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5/11/12

(PROFORMA FOR SUBMISSION OF RESEARCH PROJECTS)

Part - I : General Information

200 Project Code :

2001 Institute Code No. : C.I. 6.9  
2002 ICAR Code No. : IXX09664

201 Name of Institute and Division :

2011 Name & Address of Institute : Indian Grassland & Fodder Research Institute,  
Jhansi-284003

2012 Name of Division/Section : C. I. Division

2013 Location of Project : Jhansi

202 Project Title : Identification of Functional Markers for Drought Tolerance in Pearl millet.

203 Priority Area :

2031 Research Approach : Applied Res. / Basic Res. / Process /TOT of Tech.Develop.  
01 02 03 04

204 Specific Area :

2041 Previous Project/Projects in this specific area : None  
(Year, type of funding, cost, etc.)

205 Duration : 5 years

2051 Date of Start : October, 2012

2052 Likely Date of Completion : October, 2017

206 Total Cost of the Project : 10.5 Lakhs

2061 Foreign Exchange Component (If any) : Nil

207 Project Profile Summary :

Gene expression in plants is specifically regulated to ensure proper development and function of tissues, and adequate responses to environmental changes. Genes being present in the cell, they are regulated at transcriptional level to express the gene as and when required. Drought being a complex trait, several genes are expected to control this trait. Markers linked to the contributory loci (genes) would be of considerable help in development of drought tolerant varieties of pearl millet and other related crop. RIL will be used to develop mapping population and the doubled haploid technique will help fix the gene-combinations and save time. Tagging the genes underlying drought tolerance QTL will facilitate understanding molecular mechanisms of drought tolerance, and will accelerate genetic improvement of pearl millet through MAS.

208 Key Words : Pearl millet, Drought, Functional marker, Doubled haploid, RIL population.

PI put up with file along with IRe. proceeding of  
Shri Nigam  
13/3/12

**Part - II : Investigator Profile****210 Principal Investigator :**

2101 Name : **Dr. Suresh Kumar**  
2102 Designation : Senior Scientist  
2103 Division/Section : Crop Improvement  
2104 Location : IGFRI, Jhansi  
2105 Institute Address : IGFRI, Jhansi-284003, U.P.

**211 Co-investigator :**

2111 Name : **Dr. Kumar Durgesh**  
2112 Designation : Scientist  
2113 Division/Section : Crop Improvement  
2114 Location : IGFRI, Jhansi  
2115 Institute Address : IGFRI, Jhansi-284003, U.P.

**212 Co-investigator :**

2121 Name : **Dr. Pankaj Kaushal**  
2122 Designation : Principal Scientist & Head  
2123 Division/Section : Crop Improvement  
2124 Location : IGFRI, Jhansi  
2125 Institute Address : IGFRI, Jhansi-284003, U.P.

**213 Co-investigator :**

2131 Name : **Dr. M. G. Gupta**  
2132 Designation : Principal Scientist  
2133 Division/Section : Crop Improvement  
2134 Location : IGFRI, Jhansi  
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