

## **Pengaruh Media *Matriconditioning* Berbahan Organik dan An-Organik Terhadap Viabilitas dan Vigor Benih Kedelai (*Glycine max L.*)**

*The Effect of Matriconditioning Media Made from Organic and Inorganic Materials on the Viability and Vigor of Soybean Seeds (Glycine Max L.)*

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### **ABSTRAK**

Ketersediaan benih kedelai bermutu berpengaruh terhadap kualitas dan produksi yang dihasilkan. Mutu benih sering mengalami kemunduran akibat penyimpanan yang terlalu lama, sehingga memerlukan perlakuan invigorasi. Penelitian bertujuan untuk mengetahui pengaruh media *matriconditioning* berbahan organik dan media *matriconditioning* berbahan an-organik terhadap perbaikan viabilitas dan vigor benih kedelai. Penelitian berlangsung pada bulan September sampai Desember 2023 di Laboratorium Tanaman Fakultas Pertanian UMI Makassar. Metode yang digunakan adalah Rancangan Acak Lengkap dengan 5 (lima) perlakuan yang terdiri dari 3 (tiga) media *matriconditioning* berbahan organik yakni arang sekam, serbuk gergaji, dan jerami padi, serta 2 (dua) media *matriconditioning* yang berbahan an-organik yakni serbuk batu bata dan pasir halus. Hasil penelitian menunjukkan bahwa kelompok media *matriconditioning* berbahan organik berpengaruh secara nyata dan lebih baik dibanding media *matriconditioning* berbahan an-aorganik terhadap daya kecambah, kecepatan berkecambah, dan keserempakan berkecambah, berat kering kecambah, panjang kecambah, jumlah daun, dan tinggi tanaman. Perlakuan arang sekam dan serbuk gergaji berpengaruh lebih baik dibanding perlakuan lainnya.

**Kata Kunci: Kedelai, Matriconditioning, Bahan organik, Bahan anorganik.**

### **ABSTRACT**

*The availability of quality soybean seeds affects the quality and production produced. Seed quality often deteriorates due to prolonged storage, requiring invigoration treatment. The research aims to determine the effect of matriconditioning media made from organic materials and matriconditioning media made from inorganic materials on improving the viability and vigor of soybean seeds. The research took place from September to December 2023 at the Plant Laboratory, Faculty of Agriculture, Universitas Muslim Indonesia (UMI) Makassar. The method used was a Completely Randomized Design with 5 (five) treatments consisting of 3 (three) matriconditioning media made from organic materials, namely husk charcoal, sawdust and rice straw powder, as well as 2 (two) matriconditioning media made from inorganic materials, namely powder bricks and fine sand. The results of the research showed that the matriconditioning media group made from organic materials had a significant and better effect than the matriconditioning media made from inorganic materials on vigor and viability of soybean seed, germination simultaneity, dry weight of sprouts, length of sprouts, number of leaves and plant height. The charcoal husk and sawdust treatment had a better effect than the other treatments.*

**Keywords: Soybeans, Matriconditioning, Organic materials, Inorganic materials.**