

INTISARI

Jagung (*Zea mays* L) salah satu bahan pangan penting yang memiliki potensi besar dan menjadi komoditas unggulan. Jagung pulut dan jagung ungu memiliki keunggulan tersendiri dalam kandungan amilopektin dan antosianin. Melihat adanya kelebihan dari kedua varietas tersebut maka ada potensi untuk dilakukan pengembangan lebih lanjut yaitu merakit varietas hibrida dengan dilakukan persilangan antara keduanya. Metode persilangan yang digunakan adalah metode resiprok. Kemudian hasil pengamatan dianalisis menggunakan *chi-Square test* untuk karakter kualitatif. Sedangkan nilai heritabilitas dihitung untuk menguji karakter kuantitatif dan dilakukan perhitungan indeks seleksi. Pewarisan karakter fenotip biji generasi F₂ hasil persilangan resiprok tanaman jagung (*Zea mays* L.) ungu dan putih tidak menunjukkan pola segregasi. Nilai heritabilitas generasi F₂ tergolong tinggi pada persilangan ♀Pulut x ♂Ungu berdasarkan karakter panjang butir, tebal butir dan antosianin. Sedangkan nilai heritabilitas generasi F₂ tergolong tinggi pada persilangan ♀Ungu x ♂Pulut berdasarkan karakter tebal butir, amilopektin dan antosianin. Hasil seleksi jagung ♀Pulut x ♂Ungu hasil persilangan resiprok memiliki indeks seleksi kisaran yaitu 1,40-2,67. Sedangkan jagung ♀Ungu x ♂Pulut hasil persilangan resiprok memiliki indeks seleksi kisaran yaitu 0,85-1,19.

Kata Kunci : Jagung, Pola Pewarisan, Varietas, Resiprok

ABSTRACT

Maize (Zea mays L) is one of the important food ingredients that has great potential and is a leading commodity. Pulut and purple corn have their own advantages in the content of amylopectin and anthocyanin. Seeing the advantages of the two varieties, there is the potential for further development which is to assemble hybrid varieties by crossing them. The crossing method used is the reciprocal method. Then the observations were analyzed using the chi-square test for qualitative characters. While the heritability was calculated to test the quantitative characters and the selection index was also calculated. Inheritance of phenotypic characters of F2 generation seeds resulting from crossbreeding of purple and white corn (Zea mays L.) reciprocal plants does not show a pattern of segregation. The heritability value of F2 generation is high in ♀ Pulut x ♂ Purple crossing based on grain length, grain thickness and anthocyanin characters. While the value of heritability of generation F2 is relatively high in ♀ Purple x ♂ Pulut crosses based on grain thickness, amylopectin and anthocyanin characters. ♀ Pulut x ♂ Ungu corn selection results from reciprocal crossing have a selection index range of 1.40-2.67. While the ♀ Purple x ♂ Pulut corn from reciprocating crosses has a range selection index of 0.85-1.19.

Keyword: *Maize, Inheritance Patterns, Varieties, Reciprocal*