RESEARCH ASSOCIATE

Summary

15+ years of research experience in agricultural research 5 years of extension experience as a agronomic resource professional PhD in Soil Science and Crop physiology (minor) Strong experience in conducting and managing research trials of various crops Strong experience in various crop production systems Strong multidisciplinary background: customer support to field research Strong experience in GIS web application Development using HTML5, JavaScript, CSS3 ,PHP Strong Experience in - water and nutrient management, drought stress Instruments - Licor 6400, CIRAS3, Campbell Scientific, GC, HPLC, Wireless irrigation Strong skills in the areas : Statistical design and data analysis, Agricultural extension

Highlights

x

- x
- x
- x
- x

Accomplishments

Experience

Research Associate

January 2015 to Current Company Name

- Managing sustainable horticultural crop production through environment control Hydroponics tomato production under controlled environment of light, water and nutrients Identification and characterization of drought and nutrient stress resistance varieties University of Kentucky2010 July - 2014 Dec Production environments: field crops, nursery, green house, high tunnels, plasticulture vegetables Conducted field trials on irrigation and nutrient management, nitrogen cycling Developed physiological models on water use for irrigation scheduling for nursery crops Strong background on growth, development and phenology of various crops Multistate USDA project in collaboration with industry on sustainable nursery practices Presented results at grower meetings, national and international scientific meetings Developed programs for automation of irrigation volume, timing and frequency Working knowledge in drip, sprinkler irrigation systems, compost spreaders, mulchers, bed formers, chop gates Worked closely with growers and industry in obtaining first-hand information about their field Prepared successful grant proposals, technical reports, popular articles and peer reviewed papers Research Assistant Plant and Soil Sciences Dept., Univ.
- of Kentucky, 2006 Aug - 2010 May Field investigations of spatial variability on soil water storage and nitrogen status in corn and winter wheat in a no-till farmer's field Used soil water sensing capacitance probe, crop growth sensors; Green Seeker, Hydro-N sensor and Spectro radiometer to assess spatial variability at field scale Practical knowledge of field equipment: fertilizer applicators, cultivators, tractors, combines.

Agricultural Officer July

January 2004 to February 2006 Company Name

- Acted as a technical consultant for effective knowledge translation and transfer of technology.
- Worked on agronomic practices for field crops and fruits, vegetables and trees.
- Solved site specific soil, nutrient, pest and disease problems in the field.

Junior Research Fellow Dec

January 2000 to December 2002 Company Name

- Senior Research FellowKerala State Land Use Board, Govt.
- of Kerala 2003 April -2003 Oct.
- Identified farming systems suitable for different agro-ecological zones of Kerala state, India.
- Development of Site Specific Nutrient Management strategies for farm models of Kerala.
- Investigated rice response to nitrogen fertilization in farmer's fields.
- Used simulation models to transfer nitrogen fertilizer recommendations for rice tracts across soil and climatic barriers.

Research Assistant Nov
January 2000 to May 2000 Company Name

- Developed sustainable technologies to retain soil, moisture and vegetation in eroded regions using Coir Geo textiles.
- Identified different types of coir geo textiles for conserving soil and water under varying slopes.

Education

PhD : Soil Science and Crop physiology , 2010 University of Kentucky - City Soil Science and Crop physiology
MS : Soil Science and Agricultural Chemistry , 2002 Tamil Nadu Agricultural University India Soil Science and Agricultural Chemistry
2000 Kerala Agricultural University India PhD dissertation: Soil water and crop growth processes in a farmer's field*MS theses: Modeling rice response for agro-technology transfer

Publications

Nambuthiri, S., A. Fulcher, R. Geneve. 2014. Micro-irrigation Systems for Pot-in-Pot Ornamental Nursery Production. In: M. Goyal (Ed), Micro-irrigation management in trees and vines. CRC Press. Coolong, T., S. Nambuthiri, R. Warner. 2014. Tensiometer Based Automated Irrigation For Tomato under Plasticulture. In: M. Goyal (Ed.), Micro-irrigation management in trees and vines. CRC Press. Ethan, H., S. Nambuthiri, A. Fulcher, R. Geneve. 2014. Comparing Substrate Moisture-Based Daily Water Use and On Demand Irrigation Regimes for Oakleaf Hydrangea Grown in Two Container Sizes. Scientia Horticulturae 179: 132-139 Nambuthiri, S., D. Ingram. 2014. Sustainable Ground Cover Production for More Sustainable Kentucky Landscapes. HortTech (24) 1. Nambuthiri, S., A. Fulcher, A. Koeser, R. Geneve, G. Niu. 2015. Moving toward sustainability with alternative containers for greenhouse and nursery crop production: A review and research update. HortTechnology 25:8-16. Nambuthiri, S., G. Niu, G. Bi, T. Fernandez, R. Geneve. 2015. Substrate Temperature in plastic and alternative nursery containers. HortTechnology. 25(1):50-56 Geneve, R., S. Nambuthiri, A. Fulcher and E. Hagen. 2014. Irrigation Application Efficiency Calculation of Sprinkler Irrigated Container Plants Grown under Sensor based Irrigation Scheduling. Acta Horticulturae

Skills

automation, consultant, Dec, fertilizer, grant proposals, irrigation, Managing, meetings, Modeling, Oct, PhD, processes, Research, scheduling, scientific, simulation, translation, articles