

Sandra Happy Mufidah 14.03.1.1.1.00.014. Pengaruh Dosis Pupuk Urea Terhadap Hasil dan Kandungan Antioksidan Tanaman Kenikir (*Cosmos caudatus* H.B.K). Di bawah bimbingan **Dr. Ir. RA Sidqi Zaed ZM., MS.** dan **Drs. H. Kaswan Badami, M.Si.**

ABSTRAK

Tanaman kenikir (*Cosmos caudatus* H.B.K) merupakan tanaman yang *indigenous* yang mengandung saponin, flavonoid, polifenol, dan minyak atsiri yang bertindak sebagai kandungan antioksidan. Untuk meningkatkan produksi dan kandungan antioksidan maka perlu dilakukan pemupukan urea pada tanah mediteran yang kandungan nitrogennya relatif rendah. Penelitian ini dilakukan untuk mengetahui pengaruh dosis pupuk urea terhadap produksi dan kandungan antioksidan tanaman kenikir. Penelitian ini dilaksanakan pada bulan April – Juni 2018 di Kebun percobaan Agroteknologi Fakultas Pertanian Universitas Trunojoyo Madura dengan ketinggian tempat ± 5 mdpl. Rancangan penelitian menggunakan rancangan acak lengkap (RAL) dengan 5 taraf perlakuan dosis pupuk urea yang terdiri dari P0 (0 g/tanaman), P1 (0,4 g/tanaman), P2 (0,8 g/tanaman), P3 (1,2 g/tanaman), P4 (1,6 g/tanaman). Data hasil pengamatan dianalisis menggunakan Analisis Sidik Ragam, kemudian dilanjutkan dengan uji Beda Jarak Nyata Duncan. Hasil penelitian menunjukkan bahwa perlakuan dosis pupuk urea memberikan pengaruh nyata terhadap parameter pengamatan tinggi tanaman, jumlah daun, jumlah cabang, bobot basah cabang muda, bobot kering cabang kering, bobot basah setiap organ tanaman, bobot kering setiap organ tanaman dan kandungan antioksidan tanaman kenikir. Dosis pupuk urea 0,8 g/tanaman memberikan pengaruh yang sangat nyata semua terhadap parameter pengamatan.

Kata Kunci : pupuk urea, antioksidan, *Cosmos caudatus* H.B.K

SANDRA HAPPY MUFIDAH. 140311100000. The Effect of Urea Fertilizer on Production and Plant Antioxidant Content of Kenikir (*Cosmos caudatus* H.B.K). Supervised By: **Dr. Ir. RA Sidqi Zaed ZM., MS.** and **Drs. H. Kaswan Badami, M.Si.**

ABSTRACT

Plant marigolds (*Cosmos caudatus* HBK) is a plant that Plant marigolds (*Cosmos caudatus* HBK) is a plant that Plant marigolds (*Cosmos caudatus* HBK) is a plant that indigenous which contains saponins, flavonoids, polyphenols, and essential oil which acts as an antioxidant content. To indigenous which contains saponins, flavonoids, polyphenols, and essential oil which acts as an antioxidant content. To increase production and antioxidant content it is necessary to nitrogen fertilization on the mediterranean soil urea content is relatively low. This study was conducted to determine the effect of urea fertilizers on crop production and antioxidant content marigolds. This study was conducted in April-June 2018 trial Gardens Agro Technology Faculty of Agriculture University Trunojoyo with $\pm$ 5 meters above sea level altitude. The study design used a completely randomized design (CRD) with 5 level of urea fertilizer dose treatment consisting of P0 (0 g/plant), P1 (0.4 g/plant), P2 (0.8 g/plant), P3 (1 , 2 g/plant), P4 (1.6 g plant). Data were analyzed using analysis Fingerprint Analysis Variety, followed by a test of Duncan Real Difference distance. The results showed that the dosage of urea fertilizer significant effect on the parameters of the observations of plant height, leaf number, number of branches, wet weight of young branches, dry weight of dried branches, wet weight of each organ of the plant, dry weight of each organ of the plant and the antioxidant content of plants marigolds. Urea fertilizer dose of 0.8 g/plant give a significant influence on the parameters of all observations. dry branches dry weight, wet weight of each organ of the plant, dry weight of each organ of plants and plant marigolds antioxidant content. Urea fertilizer dose of 0.8 g/plant give a significant influence on the parameters of all observations. dry branches dry weight, wet weight of each organ of the plant, dry weight of each organ of plants and plant marigolds antioxidant content. Urea fertilizer dose of 0.8 g/plant give a significant influence on the parameters of all observations.

Keywords: Urea, Antioxidants, *Cosmos caudatus* HBK