

PENGGUNAAN SITOKININ UNTUK MENGATASI CEKAMAN KEKERINGAN SELAMA FASE REPRODUKTIF TANAMAN KEDELAI

Title	PENGGUNAAN SITOKININ UNTUK MENGATASI CEKAMAN KEKERINGAN SELAMA FASE REPRODUKTIF TANAMAN KEDELAI
Author Order	of
Accreditation	
Abstract	<p>Penelitian dilakukan untuk mengkaji efektifitas penggunaan sitokinin (kinetin) untuk menunda senesendaun tanaman kedelai yang mengalami kekeringan selama fase reproduktif dan pengaruhnya terhadap hasiltanaman. Percobaan dilakukan di rumah plastik Fakultas Pertanian, Universitas Jenderal Soedirman, Purwokertomulai bulan Januari 2006 sampai April 2006. Rancangan perlakuan adalah faktorial (3x4) yang disusun dalamRancangan Acak Lengkap (RAL) dengan tiga ulangan. Faktor pertama berupa kadar air tanah yangmenggambarkan cekaman kekeringan selama fase reproduktif, yaitu kadar air tanah 100% kapasitas lapangan(KL-100%), kadar air tanah 75% kapasitas lapangan (KL-75%), dan kadar air tanah 50% kapasitas lapangan(KL-50%). Faktor kedua berupa tingkat konsentrasi zat pengatur tumbuh sitokinin (kinetin), yaitu konsentrasi0, 20, 40 dan 60 ppm. Pengamatan yang dilakukan meliputi kandungan air nisbi daun, kandungan klorofil daun,kehijauan daun, kandungan protein daun, laju transpirasi tanaman, jumlah polong, persentase polong isi, jumlahbiji, bobot biji per tanaman dan bobot 100 biji. Hasil penelitian menunjukkan cekaman kekeringan selama fasereproduktif tanaman kedelai secara umum menurunkan karakter fisiologi dan hasil tanaman kedelai. Kinetinefektif menunda senesen daun ditinjau dari kandungan klorofil dan protein daun. Penundaan senesen daun padatanaman kedelai yang mengalami kekeringan selama fase reproduktif ternyata justru berdampak negatif terhadap pertumbuhan organ reproduktif.Kata kunci: kinetin, kekeringan, senesen, kedelai</p> <p>ABSTRACTThe research was designed to study cytokinin application to overcome the drought during reproductivestages of soybean. It was done in the plastic house Faculty of Agriculture, Jenderal Soedirman University,located in Purwokerto, Central Java from January 2006 up to April 2006. The experiment was a (3x4) factorialarranged in Completely Randomized Design (CRD) with three replications. The first factor was soil watercontent showing the level of drought, i.e. soil water content 100% field capacity, soil water content 75% fieldcapacity, and soil water content 50% field capacity. The second factor was the concentration of cytokinin(kinetin) i.e. 0, 20, 40 and 60 ppm. The observations were done on relative water content of the leaves,chlorophyll and protein content of the leaves, the level of leaves greenness, transpiration rate, number of podsand seeds, weight of seeds per plant and weight of 100 seeds. The result showed that the drought duringreproductive stages reduced on all physiological character and seed yield of soybean. Kinetin was effective todelay leaf senescence that observe on chlorophyll and protein content of leaves. Delaying leaf senescence duringthe drought at reproductive stages of soybean exactly influenced negatively on the growth of reproductiveorgans.Key words: kinetin, drought, senescence, soybean</p>
Publisher Name	Jenderal Soedirman University
Publish Date	2010-04-01
Publish Year	2010
Doi	DOI: 10.20884/1.agrin.2010.14.1.103
Citation	
Source	Agrin
Source Issue	Vol 14, No 1 (2010): Agrin
Source Page	
Url	https://jurnalagrin.net/index.php/agrin/article/view/103/89
Author	Dr. KHAVID FAOZI, S.P, M.P