

## List of Projects-2012

### Crop Improvement Division

**CI 1.6: Collection, evaluation, documentation and conservation of forage crops germplasm (Merged project of CI 1.5 and CI 1.6)**

PI: Tejveer Singh, A.K. Roy, S. Ahmed, D. C. Joshi, G. Sahay and P. Saxena

**CI 2.6: Genetic Improvement of Sorghum under Different Use Patterns**

PI: D.C. Joshi, R.V. Kumar, N.K. Shah, N. Manjunath and Sultan Singh

**CI 2.7: Development of dual purpose maize**

PI: S. Ahmed, R. P. Sah, D.R. Malaviya, P. Saxena and M.I. Azmi

**CI 2.8: Development of high yielding dual and multicut fodder oats.**

PI: S. Ahmed, R. P. Sah, and A.K. Roy

**CI 2.9: Genetic Improvement of Pearl millet (bajra) and bajra- napier (BN) hybrids for higher biomass production**

PI: Kumar Durgesh, A K. Mall, C K Gupta, A.K. Mishra and N Manjunath

**CI 2.10: 'Genetic improvement of barley for forage and grain yield' (PI: A K. Singh and P. Saxena).**

**CI 2.11: Genetic improvement for dual-purpose stay-green pearl millet.**

PI: A K. Singh and S.S. Meena

**CI 3.8: Genetic improvement in fodder Cowpea *Vigna unguiculata* with special reference to resistance to pests.**

PI: G. Sahay, N.K. Shah, Kumar Durgesh and R.B. Bhaskar

**CI 3.10: Genetic improvement of Berseem for root rot resistance, late maturity and biomass**

PI: Tejveer Singh, D. R. Malaviya, P. Kaushal, A K Roy and R. B. Bhaskar

**CI 4.5: 'Genetic improvement of guinea grass for higher biomass production and tolerance for abiotic stresses' (Drs. VK Yadav, P Kaushal).**

**CI 5.4: Basic studies on apomixis and generating cytogenetic stocks in *Pennisetum* and *Panicum* agamic complex**

PI: P. Kaushal, D. R. Malaviya, A. K. Roy, K.K. Dwivedi and A. Radhakrishna, Mridual Chakraborty

**CI 6.7: Identification of molecular markers for apomixis/ sexuality in *Cenchrus ciliaris***

PI: M.G. Gupta, Suresh Kumar, K.K. Dwivedi, A. Radhakrishna and P. Kaushal

**CI 6.8: Development of Molecular markers database in Forage grasses with special reference to stress responsive EST -SSRs.**

PI: A. Radhakrishna, K. K. Dwivedi and Suresh Kumar

**CI 6.9: Identification of Functional Markers for Drought tolerance in pearl millet**

PI: Suresh Kumar, Kumar Durgesh, P. Kaushal and M. G. Gupta

**CI 7.11: Biochemical and Molecular Approach for Characterization of Drought Tolerant Forage Sorghum.**

PI: M K Srivastava, C K Gupta

**CI 8.20: Integrated disease management for root rot & dry root rot in cowpea (*Vigna unguiculata* (L) Walp.**

PI: P. Saxena and R.B. Bhaskar

**CI 8.23: Exploration of resistant mycoflora of root and stem rot patho system and development of suitable formulation for disease management in berseem**

PI: Dr RB Bhaskar

**CI 8.24: Integrated pest management in an intensive forage production system**

PI: N. K. Shah, R. B. Bhaskar and M. I. Azmi

**CI 8.26: Management of nematode and fungal pathogen associated with root rot complex of cowpea.**

PI: M.I. Azmi and R.B. Bhaskar

**CI 8.27: Collection and characterization of biodiversity in insect pests, pathogens and nematodes of fodder crops**

PI: N. K. Shah, P. Saxena, M. I. Azmi and N. Manjunath

### **Crop Production division**

**CP 1.1.8: Market led fodder production technology for profit maximization in peri-urban agglomeration**

**CP 1.1.9: Development of Agro-techniques for the cultivation of Chaya (*Cnidocolus aconitifolius*).**

PI: A. K. Dixit and A. K. Rai

**CP 1.1.10: Standardization of Agro-techniques for newly released varieties of fodder crops.**

PI: Mukesh Choudhary and G Prabhu

**CP 1.1.11: Effect of long term organic and conventional nutrient management on soil fertility and sustain ability of cropping system**

