

STUDI SISTEM TUMPANGSARI BUDIDAYA JAGUNG MANIS (*Zea mays Saccharata Strut*) DAN LIMA AKSESI KACANG BAMBARA (*Vigna subterranea (L.) Verdc*)

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ABSTRAK

Jagung Manis (*Zea mays saccharata Strut*) merupakan salah satu komoditas sayuran paling populer. Kacang bambara (*Vigna subterranea (L.) Verdc*) merupakan tanaman legum yang toleran terhadap lahan kering serta mampu memfiksasi nitrogen. Penelitian ini bertujuan untuk mengetahui pengaruh jumlah tanaman jagung manis per lubang pada pertumbuhan dan hasil setiap tanaman, serta mengetahui respon pertumbuhan dan hasil setiap tanaman terhadap perlakuan jenis aksesori kacang bambara. Penelitian dilaksanakan di desa Sariharjo, Ngaglik, Sleman, bulan Juli-November 2024. Metode penelitian dengan rancangan *split plot design*. Petak utama adalah jumlah tanaman jagung per lubang yakni 1 dan 2 tanaman per lubang. Anak Petak adalah sistem tumpangsari dengan jenis aksesori kacang bambara, yakni aksesori Bogor, Sukabumi, Sumedang coklat, Madura, Gresik dan monokultur jagung. Data diolah menggunakan analisis varian (ANOVA) dan dilakukan uji lanjut *Duncan Multiple Range Test* (DMRT) taraf 5%. Perlakuan 1 tanaman per lubang memberikan hasil terbaik pada jumlah daun jagung, jumlah daun trifoliat, luas daun trifoliat, dan umur berbunga kacang bambara. Sistem tumpangsari jagung manis dengan kacang bambara aksesori Madura memberikan hasil terbaik pada bobot tongkol per tanaman, bobot tongkol per petak, jumlah daun trifoliat, umur berbunga kacang bambara, jumlah polong, bobot polong per tanaman, dan bobot polong per petak.

Kata Kunci :Aksesori, Jagung Manis, Kacang Bambara, Monokultur, Tumpangsari.

**STUDY OF INTERCROPPING SYSTEMS OF SWEET CORN (*Zea mays*
Saccharata Strut) AND FIVE ACCESSIONS OF BAMBARA
GROUNDNUT (*Vigna subterranea* (L.) Verdc)**

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ABSTRACT

Sweet corn is one of the most popular vegetable commodities. Bambara groundnut are legumes that are tolerant to dry land and capable of fixing nitrogen. This study aims to determine the effect of the number of sweet corn plants per hole on the growth, yield of each plant, and to determine the growth and yield response of each plant to bambara groundnut accessions. The research was conducted in Sariharjo, Ngaglik, Sleman, from July to November 2024. The research method used a split plot design. The main plots were the number of corn plants per hole (1 and 2 plants per hole). The subplots were intercropping with bambara groundnut accessions (Bogor, Sukabumi, Brown Sumedang, Madura, Gresik, and corn monoculture). The data were processed using ANOVA and followed up with DMRT at a 5% level. 1 plant per hole treatment gave the best results in terms of the number of corn leaves, number of trifoliolate leaves, trifoliolate leaf area, and flowering age of bambara groundnut. The Madura accession gave the best results in terms of cob weight per plant, cob weight per plot, number of trifoliolate leaves, bambara groundnut's flowering age, number of pods, pod weight per plant, and pod weight per plot.

Keywords : Accessions, Bambara groundnut, Intercropping, Monoculture, Sweet Corn.