

Scientist Profile



Dr. PRASHANTH SANGANAVAR

M.Sc. (Agri.), Ph.D., PGD IPR, PGD AMM.

Scientist-B

Central Muga Eri Research & Training Institute

Central Silk Board, Ministry of Textiles: Govt. of India

Lahdoigarh, Jorhat-785700, Assam (India)

E-mail ID : sangannavar.csb@gov.in

ORCID ID : [0000-0003-3373-4329](https://orcid.org/0000-0003-3373-4329)

Researchgate : https://www.researchgate.net/profile/Prashanth_Sangannavar2

Twitter ID: [@sangannavar](https://twitter.com/sangannavar)

Tel.:+ 91 376 2335513 / 2335124 (O)

+91 9845670823 (M)

Fax: +91 376 2335528 (O)

Educational Qualification:

- M.Sc. (Agri.) in Genetics and Plant Breeding from UAS, DHARWAD, Karnataka (2009).
- Ph. D in Genetics and Plant Breeding from UAS, DHARWAD, Karnataka (2013).

Area of research interest:

- Plant tissue culture
- Germplasm collection, evaluation and maintenance
- Genetic diversity analysis using Molecular marker
- Commercial hybrid development and evaluation

Professional Experiences:

- **Scientist - B** in Central Muga Eri Research & Training Institute (CMER&TI), Central Silk Board, Ministry of Textile, Govt. of India, Jorhat, Assam (November 2015 to till date).
- **Junior Breeder (Cotton)** in Varietal Research and Development Centre (VRDC), Karnataka State Seeds Corporation Ltd., State Govt. of Karnataka, Dharwad, Karnataka (April 2013 to November 2015).
- **Senior Research Fellow** under NAIP scheme entitled “Genomics of cotton boll and fibre development” in Agricultural Research Station, University of Agricultural Sciences, Dharwad, Karnataka (December 2012 to April 2013).
- **Senior Research Fellow** under NFBSR scheme entitled “Targeted gene integration in cotton” in Agricultural Research Station, University of Agricultural Sciences, Dharwad, Karnataka (November 2010 to July 2011).
- **Senior Research Fellow** under Ad hoc scheme entitled “Genetic engineering for Abiotic stress tolerance in crops” in Agricultural Research Station, University of Agricultural Sciences, Dharwad, Karnataka (October 2009 to April 2010).
- **Research Associate** under Ad hoc scheme entitled “Genetic engineering for Abiotic stress tolerance in crops” in Agricultural Research Station, University of Agricultural Sciences, Dharwad, Karnataka (February 2009 to July 2009).

Awards (if any):

- First Prize Winner of Poster Presentation entitled “” in “National seminar on Modern trends in Microbiology, Genetics and Biotechnology Research-2010” held at ANJAC, Sivakasi from 17th - 18th February 2010.

Work experience:

- **Tissue culture:** Callus regeneration, somatic embryogenesis and *Agrobacterium* mediated genetic transformation in cotton.
- **Plant Breeding:** selection in segregating population, intra species /intra generic hybrid development, hybrid evaluation, identification of traits which are involved in fibre trait improvement in cotton.
- **Genetics:** genetic inheritance study for fibre trait improvement in cotton
- **Molecular biology:** PCR, RT-PCR, qPCR, dot blotting, Southern blotting, subtraction hybridization and gene cloning.
- **Molecular Markers:** RAPD, SSR, QTL mapping in cotton.

Number of Publication:

Research Articles (13): Cumulative NAAS rating is 51.88

(National Academy of Agricultural Sciences Journal rating 2016)

