



## Subhendu Shekhar Gantait

### Associate Professor

Department of Floriculture & Landscaping  
Faculty of Horticulture  
Bidhan Chandra Krishi Viswavidyalaya (Agriculture University)

E-mail: ssgflori@gmail.com

Ph.: +919474500106 (M)

#### Academic background

- **Ph.D.(Hort) in Floriculture & Landscaping** from **Bidhan Chandra Krishi Viswavidyalaya (BCKV), India**
- **M.Sc.(Hort) in Floriculture & Landscaping** from BCKV
- **B.Sc.(Hort)Hons** (4 years' course) from BCKV

#### Positions

- **Associate Professor**, Department of Floriculture & Landscaping, Faculty of Horticulture, Bidhan Chandra Krishi Viswavidyalaya, India – present
- **Post Doctoral Research Fellow** at School of Agriculture & Food Science (QS World Rank 18 in 2014), **The University of Queensland, Australia** in 2014
- **Assistant Professor**, Department of Floriculture, Medicinal & Aromatic Plants, Faculty of Horticulture, Uttar Banga Krishi Viswavidyalaya, India
- **Head**, Department of Floriculture, Medicinal & Aromatic Plants, Faculty of Horticulture, Uttar Banga Krishi Viswavidyalaya from 23.04.2008 to 17.05.2012
- **Asstt. Director of Horticulture/Asstt. Horticulturist** at Horticultural Research & Development Station, Taldangra, Bankura, Department of Food Processing Industries & Horticulture, Govt. of West Bengal, India

#### Research interest

1. Tissue culture and *in-vitro* germplasm conservation of ornamental and medicinal plants
2. Classical and mutation breeding in ornamental geophytes
3. Stem plugging reactions in cut flower and foliage plants

#### Expertise on some important lab equipment

- Gas chromatography
- Ultrasonic Acoustic Emission
- Light microscopy
- Tissue culture – related

#### Present teaching focus

My formal and informal teaching appointment relevant to floriculture, their breeding and improvement, post harvest physiology and technology and landscape gardening in undergraduate and post graduate level courses.

#### Outreach and extension focus

Extension efforts are directed mainly at commercial producers of flower crops both in open field and greenhouse. I organized two numbers of 3 days farmers' training program at UBKV in 2013 on "Biofarming of Anthurium and Gerbera" funded by Dept. of Biotechnology, Govt. of India.

#### Supervised students (as major guide)

- Supervised **2 Ph.D students** (INSPIRE Fellows, DST, Govt. of India) and their thesis have been submitted at UBKV.
- Supervised **3 M.Sc students** successfully at UBKV.

#### Research Achievements

- Established efficient tissue culture protocol for successful micropropagation of Gladiolus, Anthurium, Gerbera and Orchid
- Standardized *in-vitro* cormel production and callus conservation in Gladiolus
- Established *in-vitro* direct organogenesis and callus conservation techniques in medicinal plants viz. Rauwolfia and Aswagandha
- Standardized *in-vitro* seed germination and regeneration protocol in Gladiolus and Gerbera hybrid seeds and Aswagandha seeds
- Measured the changes of metabolites and enzyme activities in calli during organogenesis of Gladiolus and Gerbera
- Successfully achieved around 200 crosses and got F<sub>1</sub> seeds of Gladiolus through an intensive classical breeding program
- Measured the changes in primary metabolites, phenolics, antioxidant and enzyme activities (PPO and POD) in Gladiolus corms during dormancy, sprouting and initial plant development in relation to overcome dormancy
- Developed the methodologies for dehydration of some cut flowers (Rose, Marigold, Gerbera, Gladiolus) and foliages (Mussaenda, Ixora, Fern)

