

ABSTRAK

Kacang bambara (*Vigna subterranea* L. Verdc) atau kacang bogor berasal dari Afrika, kemudian berkembang di kawasan Amerika, Asia dan Australia. Di Asia tanaman ini dibudidayakan Di India, Thailand, Philipina, Malaysia dan Indonesia. Masalah utama dalam peningkatan hasil produksi tanaman kacang bambara adalah penggunaan benih yang belum seragam, berumur panjang. Tujuan dari penelitian ini adalah untuk mengetahui perbedaan penampilan agronomis, nilai heritabilitas karakter fenotip 12 galur kacang bambara dan untuk mencari galur kacang bambara yang bisa dikembangkan untuk program pemuliaan dan budidaya tanaman. Desain penelitian yang digunakan yaitu Rancangan Acak Lengkap (RAL) non faktorial dengan faktor 12 galur kacang bambara G1 = Gresik, G2 = Gresik, G3 = Gresik, G4 = Lamongan, G5 = Lamongan, G6 = Cianjur, G7 = Sumedang, G8 = Jukong, G9 = Candi, G10 = Telang, G11 = Kec Bungah Gresik, dan G12 = Koleksi FP Universitas Brawijaya yang diulang sebanyak 3 kali. Nilai heritabilitas pada 12 galur kacang Bambara terdapat 3 kriteria yaitu Tinggi (Jumlah Polong), Sedang (tinggi tanaman, luas daun, umur berbunga, produksi per hectare), dan heritabilitas rendah (Jumlah daun, Bobot 50 biji, berat basah dan berat kering brangkasan). Galur yang dapat digunakan untuk pemuliaan tanaman adalah G1.

Kata kunci : Kacang bambara (*Vigna subterranea* L. Verdc), Karakterisasi, Penampilan Agronomis, Heritabilitas

ABSTRACT

Bambara groundnut (Vigna subterranea L. Verdc) is originated from Africa and then spread out in America, Asia and Australia. In Asia, this plant is cultivated in India, Thailand, Philipina, Malaysia, and Indonesia. The main problem in increasing productivity of bambara groundnut is the use of different seed quality and long duration crop types. This research aimed to investigate the distinct in agronomic performance, the heritability value of phenotype character from 12-bambara-groundnut types and to find out the type that can used for breeding and cultivation program. This study employed a non-Factorial of Completly Randomized Design (CRD) with 12 treatments of plant types, namely Gresik (G1), Gresik (G2), Gresik (G3), Lamongan (G4), Lamongan (G5), Cianjur (G6), Sumedang (G7), Jukong (G8), Candi (G9), Telang (G10), Bungah Gresik District (G11), and the Collection from Agriculture Faculty, Brawijaya University (G12). All treatments were repeated for 3 replications. Heritability value of the 12 bambara groundnut types had 3 criteria : High (number of pod), Medium (plant height, leaf area, the age of flowering, and plant productivity), and Low value (number of leaves, weight of 50 seeds, fresh and dry weight). The Gresik (G1) type was the plant type that could be included in breeding program.

Keyword : Bambara groundnut, characterization, agronomic traits, heritability