

**CONSOLIDATED LIST OF PROJECTS APPROVED FOR IMPLEMENTATION
DURING 2021-22**

Continuous No.	Division-wise No.	Title, duration, Number	PI
		CROP IMPROVEMENT	
	I.	Priority area I: Management of cashew genetic resources (Leader: Dr. Mohana. G.S)	
1.	1.	Collection, conservation, characterisation and evaluation of cashew genetic resources [1986 – Long term] <i>[Old title: Management of genetic resources in cashew]</i> PIMS Number: IXX00382	Mohana. G.S.
	II	Priority area II. Genetic improvement of cashew for yield and quality traits (Leader: Dr. Mohana. G.S)	
2.	2.	Genetic improvement of cashew through hybridisation and seedling selection approaches [1986 -Long Term] <i>[Old title: Genetic improvement of cashew for yield and quality traits]</i>	J.D. Adiga
3.	3.	Breeding in cashew for special traits [06/2012-05/2027] <i>[Old title: Development of dwarf and compact cashew hybrids]</i> PIMS Number: IXX09323	Eradasappa, E.
4.	4.	Breeding approaches for developing TMB tolerance [09/2017-08/2030] PIMS Number: IXX13687	Mohana, G.S.
5.	5.	Genetics of traits in cashew [05/2019 – 04/2025] <i>[Old title: Generation mean analysis in cashew to understand the nature of gene action for important traits]</i> PIMS Number: IXX15237	Eradasappa, E.
6.	6.	Evaluation of big cashew apple genotypes for apple yield and quality [10/2013-06/2021] Extended till 06/2022) PIMS Number: IXX10492	Eradasappa, E.

		PIMS Number: IXX10491	
7.	7.	Polyploidy breeding in cashew [10/2020-09/2030]	Mohana, G.S.
8.	8.	New proposal: Evaluation of dwarf and semi dwarf accessions and their seedling progenies for high density planting system [09/2021-08/2032]	Mohana G.S
	III	Priority area III. Development, refinement and use of biotechnological approaches in cashew (Leader: Dr. Siddanna Savadi)	
9.	9.	<i>De novo</i> genome assembly, linkage analysis and population structure studies in cashew (<i>Anacardium occidentale</i> L.) [09/2017 – 08/2022] PIMS Number: OXX04051	Siddanna Savadi
10.	10.	Genetic dissection of QTLs governing nut yield and cashew nut shell liquid (CNSL) content in cashew [06/2018-05/2025] PIMS Number: IXX14347	Siddanna Savadi
11.	11.	Externally Funded Project: Development of morphological descriptors and DUS test guidelines for cashew Funded by: Protection of Plant Varieties and Farmers' Rights Authority (PPV&FRA), New Delhi Budget: Rs. 10 Lakhs [04/2015-03/2022] PIMS Number: OXX03473	Mohana, G.S.
12.	12.	Externally Funded Project: Establishment of a Centre of Excellence for Biotechnology Needed for Genomics Assisted Breeding in Cashew Funded by: RKVY-FAFTAAR, Government of Karnataka Budget: Rs. 75 lakhs [04/2020 to 03/2022]	Siddanna Savadi
		CROP MANAGEMENT	
	IV	Priority area IV: Enhancing input use efficiency and productivity (Leader: Dr. Shamsudheen M)	

13.	1.	Developing nutrient management strategies for cashew based on soil and leaf status [10/2020-09/2023] [Old title: Development of nutrient management schedules for cashew based on leaf nutrient status]	Shamsudheen Mangalassery
14.	2.	Carbon cycling, sequestration and nutrient dynamics in cashew orchards [10/2020-09/2023]	Shamsudheen Mangalassery
	V	Priority area V: Physiological and basic studies (Leader: Dr. Babli Mog)	
15.	3.	Characterization of physiological responses of cashew (<i>A. occidentale</i> L.) accessions to salt and drought stresses [10/2015-09/2022] IXX11537 IXX11536	Babli Mog
16.	4.	In-vitro pollen germination and pollen tube growth of cashew varieties in response to high temperature stress [05/2019 – 04/2024] PIMS Number: IXX15130	Babli Mog
17.	5.	New proposal: Physiological and biochemical basis of salinity tolerance in cashew rootstocks [09/2021-08/2026]	Babli Mog,
	VI	Priority area VI: Horticulture production technologies (Leader: Dr. J.D. Adiga)	
18.	6.	Studies on pruning and phenology in cashew [09/2017-08/2021] IXX13900 IXX13638	J.D. Adiga
19.	7.	Effect of growth regulator in combination with flower and fruit-set enhancing chemicals on cashew (<i>Anacardium occidentale</i> L.) [10/2020-09/2022] PIMS Number: IXX16215	V. Thondaiman
20.	8.	Development of cashew (<i>Anacardium occidentale</i> L.) based cropping system for west coastal region [10/2020-09/2023]	V. Thondaiman

