

## ABSTRACT

Shallots (*Allium ascalonicum* L.) is one of the horticultural commodities that is favored by several regions in Indonesia, both in terms of economic value and nutritional content. Considering that there is a lot of market demand for shallots and production results are not achieved due to constraints from leafworm pests on shallots, it is necessary to apply liquid organic fertilizer to eradicate these pests. Kirinyuh (*Choromolaena Odorata*) is a plant that contains the active ingredient pyrrolizidine alkaloids which is toxic to insects so it has the potential to be used as a botanical pesticide to control caterpillars on onions.

The research was conducted at the Experimental Garden of the Faculty of Agriculture, Malikussaleh University, from August to October 2023. This research used a 2-factor Randomized Block Design (RBD) with 3 replications. The first factor of planting media is M1 = Topsoil, M2 = Soil and Manure (1:1), M3 = Soil and Chocopiet (1:1). The second factor is Liquid Organic Fertilizer Concentration, P0 = Control, P1 = 10 ml/l, P2 = 15 ml/l. Variables observed were plant height, number of leaves, number of tillers, number of tubers per hill, fresh weight, dry weight. The research results showed that the planting medium had a significant effect on plant height at 7 WAP and the number of leaves at 7 WAP. The concentration of liquid organic fertilizer did not have a significant effect on all observations, but a liquid fertilizer concentration of 10 ml/l was the best treatment. There is an interaction between planting media and liquid fertilizer on the number of leaves parameter at 6 WAP.

Keywords: Shallots, Planting Media, Kirinyu Leaves, Concentration of liquid organic fertilizer.