

PENGARUH LEVEL KROMOSAL B DALAM MEDIA TANAM
TERHADAP PERTUMBUHAN DAN KANDUNGAN
KROM TOTAL PADA TANAMAN CAISIN
(*Brassica chinensis*, L)

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan Kromosal B terhadap penyerapan logam krom pada tanaman caisin (*Brassica chinensis*, L). Penelitian ini dilakukan pada skala laboratorium dengan cara menanam caisin pada plastik *polybag*, dengan media tanam tanah dan kompos (2:1) dan ditambah Kromosal B sebesar 0 ppm sebagai kontrol, 400 ppm, 500 ppm, dan 600 ppm yang berfungsi sebagai perlakuan. Bibit tanaman caisin disemaikan ke dalam media penyemaian dan ke dalam *polybag*. Setiap *polybag* berisi tiga bibit tanaman dengan ulangan sebanyak tiga kali. Larutan Kromosal B digunakan untuk mengairi tanaman caisin sebanyak 10 ml setiap hari, dari umur 15 hari sampai 45 hari. Data yang diamati meliputi tinggi tanaman dan jumlah daun yang diukur setiap minggu. Serta produksi total dalam bahan kering (BK) setelah tanaman dipanen. Pengukuran kandungan krom dilakukan dengan metode AAS. Data yang diperoleh diuji analisis variansi pola searah untuk kandungan krom dan total produksi sedangkan untuk tinggi tanaman dan jumlah daun digunakan analisis pola faktorial. Hasil analisis yang berbeda nyata dilanjutkan dengan uji *Duncan Multiple Range Test (DMRT)*. Hasil penelitian menunjukkan bahwa semakin tinggi aras kromosal yang ditambahkan, semakin tinggi juga logam krom yang diserap tanaman. Penambahan kromosal sebesar 500 ppm dan 600 ppm menyebabkan penurunan tinggi tanaman, jumlah daun dan total produksi ($P < 0,05$). Kesimpulan yang dapat ditarik dari penelitian ini adalah: 1). Logam krom dapat diserap oleh caisin (*Brassica chinensis*, L); 2). Semakin tinggi aras Kromosal yang ditambahkan semakin tinggi juga penyerapannya; 3) Penambahan Kromosal B sebesar 500 ppm dan 600 ppm menurunkan tinggi tanaman, jumlah daun dan total produksi dalam bahan kering.

(Kata Kunci : Kromosal B, pertumbuhan, krom, caisin)

THE EFFECT OF CHROMOSAL B LEVEL IN MEDIUM ON GROWTH AND
TOTAL CHROME CONTENT OF CAISIN PLANT
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ABSTRACT

The study was conducted to investigate the effect of Chromosal B on growth and chrome absorbtion by caisin plant (*Brassica chinensis*, L). It was applied at laboratory level by plantation of caisin into polybag plastic, with the compost-soil by 1:2 (w/w) of 0 ppm as control, 400 ppm, 500 ppm and 600 ppm Chromosal B as treatment respectively. The seed of caisin plant were germinated in the medium. Every polybag with three-wellgrown platelet was put in polybag with three replications. The Chromosal B solution was used for watering plant in some of 10 ml per day, and it was initiated from 15 days old to 45 days. Treatment were harvested at 45 days old. Caisin crop was weighed and analyzed for total chrome by Atomic Absorbstion Spectrophotometrec (AAS). Data collected were plant height, number of leaf weekly in the other hand dry matter production and chrome content were observed at 45 days old. The obtained data were analyzed by analysis of Variance Completely Randomized Design (CRD) one-way classification for total production and chrome content, and factorial for plant height and number of leafs. The significant differences were then tested by Duncant Multiple Range Test (DMRT). The results indicated that the higher level of Chromosal supplementation had the higher chrome absorbtion into plant. Presenting of Chromosal 600 ppm and 500 ppm decreased the plant height the number of leafs and total production (PC0.05). It was concluded that (1) Chrome metal could be absorbed by caisin (2) The higher Chromosal supplementation's resulted the higher its absorbtion. (3) Adding Chromosal B by 600 ppm and 500 ppm decreased high of plant, number of leafs and total dry matter production of caisin plant..

(Key Words : Chromosal B, growth, chrome, caisin)