

Production potential of different Groundnut varieties in relation to their seed rates

B. Soumya, K. B. Suneetha Devi and Y. Siva Lakshmi

Department of Agronomy, College of Agriculture, ANGRAU, India

An experiment was conducted at college farm, college of Agriculture, Rajendranagar, Acharya N.G. Ranga Agricultural University during kharif 2010. The treatments consisted of four groundnut varieties (Narayani, ICGV 91114, K 6 and JCG 88) and four seed rates (75, 100, 125 and 150 kg ha⁻¹). Among the four varieties evaluated, the growth characters viz., plant height, total dry matter production, LAI and CGR were higher with the variety Narayani followed by K 6 variety which were significantly superior than JCG 88 and ICGV 91114 varieties. Similarly, the yield components like number of pods per plant, shelling percentage, pod yield, haulm yield and harvest index were also higher with Narayani and closely followed by K 6 variety which were significantly better over JCG 88 and ICGV 91114 varieties. As regards to the effect of seed rates, each increment of seed rate (i.e., 75 > 100 > 125 > 150 kg ha⁻¹) significantly increased the growth characters viz., plant height, LAI, dry matter production and CGR of all groundnut varieties. Similarly pod yield, haulm yield, kernel yield and harvest index also increased with increase in seed rate and were more at seed rate of 150 kg ha⁻¹ and were at par with seed rate of 125 kg ha⁻¹. However the yield component i.e. number of pods per plant significantly decreased due to increase in seed rate. Thus for attaining maximum yield Narayani with a seed rate of 125 kg ha⁻¹ would be advisable under rainfed conditions of Southern Telangana zone, Andhra Pradesh.

Biography

Soumya B. has completed her B.Sc (Agriculture) & M.Sc. (Agriculture) from Acharya N.G. Ranga Agricultural University, Hyderabad. At present she is pursuing Ph.D in Agronomy from the same university. She is credited with two research publications in agronomy.

agrosoumya@gmail.com