

***Fertilizer KCl and Usage Effectiveness straw mulch on Productivity Plant Sweet Potato (*Ipomea batatas* L.) varieties Cilembu in the lowlands guided by Ir. Muqwin Asyim RA, MP and Iqbal Erdiansyah SP, MP.***

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***ABSTRACT***

*This research aims to know the effect of KCl fertilizer and mulch mulch in interaction and each treatment to productivity of sweet potato cultivation of Cilembu varieties in lowland. Implemented from August to December 2016 at the farmland of Tamansari Village, Wuluhan District, Jember District, East Java Province, with a height of 21 meters above sea level. Using Factorial Randomized Block Design (RBD) with 2 factors and 4 replications. The first factor is KCl fertilizer consisting of 4 levels, ie A0: Without KCl (control) fertilizer, A1: Dose 100 kg/ha, A2: Dose 200 kg/ha, A3: Dose 300 kg/ha. The second factor is a straw mulch consisting of 2 levels, namely B1: Dose of 10 tons/ha and B2: Dose of 20 tons/ha. Statistically analyzed using Analysis Of Variance (ANOVA). Observation parameters were velocity per sample, number of tubers per sample, fresh weight per sample, fresh weight of tuber per sample, fresh weight of tuber per plot and harvest index per sample. The results showed that application of KCl fertilizer (factor A), the use of mulch straw (factor B), and interaction between KCl fertilizer application and mulch straw produced different effect not significant on each observation parameter.*

*Keywords: Sweet Potato Cilembu Variety, Lowland, KCl Fertilizer, Straw Mulch.*