

## SHANTHANU KRISHNAKUMAR

### EDUCATION:

- Dalhousie University- B.Tech (Envi. Landscape Horticulture) **Dec 2015**  
Major in Environmental Landscape Horticulture  
Agricultural Campus, Truro, NS, Canada
- Tamil Nadu Agricultural University- B.Tech (Horticulture) **2011-14**  
Coimbatore, India.

### EMPLOYMENT EXPERIENCE:

- Writing Centre Tutor **Fall 2015**  
Duties include offering support in writing in all subjects—from academic assignments to dissertations—for both undergraduate and graduate students. Meet with students individually to discuss their work and also offer seminars regarding English language writing.
- IT Lab Assistant **Fall 2015**  
The IT Lab assistant is responsible for providing desktop services to the client (faculty, staff and students). Communicating and interacting with the clients to troubleshoot the computer problems and repair minor problems in computers, scanners and printers.
- Community Garden Manager-Dalhousie Agricultural Campus **2015**  
The garden manager is responsible for running the garden with 50 plots, collecting rents from gardeners, ensuring that the compost and mulch is available, conducting workshops and taking care of the common areas in the garden.
- Summer Student-Vegetation Management Research Laboratory-Dalhousie Agricultural Campus **Summer & Fall 2015**
- Research Assistant- Dept. of Medicinal and Aromatic Plants-Tamil Nadu Agricultural University, India **Summer 2014**

### RESEARCH PRESENTATIONS (ORAL AND POSTER)

- Seed bank characteristics, seedling recruitment, and management of fescues (*Festuca* spp.) in wild blueberry. Scott N. White and **Shanthanu K. Kumar**. 2015 Canadian Weed Science Society Meeting, Edmonton, AB, Canada. **Nov 2015**
- Glufosinate Ammonium Increases Foramsulfuron Efficacy on *Festuca* spp. in Wild Blueberry. **Shanthanu K. Kumar** and Scott White. 2015 Wild Blueberry Producers Association of Nova Scotia (WBPANS) annual meeting, Truro, NS, Canada. **Nov 2015**

- Preliminary studies on the seed bank dynamics, seedling recruitment patterns, and management of fescues (*Festuca* spp.) in wild blueberry. Scott N. White and **Shanthanu K. Kumar**. 2015 Wild Blueberry Research and Extension Workers Conference. Maine, USA. **Oct 2015**
- Genetic Diversity of *Plumbago zeylanica*. Nalina L., **Shanthanu K. Kumar** et al. Third International Conference on Underutilized Plants, International Society of Horticultural Science (ISHS), Coimbatore, India. **Aug 2015**

## RESEARCH PAPERS

- Manuscript under preparation-Effect of glufosinate ammonium (Ignite) in improving foramsulfuron (Option) efficacy to control *festuca spp.* in wild blueberry (*vaccinium angustifolium Ait.*) fields. Scott N. White and **Shanthanu K. Kumar**.- to be submitted to the Canadian Journal of Plant Science

## RESEARCH & FIELD EXPERIENCE:

- **Summer student at the Vegetation Management Research Laboratory-Project- ‘Effect of burndown glufosinate ammonium treatment in improving the efficacy of Foramsulfuron to suppress Fescue spp. in commercial wild blueberry (*Vaccinium angustifolium Ait.*) fields.’**  
Duties included greenhouse maintenance and data collection of fescue grass, seed bank studies, field herbicide application and data collection, statistical analysis and interpretation.
- I have 4 months of experience in working in the Tree Fruit Bioproducts Lab, I worked in the Biosafety Level 2 lab doing spots on lawn tests and micro broth dilutions to determine the antibacterial activity of phytochemical extracts of medicinal plants. **Fall 2014**
- **Research Assistant for the work on the medicinal plant “*Plumbago zeylanicum*”** (Assessment of germplasm pool of 45 accessions)  
Duties include the bioactive extraction of the compounds, assessment of morphological characters, photograph the different characteristic features, and check the content of Plumbagin using thin layer chromatography, spectrophotometer and selection of the best genotype for further commercial propagation based on the results from the various tests performed. **Summer 2014**
- **Volunteer for the project, “Standardization of fertigation schedule of *Coleus forskholii*”**  
Duties included regular daily maintenance of the *Coleus* plants. Different fertigation ratios for the replications were calculated and provided to the plants. After growth, the roots were harvested, dried, powdered, solvent extracted and then the chemical constituents (forskholin content) were analyzed using spectrophotometer and HPLC. **Summer 2013**

