Physiological Effect of Salicylic Acid on Pod Setting and Yield of Groundnut (*Arachis Hypogaea* L.)

Md Nazim Pasha, K L Narasimha Rao, Y Ashoka Rani and D Ratna Babu
Department of Crop Physiology, Agricultural College, Bapatla 522 101, Andhra Pradesh

ABSTRACT

To study the effect of Salicylic acid on growth and yield of groundnut, to find out its effective concentration along with the proper stage of spraying in improving growth, yield parameters and yield of groundnut plants, present investigation was under taken with salicylic acid at 50,100 and 150ppm concentrations sprayed at three different stages *viz*., peak vegetative stage, flowering stage and peg formation stage. Number of pods per plant (15.53), pod yield per plant (6.59 g), kernel yield per plant (5.02 g), shelling percentage (76.11), harvest index (28.96), yield (2329 kg ha^{-1}) increased with spray of salicylic acid @ 150 ppm at flowering stage (T_6). Test weight (47.63 g) and oil percentage of kernels (48.90) increased with foliar spray of salicylic acid @ 150 ppm at peg formation stage (T_9).

Key words: *Groundnut, Salicylic acid, Pod setting and Yield.*