PI: A. K. Rai, A.K. Dixit, M. K. Srivastava and S. K. Rai

**CP1.2.11: Optimization of forage yield through development of suitable soil - crops management strategies under rainfed semi arid conditions ()**

CP 1.5.1: Tillage management practices in fodder-food cropping system for sustainable production

**CP 2.1.13: Fodder based Colltingent crop planning modules for rainfed semi-arid region.**

PI: A. K. Dixit, S. K. Rai and Mukesh Choudhary

**CP 2.1.14: Climate resilient forage production system under rainfed situation**

PI: Sunil Kumar, Kiran Kumar T. and .I.B. Singh

**CP 2.3.10: Water requirement of hybrid Napier- berseem intercropping system under organic nutrition in semi arid region.**

PI: Pradeep Behari, J. B. Singh and R. K. Agrawal

**CP 2.3.11: Forewarning models for major pests of cowpea and berseem.**

PI: J. B. Singh, Pradeep Saxena .md Pradeep Behari

**CP 2.3.12: Studies of crop growth simulation model for fodder cowpea using CERES-Grain Cowpea Model for agronomic management and to study the impact of projected climate change on its productivity in semiarid region of India.**

PI: S.K. Rai and D. Deb

**FM&PHT**

**AE(CRP) IGFRI-CIPHET: Development and testing of berseem - chicory seed separator**

PI: P.K.Pathak, C. S. Sahay and VK Bhargav (CIPHET)

**AE 3.1: Evaluation of water resources for efficient utilization in enhancing productivity of forage crops**

PI: A. K. Dixit, S. K. Rai, Pradeep Behari

**AE 2.4.1: 'Studies on post harvest practices, transport and storage system of feed and fodder resources under different climatic situation in India'. Dr. P.K. Pathak**

**AE 2.4.2 Nutritional quality assessment of different crop residues/ fodder at different stages of post harvest practices and storage in the country. Dr. P.N. Dwivedi**

**Grassland and Silvipasture Management Division**

**GSM 1.16: Grazing system and forage availability in tribal region of northern district of Chhattisgarh**

PI: N.S.Ekka & S K Gupta, S. N. Ram

**GSM 3.8: Establishment and management of silvopastures for optimizing forage availability and productivity**

PI: S K Gupta

**GSM 4.19 Studies on microflora of Bahaunia and aonla based silvi-hortipasture system**

PI: HV Singh

**GSM 4.12.1: Evaluation of aonla based Horti-pastoral system under different soil & water conservation practices in central India. (2007-12) Ist Phase.** Dr. Sunil Kumar

#### **Division of PAR**

**PAR 5.1: Evaluation of Stylosanthes seabrana and S. hamata meal as a supplementary feed in animals**

PI: M.M. Das, S.K. Mahanta and S.N. Ram

**PAR 3.1: Methane production potential of tropical fodders/feeds vis-a-vis efficacy of tree foliages secondary metabolites for defaunation and methanogenesis**

PI: Sultan Singh, B.K. Bhadoria

**PAR 4.1: Performance of mixed herd of sheep and goats under grazing in different silvopasture systems**

PI: S. K. Mahanta, S.N. Ram, S.K. Das, Archana Singh and N. Das

**PAR 6.2: Utilization of chaya (Cnidocolus aconitifolius) for efficient livestock production**

PI: P. Sharma, K.K. Singh, M.M. Das, A.K. Misra and S.B. Maity

#### **Division of Seed Technology**

**STR 1.2: Response of Subabool (Leucaena leucocephala) varieties to nutrient management practices for seed production.**

