USE OF SPACING AND LIQUID ORGANIC FERTILIZER RICE STRAW ON THE GROWTH OF COWPEA (*Vigna unguiculata*)

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ABSTRACT

Cowpea (*Vigna unguiculata* (L.) Walp) is a plant that has good drought resistance. Cowpea is included in the *Leguminoceae* family and is thought to originate from Africa and then spread widely to tropical areas. Cowpea can be a source of vegetable protein. This research was conducted in the Jember State Polytechnic Innovation Garden, Jember Regency, East Java Province from January 2024 to February 2024. The research method used a factorial Randomized Block Design (RAK) using two factors, namely the first factor of planting distance and the second factor of the concentration of liquid organic fertilizer of rice straw which was arranged with 9 treatments with 3 replications so that there were 27 experimental units. The first factor is the planting distance which consists of three levels: J1 (40cm x 10cm), J2 (40cm x 20cm) and J3 (40cm x 30cm). The second factor is the concentration of liquid organic fertilizer of rice straw consisting of three levels: 0%, 15% and 30%. The results showed no interaction between the use of planting distance and rice straw POC. Planting distance of 40cm x 10cm showed a significant difference in plant height of 676.7 cm, planting distance of 40cm x 30 cm showed a significant difference in the number of leaves of 110.3 strands and stem diameter of 0.91 mm. The use of 30% rice straw POC showed a significant difference in plant height of 564.6 cm, 15% rice straw POC showed a significant difference in stem diameter of 0.92 mm.

Keywords: Beans, planting distance, rice straw