1. **Prashanth Sangannavar.,** I. S. Katageri., H. M. Vamadevaiah, Nirupama chikodi., B. M. Khadi and P. Anand Kumar. (2011), Genetic transformation studies in cotton: a) Effect of pre-culture, colonization, co-cultivation and vacuum infiltration on regeneration of explants b) Effect of trimming, chilling injury, sand injury and blot drying on regeneration of explants. *Cotton Research Journal.*, **Vol. 2** (1): 21-32.
2. **Prashanth Sangannavar.,** I. S. Katageri., H. M. Vamadevaiah. and B. M. Khadi. (2011), Effect of external damage on regeneration of cotton explants (*Gossypium arboreum* and *G. barbadense*). *Karnataka Journal of Agricultural Sciences.*, **Vol. 24** (5): 629-632.
3. **Sangannavar, P. A.,** Hegde, P. M., Choudki, V. M., Savita, S. G., Vanti, G. L., Barkeer, S., Abdalnayeem., Vamadevaiah, H. M., Khadi, B. M. and Katageri, I. S. (2012), *In vitro* and *in vivo* studies on induction of multiple shoots and regeneration in cotton (*Gossypium arboreum* and *G. barbadense*). *Journal of Cell and Tissue Research.*, **Vol. 12** (1): 3069-3074.
4. **Sangannavar, P. A.,** Katageri. I. S., Vamadevaiah. H. M. and Khadi. B. M. (2012), Somatic Embryogenesis and plant regeneration in cotton *cv.* Coker 312. *Journal Cell and Tissue Research.*, **Vol. 12** (3): 3401-2408.
5. I. S. Katageri., Madan Mohan., Savita Mantri., S. G. Savita., **Prashanth Sangannavar.,** V. M. Choudki., H. M. Vamadevaiah. and B. M. Khadi. (2012), Study on genetic introgression in diploid cotton through interspecific hybridization and validation by RAPD. *Journal of Cotton Research and Development.*, **Vol. 26** (1): 1-7.

6. Barkeer, S. K., Burdekar, V. K., **Sangannavar, P. A.**, Mohan, T. C., Vamadevaiah, H. M., Khadi, B. M. and Katageri, I. S. (2012), Temporal and spatial expression of flavonoid biosynthetic genes in petals of cotton. *Journal of Cell and Tissue Research.*, **Vol.** 12 (2): 3149-3155.
7. V. M. Choudki, **Prashanth Sangannavar.**, Anupama. S., Savita, S. G., Vamadevaiah. H. M., Khadi. B. M. and Katageri. I. S. (2012), Molecular variance dissection among F₁₁ recombinant lines of *G. hirsutum* x *G. barbadense* cross using RAPD marker technology. *Green farming.*, **Vol.** 3 (4): 384-388.
8. B. Nagaraj., S. G. Savita., **Prashanth Sangannavar.**, V. M. Choudki, H. M., Vamadevaiah., B. M. Khadi. and I. S. Katageri. (2012), Molecular v/s morphological character based genetic diversity estimates in elite cotton lines. *Green farming.*, **Vol.** 3 (5): 511-514.
9. V. M. Choudki, **Prashanth Sangannavar.**, Savita, S. G., Vamadevaiah. H. M., Khadi. B. M. and Katageri. I. S. (2012), Genetic improvement of fibre strength in tetraploid cotton (*G. hirsutum*) through inter specific hybridization using *G. barbadense* species. *Green farming.*, **Vol.** 3 (6): 631-636.
10. V. M. Choudki, **Prashanth Sangannavar.**, S. G. Savita, Rajesh S. Patil, H. M. Vamadevaiah, B. M. Khadi and I. S. Katageri. (2012), Variability studies in F₆ generation recombinant lines of *G. hirsutum* X *G. barbadense* cross. *Bioinfolet.*, **Vol.** 9(4A): 544-553.
11. V. M. Choudki., **Prashanth Sangannavar.**, Savita. S. G., B. M. Khadi., H. M. Vamadevaiah. and I. S. Katageri. (2012), Genetic improvement of fibre traits in diploid cotton (*G. herbaceum* L.) through interspecific hybridization using *G. barbadense* tetraploid species. *Electronic Journal of Plant Breeding.*, **Vol.** 3 (1): 686-691.
12. **Sangannavar, P.A.**, Vanti, G. L., Anupama, S., Methre, R.M., Bhute, N. B., Savita, S. G., Vamadevaiah, H.M. and Katageri, I. S (2013) Economic, easy and fast method for isolating high quantity and quality DNA from cotton (*Gossypium* Spp) suitable for molecular studies. *Journal Cell and Tissue Research.*, **Vol.** 13 (1): 3503-3506.
13. V. M. Choudki, S. G. Savita, **Prashanth Sangannavar.**, H. M Vamadevaiah., B. M. Khadi., Rajesh S Patil and I. S. Katageri. (2013), Genetic improvement of fibre strength in diploid cotton (*G. herbaceum*) through interspecific hybridization using *G. anomalum* wild species. *Crop Research- an International Journal.*, **Vol.** 45 (1, 2 & 3): 259-267.

