THE IDENTIFICATION OF POTENTIAL CROPS AND AGRONOMIC CHARACTER IN SOME HYBRIDS OF CORN (Zea mays .L) IN THE FIRST GENERATION By : Guntur Ramadhan

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ABSTRACT

Corns (Zea mays L) is one of the important food commodity in this country. Corns also have function for animal feed. To supply the corn needs of Indonesian people, the hybridization can be an alternative in enhancement of national corn production. This research aims to find out the growth and the potential crops of some hybrid corn genotype. Also, this research has purpose to determine the genotype of hybrid corn which have the best yield and growth in Experimental Farm of UPN "Veteran" Yogyakarta. The research was conducted starting December 2017 until March 2018. The research method which is used is complete randomized group design a.k.a. Rancangan Acak Kelompok Lengkap (RAKL). There is one treatment factor which is applied. It is the genotype of hybrid corn. In this research, the researcher used 17 genotypes of hybrid corn, they are: (G2KPW-18, G2KPW-19, G2KPW-20, G2KPW-21, G2KPW-22, G2KPW-23, G2KPW-24, G2KPW-25, G2KPW-26, G2KPW-27, G2KPW-28, G2KPW-29, G2KPW-30, G2KPW-31, G2KPW-32, G2KPW-33, G2KPW-34). There are three comparison varieties, they are BISI 18, NK6172, and P32. The data is analyzed by using variance of 5%, then, the further examination uses Least Significant Increase in variance of 5 %. The genotype of G2KPW 32 has the age of early flowering (male parent). Moreover, G2KPW 21, G2KPW 24, G2KPW 28, G2KPW, 31 have the diameter of corn ear which are bigger than the comparison varieties. G2KPW 34 has the potential crops which is bigger than two comparison genotypes of BISI 18 and NK6172.

Keywords : Corn, Genotype, Hybrida, Crop