PI: D. Vijay and S.K. Gupta

**STR 3.5 : Economics of forage seed production under farmers' participatory research and at organized farms.**

PI: Vikas Kumar, Satyapriya, Maharaj Singh and D. Bahukhandi

**STR 3.6: Impact of forage technology on socio- economic development of farmers.**

PI: Vikas Kumar and Maharaj Singh

**STR 3.7 : Developing seed standards and enhancing seed production in forages.**

PI: D. Vijay and C.K. Gupta

**STR 3.8 : Low input, eco-friendly storage of Forage Seeds.**

PI: D. Bahukhandi and D. Vijay

**STR 3.9 : Quality Seed Production in Forage Grasses: Physiological and Biochemical Interventions**

PI: C.K. Gupta, M.K. Srivastava, D.R. Malaviya and D. Vijay

**STR 3.10 : Biochemical Analysis of Forage Seeds During Post Harvest Storage**

PI: C.K. Gupta, D. Vijay and M.K. Shrivastava

**STR 3.12: Livelihood improvement of farmers through quality seed production of fodder crops.**

PI: Vikas Kumar, Satyapriya, and P. Sharma,

**Division of Social Science**

**SS 1.04: Economic evaluation of feeding value added fodder products and green fodder**

PI: Purushottam Sharma, PN Dwivedi and PK Pathak

**SS1.03: Development and standardization of scale to measure socio-economic status of a farmer practicing livestock based farming**

PI: Satyapriya , Maharaj Singh, Purushottam Sharma, Ashok Kumar and Vikas Kumar

**SS 2.04: Technology gap analysis of fodder production technology in Bundelkhand region**

PI: Manju Suman, Ashok Kumar, Vikas Kumar

**SS 2.05: Capacity - building of farm women on animal rearing practices**

PI: Sadhna Pandey, Purushottam Sharma and Satyapriya

**SS 1.04: Economic evaluation of feeding value added fodder products and green fodder**

(Dr. P. Sharma, Dr. P.N. Dwivedi and Dr. P.K. Pathak)

**RRS, Dharwad**

- i. Breeding for forage yield, quality and biotic and abiotic tolerance in alfalfa [*Medicago sativa* (L.)] (PI: Dr. S. Karthigeyan)
- ii. Agro ecological evaluation of different horti-pastoral systems for peninsular India (PI: Dr. B.G. Shivakumar)
- iii. Optimizing seed production and seed standardization protocols in range grasses and legumes (PI: Dr. Vinod Kumar)
- iv. Physiological interventions for improving seed yield in *Brachiaria* species (PI: Dr. Edna Antony)
- v. Studies on insect fauna and its influence on forage and seed yield in lucerne [*Medicago sativa* (L.)] (PI: Dr. Narendra Kulkarni)
- vi. Training needs analysis of clientele on fodder promotion and development (PI: Dr. N.B. Biradar)
- vii. Studies on commercialization and utilization of fodder technologies (PI: Dr. N.B. Biradar)

- viii. Evaluation of ligno-cellulosic constituents in *Panicum maximum* Jacq. germplasm(PI: Dr. K. Sridhar)

**RRS, Srinagar**

**RSJ&K4.1: Augmenting forage resource availability through development of hortipasture systems**

PI: Suheel Ahmad

**RSJ&K4.2: Establishment and Evaluation of Almond based Hortipastoral System in Karewa uplands of Kashmir**

PI: Suheel Ahmad and D.K. Verma

**RRS, Avikanagar**

**RSA 7: Aonla based Horti-pastoral system under semi-arid conditions**

PI: RP. Nagar, Sunil Kumar Seth

**RSA 8: Neem & Kbejri based silvi-pastoral system under semi arid condition**

PI: S.L. Meena

**RSA 10: Evaluation of Promising neem strains under agri-silvi-pasture system in the semiarid conditions**

PI: SS Meena, SL Meena

**RSA 11: Maximization of quality seed production and standardization of seed testing protocol in range grasses and legumes**

PI: R.P. Nagar, S.L. Meena

**RSA 12: Influence of moisture conservation techniques on performance of different forage crops and cropping systems under semi arid environment**

PI: S L Meena, S S Meena

**RSA 13: Germplasm enrichment, evaluation, maintenance and genetic improvement of forage crops for arid, semi-arid regions**

PI: S S Meena, RP. Nagar