



**भाकृअनुप – केन्द्रीय कन्द फसल अनुसंधान संस्थान  
श्रीकार्यम्, तिरुवनन्तपुरम् 695 017, केरल**  
**ICAR-CENTRAL TUBER CROPS RESEARCH INSTITUTE**  
**Sreekariyam, Thiruvananthapuram 695 017, Kerala**



**List of Institute, Externally aided and Developmental projects  
(April 2023-March 2024)**

**Institute Projects**

| Sl. No. | Project Title   | PI                    | Co-PIs  |
|---------|---|-----------------------|---|
| I       | <b>HORTCTCRISIL 202000901465</b><br><b>Mega Project 1: Conservation and utilization of germplasm of tuber crops for sustaining production</b>                       | Asha K.I.             | M.N. Sheela, P. Murugesan, Visalakshi Chandra C., Asha Devi A., Kalidas Pati, Krishna Radhika N.<br><b>Project Associates</b><br>Shirly Raichal Anil, L.K. Bharathi, Senthilkumar K.M., M.L. Jeeva S.S. Veena V.B.S. Chauhan, E.R. Harish, T. Makeshkumar, A.N. Jyothi, H. Kesava Kumar, J. Sreekumar, R. Arutselvan, Hanume Gowda K., Sujatha T.P., Rahana, S.N. |
| II      | <b>HORTCTCRISIL 202001001466</b><br><b>Mega Project 2: Genetic improvement of tuber crops through conventional breeding and molecular approaches</b>                | C. Mohan              |   |
| 1       | <b>Project 1:</b> Breeding to evolve trait specific varieties in cassava, yams and arrowroot for productivity, earliness, quality and resistance to biotic stresses | M.N. Sheela           | Asha K.I., C. Mohan<br>T. Makeshkumar, Asha Devi A.<br>G. Suja, K. Susan John<br>A.N. Jyothi, Krishna Radhika N.<br>Visalakshi Chandra C.<br>J. Sreekumar, Senthilkumar K.M.<br>E.R. Harish, T. Krishnakumar<br>P. Prakash, S. Sunitha, Sujatha T.P., Rahana S.N.   |
| 2       | <b>Project 2:</b> Map based cloning of CMD resistant gene(s) & identification of markers associated with drought tolerance and high starch content in cassava       | C. Mohan              | Senthilkumar K.M.<br>J. Sreekumar, A.N. Jyothi<br>T. Makeshkumar, Saravanan Raju  |
| 3       | <b>Project 3:</b> Genetic analysis and QTL mapping for determining genetic basis of post-harvest physiological  | Visalakshi Chandra C. | M.N. Sheela, Saravanan Raju<br>Asha K.I., A.N. Jyothi<br>J. Sreekumar   |

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|    | deterioration (PPD) tolerance and enhanced shelf life in cassava  |                     |  |
| 4  | <b>Project 4:</b> Genome analysis, identification and functional characterization of early bulking genes in cassava, abiotic stress and tuberization responsive genes in sweet potato | Senthilkumar K.M.   | M.N. Sheela, C. Mohan<br>Saravanan Raju<br>Krishna Radhika N., J. Sreekumar<br>CC-PI<br>Monika Dalal (ICAR-NIPB)         |
| 5  | <b>Flagship Project 5:</b> Genetic improvement of cassava through gene editing for modified starch  | Krishna Radhika N.  | Senthilkumar K.M., Sujatha T.P.<br>T. Makeshkumar, A.N. Jyothi   |
| 6  | <b>Project 6:</b> Molecular characterization of nutrient homeostasis in tubers for biofortification of cassava  | Sujatha T.P.        | M.N. Sheela, A.N. Jyothi<br>J. Sreekumar   |
| 7  | <b>Project 7:</b> Phenomics approaches for physiological trait based breeding for drought and PPD tolerance in cassava  | C. Mohan            | Visalakshi Chandra C.<br>Senthilkumar K.M.<br>Krishna Radhika N., J. Sreekumar V.S.<br>Santhosh Mithra<br>Saravanan Raju |
| 8  | <b>Project 8:</b> Breeding and evaluation for development of high yielding nutritionally enriched, photo-insensitive, processable and multipurpose sweet potato varieties             | Shirly Raichal Anil | Visalakshi Chandra C., S. Sunitha<br>E.R. Harish, Saravanan Raju<br>A.N. Jyothi, J. Sreekumar                            |
| 9  | <b>Project 9:</b> Harnessing the genetic potential of wild <i>Ipomoea</i> spp. through wide hybridization for improvement of sweet potato   | L.K. Bharathi       | Kalidas Pati, E.R. Harish<br>T. Makeshkumar<br>Visalakshi Chandra C.   |
| 10 | <b>Project 10:</b> Breeding for development of high starch, anthocyanin and β-carotene rich varieties in sweet potato and high yielding nutritional rich varieties in yam bean        | Kalidas Pati        | V.B.S. Chauhan, R. Arutselvan<br>M. Nedunchezhiyan<br>K. Laxminarayana   |
| 11 | <b>Project 11:</b> Genetic improvement for drought tolerance in sweet potato and high yielding, disease tolerant nutritionally rich lines in taro                                     | V.B.S. Chauhan      | Kalidas Pati, R. Arutselvan<br>M. Nedunchezhiyan, K. Laxminarayana<br>Hanume Gowda K., Manas Ranjan Sahoo                |
| 12 | <b>Project 12:</b> Breeding for earliness, quality traits and salinity tolerance in sweet potato  | Hanume Gowda K.     | Senthilkumar K.M., K. Laxminarayana,<br>V.B.S. Chauhan Kalidas Pati, Saravanan<br>Raju, Manas Ranjan Sahoo               |
| 13 | <b>Project 13:</b> Genetic improvement of edible aroids for resistance to biotic stress and quality parameters  | Asha Devi A.        | Shirly Raichal Anil, S. Sunitha,<br>S.S. Veena, Krishna Radhika N.,<br>Senthilkumar K.M., Manas Ranjan Sahoo             |

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| 14 | <b>Project 14:</b> Developing breeder seed standards and precocity of genetic vigour for tropical tuber crops  | P. Murugesan | Shirly Raichal Anil<br>Kalidas Pati, R. Arutselvan<br>R. Umarani,<br>CC-PI<br>Pakmakshi Thakur(IGKV) |
| 15 | <b>Project 15:</b> Inducing genetic variability, characterization, grouping and developing breeding lines with large tuber size and short duration in Chinese potato | P. Murugesan | L.K. Bharathi, Sujatha T.P.<br>H. Kesava Kumar, Visalakshi Chandra C.                                |