- Project Team Leader- Crop Production Course-Tamil Nadu Agricultural University**  
 Duties included managing plots of chrysanthemum (2 acres) and lab-lab (2.5 acres) from soil preparation till harvest of the crop. I was responsible for the weekly schedule creation for irrigation, fertilization, plant protection sprays, weeding and mulching activities along with my professor. I also performed all these activities especially during holidays and weekends. **2013**
- Assistant and volunteer in the Tamil Nadu Agricultural University Vineyards.**  
 Duties included pruning, irrigation, maintenance, fertilization, Bordeaux mixture sprays, other pre-harvest and post-harvest treatment measures, harvesting of the crop, measurement of fruit bunch details such as length, approximate number of branches, weight, size of individual grape berries etc. Lab analysis of the grapes took place in the Post-Harvest Food Processing Laboratory at TNAU. I had also been selected as the official college representative to visit the 1<sup>st</sup> Organic Grape Vineyard in the neighbouring district (Nilgiris District). I performed pruning for all the plants at 5 bud, 6 bud and 7 bud stages in order to test which pruning method gave good yields as the crop was new in that area. I have experience with Red Globe, Italica and Muscat varieties. **2011-2012**

**CERTIFICATION:**

- First Aid **Sept 2014**
- WHIMS **Nov 2014**
- OH&S **Nov 2014**
- Biosafety training– Level I &II. **Nov 2014**
- Autoclave Training **Dec 2014**
- Class 5 Drivers License **Sept 2015**

**AWARDS AND SCHOLARSHIPS:**

- Ontario Ministry of Agriculture-Highly Qualified Personnel Scholarship **2015**  
 (scholarship worth \$17,300/yr for 2 years to pursue Masters at the University of Guelph)
- Nova Scotia Research and Innovation Graduate Scholarship **2015**  
 (Scholarship worth \$10,000/yr for 2 years to pursue Masters at Dalhousie University)
- Secured first place in the Sprint Ag Competition (cash prize: \$1000) conducted by the Cultiv8 entrepreneurship club of Dalhousie University-Agricultural Campus. **2015**
- Collins Memorial Scholarship for excellence in Horticulture (\$2000) **2015**
- Grace and Cliff Reston Memorial Bursary (\$600) **Nov 2014**
- Dalhousie Entrance Scholarship (\$1500) **May 2014**
- 1<sup>st</sup> place in essay writing competition conducted as part of the World Water Day by the Water Technology Centre, TNAU.

The different hydroelectric technologies required for saving water and sustainable water use were the themes for the year. I stood first in essay writing among a total of more than 100 participants **Mar 2014**

- Won second prize at IIT Madras- Shastraa 2014 in the National Symposium on sustainability in Agriculture (cash prize: INR 4000) **Jan 2014**

