



List of Ongoing Projects -2022

List of ongoing projects

S. No	Project Title	Principal investigator	Duration
Crop Improvement Sorghum			
1	Breeding for genetically diverse kharif sorghum genotypes with improved grain yield, quality, and resistance to important biotic stresses	C Aruna	2021-2026
2	Genetic enhancement of energy sorghums for renewable fuels and fodders	AV Umakanth	2021-2026
3	Utilization of wide hybridization derivatives in breeding program and molecular characterization in sorghum	KBRS Visarada	2020-2023
4	Genetic enhancement of rabi sorghum adaptive traits for improved varietal performance	Parashuram Patroti	2020-2025
Pearl Millet			
5	Improving the yield potential of pearl millet hybrids for favorable and marginal environments	T Nepolean	2018-2023
6	Genetic enhancement of pearl millet for yield and adaptation to arid regions	P Sanjana Reddy	2021-2026
7	Forage pearl millet improvement for high biomass	Avinash Singode	2021-2026
Small Millets			
8	Genetic improvement of foxtail millet for grain yield and related traits	K Hariprasanna	2021-2026
9	Genetic diversification for grain yield and related traits in finger millet genotypes	KN Ganapathy	2021-2026
10	Development of end-use specific little millet genotypes with improved grain yield and grain micronutrients	KN Ganapathy	2021-2026
11	Genetic improvement of proso millet for yield and protein content	Avinash Singode	2021-2026
12	Development of dual purpose cultivars with improved quality in barnyard millet	B Amasiddha	2021-2026
13	Improvement of kodo millet for economically important traits and development of markers for cultivar identification	Ch Deepika	2021-2026
Genetic resources management			
14	Nutri-cereals genetic resources management	M Elangovan	2021-2026
15	Pre-breeding of sorghum and finger millet for specific trait improvement	Karnam Venkatesh	2021-2026
	Biotechnology		

S. No	Project Title	Principal investigator	Duration
16	Manipulating SbSERK gene(s) to understand their effect on generating apomixis components through CRISPR-Cas9 mediated gene editing technology	D Balakrishna	2020-2025
17	Generation of genomic resources and its application for the improvement of millets	P Rajendra Kumar	2021-2026
Crop Protection			
18	Studies on virulence and host plant resistance on important diseases of millets	IK Das	2021-2026
19	Studies on endophytes for management of major soil-borne diseases of millets	G Rajesha	2020-2024
20	Yield loss assessment in millets due to invasive fall army worm, and its integrated management with special emphasis on sorghum	G Shyam Prasad	2020-2024
21	Understanding the host-pest interactions of shoot fly, stem borer and fall armyworm in millets and management through semio-chemicals	PG Padmaja	2020-2025
22	Integrated pest management for major shoot pests of sorghum during post rainy season in dryland region	B Subbarayudu	2020-2024
23	Studies on major insect pests of rabi sorghum and development of EILs	K Srinivas Babu	2020-2025
24	Assessment of crop losses due to major insect pests and role of enemies in reducing the pest load in millets	A Kalaisekar	2018-2023
25	Risk of pesticide sprays on sorghum: Acute and field toxicities on stem borers & shoot bug and their natural enemies	J Stanley	2020-2023
Crop Production & Physiology			
26	Development of intra millet intercropping systems for resilience and sustainability	B Gangaiah	2020-2024
27	Improving water use efficiency of finger millet & foxtail millet under limited moisture conditions	Swarna Ronanki	2021-2026
28	Physiological dissection of key traits contributing for moisture stress adaptations in post rainy sorghum: with an emphasis on root architectural traits	S Srividhya	2020-2025
29	Livelihood security of millets stakeholders through production and processing technologies in NE region	B Sangappa	2020-2023
	Nutritional quality & Seed Science		
30	Biochemical characterization of millets and millet food products for nutraceuticals and health benefits	CV Ratnavathi	2021-2026
31	High calcium accumulation in finger millet and its relationship to grain constituents	R Venkateshwarulu	2020-2023
32	Nutritional composition, phenolic profile and bioactivities of sorghum, and foxtail, kodo and proso millet grains	VM Malathi	2021-2026
33	Investigations on genetics of seed vigor and longevity, and effect of foliar plant nutrition on seed yield and quality in small millets	N Kannababu	2020-2025
34	Studies on cold tolerance in sorghum and foxtail millet	Sooganna	2018-2023

S. No	Project Title	Principal investigator	Duration
Socioeconomics & Extension			
35	Development of millet based composite foods in collaboration with fishery, dairy, horticulture and meat commodities	B Dayakar Rao	2021-2026
36	Yield gap and constraints analysis of sorghum production in traditional area	RR Chapke	2021-2026
37	Economic analysis of production, marketing, utilization, and policy perspectives of sorghum in India	Anuradha Narala	2020-2025
38	Development of selected value-added products of dairy analogue, pigments extraction from millets and its evaluation for enhanced shelf life	P Hemashankari	2020-2023
39	Development of online web application for hybrid and varietal germplasm PME students database information and data retrieval system	P Mukesh	2021-2023

List of Completed Projects

S. No	Project Title	Principal Investigator	Duration
1	Development of genetically diversified high yielding Rabi sorghum Hybrids	R Madhusudhana	2017-2022
2	Brown top millet- Characterization and genetic improvement	B Venkatesh Bhat	2017-2022 Revised duration (2017-2025)
3	Sorghum transgenic for stem borer resistance	D Balakrishna	2017-2022
4	Biochemical and molecular mechanisms of thermo-tolerance in pearl millet	Jinu Jacob	2017-2022

List of New Projects

S.No	Title of the Project	Name of PI/ Co-PIs	Duration
1	Breeding forage sorghum for higher productivity	B Venkatesh Bhat (PI), Avinash Singode, AV Umakanth, G Shyam Prasad, R Venkateshwarulu	2022-2027
2	Viral diseases of sorghum: A focused study on characterization, developing advanced diagnostic and strategy towards management	Baswaraj Raigond (PI), IK Das, Parasuram Patroti, N Manjunath, (NRCP), YB Basavaraj (IARI), M Elangovan	2022-2027
3	Physiological basis of high temperature stress on summer sorghum	Seva Nayak (PI), S Srividhya, Swarna Ronanki, R Madhusudhana	2022-2025
4	Adoption and impact of improved finger millet production technologies	A Srinivas (PI), B Dayakar Rao, U Triveni (RARS, Vizianagaram), TS Sukanya (PC Unit, UAS, Bangalore)	2022-2026