

## List of approved projects

| S.No | Project Title   | Principal Investigator and Associates   |
|------|---|---|
| 1    | Role of plant volatiles in oviposition behavior of sorghum shoot fly ( <i>Atherigona soccata</i> Rondani) | <b>PG Padmaja</b> and N Seetharama  |
| 2    | Wide hybridization and mutagenesis in sorghum to create economically useful pre-breeding material         | <b>SV Rao</b> , KBRS Visarada and M Elangovan   |
| 3    | Sorghum genetic resources management  | <b>M Elangovan</b> , VA Tonapi and Prabhakar  |
| 4    | Basic and strategic studies on seed longevity in sorghum  | <b>N Kannababu</b> , R Madhusudhana, G Shyam Prasad, IK Das, HS Talwar, VA Tonapi and M Elangovan |
| 5    | Overcoming cold-induced poor seed set and ergot incidence in sorghum                                      | <b>VA Tonapi</b> , IK Das, R Madhusudhana, M Elangovan, Prabhakar and N Kannababu                 |
| 6    | Improving grain mold resistance to sorghum parental lines   | <b>S Audilakshmi</b> and IK Das   |
| 7    | Development of rabi parental lines and varieties  | <b>Prabhakar</b> , VR Bhagwat, HS Talwar and AV Gadewar   |
| 8    | Identification of new sources and traits associated with drought tolerance in sorghum                     | <b>HS Talwar</b> , Prabhakar, M Elangovan and CV Ratnavathi                                       |
| 9    | Overcoming <i>Fusarium</i> induced losses in grain sorghum  | <b>IK Das</b> , S Audilakshmi and R Madhusudhana  |
| 10   | Improving and utilizing sweet sorghum for high biofuel and biomass production                             | <b>SS Rao</b> , AV Umakanth, M Elangovan, B Dayakar Rao, CV Ratnavathi and JS Mishra              |
| 11   | Breeding for micronutrient enrichment in sorghum  | <b>K Hariprasanna</b> , M Elangovan and R Madhusadana   |
| 12   | Development of superior sorghum genotypes for forage and animal feed                                      | <b>C Aruna</b> , BV Bhat, AV Umakanth, G Shyam Prasad and VR Bhagwat                              |
| 13   | Genetics of fertility restoration in alternate cytoplasm and mapping fertility gene(s) in sorghum         | <b>R Madusudhana</b> , AV Umakanth  |
| 14   | Development of transgenic sorghum for improved insect resistance and salinity tolerance                   | <b>D Balakrishna</b> , G Shyam Prasad and HS Talwar   |
| 15   | Production of doubled-haploids in sorghum   | <b>KBRS Visarada</b> and SV Rao   |
| 16   | Studies on the mechanism of resistance against shoot bug [ <i>Peregrinus maidis</i> (Ashmead)] in sorghum | <b>B Subbarayudu</b> , A Kalaisekar and MY Samdur   |
| 17   | Development of sorghum resistant to shoot fly ( <i>Atherigona soccata</i> Rondani)                        | <b>VR Bhagwat</b> , G Shyam Prasad and C Aruna  |
| 18   | Development of dual type sorghum resistant to stem borer, <i>Chilo partellus</i>                          | <b>G Shyam Prasad</b> , VR Bhagwat and AV Umakanth  |
| 19   | Weed management in sorghum  | <b>JS Mishra</b> , M Elangovan, KBRS Visarada, SS Rao and MS Raut                                 |
| 20   | Marker-assisted selection for heterosis and combining ability   | <b>P Rajendra Kumar</b> , K Hariprasanna and R Madhusudhana                                       |

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| 21                  | Genetic enhancement of sweet sorghum for high sugar content, high biomass and related traits  | <b>AV Umakanth</b> , BV Bhat, SS Rao and G Shyam Prasad            |
| 22                  | Evaluations of public and private sorghum hybrids and standardization of package of practices for sorghum cultivations under zero tillage in rice fellows | <b>RR Chapke</b> , JS Mishra, MS Raut and K Hariprasanna           |
| <b>New projects</b> |   |  |
| 23                  | Promotion of entrepreneurship development to enhance scope of innovation and business development in millets  | <b>B Dayakar Rao</b> , Ch Shashidhar Reddy and Chari Appaji        |
| 24                  | Enhancing socio-economic status of resource poor farmers in drought prone area through sorghum technologies intervention                                  | <b>Chari Appaji</b> , MS Raut and B Dayakar Rao                    |
| 25                  | Study of biochemical mechanisms of sucrose accumulation and fermentation technology for biofuel production in sweet sorghum                               | <b>CV Ratnavathi</b> , Monika Dalal and SS Rao                     |
| 26                  | Collation, evaluation, documentation and utilization of sorghum genetic stocks  | <b>S Rakshit</b> , S Gomashe, KN Ganapathy and VR Bhagwat          |
| 27                  | Developing early duration and photoperiod insensitive grain sorghum MS and R lines  | <b>S Gomashe</b> and S Rakshit                                     |
| 28                  | Association mapping for grain quality traits in sorghum related to poultry feed industry  | <b>KN Ganapathy</b> , S Audilakshmi, S Rakshit and K Hariprasanna  |
| 29                  | Eco-biological dynamism of aphids and its natural enemy complex in sorghum  | <b>A Kalaisekar</b> , G Shyam Prasad, VR Bhagwat and B Subbarayudu |