

Growth and nutrient uptake of *Jatropha curcas* L. under nutrient supply, pruning levels and planting geometry

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Received 24 September 2015 - Received in revised form 31 October 2015 - Accepted 6 November 2015

Keywords: height, *Jatropha curcas*, nutrient uptake, pruning, spacing

SUMMARY. – *Jatropha curcas* is a promising alternative to meet the requirement of fossil fuels and utilize the degraded lands. To harness the maximum production of *Jatropha*, nutrient application, pruning and plant geometry optimization is essential. Six nutrient doses, four pruning levels and five spacing treatments were imposed in a factorial randomised block design. Pruning plant at one meter from ground level (P_2) produced wider canopy Nitrogen uptake was higher in N_3 (50 – 50 – 50 kg ha⁻¹ of N, P_2O_5 and K_2O) and N_4 (60 – 60 – 60 kg ha⁻¹ of N, P_2O_5 and K_2O), ranging from 666 to 808 mg plant⁻¹. Chlorophyll content was maximum (39.52 SPAD value) in N_4 . Collar diameter was significantly higher (66.36 mm) at 0.5 m pruning in 4 × 4 m spacing. Biomass was higher at wider spacing and lowest in closer spacing. Increased spacing resulted in higher canopy diameter, leading to higher PAR interception.