

RINGKASAN

Genotipe kedelai yang unggul untuk suatu daerah belum tentu menunjukkan keunggulan yang sama di daerah lain, karena faktor agroekologi yang sangat beragam. Penelitian ini bertujuan untuk (1) mengetahui pertumbuhan dan daya hasil dari lima genotipe kedelai, (2) mengetahui keragaman genetik, (3) mengetahui heritabilitas serta genotipe yang memiliki daya hasil paling tinggi. Penelitian dilakukan di lahan petani yang berada di Desa Papringan, Kecamatan Banyumas, Kabupaten Banyumas, Provinsi Jawa Tengah. Penelitian ini dimulai pada September 2016 sampai dengan Januari 2017. Rancangan percobaan yang digunakan adalah Rancangan Acak Kelompok Lengkap (RAKL), delapan kali ulangan dengan perlakuan tunggal (varietas Slamet, Grobogan, galur G2, G71 dan A343). Data yang diperoleh diuji menggunakan analisis varian (ANOVA), jika terdapat perbedaan yang nyata dilanjutkan dengan *Least Significant Difference* (LSD). Keragaman genetik dan heritabilitas. Variabel yang diamati adalah tinggi tanaman (cm), jumlah cabang produktif (cabang), jumlah buku batang utama, jumlah buku total per tanaman, jumlah polong total (polong), jumlah polong normal (polong), jumlah biji total per tanaman (polong), jumlah biji normal per tanaman (biji), bobot biji per tanaman (gram), bobot biji per petak efektif (gram), bobot 100 biji (gram), dan bobot brangkasan kering (gram). Hasil penelitian menunjukkan (1) terdapat perbedaan pengaruh seluruh terhadap karakter agronomi pada kelima genotipe kedelai. (2) Keragaman genetik kelima genotipe tanaman kedelai seluruh karakter agronomi termasuk ke dalam kriteria luas. (3) Besaran nilai duga heritabilitas kelima genotipe tanaman kedelai semua karakter agronomi termasuk ke dalam kriteria tinggi. Produktivitas tertinggi dimiliki oleh galur G2 sebesar 3,99 ton/ha.

Kata Kunci : Kedelai, fenotipe, genetik, heritabilitas, daya hasil, Banyumas.

SUMMARY

Soybean genotypes that are superior to a region are not necessarily show the same advantages in other areas, due to the very diverse agro-ecological. This research aims to (1) determine growth and yield of five soybean genotypes, (2) know genetic variability, (3) know heritability and determine genotypes that have the highest yield. The study was conducted in farmers' fields in the village of Papringan, District of Banyumas, Banyumas, Central Java Province. The research was started from September 2016 to January 2017. The experimental design used a Randomized Complete Block Design (RCBD) With single factor (varieties of Slamet, Grobogan, lines of G2, G71 and A343). The experiment was repeated 8 times. Obtained datas from 5 soybean genotypes were tested using analysis of variance (ANOVA) or F test, if there was variations, it is followed by Least Significant Difference (LSD). Genetic variability, and heritability. The observed variables are plant height (cm), number of productive branches (branch), nodes number of the main stem (nod), total number of nodes per plant (nod), total number of pods (pod), number of normal pods (pod), the total number of seeds per plant (seed), number of normal seeds per plant (seed), seed weight per plant (gram), seed wight per effective square (gram), 100-seeds weight (gram), and plant dry weight (gram).Soybean genotypes influence on all agronomic characters. Genetic variability of soybean genotypes of all agronomic characters belong to the broad criteria. The magnitude of heritability estimates genotypes agronomic characters of soybean plants all belong to the high criteria. The highest productivity is owned by line G2 is 3.99 tons / ha.

Keyword: Soybean, fenotypes, genetic, heritability, yield, Banyumas,