

## ABSTRACT

Oil palm (*Elaeis guineensis* Jacq.) is a plantation crop that has important significance in Indonesia because it can contribute as a source of foreign exchange, maintain stable palm oil prices, and provide employment opportunities. The research was carried out at the experimental field of the Faculty of Agri

culture, Malikussaleh University, at an altitude of 11 meters above sea level and the Soil Science Laboratory of the Faculty of Agriculture, Malikussaleh University, which is located in Muara Batu District, North Aceh Regency. This research used a two-factor randomized block design (RAK) treatment with three replications. The first factor, namely Dolomid (D), consists of D0 = Biochar Dolomid 0 g/polybag D1 = Dolomid, 15 g/polybag and D2 = Dolomid 25 g/polybag. The second factor is NPK fertilizer (P) consisting of P0 = 0 g NPK fertilizer/polybag, P1 = 4 g NPK fertilizer/polybag and P2 = 6 g NPK fertilizer/polybag. Observation variables were plant height, stem diameter, number of leaves, chlorophyll content, wet weight, root length. The results of the research showed that the 25 g/polybag dolomite treatment responded to the growth of oil palm seedlings on the variables of plant height, stem diameter, number of leaves, and leaf chlorophyll. Treatment of 6 g NPK fertilizer/polybag provided a response to the growth of oil palm seedlings on the variables of plant height, stem diameter, number of leaves, leaf chlorophyll, wet weight and root length.

Keywords: Palm oil, Dolomite, NPK fertilizer