

# Cloning and Expression Analysis of OsNADPH1 Gene from Rice in Drought Stress Response [PDF]

CHEN Jing<sup>1</sup> WAN Jia<sup>1</sup> JIANG Hua<sup>1,2</sup> GAO Xiao-ling<sup>1</sup> WANG Ping-rong<sup>1</sup> XI Jiang<sup>1</sup> XU Zheng-jun<sup>1,2</sup>

(1 Rice Research Institute, Sichuan Agricultural University, Wenjiang 611130, China; 2 Key Laboratory of Crop Genetic Resources and Improvement, Ministry of Education, Sichuan Agricultural University, Ya' an 625014, China)

**摘要:** An experiment was conducted to compare the mRNA expression difference in rice leaves and roots under drought stress and normal conditions using Fluorescent Differential Display (FDD) method. One positive fragment was isolated by combination of the H. A. Yellow-PAGE (contained 0.1% H. A. Yellow) separation and macroarray screening methods. Compared to *Arabidopsis thaliana* NADPH oxidoreductase gene, it has 96% identity. The cDNA was 1423 bp, and contained a complete open reading frame of 1048 bp encoding a protein with 345 amino acid residues. Moreover, the gene expression level was higher under drought stress than that under normal conditions. The possible role of NADPH oxidoreductase gene under drought response was also discussed.

**关键词:** rice; drought stress; NADPH oxidoreductase-like gene; cloning; gene expression

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