Effect of Foliar Spray of Kinetin and Brassinosteroid During Drought Period on Yield and Yield Components of Groundnut (*Arachis hypogaea* L.)

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ABSTRACT

A field experiment was conducted in Agricultural College Farm, Bapatla, during *rabi* 2012-13 to study the effect of foliar spray of kinetin and brassinosteroid during drought period on yield and yield components (test weight, shelling percentage and harvest index) of groundnut. The treatments comprised of foliar sprays of kinetin @ 5 ppm and 10 ppm and homobrassinolide (HBL) @ 0.5 ppm, 1 ppm and 2 ppm at 32 DAS and at 32 and 45 DAS, water stress and irrigation without foliar spray as control in RBD with three replications. The treatment plots were exposed to water stress by withholding irrigation at 30 DAS, continuing for 20 days and relieving at 50 DAS. The present study revealed that homobrassinolide @ 1 ppm at 32 and 45 DAS (T_{10}) increased harvest index over water stress (T_1) by 43.3 per cent, over irrigation without foliar spray (T_{12}) by 30.3 per cent and over other treatments by 2.4 to 26.5 per cent. Irrigation (T_{12}) increased harvest index over water stress (T_1) by 10 per cent.

Key words : Components, Ground nut, Yield