

## RINGKASAN

Penelitian ini dilaksanakan di Kebun Percobaan Fakultas Pertanian Universitas Islam Sumatera Utara, Kelurahan Gedung Johor, Kecamatan Medan Johor, Kota Medan, Provinsi Sumatera Utara dengan ketinggian tempat  $\pm$  25 mdpl dan topografi datar. Penelitian dilaksanakan pada bulan Juni sampai dengan bulan September 2021. Penelitian ini dibimbing oleh Bapak Arif Anwar, MM. sebagai Ketua Pembimbing dan Ibu Ir. Markhaini, MS sebagai Anggota Pembimbing. Penelitian ini bertujuan untuk mengetahui pertumbuhan dan hasil dua jenis tanaman jagung akibat pemberian tiga jenis pupuk.

Penelitian ini menggunakan Rancangan Petak Terbagi (RPT) dengan petak utama yaitu: Pupuk Daun ( $P_1$ ), Pupuk Kandang Ayam ( $P_2$ ), dan Pupuk Kandang Ayam + Pupuk NPK ( $P_3$ ). Anak petak yaitu: Jagung Putih ( $V_1$ ) dan Jagung Ungu ( $V_2$ ). Parameter yang diamati adalah tinggi tanaman, jumlah daun, diameter tongkol, panjang tongkol, bobot tongkol per tanaman, bobot tongkol per plot dan kadar gula/TSS.

Hasil penelitian menunjukkan bahwa Jenis jagung berbeda nyata terhadap tinggi tanaman, diameter tongkol, panjang tongkol, bobot tongkol per tanaman dan bobot tongkol per plot, namun berpengaruh tidak nyata terhadap jumlah daun dan kadar gula. Pemberian beberapa jenis pemupukan berpengaruh nyata terhadap tinggi tanaman, jumlah daun, diameter tongkol, panjang tongkol, bobot tongkol per tanaman dan bobot tongkol per plot, namun berpengaruh tidak nyata terhadap dan kadar gula. Interaksi antara jenis jagung dan jenis pemupukan berpengaruh tidak nyata terhadap semua parameter yang diamati.

*Kata Kunci : Jagung Putih (Waxy corn), Jagung Ungu (Mays morado), Pemupukan, Jenis Pupuk.*

## SUMMARY

This research was conducted at the Experimental Garden of the Faculty of Agriculture, Islamic University of North Sumatra, Gedung Johor Village, Medan Johor District, Medan City, North Sumatra Province with an altitude of  $\pm$  25 meters above sea level and flat topography. The research was conducted from June to September 2021. This research was supervised by Mr. Ir. Arif Anwar, MM. as the Head of Advisor and Mrs. Ir, Markhaini, MS. as a Advisory Member. This study aims to determine the growth and yield of two types of corn plants due to the application of three types of fertilizers.

This study used a Split Plot Design (SPD) with the main plots namely Leaf Fertilizer (P1), Chicken Manure (P2), and Chicken Manure + NPK Fertilizer (P3). The sub-plots are: White Corn (V1) and Purple Corn (V2). Parameters observed were plant height, number of leaves, diameter of ear, length of ear, weight of ear per plant, weight of ear per plot and sugar content/TSS.

The results showed that the type of corn was significantly different to plant height, cob diameter, cob length, cob weight per plant and cob weight per plot, but had no significant effect on leaf number and sugar content. The application of several types of fertilizers had a significant effect on plant height, number of leaves, ear diameter, length of ear, weight of ear per plant and weight of ear per plot, but had no significant effect on sugar content. The interaction between the type of corn and the type of fertilization had no significant effect on all observed parameters.

*Keywords:* White Corn (Waxy corn), Purple Corn (*Mays morado*), Fertilization, Type Of Fertilization.