

## ABSTRACT

Grapes (*Vitis vinifera* L.) is fruit vines in the form of bushes. Efforts to increase grape production in Indonesia include the application of organic fertilizer and growth regulators. This research was conducted in the experimental garden of Malikussaleh University, Muara Batu District, Nort Aceh Regency from September to November 2023. The method used in this research was Randomized Group Design (RAK) Factorial. The coffee skin waste factor (L) consists of 3 levels,  $L_0 = 0$  grams/polybag,  $L_1 = 100$  grams/polybag,  $L_2 = 150$  grams/polybag, the growth regulator factor (Z) consists of 3 levels,  $Z_0 = 0$  ml/l water,  $Z_1 = 2$  ml/l water,  $Z_2 = 4$  ml/l water. Data obtained from the study were analyzed using the F test if there was a significant effect. Then continued with DMRT (Duncan's Multiple Range Test) test at 5% level. The results showed that the dose of 100 grams/polybag of coffe skin waste with a shoot length and in the growth regulator sat treatment giving 4 ml/liter of water had a real effect on the parameters of shoot length, shoot diameter, number of leaves, leaf chlorophyll and percent of live cuttings.

Keywords : Grape, Coffe Skin Waste, Growth Regulator.