

Pengaruh Jarak Tanam dan Dosis Pupuk NPK terhadap Produksi dan Mutu Benih Mentimun (*Cucumis sativus* L.), *Effect of Treatment spacing and NPK on Production and Quality of Seed Cucumber (Cucumis sativus L.)*. Supervisor: Ir. Sri Rahayu, MP.

Muhammad Fuad Amsyari
Study Program of Seed Production Technique
Departement of Agricultural Production
Program Studi Teknik Produksi Benih
Jurusan Produksi Pertanian

ABSTRACT

Cucumber fruit is a fruit that has various benefits in everyday life, including food, medicine, and cosmetics. The need for cucumbers tends to increase along with the increasing number of people in Indonesia who like cucumbers a lot, but the demand for cucumbers is not matched by the availability of cucumbers by farmers. Cucumber cultivation is still not good enough so that it cannot meet domestic market demand. This study aims to determine the effect of the interaction between spacing treatment and doses of NPK fertilizer on the production and quality of cucumber seeds. This study used a factorial randomized complete block design (RCBD). The first factor was the treatment of spacing with 3 treatment levels and the second factor was the application of NPK fertilizer with 3 treatment levels. Each treatment was repeated 3 times, so there were 27 experimental units. The results of this study are based on the results of the analysis and discussion of the treatment spacing of 40 cm x 60 cm which has a very significant effect on the diameter of the fruit having an average of 7.18 cm, the length of the fruit having an average of 27.24 cm, and the weight of 1000 grains having an average an average of 2.29 grams. NPK fertilizer dose treatment of 250 Kg/Ha had a very significant effect on the observed parameters. Fruit diameter had an average of 7.18 cm, fruit length had an average of 27.24 cm, number of seeds per fruit has an average of 315.47 grains, seed weight per fruit has an average of 7.37 grams, weight of 1000 seeds has an average of 2.29 gram and seed weight per hectare has an average of 159.26 kilograms. The treatment interaction with a spacing of 40 cm x 60 cm and a dose of NPK fertilizer of 250 kg/ha gave the best value for fruit weight, namely 737.87 grams. Furthermore, the observation parameters that show significant or very significant differences are further tested using the DMRT test with a level of 5%.

Keywords: *Seed Quality, Cucumber, Planting Distance, NPK Fertilizer*