

***Yield Evaluation of Several Corn (Zea mays L.) Lines At
PT. Surya Kencana Agrifarm Sejahtera
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ABSTRACT

This study aimed to evaluate the yield performance of several maize (Zea mays L.) hybrid lines consisting of three way cross genotypes (TS04, TS06, TS12, and TS14) and single cross genotypes (G01 and G02) at PT. Surya Kencana Agrifarm Sejahtera. The experiment was arranged in a non-factorial Randomized Block Design (RBD) with genotype as a single factor and three replications. Observed parameters included days to silking, days to harvest, ear length and diameter, dry ear weight, number of kernel rows per ear, dry kernel weight per ear, number of kernels per row, dry kernel weight per plot, 1,000-kernel weight, seed recovery, and yield potential. The results indicated that genotype significantly affected several parameters, particularly days to silking, ear diameter, dry kernel weight per ear, number of kernels per row, dry kernel weight per plot, 1,000-kernel weight, and yield potential. Genotypes TS06 and TS04 exhibited earlier silking, while genotype G02 showed superior performance in yield components and achieved the highest yield potential. In contrast, days to harvest, ear length, dry ear weight, number of kernel rows per ear, and seed recovery were not significantly different among genotypes. These findings suggest that genotype G02 has strong potential to be further developed as a superior hybrid candidate.

Keywords: Corn (Zea mays L.), Yield capacity, Corn lines