#### **OTHER PRESENTATIONS:**

- Secured first place in the Sprint Ag Competition (cash prize: \$1000) conducted by the Cultiv8 entrepreneurship club of Dalhousie University-Agricultural Campus. Sprint Ag is a pitch competition where competitors pitch their business ideas to experienced judges and investors to solve problems in the industry. I talked about the idea of a Community Supported Agriculture business start-up in the Agricultural Campus of Dalhousie University. **Dec 2015**
- I was fully funded by the Rotary club of Truro to attend the Rotary Youth Leadership Awards (RYLA on the Rock) held at St. Johns, New Foundland, Canada. A participant was selected by each rotary club based on their leadership skills, extracurricular activities and volunteer experience apart from academics. A plethora of talks by eminent world leaders in various fields were filled with motivation and encouragement. **Aug 2015**
- Won a spot in the Top 3 sessions in the East Coast Student Leadership Conference on the topic 'Creating sustainable and local food communities'. The presentation was centered on bringing about leadership changes regarding healthy food choices. I talked about the different practices that have been adopted by communities to sustain their agricultural production and also about genetically modified food. **Nov 2014**
- Won second place at IIT Madras- Shastraa 2014 in the National Symposium on sustainability in Agriculture. (cash prize: INR 4000)  
The Indian Institute of Technology (IIT) is a federal government Institute and it conducts the annual technical symposium every year. There is a preliminary screening of applicants based on a 1000 word essay on sustainable agriculture. I was selected for the finals. Many eminent agricultural scientists and food policy analysts gave seminars and based on the experience gained from them, I worked on a presentation for 4 days and then presented it on the last day in front of the jury. I was awarded the second place. **Jan 2014**

#### **SEMINARS ATTENDED:**

- Economics of Happiness conference by International Society of Ecology & Culture at Bangalore. **2014**
- National Conference on Yoga, Naturopathy and Alternative Medicine. **2013**
- Indian Council of Agricultural Research (ICAR) - National Consultation Meeting on High Density and Canopy Management in Horticultural Crops. **2013**
- Seminar on 'Introduction of Temperate Fruits and Nuts in Nilgiris District of Tamil Nadu' by CITH Director (Central Institute of Temperate Horticulture). **2013**

### **IN-PLANT TRAINING:**

- 1 week training program at Sakthi Sugars limited, India (Dairy division). **May 2013**
- 1 week training program at Sakthi Sugars limited, India (Soy division). **May 2013**

### **ACADEMIC SERVICE:**

- Student Representative to the Dean's Internationalization Committee. **2015**
- VP (Finance)-International Students Association **2015-16**
- Dal AC Music Club-Chair **Sept 2014-Present**
- Member of Dal AC Agrology Club **Sept 2014**
- Tamil Nadu Agricultural University Music Band Leader **June 2012-14**
- Class Representative-TNAU **2011-12**

### **PROFESSIONAL MEMBERSHIPS:**

- Canadian Society of Horticultural Science **2015**
- American Botanical Council **2014**
- American Conifer Society **2014**
- Landscape Ontario **2014**
- American Society of Horticultural Science **2013**
- All India Agricultural Students Association **2013**
- Indian Academy of Science **2012**
- Indian Science Congress **2012**

### **VOLUNTEER EXPERIENCE:**

- Volunteered for the multicultural night, Chinese spring Festival **2015**
- Volunteered for Shinerama, holi, Truro First Aid Group **2014**
- Active member of SAIL (Student Advancement in Leadership) and involved in various campus activities including Movember fundraisers. **2014-15**
- Worked with rural agricultural communities near my college every weekend for two years informing and educating them about the latest technologies developed by the university and water saving techniques. **2012-14**
- Volunteered at the 3 day workshop on sustainability values at PSG Institute of Management. **July 2013**
- NSS-National Service Scheme-Worked for the social empowerment of the rural population by attending camps and conducting workshops such as AIDS awareness, organ donation and basic human rights. **2011-13**
- As part of NSS, Organizer of the weekly program conducted for the benefit of the downtrodden. **2011-12**

## **MUSIC SKILLS:**

- Currently pursuing B. Music correspondence course at University of Madras  
**Sept 2011-Present**
- Indian Music (Vocal)- Passed with II Grade(80-90), Government of Tamil Nadu.  
**Nov 2009**
- Grade1&2 Theory of Music – Passed with Distinction from Royal School of Music,  
London **2005**

