2</sup>) is 0.752 or 75.2%, so the conclusion of this study states that the shape of the canopy, canopy shade, stem diameter shows a simultaneous effect of 73.3-75.2% of durian fruit production.

*Key words : Durian,duian tree, mixed agroforestry, durian fruit production, canopy shape, canopy position*

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