ABSTRACT

Oil palm (*Elaeis guineensis* Jacq.) is a key commodity that requires high-quality seedlings from the pre-nursery stage. The use of organic fertilizers such as tofu dregs compost and cow manure offers an eco-friendly alternative to improve seedling growth. This study aimed to determine the effects and optimal combination of both materials on early oil palm growth.A factorial Randomized Complete Block Design (RCBD) was used with two factors: tofu dregs compost (0, 40, 50 g/polybag) and cow manure (0, 150, 200 g/polybag), each with three replications. Results showed tofu dregs significantly affected plant height (45 DAP), and cow manure influenced leaf chlorophyll (75 DAP). The best growth was achieved with 50 g tofu compost and 150 g cow manure per polybag.

Keywords: oil palm, tofu dregs compost, cow manure, pre-nursery