Analisis Genetik Beberapa Komponen Hasil Cabai (*Capsicum annuum* L.) Menggunakan Persilangan Dialel Penuh

(Genetics Analysis for Yield Components of Pepper (Capsicum annuum L.) by Full Diallel Crosses)

Muhamad Syukur[1]*, Sriani Sujiprihati[1], Rahmi Yunianti[2], dan Undang[1]

[1] *Staf Pengajar Departemen Agronomi dan Hortikultura Fakultas Pertanian IPB*
Jl. Meranti Kampus IPB Darmaga, Bogor 16680 Telp/Fax (0251) 8629353
e-mail muhsyukur@yahoo.com (Penulis untuk korespondensi)*
[2] *Staf Pengajar Fakultas Pertanian Universitas Riau*
[3] *Alumni S_1 Departemen Agronomi dan Hortikultura IPB*

Key words: pepper, additive effects, dominant effect, yield component, full diallel

ABSTRACT

The objective of this study is to estimate genetics parameter of six pepper (Capsicum annuum L.) inbred lines by full diallel crosses. The experiment was conducted from October 2005 to March 2006 at IPB Experiment Field, Cikabayan, Darmaga. Randomized Complete Block Design was used with three replications. Data from F1 generation and parents were analyzed using the Hayman Method. Results indicated that neither epistasis effects was significant for all the traits assessed. Additive genetic effects were larger than dominan effects for yield per plant, fruit length, and fruit diameter traits. Dominan genetic effects were larger than aditif effects for fruit wieght traits. Narrow-sense and broad-sense heritabilities were high for all the traits assessed. Employing pedigree breeding should be successful in developing high productivity lines in this population.