



## Groundut Yields as Influenced by Heat Unit Efficiency, Levels of Fertility and Varieties under Different Growing Environment in Hyper Arid Zone of Rajasthan

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**Abstract**: A field experiment was conducted during *Kharif* seasons of 2009 and 2010 on effect of four growing environments ( $20^{th}$  April,  $15^{th}$  May, $9^{th}$  June and  $4^{th}$  July) and four fertility levels ( $0.20N:40P_2O_5,30N:60$   $P_2O_5$  and 40N:80  $P_2O_5$  kg ha<sup>-1</sup>) on various agronomic traits of two varieties (HNG-10 and TG-37A) of groundnut under semi-arid region of Rajasthan. Semi-spreading variety HNG-10 had yields i.e. pod, kernel, haulm and biological yield were also statistically at par with each other from  $20^{th}$  April to  $9^{th}$  June sowing while days to maturity reduced significantly with delay sowing. Variety TG-37A sown at  $4^{th}$  July had significantly higher yields at  $4^{th}$  July sowing. However, in  $9^{th}$  June sowing had significantly higher heat unit efficiency than all three sowing. Significantly higher yields were recorded in 30 kg N-60 kg  $P_2O_5$  ha<sup>-1</sup> plots which was statistically at par with 40 kg N-80 kg  $P_2O_5$  ha<sup>-1</sup>.

Key words: Dates of sowing, Fertility levels, Heat unit, Varieties, Yield.