

USING GIBBERELIC ACID (GA3) FOR INDUCING MALE STERILITY IN SAFFLOWER (*Carthamus tinctorius L.*) .

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ABSTRACT

Agricultural field experiment was carried out to study effect of Gibberellic acid treatments(0,150,300and450ppm)on two Safflower genotypes(Al-Mais and Jordanian)for inducing male sterility in safflo-Factorial randomized -wer at the field belong to Agriculture college. completely block design with three replications was used Data recorded for: Plant height, number of seeds\ capitula, seed coat percentage for coated and on coated flowers and germination percentage of treated non coated flowers.

Result showed Gibberellic Acid significantly increased plant height for the two genotypes while significant reduction took place in percent of seeds\capitula (93.42 95.01and 90.42%for 150,300and 450ppm respectively comparison with control treatment for coated flowers .No differences were shown between number of hybrid seeds of uncoated treated flowers and control treatments for the studied genotypes. Although GA3 increased thickness of seed coat but did not affect on germination percentage without higher concentration (450ppm) therefore 150ppm ofGA3regarding adequate for inducing male sterility in Safflower.