



KAJIAN HUBUNGAN ANTARA KOMPONEN HASIL DAN HASIL WIJEN (*Sesamum indicum* L.)

Intisari

Dalam rangkaian pemuliaan tanaman dalam meningkatkan produktivitas wijen Indonesia, informasi keragaman dan hubungan antar sifat sangat penting untuk menentukan keberhasilan seleksi. Oleh karena itu, penelitian untuk mengetahui besarnya keragaman genetik pada komponen hasil dan hasil wijen dan mengetahui komponen hasil yang berpengaruh langsung terhadap hasil wijen merupakan kajian yang sangat penting. Penelitian dilaksanakan pada bulan November 2012 di Padangan, Sitimulyo, Piyungan, Bantul, Yogyakarta. Penelitian menggunakan Rancangan Acak Lengkap (RAL), bahan tanam yang dipergunakan adalah benih tetua SBR3, SBR2, Turki DT36, F1 dan F2 hasil persilangan antara SBR3 x SBR2, SBR3 x Turki DT36, SBR2 x Turki DT36 dan resiproknnya. Benih ditanam secara rapat pada petak-petak sesuai dengan galurnya. Hasil penelitian menunjukkan komponen yang memiliki keragaman besar secara berturut-turut yaitu berat biji per tanaman (68,43%), berat polong (40,532%), jumlah cabang (33,251%), jumlah polong (30,269%), tinggi tanaman (21,256%), dan jumlah ruas (15,511%). Nilai heritabilitas tinggi terdapat pada tinggi tanaman (65,52%) dan umur panen (55,00%). Nilai heritabilitas sedang terdapat pada jumlah ruas (21,91%), umur berbunga (44,68%), berat biji per tanaman (27,05%). Komponen hasil yang berkorelasi positif nyata terhadap hasil adalah tinggi tanaman, dan yang berkorelasi sangat nyata positif terhadap hasil adalah jumlah cabang, jumlah polong, berat polong, jumlah ruas, dan umur berbunga. Komponen hasil yang memiliki pengaruh langsung terhadap hasil adalah tinggi tanaman, jumlah polong, berat polong, umur berbunga, dan berat 1000 biji. Kelima komponen hasil tersebut dapat dijadikan indek seleksi terhadap hasil.

Kata kunci: wijen, keragaman, korelasi, komponen hasil, hasil



***STUDIES ON CORRELATION BETWEEN YIELD AND YIELD
COMPONENTS IN SESAME (*Sesamum indicum* L.)***

Abstract

In sesame breeding program to improve the productivity, information about diversity and relationship between the yield characters is very important to determine the success of the selection. Therefore, studies of the genetic variability and identify the components that directly affect the yield can be an important point. The research was conducted in November 2012 in Padangan, Sitimulyo, Piyungan, Bantul, Yogyakarta. The treatments arranged in Complete Randomized Design (CRD), and the planting material used were the seeds of parent (SBR3, SBR2, Turki DT36), F1, F2 from crosses between them and their reciprocals. The result showed that components which had great diversity were the weight of seeds per plant (68,43%), weight of pods (40,532%), number of branches (33,251%), number of pods (30,269%), plant height (21,256%), and number of internodes (15,511%). High heritability values were shown in plant height (65,52%) and the day of mature (55,00%). Moderate heritability values were shown in number of internodes (21,91%), days of flowering (44,68%), and weight of seeds per plant (27,05%). Yield components that positive significant correlated to the yield was plant height, and the yield components that highly positive significant correlated to the yield were the number of branches, number of pods, pod weight, number of internodes, and days of flowering. Yield component that showed a direct effect to the yield were plant height, number of pods, pod weight, days of flowering, and the weight of 1000 seeds. The last fifth yield components could be used as a selection index for the yield.

Keywords: sesame, variability, correlation, yield components, yield.