

Growth and Yield of Rice Fallow Sorghum as Influenced by Planting Density and Nitrogen

H Arunakumari, P V N Prasad, B Venkateswarlu, P R K Prasad

Department of Agronomy, Agricultural College, Bapatla 522 101, Andhra Pradesh

ABSTRACT

A field experiment conducted during *rabi*, 2014-2015 on clay loam soils of Agricultural College Farm, Bapatla was laid out in factorial randomized block design with three replications. The treatments comprised of three planting densities (S_1 : 3.33 lakh plants ha^{-1} , S_2 : 2.22 lakh plants ha^{-1} , S_3 : 1.66 lakh plants ha^{-1}) allotted to factor-A and four nitrogen levels (N_0 : 0 kg ha^{-1} , N_1 : 50 kg ha^{-1} , N_2 : 100 kg ha^{-1} , N_3 : 150 kg ha^{-1}) allotted to factor-B. The results revealed that the highest plant height (215.3cm) was recorded at a planting density of 1.66 lakh plants ha^{-1} , but higher drymatter production, yield attributes and grain yield was higher at a planting density of 2.22 lakh plants ha^{-1} with 150 kg N ha^{-1} .

Key words : Nitrogen, Planting density, Sorghum.