

INFLUENCE OF WATERLOGGING, SALINITY AND THEIR INTERACTION ON BIOMASS AND YIELD AND ITS ATTRIBUTES OF PIGEONPEA (*CAJANUS CAJANS* L. MILLSP.) GENOTYPES

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Abstract: The Influence of waterlogging, salinity and their interaction on biomass and yield and its attributes was studied in four pigeonpea genotypes (ICPH-2431, PARAS, UPAS-120, H09-33). Plants were raised in polythene bags filled with half kg soil + FYM manure mixture. Waterlogging, salinity and waterlogging + salinity treatments were given for 8 and 12 days and observations were recorded 1 and 8 days after removal from treatment in 20 and 40 day old plants. A significant decline in percent survival, biomass, seed yield and seed test weight was observed with waterlogging and combined treatment of waterlogging and salinity. Alone salinity resulted in no decline in percent survival and comparatively less decline in biomass, seed yield and seed test weight. All the stresses were found more deleterious when given at later stages. ICPH 2431 performed best among all the genotypes in terms of percent survival, biomass, seed yield and seed test weight.

Keywords: Waterlogging, Salinity, Pigeonpea, Biomass, Seed yield

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