		[Old title: Development of cashew (<i>Anacardium occidentale</i> L.) based cropping system under rainfed condition of Karnataka]	
21.	9.	Design, development and performance evaluation of Cashew fruit and nut separator [10/2020-09/2024] PIMS Number: IXX15634	Manjunatha. K
22.	10.	Design and development of gadgets for cashew fruit harvesting and collection [10/2020-09/2024] PIMS Number: IXX15635	Manjunatha. K
23.	11.	New proposal: Influence of weather parameters on growth dynamics of apple and nut in selected varieties of Cashew [09/2021-08/2024]	Manjesh, G. N.
24.	12.	New proposal: Effect of inter-stocks in Cashew (<i>Anacardium occidentale</i>) [09/2021-08/2024]	V. Thondaiman
25.	13.	New proposal: Biochemical and mineral composition studies in relation to phenology of fruit development and maturity in cashew [09/2021-08/2023]	B.M. Muralidhara
		CROP PROTECTION	
	VII	Priority area VIII: Integrated management of pests and diseases & ecosystem services in cashew (Leader: Dr. T.N. Raviprasad)	
26.	1	Investigations on inflorescence insect pests of cashew and their management [10/2016-05/2022] PIMS Number: IXX13176	K. Vanitha
27.	2	Cashew tea mosquito bug interactions and the defensive responses [05/2019 – 04/2023] PIMS Number: IXX14975	K. Vanitha
28.	3	Characterization and synthesis of female sex pheromone of Tea Mosquito Bug; (<i>Helopeltis antonii</i>) and its bioassay [10/2020-09/2025]	T N Raviprasad
29.	4	Influence of <i>Apis cerana</i> and <i>Braunsapis picitarsis</i> on pollination and fruit set of cashew	K. Vanitha

		[05/2019 – 04/2023] PIMS Number: IXX14974	
30.	5	New proposal: Assessing the field effectiveness of entomopathogenic nematodes (EPN) and indigenous strain of entomopathogenic fungus (EPF) in management of cashew stem and root borers (<i>Plocaederus ferrugineus</i> and <i>Plocaederus obesus</i>) [09/2021-08/2026]	T.N. Raviprasad,
31.	6.	New proposal: Survey and diagnosis of diseases occurring in cashew crop and their morphological and molecular characterization [09/2021-08/2024]	H. Rajashekara
		POST HARVEST TECHNOLOGY	
	VIII	Priority area VIII: Post-Harvest Technology (Leader: Dr. D. Balasubramanian)	
32.	1	Design and development of mechanized slicer for cashew apple [10/2014 – 06/2022] PIMS Number: IXX11563	D. Balasubramanian
33.	2	Studying comparative performance of cashewnut processing systems in India [10/2017-09/2022] IXX13902 IXX13683	D. Balasubramanian
34.	3	Design and development of moisture meter for raw cashewnuts [07/2018-06/2022] IXX13901 IXX13682	D. Balasubramanian
35.	4	Development of value added products from cashew apple and sprouts [06/2018-05/2022] [Old title: Development of dehydrated products from cashew apple and sprouts] PIMS Number: IXX14346	Shamsudheen Mangalassery
36.	5	Optimizing Processing Parameters In Cashew For Enhancing Whole Kernel Recovery	D. Balasubramanian

		[10/2020-09/2021]	
37.	6	New proposal: Development of Ready to Eat alternate Snack food using cashew apple - Extrusion and Vacuum frying approach [09/2021-08/2024]	D. Balasubramanian
38.	7	New proposal: Development of Probiotic Food Product/s from Cashew Apple [09/2021-08/2024]	Rajkumar, A.D
39.	8	New proposal: Phytochemical characterization of cashew (leaf and apple) nutraceuticals for its utilization in development of functional foods [09/2021-08/2024]	Rajkumar, A.D
		TRANSFER OF TECHNOLOGY	
	IX	Priority area IX: Transfer of technology and knowledge management (Leader: Dr. Aswathy Chandrakumar)	
40.	1	New proposal: Knowledge management and technology transfer in cashew [09/2021-Long term]	Aswathy Chandrakumar
41.	2	New proposal: Analysis of socio-economic dimensions and innovation system dynamics in Cashew sector [09/2021-Long term]	Aswathy Chandrakumar
42.	3	Externally Funded Project: Development of an exclusive android application for cashew cultivation Funding: Directorate of Cashewnut and Cocoa Development (DCCD), Cochin Budget: Rs. 5.0 Lakhs [09/2017-03/2022] OXX04052 OXX03985 OXX03984	Mohana, G.S.

43.	4	<p>Externally Funded Project:</p> <p>Farmer participatory soil and plant health management – An attempt for improving livelihood of cashew farmers of coastal Karnataka Funded by: RKVY-FAFTAAR, Government of Karnataka Budget: Rs. 1.89 Crores [04/2018 to 03/2021]</p> <p>PIMS Number: OXX04244</p>	Shamsudheen Mangalassery
44.	5	<p>Externally Funded Project:</p> <p>Utilization of cashew apple for new products and entrepreneurship development of rural women and youth in Karnataka for mitigating the effect of COVID-19 Funded by: RKVY-FAFTAAR, Government of Karnataka Budget: Rs. 57.0 lakhs [04/2020 to 03/2022]</p>	Shamsudheen Mangalassery
45.	6	<p>Externally Funded Project:</p> <p>Improving area, production and productivity of cashew in Shivamogga and Chitradurga districts in Karnataka Funded by: RKVY-FAFTAAR, Government of Karnataka Budget: Rs. 36 lakhs [04/2020 to 03/2022]</p>	Mohana, G.S.
46.	7.	<p>Externally Funded Project:</p> <p>Development of an AI-based app for identification of pests and diseases in cashew Funded by: RKVY-FAFTAAR, Government of Karnataka Budget: Rs. 16 lakhs [04/2020 to 03/2022]</p>	Mohana, G.S.
47.	8.	<p>Externally Funded Project:</p> <p>Establishment of an exclusive ‘Cashew Parlour’ for creating awareness on value added products of cashew</p>	Mohana, G.S.

		Funded by: RKVY-FAFTAAR, Government of Karnataka Budget: Rs. 2.2 Crores [04/2020 to 03/2022]	
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