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**RESEARCH PAPER** 

## Nitrogen content and uptake of malt barley (*Hordeum vulgare* L.) influenced by levels and scheduling of nitrogen application and date of sowings

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**Abstract :** A field experiment was conducted at instructional farm of College of Agriculture, Bikaner, Rajasthan to study the effect of levels and scheduling of nitrogen application on N content and uptake of malt barley (*Hordeum vulgare* L.) as affected by sowing dates during winter seasons of 2005-06 and 2006-07. The experiment was laid out in the split plot design with four replications on loamy sand soil. The growing environments and nitrogen levels were in main plot and nitrogen scheduling in the sub-plots. The results showed that significantly higher nitrogen content at pre-anthesis, in grain and straw, nitrogen uptake by grain and straw and total uptake of malt barley was observed under normal sown condition compared to late sown condition on two years pooled basis. Further, application of increasing levels of nitrogen from 60 to 90 kg ha<sup>-1</sup> significantly enhanced nitrogen content at pre-anthesis, in grain and straw and total uptake by grain and straw and total uptake of malt barley. Scheduling of nitrogen at 1/3 as basal + 1/3 at I<sup>st</sup> irrigation + 1/3 at I<sup>nd</sup> irrigation brought a substantial improvement in nitrogen content at pre-anthesis, in grain and straw, nitrogen uptake by grain and straw and total uptake of malt barley.

Key Words : Nitrogen content and uptake, Nitrogen levels, Date of sowing, Malt barley

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