CURICULUM VITAE

PERSONAL DETAILS

Name Yantree Devi Sankar-Thomas

Date of birth 06 April 1961
Nationality: Guyanese

Marital status married, two children

Profession Biologist

University Education Ph.D. University of Hamburg, 2009

M.Sc. University of Hamburg, 2003

Professional Affiliations German in vitro horticulture research group (ADIVK)

Society of Friends, the Botanical Garden Hamburg e.V.

AREAS OF EXPERTISE

Over 16 years of experiences in plant cell and tissue culture

- Establishment of in vitro protocols on micropropagation for a broad variety of ornamental and medicinal plants
- In vitro cultivation of plants that are difficult to propagation by conventional methods
- Plant Conservation ex situ collections and in vitro maintenance of plant & cell materials
- Considerable knowledge on greenhouse acclimatization and field operations associated with plant propagation and tissue culture practices.
- Media modification, preparation, sterilization and laboratory protocols
- Laboratory experiments covering also the basic techniques in molecular biology

KEY SKILLS AND COMPETENCIES

- Professional competence in plant tissue culture through collaboration with the botanical Garden in Hamburg on the micropropagation of rare and endangered species via somatic embryogenesis and other breeding methods.
- Professional skills on conventional plant propagation, horticulture, grafting methods, and the selection of quality plants for sales gained through training courses in plant nurseries
- Good knowledge in field work and greenhouse plant culture operation.

Teaching Experience

Research assistant in courses and seminars for plant identification and taxonomy Presentations and training courses in plant in vitro culture for graduate students and apprentice at the botanical garden.

Personal Abilities

- Interpersonal skill and the ability to work independently, to manage a team and collaborate with other researchers.
- Ability to solve complex problems and an excellent communication and presentation skills.
- Abilities in supervising and training of students or employees, to assist in other projects and perform other duties when required.
- Team player, self motivated and conscious of a high degree of responsibility.
- Experience in analysing natural compound, and laboratory work including record keeping.
- At various international locations and in different working groups I could demonstrate my teamwork ability and quick apprehension to new tasks.



ACADEMIC QUALIFICATIONS

2012 to date Specialist for Plant cell and Tissue culture in the Research & Develope-

ment at a pharmaceutical Company. The implementation and coordination of scientific experiments and cell culture media optimisation as well the plant sourcing according the Nagoya Protocol and within the EU

legislation

2010 - 2013 Research Scientist at the Botanical Garden, Biocenter Klein Flottbek,

University of Hamburg. Responsible for the *in vitro* collections, maintenance and conservation of rare and endangered plant species. The development of protocols for *in vitro* propagation, acclimatisation of tissue-cultured plants. Presentations, courses on tissue culture for graduates

and apprentices

2004 - 2009 PhD thesis "In vitro culture of Camptotheca acuminata (Decne) in

Temporary Immersion System (TIS): Growth, development and produc-

tion of secondary metabolites", University of Hamburg

2002 - 2003 Master thesis "Phenolische Substanzen und Polyphenoloxidasen in

Blättern von Bixa orellana L., dem Orleanstrauch".

1996 - 2002 Studies in Biology at the University of Hamburg

2001, 2003 Research assistant in plant identification and taxonomy, seminars, presen-

tations and courses supervision in plant in vitro culture. University of

Hamburg

1998 - 2000 Research assistant at the Senckenbergische Naturfor. Gesell., Hamburg.

Responsible for the separation and determination of fish eggs and fry

from samples of the North Sea

1996 - 1998 Research assistant at the Biologische Anstalt Helgoland (BAH), Hamburg.

Responsible for literature recherche and assort of data on Cnidarians, separating planktonic and other organisms from samples of the North

Sea for determination.

Schools / Apprenticeship

1979 - 81 Diploma School for Textile-designing (Suriname, SA)

1981 - 1982 Hauptschulabschluss at VHS eveningclasses, Pinneberg

1992 – 1995 Abitur at evening classes at the Hamburger Abendgymnasium vor dem

Holstentor

Languages English (mother tongue), German (C2), Indonesian (reasonable), Dutch

and French (fair)

Residences Germany (1992 to date), Indonesia (87 - 92), Nigeria (83 - 85),

Suriname (78 - 81)

Computer Skills MS- Office, PowerPoint, Sigma Plot, Smart Draw, Photoshop

Avocation Orchid and plant culture, gardening, travelling, plant propagation for

commercial companies

References Available on request.