Seminar/conference/symposium (8):

1. **Prashanth S.**, I. S. Katageri, Yamanura M., H. M. Vamadevaiah and P Anand kumar.(2009) Effect of pre-culture, colonization, co-cultivation and vacuum infiltration on regeneration of explants. National symposium on “Role of Biology and Biotechnology in Conservation of Biodiversity and Sustainable Development” December 22-24, 2009 in Gulbarga University, Gulbarga, Karnataka India. Page 120.
2. **Prashanth S.**, I. S. Katageri, Yamanura M., H. M. Vamadevaiah and P Anand kumar. (2009), Effect of trimming, chilling injury, sand injury and blot drying on regeneration of explants. National symposium on “Role of Biology and Biotechnology in Conservation of Biodiversity and Sustainable Development” December 22-24, 2009 in Gulbarga University, Gulbarga, Karnataka India. Page 121.

3. **Prashanth Sangannavar.**, Katageri, I.S. and Vamadevaiah, H.M., (2010) Agrobacterium mediated in vivo method of transformation in cotton (*Gossypium arboreum* and *G. barbadense*. National seminar on “Modern trends in microbiology, genetics and biotechnology research” February 17-18, 2010 in Sivakasi, Tamil Nadu, India. Page 14-15.
4. **Prashanth Sangannavar.**, Varada. K., Vamadevaiah, H.M., Khadi, B.M., and Katageri, I.S (2011), Identification of markers linked to fibre elongation genes by bulked segregant analysis in cotton. National seminar on “Contemporary Approaches to Crop Improvement” April 22-23, 2011 at UAS, Bangalore, Karnataka, India. Page 215.
5. **P. Sangannavar**, S. G. Savita, V. M. Choudki, G. L. Vanti, P. M. Hegde, S. Anupama, S. Barkeer, B. Varada, H. M. Vamadevaiah and I.S. Katageri (2011), Genetic inheritance studies in the segregating population of cross involving fibered x fibreless cotton. “World Cotton Research Conference on Technologies for Prosperity” November 5-8, 2011 at Mumbai, Maharashtra, India. Page.120.
6. V. M. Choudki, S. G. Savita, **Prashanth Sangannavar.**, K. P. Roopa, M. Ramesh, Gulamnabi Vanti, H.M. Vamadevaiah, B.M. Khadi, Rajesh Patil and I.S. Katageri (2011), Genetic improvement of fibre strength in diploid cotton (*G. herbaceum*) through interspecific hybridization using *G. anomalum* wild species. “World Cotton Research Conference on Technologies for Prosperity” November 5-8, 2011 at Mumbai, Maharashtra, India. Page.128.
7. S. G. Savita, Harikrishna, S. Barkeer, S. Anupama, **P. Sangannavar**, H.M. Vamadevaiah, B.M. Khadi, R. Patil and I.S. Katageri (2011), Validation of SSR markers linked to fibre traits in cotton. “World Cotton Research Conference on Technologies for Prosperity” November 5-8, 2011 at Mumbai, Maharashtra, India. Page 3.
8. **Prashanth A Sangannavar**, Savita Gamangatti, Vamadevaiah Hiremath, Basavaraj Khadi, Ishwarappa Katageri (2012), Genetic variability for number of elongating fibre cells in cotton (*G. hirsutum*, L.). “2012 International Cotton Genome Initiative Research Conference” October 9-12, 2012 at Raleigh, North Carolina, USA.

Popular Articles (2):

1. **Prashanth Arjun Sangannavar** (2011), Integration of genomic approaches to improve abiotic stress resistance in crop plants. *Agrobios. News letter.*, Vol. 10 (6): 47-49.
2. **Prashanth Arjun Sangannavar** (2012), Transcription factors for abiotic stress resistance in plants. *Agrobios. News letter.*, Vol. 10 (12): 9-11.

Training Attended (1):

1. Twenty one days training programme on “**Plant Disease Management Approaches using Microbial and Plant Genomic Resources**” sponsored by ICAR, New Delhi organized by University of Agricultural Sciences, Dharwad from 24 January 2014 to 13 February 2014.

Date: 08-01-2016
Place: Jorhat, Assam

(Prashanth Sangannavar)