ABSTRACT

Groundnut is an important commodity in the national food strategy because it has a high economic value. Groundnut cultivation on marginal land will affect plant growth. An alternative to overcome the problem of marginal land is the use of biochar and eco-enzyme. Biochar can optimize nutrient absorption. In addition, eco-enzyme has the P and K content needed by plants. This study used a two factor Randomized Block Design. The first factor was biochar consisted of (B0) 0 ton/ha, (B1) 7,5 ton/ha, and (B2) 10 ton/ha. The second factor was eco-enzyme concentration consisted of (E0) 0 ml/l, (E1) 22,5 ml/l, and (E2) 30 ml/l. The variables observed were number of leaves, number of branches, chlorophyll content, age of flower emergence, number of root nodules on primary roots, number of pods, number of seeds planted, 100 seed weight, and dry seed weight planted. The results showed that biochar application increased the number of leaves at 4 week after planting, the number of branches planted at 2 week after planting, the number of root nodules, the number of seeds planted, the weight of 100 seeds, and the weight of dry seeds planted. The application of eco-enzyme increased the number of leaves at 6 and 8 week after planting, the number of branches (2, 4, and 6 week after planting), and the number of root nodules on the primary roots. There was an interaction root nodules on primary roots in the B2E0.

Key word: Groundnut, rice husk, concentration