low_-K stress_conditions, GO enrichment analysis of functional significance was used. Gene Ontology (GO) is an internationally standardized gene functional classification system and a strictly defined concept to for comprehensively describing thee properties of genes and their products in any organism. GO has three ontologies: molecular functions, cellular components, and biological processes. The basic unit of GO is the GO-term. Every GO-term belongs to a type of ontology. In gene expression profiling analysis, GO enrichment analysis of functional significance applies uses hypergeometric testing to map all differentially expressed genes to terms in the GO database (http://www.geneontology.org/); looking for significantly enriched GO terms that are significantly enriched in a given DEG relative to thein DEGs comparing to the genome background. In our study, apart from the unknown transcripts, predicted or and known transcriptsa were eategorized according to their divided into groups: molecular function transcripts, cellular 专业SCI论 component transcripts, and biological process transcripts. Of these, 4813 differentially expressed transcripts ean be-were eategorized divided into 50 functional groups (Figure 2). In aspect of the For molecular function, the most significant enrichment was observed among the the various binding genes (GO: 0005488), including 40 DEGs encoding encoded calcium ion binding proteins (GO: 0005509), 66 DEGs encodinged iron ion binding proteins (GO: 0005506), 55 DEGs encoded encoding zinc ion binding proteins (GO: 0008270), and 4 DEGs encoded encoding potassium ion binding proteins (GO: 0030955). 280 Two hundred and eighty DEGs were found to encoded transferase activity (GO: 0016740), which These included the kinase activity genes (GO: 0016301). 94-Ninety-four DEGs were found to encoded transporter activity (GO: 0005215), which These included transmembrane

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224