

**SKRIPSI**

**PENGARUH PENGGUNAAN BIOCHAR DAN TINGGI MUKA  
AIR TERHADAP PERTUMBUHAN DAN HASIL TANAMAN  
BAWANG MERAH VARIETAS SANREN**

***THE EFFECTS OF THE USE OF BIOCHAR AND WATER  
TABLE ON THE GROWTH AND YIELD OF SANREN  
VARIETY SHALLOT PLANT***



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## SUMMARY

**PANJI DERMAWAN**, The Effects of The Use of Biochar and Water Table On The Growth and Yield of Sanren Variety Shallot Plant (Supervised by **MARIA FITRIANA** and **SUSILAWATI**).

The aim of this research was to find out the effects of the use of biochar and water table on the growth and yield of shallot (*Allium ascalonicum* L.) variety of Sanren. The research was conducted in the experimental garden of the Faculty of Agriculture, Sriwijaya University, on March until June 2019. The research using factorial randomized completely block design with 12 treatments that were repeated 3 times. Each unit treatment had 2 plant so there were  $12 \times 3 \times 2 = 72$  plants. The first factor is Biochar.  $P_0$  = control (without biochar)  $P_1$  = 51 g per plant,  $P_2$  = 102 g per plant, the second factor was water table.  $T_0$  = control (without water table treatments),  $T_1$  = height of water table 10 cm below ground level,  $T_2$  = height of water table 15 cm below ground level,  $T_3$  = height of water table 20 cm below ground level. The observed parameters were plant height, number of leaves, number of tillers, number of bulbs, diameter of the bulbs, root length, stover weight, fresh and dry weight of the bulbs. The results showed that the utilization of biochar at 20 tons  $ha^{-1}$  (102 g per plant) had the best effects on the growth and yield of Sanren variety shallot plant, based on plant height, number of leaves, diameter of the bulbs, root length, stover weight, fresh and dry weight of the bulbs. The water table treatment showed that the  $T_2$  treatment (15 cm below ground level) which could still be tolerated by the Sanren variety of shallot.

**Keywords:** *Shallots, water table, biochar*