Effect of Foliar Spray of Kinetin and Brassinosteroid during Drought Period on Biochemical Parameters of Groundnut (*Arachis hypogaea* L.)

Punnia Viswan, K L Narasimha Rao, Y Ashoka Rani and M Lal Ahamed
Department of Crop Physiology, Agricultural College, Bapatla 522 101, A P

ABSTRACT

A field experiment was conducted in Agricultural College Farm, Bapatla, during *rabi* 2012-13 to study the effect of foliar sprays of kinetin and brassinosteroid during drought period on biochemical parameters *viz*., chlorophyll stability index, leaf proline content and nitrate reductase activity 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. Foliar spray of homobrassinolide @ 1 ppm at 32 and 45 DAS during water stress gave higher values for all the biochemical parameters of groundnut in the study.

Key words : Biochemical parameters, Drought period, Groundnut, Spray of kinetin.