

Uji Daya Hasil Silang Tiga Jalur (*Three Way Cross*) Pada Beberapa Calon Varietas Jagung (*Zea mays L.*). (*Three Way Cross Yieldability Test on Several Candidate Corn Varieties (Zea mays L.)*)

Supervised by : Ir. Hari Prasetyo, M.P.

Diajeng Maharani Ratna Pangestuti Sugiono

Program Studi Teknik Produksi Benih

Jurusan Produksi Pertanian

ABSTRACT

One effort in breeding hybrid corn plants can be to use yield tests. This research was conducted to obtain the best F1 results from a three way cross between female parents (TS 01, TS 02, TS 03, TS 04, and TS 05) with male parents (R1). This research was carried out in May – September 2024, at PT. Surya Kencana Agrifarm Group, Jl. Manyar Gg. Coconut, Puring, Slawu, District. Patrang, Jember Regency, East Java Province, Indonesia. The experimental design used was a non-factorial randomized block design (RAK) consisting of crossing TS 01 female parents with R1 male parents, crossing TS 02 female parents with R1 male parents, crossing TS 03 female parents with R1 male parents, crossing TS female parents. 04 with male parent R1, cross between female parent TS 05 with male parent R1. The results obtained were then analyzed using the ANOVA (Analysis of Variance) test and then carried out a further BNT test. The parameters observed were flowering age (DAP), harvest age (DAT), wet cob weight and dry cob weight (grams), ear diameter (mm), ear length (cm), number of rows per ear (row), number of seeds per cobs (seeds), dry shelled weight per plant (grams), weight of 1000 grains (grams), yield (%), potential yield of dry cobs per hectare (tons/ha), germination capacity (%), growth speed (%). From the results of this research, it can be concluded that the candidate variety that exceeds the standard parameters of potential dry cob yield per hectare, yield, germination capacity set by the company standard is the candidate variety TS 04.

Keyword : Hybrid Corn, Yieldability Test, Three-way Cross