**THE APPLICATION OF OXYFLUORFEN AND PENDIMETHALIN HERBICIDES TO CONTROL WEEDS AND THEIR EFFECTS ON THE GROWTH AND YIELD OF SHALLOTS**

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***ABSTRACT***

Shallot is a plant that has high economic value. Along with the increasing number of consumers, national shallot production needs to be increased. One of the obstacles to increasing shallot production is the suboptimal cultivation of shallot plants related to weed control in the cultivation area. Weed control can be done by applying pre-planting herbicides in a mixture to suppress weed growth. This study was conducted to determine the best dosage of a mixture of herbicides containing Oxyfluorfen and Pendimethalin to control weeds and improve the growth and yield of shallots. This study used a Complete Randomized Block Design (CRBD) method with one factor consisting of 9 treatments and 1 control. The treatments consisted of oxyfluorfen 240g/ha, oxyfluorfen 480g/ha, pendimethalin 495g/ha, pendimethalin 990g/ha, oxyfluorfen 240g/ha + pendimethalin 495g/ha, oxyfluorfen 240g/ha + pendimethalin 990g/ha, oxyfluorfen 480g/ha + pendimethalin 495g/ha, oxyfluorfen 480g/ha + pendimethalin 990g/ha, and weeding at 4 weeks after planting (WAP) and 6 WAP. Each treatment was repeated 3 times. The observation results were analyzed using analysis of variance (ANOVA) with a significance level of 5% and least significant difference (LSD) test with a significance level of 5%. The results showed that the application of a combination of oxyfluorfen and pendimethalin herbicides fell into moderate but not generally acceptable category and did not improve the growth and yield of shallot plants. The dosage that had the best weed efficiency, growth, and yield was oxyfluorfen 480g/ha + pendimethalin 990g/ha.

Keywords: *Shallot, weed, oxyfluorfen, pendimethalin*