

RINGKASAN

Bawang daun (*Allium fistulosum* L.) merupakan salah satu jenis tanaman sayuran yang dimanfaatkan sebagai bahan penyedap sekaligus pengharum masakan, dan campuran berbagai masakan. Selain dimanfaatkan sebagai sayuran, bawang daun juga baik untuk dikonsumsi sebagai bahan pengobatan (terapi) beberapa jenis penyakit. Dalam budidaya tanaman bawang daun penggunaan pupuk anorganik seperti NPK sangat efektif dalam meningkatkan pertumbuhan dan hasil tanaman. Keadaan ini membuat petani sangat tergantung kepada pupuk anorganik, dan cenderung memberikan takaran dalam jumlah yang tinggi. Penggunaan pupuk kimia secara terus menerus terbukti sangat merugikan karena dapat merusak sifat fisik, kimia, dan biologi tanah. Penggunaan pupuk kimia dapat diimbangi dengan pupuk organik untuk dapat memenuhi unsur hara makro dan mikro esensial yang dibutuhkan oleh tanaman. Salah satu bahan pupuk organik adalah kotoran ternak yaitu feses dan urin. Urin hewan yang dapat digunakan sebagai pupuk organik adalah urin kelinci. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian pupuk organik cair urin kelinci terhadap pengurangan dosis pupuk NPK pada pertumbuhan dan hasil bawang daun

Penelitian ini dilaksanakan pada bulan September 2019-November 2019 di screen house dan Laboratorium Agronomi dan Hortikultura, Fakultas Pertanian Universitas Jenderal Soedirman. Penelitian ini merupakan percobaan pot menggunakan RAKL dengan dua faktor yang diulang sebanyak tiga kali. Faktor pertama dosis pupuk organik cair urin kelinci (N), terdiri atas 3 taraf yaitu tanpa pupuk organik cair, 150 ml tanaman⁻¹, 300 ml tanaman⁻¹. Faktor pengurangan dosis pupuk anorganik, terdiri atas 3 taraf yaitu pengurangan pupuk anorganik 0% dosis anjuran 500 kg ha⁻¹ atau 1,16 kg tanaman⁻¹, pengurangan pupuk anorganik 25% dosis anjuran 375 kg ha⁻¹ atau 0,8 g tanaman⁻¹, pengurangan pupuk anorganik 50% dosis anjuran 250 kg ha⁻¹ atau 0,57 g tanaman⁻¹. Variabel yang diamati, meliputi tinggi tanaman (cm), jumlah daun (helai), jumlah anakan, luas daun (cm²), kandungan klorofil (unit/mm), bobot tajuk segar (g), bobot tajuk kering (g), bobot akar segar (g), dan bobot akar kering (g).

Hasil penelitian menunjukkan bahwa Pupuk organik cair urin kelinci 300 ml/tanaman⁻¹ mampu meningkatkan bobot tajuk segar, bobot tajuk kering, dan luas daun tanaman bawang daun. Pengurangan 50% dosis pupuk anorganik mampu meningkatkan bobot tajuk segar, bobot tajuk kering, dan luas daun tanaman bawang daun. Pengaruh interaksi antara pemberian pupuk organik cair urin kelinci dan pengurangan dosis pupuk anorganik terdapat pada bobot tajuk segar, bobot tajuk kering, dan luas daun tanaman bawang daun. Pemberian pupuk organik cair urin kelinci 300 ml tanaman⁻¹ dan pengurangan dosis pupuk anorganik 50% bobot tajuk segar sebesar 36,61 g meningkat sebesar 62%, bobot tajuk kering sebesar 3,84 g meningkat sebesar 34,73%, dan luas daun 583,36 cm² meningkat sebesar 54,93% dibanding tanpa pemberian pupuk organik cair urin kelinci dan tanpa pengurangan dosis pupuk anorganik.

SUMMARY

Leek (Allium fistulosum L.) is one type of vegetable plant that is used as a flavoring ingredient as well as food fragrance, and a mixture of various dishes. Besides being used as a vegetable, scallions can also be consumed as medicinal ingredients. In the cultivation of leek plants, the use of inorganic fertilizers such as NPK is very effective in increasing plant growth and yield. This situation makes farmers very dependent on inorganic fertilizers, and tends to provide high amounts of quantities. The use of chemical fertilizers continuously proved to be very dangerous because it can damage the physical, chemical, and biological properties of the soil. The use of chemical fertilizers can be balanced with organic fertilizer to meet the micro and macro needs needed by plants. One of the organic fertilizer materials is animal manure, which is feces and urine. Animals that can be used as organic fertilizer are rabbits. This study discusses the importance of rabbit urine liquid organic fertilizer on NPK fertilizer dosages on the growth and yield of leek plants.

This research was conducted in September 2019-November 2019 at the screen house and the Agronomy and Horticulture Laboratory, Faculty of Agriculture, Jenderal Soedirman University. This research was a pot experiment using RAKL with two factors which were repeated three times. The first factor is the dose of liquid organic fertilizer rabbit urine (N), consisting of 3 levels, namely without liquid organic fertilizer, 150 ml plant⁻¹, 300 ml plant⁻¹. Factors for reducing the dose of inorganic fertilizer, consisting of 3 levels, namely 0% reduction in inorganic fertilizer recommended dosage 500 kg ha⁻¹ or 1.16 kg plant⁻¹, reduction in inorganic fertilizer 25% recommended dosage 375 kg ha⁻¹ or 0.8 g plant⁻¹, 50% reduction in inorganic fertilizer recommended dosage of 250 kg ha⁻¹ or 0.57 g of plant⁻¹. The observed variables included plant height (cm), number of leaves (strands), number of tillers, leaf area (cm²), chlorophyll content (unit / mm), fresh crown weight (g), dry crown weight (g), root weight fresh (g), and dry root weight (g).

The results showed that rabbit urine liquid organic fertilizer 300 ml / plant⁻¹ was able to increase the weight of fresh crowns, dry crown weights, and leaf area of leek plants. Reduction of 50% dose of inorganic fertilizer can increase the weight of fresh canopy, weight of dry canopy, and leaf area of leek plants. leek plant. The application of rabbit urine liquid organic fertilizer 300 ml plant⁻¹ and reduction in dose of inorganic fertilizer 50% weight of fresh canopy by 36.61 g increased by 62%, weight of dry canopy by 3.84 g increased by 34.73%, and leaf area 583.36 cm² increased by 54.93% compared without the administration of rabbit urine liquid organic fertilizer and without a reduction in the dose of inorganic fertilizer.