

Pengaruh Pupuk Majemuk dan Mulsa Jerami Padi Terhadap Produksi Benih Kacang Tanah (*Arachis hypogaea* L.). (Effect of Compound Fertilizer and Rice Straw Mulch on Peanut Seed Production (*Arachis hypogaea* L.)). Supervisor : Ir. Suwardi, M.P.

Firman Miftahul Rozaq
Study Program Of Seed Production Technique
Departement of Agricultural Production
Program Studi Teknik Produksi Benih
Jurusan Produksi Pertanian

ABSTRACT

Peanut is the most important agricultural commodity in Indonesia after soybeans and has a strategic role in national food which is much needed by the wider community as food and industrial raw materials. Peanut production needs to be increased because it is in line with population growth. However, the national peanut production began to decline in recent years. Improvement efforts can be done by intensification, land expansion, and increase per land unit. The research was carried out at IP2TP Genteng Banyuwangi. The study was conducted in October 2021 – February 2022. The experimental design used was a Factorial Randomized Block Design (RBD) consisting of 2 treatment factors and 3 replications. The first factor is compound NPK fertilizer consisting of 200 kg/ha (D1), 300 kg/ha (D2), and 400 kg/ha (D3). The second factor is rice straw mulch consisting of 0 tons/ha (M0), 3 tons/ha (M1), and 6 tons/ha (M2). Then the data were analyzed using the F test (ANOVA) and the DMRT follow-up test at 5% level. The results of this study indicate that the treatment of compound NPK fertilizers has no significant effect on all observation parameters. Meanwhile, rice straw mulch treatment had a very significant effect on plant heights of 15 days after planting (M2 = 8.99 cm) and 30 days after planting (M2 = 22.35 cm). The interaction of compound NPK fertilizer treatment and rice straw mulch gave a significant effect on the number of branches 15 DAP (D2M2 = 2.10), dry weight of pods per plot (D2M2 = 1,80 kg) and seed production per ha (D2M2 = 2,48 tons).

Keywords: *peanut, compound fertilizer, rice straw mulch*