

Pengaruh Konsentrasi Paclobutrazol dan Dosis Pupuk NPK Terhadap Produksi dan Mutu Benih Mentimun (*Cucumis sativus L.*), *Effect of Paclobutrazol Concentration and NPK Fertilizer Dose on Production and Quality of Basic Cucumber Seed (*Cucumis sativus L.*)*. Supervised by Ir. Suwardi, MP.

Alya Ruthifatul Ukrimiyah
Study Program of Seed Production Technique
Departement of Agricultural Production
Program Studi Teknik Produksi Benih
Jurusan Produksi Pertanian

ABSTRACT

*Cucumber (*Cucumis sativus L.*) is a vegetable commodity that belongs to the cucurbitae group. Each year, the demand for cucumbers increases in line with population growth, improved living standards, and public awareness of its nutritional value. Additionally, the demand for cucumbers has risen due to its role as a raw material in the pharmaceutical industry for medicines, as well as in the production of candies, cosmetics, perfumes, and beverages. To enhance cucumber production, proper and effective cultivation techniques are required. This research aims to investigate the influence of paclobutrazol concentration and NPK fertilization on cucumber yields. The research involves testing two factors. The first factor is the paclobutrazol concentration, with levels of 0 mililiter/liter, 0.250 mililiter/liter, 0.375 mililiter/liter, and 0.500 mililiter/liter. Meanwhile, the second factor is the NPK fertilizer dosage, with levels of 200 kilogram/hektar, 250 kilogram/hektar, and 300 kilogram/hektar. The results indicate that the paclobutrazol concentration of 0.375 mililiter/liter affects the number of female flowers, male flowers, fruit length, seed count, seed weight, and seed production per hectare. On the other hand, the NPK fertilizer dosage of 250 kilogram/hektar influences the flowering period, seed count, seed weight, and seed production per hectare. The interaction between the paclobutrazol concentration of 0.375 mililiter/liter and NPK fertilizer dosage of 250 kilogram/hektar significantly impacts the number of fruits per plant..*

Keywords: *cucumber, paclobutrazol, NPK Fertilizer*