

## PERTUMBUHAN DAN HASIL BEBERAPA AKSESI MENTIMUN (*Cucumis sativus* L.) PADA PERLAKUAN KEKERINGAN

HENKY YOGA ARI PRATAMA

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### Intisari

Perubahan iklim yang ditandai dengan kenaikan suhu bumi telah menyebabkan beberapa kawasan mengalami kekeringan sehingga terjadi penurunan produktivitas tanaman. Penelitian ini bertujuan untuk mengetahui pertumbuhan dan hasil beberapa aksesori mentimun (*Cucumis sativus* L.) pada perlakuan kekeringan; menentukan karakter pertumbuhan dan komponen hasil yang menjadi penciri sifat ketahanan aksesori mentimun terhadap cekaman kekeringan; serta menentukan pengelompokan ketahanan aksesori mentimun terhadap cekaman kekeringan. Penelitian ini dilaksanakan di Pusat Inovasi Agro Teknologi Universitas Gadjah Mada dan Departemen Budidaya Pertanian Universitas Gadjah Mada, Yogyakarta; menggunakan rancangan petak terbagi. Perlakuan cekaman kekeringan sebagai petak utama berupa penyiraman sebanyak dua aras, yaitu satu liter setiap hari dan lima hari sekali. Perlakuan aksesori sebagai anak petak sebanyak tujuh aras, yaitu CBT41 asal Sumatera Barat, CBT99 asal Prambanan, CBT103 asal Blitar, CBT115 asal Yogyakarta, CBT147 asal Saporan, CBT171 asal Surabaya, dan Batara F1. Berdasarkan analisis data yang telah dilakukan, diperoleh bahwa secara umum, tidak terdapat perbedaan nyata antara pertumbuhan dan hasil ketujuh aksesori dalam perlakuan penyiraman yang diberikan. Meskipun demikian, setiap aksesori memberikan tanggapan yang berbeda-beda terhadap perlakuan kekeringan. Aksesori yang tidak mengalami penurunan pertumbuhan dan hasil ketika terjadi cekaman kekeringan adalah CBT41. Aksesori yang paling mengalami penurunan pertumbuhan ketika terjadi cekaman kekeringan adalah CBT147. Aksesori mentimun yang paling mengalami penurunan hasil ketika terjadi cekaman kekeringan adalah CBT103. Sifat penciri ketahanan adalah bobot kering tajuk, luas daun, dan produktivitas. Aksesori yang paling tahan ketika terjadi cekaman kekeringan adalah CBT41. Sementara itu, aksesori yang paling peka ketika terjadi cekaman kekeringan adalah CBT103 dan CBT147.

Kata kunci: mentimun, cekaman, kekeringan

## GROWTH AND YIELD OF DIFFERENT CUCUMBER (*Cucumis sativus* L.) ACCESSIONS UNDER DROUGHT TREATMENTS

HENKY YOGA ARI PRATAMA

17/412766/PN/15088

### Abstract

Climate change, which is marked by an increase in the earth's temperature, has caused several regions in the world to experience water deficits and droughts, resulting in a decrease in plant productivity. This study aimed to determine the growth and yield of several accessions of cucumber (*Cucumis sativus* L.) during the drought treatment; determine growth characters and yield components that characterize the resistance properties of cucumber accessions to drought stress; determine the resistance grouping of cucumber accession to drought stress. This research was conducted at the Center for Agro-Technology Innovation, Universitas Gadjah Mada, and the Department of Agronomy, Universitas Gadjah Mada, Yogyakarta using a split-plot design. Drought stress treatment as the main plot consisted of two levels of watering, one liter which was watered every day and every five days. The treatment of accessions as sub-plots was seven levels, namely CBT41 from West Sumatra, CBT99 from Prambanan, CBT103 from Blitar, CBT115 from Yogyakarta, CBT147 from Saparan, CBT171 from Surabaya, and Batara F1. Based on the data analysis that has been carried out, it was found that in general, there was no significant difference among the growth and yield of the seven accessions in the given watering treatment. However, each accession responded differently to drought treatment. The accession that did not experience a decrease in growth and yield during drought stress was CBT41. The accession that experienced the most decline in growth during drought stress was CBT147. The cucumber accession that experienced the most yield reduction during drought stress was CBT103. Characteristic properties of resistance were canopy dry weight, leaf area, and productivity. The most resistant accession in drought stress was CBT41. Meanwhile, the most sensitive accessions during drought stress were CBT103 and CBT147.

Key words: cucumber, stress, drought