

PENGARUH *GRADING* UKURAN BENIH KACANG HIJAU
(*Vigna radiata* L.) VARIETAS KUTILANG TERHADAP MUTU
FISIOLOGIS BENIH

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Intisari

Kacang hijau adalah salah satu komoditi kacang-kacangan yang mempunyai arti penting bagi masyarakat baik dilihat dari nilai ekonomisnya yang tinggi maupun dari kandungan gizinya. Penelitian ini dilakukan untuk mengetahui pengaruh *grading* ukuran benih kacang hijau varietas kutilang terhadap mutu fisiologis benih. Penelitian ini dilakukan menggunakan Rancangan Acak Lengkap (RAL) satu faktor yaitu ukuran benih terdiri dari 3 taraf yaitu benih tanpa *grading*, benih *grading* besar, benih *grading* kecil. Dengan 6x ulangan sehingga terdapat 18 perlakuan. Ukuran biji kacang hijau yang digunakan dalam penelitian ini diklasifikasikan menjadi tiga kelompok berdasarkan berat ukuran benih 25 benih kacang hijau, butir biji tanpa *grading*. Pada ukuran besar 25 benih dengan berat 2-2,5 g, dengan ukuran kecil 25 benih dengan berat < 1,5 g. Data dianalisis dengan Anova 5% dan 1%, dan jika ada berpengaruh maka dilakukan uji beda DMRT 5%. Berdasarkan hasil penelitian ini ukuran benih berpengaruh nyata terhadap mutu fisiologis benih yang meliputi daya kecambah, kadar air, indeks vigor, plumula dan radikula. Ukuran benih besar (P1) adalah ukuran yang terbaik untuk mutu fisiologis benih dibuktikan dengan daya kecambah dengan nilai 91%, dan hasil penelitian ini juga menunjukkan *grading* dengan alat *Gravity Separator* mampu memberikan *grade* benih yang dikehendaki terutama untuk mendapatkan ukuran benih yang terbaik untuk mutu fisiologis benih.

Kata kunci : Kacang hijau, grading, mutu fisiologis benih

*THE EFFECT OF SEED SIZE GRADING OF GREEN BEAN
(Vigna radiata L.) KUTILANG VARIETIES ON THE PHYSIOLOGICAL QUALITY
OF SEEDS*

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Abstract

Mung bean is a legume commodity which has important meaning for the community, both in terms of its high economic value and nutritional content. This research was conducted to determine the effect of grading the size of the green bean seed of the finches variety on the physiological quality of the seed. This research was conducted using a completely randomized design (CRD) with one factor, namely seed size consisting of 3 levels, namely seeds without grading, large grading seeds, small grading seeds. With 6x repetitions so there were 18 treatments. The size of the green bean seeds used in this study were classified into three groups based on the weight of the seed size of the 25 green bean seeds, the seeds without grading. On a large size 25 seeds weighing 2-2.5 g, on a small size 25 seeds weighing < 1.5 g. Data were analyzed with 5% and 1% Anova, and if there was an effect then a 5% DMRT different test was performed. Based on the results of this study, seed size had a significant effect on the physiological quality of seeds which include germination, moisture content, vigor index, plumule and radicle. Large seed size (P1) was the best measure for the physiological quality of seeds as evidenced by the germination rate with a value of 91%, and the results of this study also showed that grading with the Gravity Separator tool was able to provide the desired seed grade, especially to get the best seed size for physiological quality seed.

Keywords: Green beans, grading, physiological quality of seeds