

## ABSTRAK

### PENGARUH KOMBINASI POPULASI DALAM TUMPANGSARI KEDELAI-SINGKONG PADA VIGOR DAYA SIMPAN 16 BULAN BENIH KEDELAI DALAM RUANG BER AC

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Kedelai (*Glycine max* (L.) Merr.) merupakan komoditas pangan penting yang membutuhkan benih bermutu untuk mendukung keberhasilan budidaya. Mutu benih kedelai sangat dipengaruhi oleh kemampuan benih dalam mempertahankan vigor selama penyimpanan. Penelitian ini bertujuan untuk mengetahui pengaruh populasi kedelai, lama simpan, serta interaksi keduanya terhadap vigor daya simpan benih kedelai. Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan pola *split in time*. Faktor utama adalah populasi kedelai yang terdiri atas P1, P2, P3, dan P4, sedangkan faktor anak petak adalah lama simpan (LS) yang meliputi LS 0, 2, 4, 6, 8, 10, 12, 14, dan 16 bulan. Data dianalisis menggunakan analisis ragam dan dilanjutkan dengan uji Beda Nyata Jujur (BNJ) taraf 5%. Variabel yang diamati meliputi kecepatan perkecambahan, persentase kecambah normal, dan persentase benih mati. Hasil penelitian menunjukkan bahwa lama simpan berpengaruh nyata terhadap seluruh variabel yang diamati. Penurunan vigor mulai terjadi sejak penyimpanan 2 bulan dan semakin menurun seiring bertambahnya lama simpan hingga 16 bulan. Populasi kedelai menunjukkan respon yang berbeda terhadap lama simpan, dan interaksi populasi dan lama simpan berpengaruh nyata pada beberapa variabel. Dapat disimpulkan bahwa vigor daya simpan benih kedelai menurun seiring bertambahnya lama simpan hingga 16 bulan dan dipengaruhi oleh perbedaan populasi kedelai..

**Kata kunci:** Benih, kedelai, lama simpan, populasi, vigor daya simpan

## **ABSTRACT**

### **EFFECT OF POPULATION COMBINATION IN SOYBEAN–CASSAVA INTERCROPPING ON SOYBEAN SEED STORABILITY AFTER 16 MONTHS OF STORAGE AC**

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Soybean (*Glycine max* (L.) Merr.) is an important food crop that requires high-quality seeds to ensure successful cultivation. Seed quality is closely related to the ability of seeds to maintain vigor during storage. This study aimed to evaluate the effects of soybean population, storage duration, and their interaction on seed storability vigor. The experiment was conducted using a Completely Randomized Design (CRD) with a split-in-time arrangement. The main factor was soybean population consisting of P1, P2, P3, and P4, while the sub-factor was storage duration (SD) of 0, 2, 4, 6, 8, 10, 12, 14, and 16 months. Data were analyzed using analysis of variance, followed by the Honestly Significant Difference (HSD) test at the 5% level. Observed variables included germination speed, percentage of normal seedlings, and percentage of dead seeds. The results showed that storage duration significantly affected all observed variables. Seed vigor began to decline after 2 months of storage and progressively decreased with increasing storage duration up to 16 months. Soybean populations showed different responses to storage duration, and the interaction between population and storage duration significantly affected several variables. It can be concluded that soybean seed storability vigor decreases with increasing storage duration up to 16 months and is influenced by differences among soybean populations.

**Keywords:** Population, seed quality, soybean, storability vigor, storage duration