

## **Effect of Nitrogen Management on Nitrogen Uptake, Dry Matter Production and Some Yield Parameters**

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**Abstract :** Effect of nitrogen (N) fertilizer levels on nitrogen uptake, dry matter production, yield and some yield components of rice (Hashemi, Kazemi, Khazar) was investigated in an experiment as factorial in RCBD with 3 replications in a paddy light soil at Guilan province, Iran, 2008-2009. In this experiment, four treatments including: N1-control (no N fertilizer); N2- 30 kgN/ha; N3- 60 kgN/ha; N4- 90 kgN/ha were compared. Results showed that total biomass (8386 kg/ha), grain yield (3662 kg/ha), panicles m<sup>-2</sup> (235.8) and total grain per panicle (103.8) were reached the highest value at high nitrogen level. Among the varieties the highest total biomass (7734 kg/ha), grain yield (3414 kg/ha) and total grain per panicle (78.2) belonged to Khazar. Dry matter, total N uptake was varied in different cultivars significantly and Khazar variety had the highest contents. Total biomass and total N uptake was varied significantly with the increasement of the amount of nitrogen applied. As total biomass and total N uptake increased with increasing in N fertilizing.

**Keywords :** rice, nitrogen, nitrogen uptake, dry matter

**Conference Title :** ICAE 2015 : International Conference on Agricultural Engineering

**Conference Location :** Istanbul, Türkiye

**Conference Dates :** August 17-18, 2015