Personal Driving license: yes

Publications:

- Gilbert Gorr, David Alexander Ullisch, Yantree Devi Sankar-Thomas, Thomas SELGE, Thomas Leibold, Harald Heckenmüller (2016) Production of ingenol, ingenol esters and/or tiglian-3-one derivatives by euphorbiaceae plant cell suspension cultures WO 2016150860 A1
- Ullisch D.A., **Sankar-Thomas Y.D.**, Wilke S., Leibold T., Pump M., Heckenmüller H., Schütte K. and Gorr G., 2016 Plant cell culture as a highly controllable tool for the sustainable production of anticancer products The second conference of the International Society for Plant Molecular Farming
- Gorr, G., Heckenmüller, H., Wilke, J.S., Ullisch, D.A., and **Sankar-Thomas, Y. D** (2015) Production of thapsigargins by thapsia cell suspension culture WO 2015082978 A1
- Sankar-Thomas, Y.D. and R. Lieberei, 2011. Camptothecin accumulation in liquid culture medium, on differentiated cell and plant organs of *Camptotheca acuminata* (Decne) grown in different culture systems. Plant, Cell, Tissue & Organ Culture, Article No. s 11240-011-9942-6, 10p
- Sankar-Thomas, Y.D., 2009. *In vitro* culture of *Camptotheca acuminata* (Decaisne) in Temporary Immersion System (TIS): Growth, development and production of secondary metabolites. http://www.sub.uni-hamburg.de/opus/volltexte/2010/4419/
- Sankar-Thomas, Y.D., 2009. Sproßvermehrung von *Camptotheca acuminata* in Temporary Immersion System. ADIVK Aktuell 13.JG., Nummer 2, Dezember 2009, p. 21-31. Herausgeber: Arbeitskreis Deutsche In Vitro Kulturen e.V. (ADIVK)
- **Sankar-Thomas, Y.D.**, K Saare-Surminski; R. Lieberei, 2008. Plant regeneration via somatic embryogenesis of *Camptotheca acuminata* in Temporary Immersion System (TIS). Plant, Cell, Tissue & Organ Culture, p. 163-173
- Sankar-Thomas, Y.D., 2003. Phenolische Substanzen und Polyphenoloxidasen in Blättern von Bixa orellana L., dem Orleanstrauch. 75 pp, Diplomarbeit (Univ. Hamburg)
- **Sankar-Thomas, Y.D. and** R. Thomas, Somatic Embryogenesis, Organogenesis and Shoot Multiplication in Temporary Immersion System (TIS) of *Amorphophallus titanium* (Becc.) Becc. Ex Arcangeli (in prep.)

Presentations:

- Y.D. Sankar-Thomas 2016. Vermehrung und Erhltung seltener und gefährdeter Pflanzenarten durch die Gewebekultur. Rotary Club
- Sankar-Thomas, Y.D., 2011. Schwierig zu kultivierende Pflanzen (Tissue Culture for Challenging Plants) im Temporary Immersion System (TIS). University Hamburg
- Sankar-Thomas, Y.D., 2009. Sproßvermehrung von *Camptotheca acuminata* in Temporary Immersion System. Temporary Immersion System -working group meeting- of ADIVK. IPK in Gatersleben, 24-25.09.09
- Sankar-Thomas, Y.D.; R. Thomas. Since 2009 two times a year *In vitro* presentation at "Tropentag" inside the show green houses at -Planten un Blomen-, Hamburg.

- Sankar-Thomas, Y.D., 2006. *In Vitro* propagation of *Camptotheca acuminata* Decne., Nyssaceae via somatic embryogenesis. Temporary Immersion System -working group meeting- of ADIVK. Wismar, 29.11.06
- Sankar-Thomas, Y.D., 2005. *In Vitro* propagation of *Camptotheca acuminata* Decne., Nyssaceae via somatic embryogenesis. Presentation at the Turkeyen Campus (University of Guyana) and WIU (West Indies University, Trinidad)
- K. Saare-Surminski; **Sankar-Thomas, Y.D.**, 2003. Presentation of Temporary Immersion System. 'Biotechnica' International Trade Fare for Biotechnology. Hannover 07.- 09.10.2003