ABSTRAK

Muhammad Fathkur Rizal. 2025. " *Pengaruh Jarak Tanam dan Dosis Pupuk N terhadap Pertumbuhan dan Perkembangan Tanaman Kenaf (Hibiscus cannabinus L)*". Skripsi, Program Studi Agroteknologi Fakultas Pertanian Universitas Panca Marga Probolinggo. Pembimbing Ida Sugeng Suyani, S.P.,MP. Selaku Pembimbing Utama, Aprilia Hartanti, S.P.,M.P. Selaku Pembimbing Anggota.

Kenaf (*Hibiscus cannabinus L*.) merupakan tanaman serat alam yang berpotensi besar untuk dikembangkan di Indonesia karena memiliki nilai ekonomi tinggi serta manfaat yang luas, mulai dari serat, biji, hingga daun. Namun, produktivitas kenaf di lahan marginal seperti tanah latosol relatif rendah sehingga diperlukan upaya peningkatan melalui pemupukan dan pengaturan jarak tanam yang tepat. Penelitian ini bertujuan untuk mengetahui pengaruh dosis pupuk nitrogen (N) dan jarak tanam terhadap pertumbuhan dan hasil tanaman kenaf.

Penelitian dilaksanakan menggunakan rancangan Split Plot Design (SPD) dengan dua faktor. Faktor pertama adalah jarak tanam (15 × 20 cm, 20 × 20 cm, dan 25 × 20 cm) dan faktor kedua adalah dosis pupuk N (0, 100, 200, dan 300 kg/ha). Terdapat 12 kombinasi perlakuan yang diulang tiga kali, masing-masing terdiri dari 15 tanaman sehingga total berjumlah 540 tanaman. Parameter yang diamati meliputi tinggi tanaman, jumlah daun, lebar daun, panjang daun, luas daun, diameter batang, berat brangkasan basah.

Hasil penelitian menunjukkan bahwa pemberian pupuk N berpengaruh sangat nyata terhadap pertumbuhan kenaf, di mana dosis 300 kg/ha menghasilkan pertumbuhan vegetatif dan biomassa tertinggi. Perlakuan jarak tanam juga berpengaruh nyata terhadap pertumbuhan, dengan jarak tanam 25 × 20 cm menghasilkan ukuran tanaman yang lebih optimal. Interaksi antara jarak tanam dan dosis pupuk N memberikan pengaruh nyata, dan kombinasi terbaik diperoleh pada perlakuan J3D3 (jarak tanam 25 × 20 cm dan dosis pupuk N 300 kg/ha).

Kata kunci: Kenaf, pupuk nitrogen, jarak tanam, pertumbuhan, hasil

ABSTRACT

Muhammad Fathkur Rizal. 2025. "*The Effect of Plant Spacing and Nitrogen Fertilizer Rates on the Growth and Development of Kenaf* (*Hibiscus cannabinus L.*)." Undergraduate Thesis, Agrotechnology Study Program, Faculty of Agriculture, Panca Marga University Probolinggo. Supervisor: Ida Sugeng Suyani, S.P., M.P. (Main Supervisor) and Aprilia Hartanti, S.P., M.P. (Co-Supervisor).

Kenaf (*Hibiscus cannabinus L.*) is a natural fiber crop with great potential for development in Indonesia due to its high economic value and wide utilization, ranging from fiber, seeds, to leaves. However, its productivity on marginal soils such as latosol remains relatively low, requiring improvement through appropriate fertilization and plant spacing management. This study aimed to determine the effect of nitrogen (N) fertilizer rates and plant spacing on the growth and yield of kenaf.

The experiment was carried out using a Split Plot Design (SPD) with two factors. The first factor was plant spacing (15 × 20 cm, 20 × 20 cm, and 25 × 20 cm), and the second factor was N fertilizer rates (0, 100, 200, and 300 kg/ha). A total of 12 treatment combinations were tested with three replications, each consisting of 15 plants, resulting in 540 plants in total. The observed parameters included plant height, leaf number, leaf width, leaf length, leaf area, stem diameter, and fresh biomass weight.

The results showed that nitrogen application had a highly significant effect on kenaf growth, with 300 kg/ha producing the highest vegetative growth and biomass. Plant spacing also significantly influenced growth, with 25 × 20 cm spacing providing more optimal plant performance. The interaction between plant spacing and nitrogen fertilizer rates was significant, and the best combination was observed in J3D3 (25 × 20 cm spacing and 300 kg/ha N fertilizer).

Keywords: Kenaf, nitrogen fertilizer, plant spacing, growth, yield