ABSTRACT

The purpose of this study was to determine the growth response and yield of onion plants (Allium ascalonicum L.) due to catfish water waste and eggshell powder. This research was conducted in Gampong Releut, Muara Batu District, North Aceh Regency with an altitude of 18 meters above sea level. The time for this research to be carried out will begin in July 2023. The design used in this study is a factorial group randomized design (RAK) consisting of 2 factors. The first factor is catfish waste (L) and the second factor is eggshell powder (C) consists of 3 levels, so there are 9 treatment combinations with 3 repeats. The parameters observed were plant height, number of leaves, number of saplings, number of tubers per sample, fresh weight of tubers per sample, dry weight of tubers per sample, production (ton/ha). The observational data were statistically analyzed and continued with Duncan's follow-up test at the level of 0.05%. The results showed that the effect of catfish wastewater treatment had a significant effect on plant height parameters, number of tillers, fresh weight of tubers, weight of dried tubers and production (tons / ha) and egg shell powder treatment had a real effect on plant height. The best treatment is catfish wastewater at a dose of L2 (300 ml) per polybag. While in eggshell powder, the best treatment is found at a dose of C2 fertilizer (30 g) per polybag.

Keywords: onion, catfish wastewater, eggshell powder.