ABSTRACT

Groundnut is the second most important crop after soybean. Groundnut production has decreased from year to year. Efforts that can be made to increase groundnut production are through fertilization and fertile soil. The purpose of this study was to determine the response of peanut growth and yield due to the application of NPK fertilizer and rice husk biochar. This research was carried out in the Experimental garden and Agroecotechnology Laboratory of the Faculty of Agriculture, Malikussaleh University, North Aceh Regency, from July to October 2023 the method used was a factorial Randomized Block Design (RBD) with 3 replications. The NPK fertilizer factor consists of 3 levels, namely N0 = 0 kg/ha, N1 = 300 kg/ha, N2 = 400 kg/ha, and the biochar factor consists of 3 levels, namely, B0 = 0 ton/ha, B1 = 10 ton/ha, B2 = 20 ton/ha. The treatment of NPK fertilizer gave the best results on the growth and yield of peanut plants at a dose of 38,4 grams/plot. NPK fertilizer increased plant height, leaf chlorophyll, dry seed weight per plant, dry seed weight per plot and 100 seed weight per plot. Biochar treatment did not significantly affect the parameters observed. There was no significant difference between the NPK fertilizer treatment and the rice husk biocar treatment.

Keywords: peanuts, NPK fertilizer, biochar