

ONGOING AND CONCLUDED RESEARCH PROJECTS

Ongoing Projects

Sl. No.	Project	PI	Co-PIs
Crop Improvement			
1.1. Management of cashew germplasm resources			
1.	1.1.1. Management of genetic resources in cashew [1986 - Long term]	M.G. Nayak	Mohana, G.S. K. Vanitha Eradasappa, E. *Muralidhara, B.M.
2.	1.1.2. Screening of cashew germplasm for apple and nut characters [03/2016 - 03/2024]	Mohana, G.S.	D. Balasubramanian Preethi, P. *Muralidhara, B.M.
3.	1.1.3. Evaluation of big cashew apple genotypes for apple yield and quality [10/2013 - 06/2021]	Preethi, P.	K. Vanitha Eradasappa, E.
1.2. Genetic improvement of cashew			
4.	1.2.1 Genetic improvement of cashew for yield and quality traits [1986 - Long Term]	J.D. Adiga	Mohana, G.S. M.G. Nayak Eradasappa, E. Siddanna Savadi *Muralidhara, B.M.
5.	1.2.2 Development of dwarf and compact cashew hybrids [06/2012 - 05/2027]	Eradasappa, E.	Mohana, G.S. J.D. Adiga
6.	1.2.3 Breeding for improvement of nut size in cluster bearing genotypes [06/2018 - 05/2024]	Eradasappa, E.	Mohana, G.S. M.G. Nayak
7.	1.2.4 Breeding approaches for developing TMB tolerance [09/2017 - 08/2030]	Mohana, G.S.	Eradasappa, E. K. Vanitha
8.	1.2.5 <i>De novo</i> genome assembly, linkage analysis and population structure studies in cashew (<i>Anacardium occidentale</i> L.) [09/2017 - 08/2020]	Siddanna Savadi	Mohana, G.S. J.D. Adiga

9.	1.2.6 Genetic dissection of QTLs governing nut yield and cashew nut shell liquid (CNSL) content in cashew [06/2018 - 05/2025]	Siddanna Savadi	Eradasappa, E. Mohana, G.S.
10.	1.2.7 Generation mean analysis in cashew to understand the nature of gene action for important traits [05/2019 - 04/2025]	Eradasappa, E.	Mohana, G.S.
11.	1.2.8 Breeding for reduced tannin content in cashew apples of hybrids of popular cultivars [05/2019 - 04/2025]	Eradasappa, E.	Mohana, G.S. J.D. Adiga Preethi, P.
12.	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 - 03/2020]	M.G. Nayak	Mohana, G.S.
Crop Management			
13.	2.1.1 Studies on pruning and phenology in cashew [09/2017 - 08/2020]	J.D. Adiga	Preethi, P. Siddanna Savadi *Muralidhara, B.M.
14.	2.1.3 Optimisation of mineral nutrition to cashew under high density planting [06/2018 - 05/2021]	Shamsudheen Mangalassery	M.G. Nayak Preethi, P. Babli Mog
15.	2.1.4 Characterization of physiological responses of cashew (<i>A. occidentale</i> L.) accessions to salt and drought stresses [10/2015 - 09/2020]	Babli Mog	-
16.	2.1.6 In-vitro pollen germination and pollen tube growth of cashew varieties in response to high temperature stress [05/2019 - 04/2021]	Babli Mog	Shamsudheen Mangalassery Eradasappa, E. K.B. Hebbar

17.	Externally Funded Project: Farmer participatory soil and plant health management – An attempt for improving the livelihood of cashew farmers of coastal Karnataka Funded by: RKVY-FAFTAAR, Government of Karnataka Budget: Rs. 1.89 Crores [04/2018 to 03/2020]	Shamsudheen Mangalassery	M.G. Nayak J.D. Adiga Preethi, P. *Muralidhara, B.M.
Crop Protection			
3.1. Management of Insect Pests of Cashew			
18.	3.1.1 Investigations on semiochemicals for management of TMB and CSRB [10/2014 - 10/2020]	T.N. Raviprasad	K. Vanitha Bakthavatsalam, N. (ICAR-NBAIR) Gajbhiye, N. (ICAR-DMAPR)
19.	3.1.2 Investigations on inflorescence insect pests of cashew and their management [10/2016 - 09/2020]	K. Vanitha	T.N. Raviprasad
20.	3.1.3 Evaluation of alternative insecticides/ products for the management of tea mosquito bug (TMB) and cashew stem and root borers (CSRB) [10/2016 - 10/2020]	T.N. Raviprasad	K. Vanitha
21.	3.1.4 Standardization of IPM involving EPN and <i>Metarhizium anisopliae</i> for management of CSRB [09/2017 - 10/2021]	T.N. Raviprasad	Rajkumar (ICAR-CPCRI)
22.	3.1.5 Cashew tea mosquito bug interactions and the defensive responses [05/2019 - 04/2023]	K. Vanitha	T.N. Raviprasad Preethi, P.
3.2. Arthropod Bio-diversity and Pollinator Activity in Cashew			
23.	3.2.3 Influence of <i>Apis cerana</i> and <i>Braunsapis picitarsis</i> on pollination and fruit set of cashew [05/2019 - 04/2023]	K. Vanitha	-

Post Harvest Technology			
4.1. Improving performance of cashewnut processing			
24.	4.1.2 Design and development of moisture meter for raw cashewnuts [07/2018 - 06/2020]	D. Balasubramanian	Sreejith (M/s EMCON, Kerala)
25.	4.1.3 Studying comparative performance of cashewnut processing systems in India [10/2017 - 09/2019]	D. Balasubramanian	-
4.2. By-product utilization and product diversification			
26.	4.2.1 Design and development of mechanized slicer for cashew apple [10/2014 - 06/2020]	D. Balasubramanian	Ravindra Naik (ICAR-CIAE)
27.	4.2.3 Development of dehydrated products from cashew apple and sprouts [06/2018 - 05/2021]	Preethi, P.	Shamsudheen Mangalassery
Transfer of Technology			
28.	Externally Funded Project: Development of an exclusive android application for cashew cultivation Funding: Directorate of Cashewnut and Cocoa Development (DCCD), Kochi Budget: Rs. 5.0 Lakhs [09/2017 - 09/2019]	Mohana, G.S.	M.G. Nayak

Concluded projects

Sl. No.	Project	PI	Co-PIs
Post Harvest Technology			
1.	4.1.1 Developing quality standards for raw cashew nuts [10/2014 - 09/2018]	D. Balasubramanian	K. Vanitha
2.	4.2.2 Screening of cashew varieties to specify the use of cashew apple in value-added products [10/2014 - 06/2018]	*Rajkumar, A.D.	Preethi, P.

*On study leave