

**Effect of Rhizobium and Dolomite Application on Soybean (Glycine Max (L.)
Merrill Production)**

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ABSTRACT

Soybean is a food crop that has decreased production due to reduced organic matter in the soil and decreased soil fertility such as experiencing acidity. Efforts to overcome these problems can be done one of them by applying rhizobium to add nutrient N, because the more soybeans need a high enough N element so that it can increase production, then the administration of dolomite aims to neutralize soil pH and supply nutrients needed by plants. This research was carried out from August 2021 to November 2021 in Wringin Village, Summersari District, Jember Regency. The design used was a factorial Randomized Block Design (RAK) using two factors, namely the first factor was Rhizobium fertilizer consisting of 3 levels, the second factor was dolomite consisting of 3 levels and 3 replications. The treatment factors in this study were rhizobium doses of 0.30, and 60 grams/8 kg of seeds and doses of dolomite 1, 2 and 3 tons/ha. The results showed that rhizobium dose of 30 gram/8 kg of seed and dose of dolomite 1 ton/ha had a significant effect on soybean plant height, but were not significantly different on all observed variables. The single treatment of rhizobium, dolomite and their interaction showed that they did not have an impact on the growth and production of soybean plants.

Keywords: dolomite, soybean, rhizobium