

GROWTH AND YIELD THROUGH SETTING SPACING ON CORN AND SOYBEAN INTERCROPPING

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ABSTRACT

The productivity of corn and donkeys in the field tends to be unstable and requires agricultural intensification efforts such as intercropping to obtain optimal yields and can maintain soil fertility. The purpose of the study was to determine the right intercropping pattern of corn and soybeans in increasing growth and yield. The research was conducted in March–July 2021 in Pelembutan, Playen District, Gunung Kidul Regency, DIY. The experiment using RCBD was one factor, namely the planting distance was repeated four times. Factors include JT1(Corn plants planting distance 45x20cm², soybeans 30x20cm², corn with soybeans 35cm), JT2(corn plants planting distance 70x25cm², soybeans 30x25cm², corn with soybeans 30cm), JT3(corn plants planting distance 150x40cm², soybeans 20x20cm², corn with soybeans 25cm), JT4(corn plants planting distance 160x40cm², soybeans 40x20cm², corn with soybeans 40cm), JT5(Corn monoculture planting distance 70x25cm²), JT6(Soybean monoculture planting distance 30x25cm²). The data were analyzed using Fingerprint Variety at the level of 5%, followed by the Duncan Multiple Distance Test at the real level of 5%. The results showed that the best planting distance in JT1 treatment using corn planting distance of 45x20cm² and soybean planting distance of 30x20cm² using a combination of planting patterns of two rows of corn and four rows of soybeans was able to increase plant growth and yield.

Keywords: *Corn , Soybean, Intercropping, Planting distance*