

Imam Busthomi. (180311100045). Respon Pertumbuhan dan Hasil Tanaman Mentimun (*Cucumis sativus* L.) Pada Jenis Mulsa dan Pemupukan Metode Minus One Test. Dibimbing Oleh: Dr. Mustika Tripatmasari S.P., M.Si dan Dr. Catur Wasonowati S.P., M.Si

ABSTRAK

Kebutuhan masyarakat terhadap mentimun mengakibatkan permintaan mentimun semakin tinggi. Ketersediaan mentimun yang rendah mengakibatkan, Kurang insentifnya budidaya mentimun berdampak pada hasil panen mentimun yang semakin menurun tiap tahunnya. Strategi yang perlu dilakukan untuk meningkatkan produksi mentimun yaitu dengan pengaplikasian jenis mulsa dan pemupukan metode *minus one test*. Pengaplikasian mulsa bertujuan agar air tidak cepat mengalami evaporasi yang dapat mengakibatkan tanaman kekurangan air, pemupukan metode *minus one test* yaitu pemupukan dengan mengurangi salah satu unsur sehingga dapat diketahui peranan unsur terhadap tanaman. Tujuan penelitian ini untuk mengetahui kombinasi pemberian mulsa dan pemupukan metode *minus one test* pada tanaman mentimun (*Cucumis sativus* L.) sehingga dapat diketahui unsur yang menjadi faktor pembatasnya, sehingga informasi tersebut dapat oleh pembudidaya mentimun. Penelitian ini dilaksanakan di Dusun Gilin, Desa Pesanggrahan, Kecamatan Kwanyar, Kabupaten Bangkalan pada bulan Juni sampai Agustus 2023. Penelitian ini menggunakan Rancangan Acak Kelompok Non-Faktorial (RAK) Non-Faktorial, dengan 8 kombinasi perlakuan, (P1) Mulsa Hitam Perak + Pupuk Urea + SP-36 + KCl, (P2) Mulsa Hitam Perak + Pupuk Urea + KCl, (P3) Mulsa Hitam Perak + Pupuk Urea + SP-36, (P4) Mulsa Hitam Perak + Pupuk SP-36 + KCl, (P5) Mulsa Jerami Padi + Pupuk Urea + SP-36 + KCl, (P6) Mulsa Jerami Padi + Pupuk Urea + KCl, (P7) Mulsa Jerami Padi + Pupuk Urea + SP-36, (P8) Mulsa Jerami Padi + Pupuk SP-36 + KCl. Analisis data menggunakan analisis of varian (ANOVA) dengan taraf 5% , apabila terdapat pengaruh nyata maka dilanjut dengan uji DMRT. Hasil penelitian menunjukkan adanya pengaruh nyata kombinasi perlakuan jenis mulsa dan pemupukan metode *minus one test* pada setiap parameter pengamatan. Hasil penelitian menunjukkan Rata-rata terendah terdapat pada perlakuan (P4) Mulsa Hitam Perak + Pupuk SP-36 + KCl, sedangkan Rata-rata tertinggi terdapat pada perlakuan (P5) Mulsa jerami Padi + Pupuk Urea + SP-36 + KCl.

Kata kunci : mentimun, mulsa, minus one test

Imam Busthomi. (180311100045). Growth and Yield Response of Cucumber (*Cucumis sativus* L.) Plants on Mulch and Fertilization Types Minus One Test Method. Guided by: Dr. Mustika Tripatmasari S.P., M.Si dan Dr. Catur Wasonowati S.P., M.Si

Abstract

The public's need for cucumbers has resulted in higher demand for cucumbers. The low availability of cucumbers has resulted in the lack of incentives for cucumber cultivation which has an impact on cucumber yields which are decreasing every year. The strategy that needs to be implemented to increase cucumber production is by applying mulch and fertilizing using the minus one test method. The aim of applying mulch is to ensure that water does not evaporate quickly which can result in plants lacking water. The minus one test method is fertilized by reducing one of the elements so that the role of the element on the plant can be determined. The aim of this research is to determine the combination of mulching and fertilization using the minus one test method on cucumber plants (*Cucumis sativus* L.) so that the elements that are limiting factors can be identified, so that this information can be obtained by cucumber cultivators. so that the elements that are limiting factors can be identified, so that this information can be obtained by cucumber cultivators. This research was conducted in Gilin Hamlet, Pesanggrahan Village, Kwanyar District, Bangkalan Regency from June to August 2023. This research used a Non-Factory Randomized Block Design (RAK), with 8 treatment combinations, (P1) Silver Black Mulch + Urea Fertilizer + SP-36 + KCl, (P2) Black Silver Mulch + Urea Fertilizer + KCl, (P3) Black Silver Mulch + Urea Fertilizer + SP-36, (P4) Black Silver Mulch + SP-36 Fertilizer + KCl, (P5) Rice Straw Mulch + Urea Fertilizer + SP-36 + KCl, (P6) Rice Straw Mulch + Urea Fertilizer + KCl, (P7) Rice Straw Mulch + Urea Fertilizer + SP-36, (P8) Rice Straw Mulch + SP Fertilizer -36 + KCl. Data analysis uses analysis of variance (ANOVA) with a level of 5%, if there is a real effect then proceed with the DMRT test. The results of the research show that there is a real influence of the combination of mulch type treatment and minus one test fertilization method on each observation parameter. The results of the research showed that the lowest average was found in treatment (P4) Silver Black Mulch + SP-36 Fertilizer + KCl, while the highest average was found in treatment (P5) Rice Straw Mulch + Urea Fertilizer + SP-36 + KCl.

Keywords : cucumber, mulch, minus one test