

***Characterization of Six Maize (*Zea mays* L.) Genotypes at PT Surya
Kencana Agrifarm Sejahtera***
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ABSTRACT

*Maize (*Zea mays* L.) is an important commodity for food and feed, requiring the development of high-yielding and adaptive genotypes. This study aimed to evaluate the qualitative and quantitative characteristics of six hybrid maize genotypes as a basis for selecting superior genotypes. The research was conducted in Antirogo, Summersari District, Jember Regency, using a non-factorial Randomized Block Design with three replications. The genotypes evaluated were G01, G02, TS04, TS06, TS12, and TS14. Observed parameters included qualitative traits and quantitative traits related to growth and yield components. The results showed variability among genotypes for several agronomic traits, with highly significant differences in plant height, flowering time, ear diameter, and yield potential per hectare. Meanwhile, ear length, number of rows per ear, number of kernels per row, 100-kernel weight, and harvest time showed no significant differences. Genotype G02 exhibited the highest yield potential compared to the other genotypes. In conclusion, genotype G02 has promising potential for further development in hybrid maize breeding programs.*

Keywords: hybrid maize, characterization, genotype, yield potential.