



TENNESSEE  
STATE UNIVERSITY  
COLLEGE OF AGRICULTURE

## **Certificate Course:** **Conservation Practices in Container Nursery Production**

Promoting

**Best Management Practices (BMPs)**

in the nursery production systems by providing  
planning and technical assistance

THIS PROJECT IS DESIGNED TO TRAIN  
GROWERS, EXTENSION AGENTS, NRCS FIELD STAFF AND STUDENTS ON

**Conserving Natural Resources**





## Planning and Technical Assistance to Promote BMPs in Nursery Production Systems

**G**rowing nursery plants in containers is a unique plant production system compared to growing field crops in soil. Container production uses a soilless substrate that contains a limited amount of water, small quantities of nutrients and pesticides, and confines roots in a limited volume. Consequently, production inputs such as irrigation, nutrients, and pesticides require precise and properly timed applications in quantities that result in

maximum benefits and minimum resources risk. An opportunity exist to make sure the best possible management strategies (BMPs) are used. This certificate course provides a project that can conserve and protect the natural resources from adverse environmental impacts in the container plant nursery industry by enhancing the current Southern Nursery Industry "Guide for BMPs" while addressing the resources concerns of the industry.







## Certificate Course: Conservation & Innovation Practices in Container Nursery

Nursery operations and management are classified as intensive agricultural systems because they use a combination of expensive resources (labor, water, nutrients) to produce plants in large numbers on small acreages. Therefore, there is a need for minimizing contaminant

runoff, harvesting and recycling rainwater and runoff water, recuperating disturbed soil areas, and adopting 4R nutrient stewardship of the right source, rate, timing and method of application. The certificate course covers 8 weeks training module. This includes two field trips.

## Conservation Practices in Container Nursery Production Training Module

Week One	Module 1	Substrate Formulation and Measurement of Physical Properties
Week Two	Module 2	Laboratory analysis of substrates and plant tissues Monitor and Manage substrate/Water pH, EC, NO <sub>3</sub> etc
Week Three	Module 3	Water & Plant Nutrient Management - 4R Nutrient Stewardship Concept
Week Four	Module 4	Environmental Requirements - Light, Temperature, Ventilation, Humidity, etc. Integrated Pest, Weed and Ground Cover Management
Week Five	Module 5	a) Overview of the Industry b) Weed management in containers c) Nutrient management of Oxyanion d) Experimental Design and Statistical Analysis, e) Economics of adopting BMPs: Benefits: Costs alternate Management Program f) Panel discussion







## Conservation Practices in Container Nursery Production Field Training and Visits

### ***Some of the Comments from the Participants of Previous Certificate Training Programs***

*This is a real-life experience. It inspires and encourages to start own business in greening our planet.*

*I like the diversity and the head grower, it gives me ideas for me to start my own business*

*I was given the opportunity to see and learn the actual operation and management of nursery production.*

*I begin to love and appreciate nursery production*

*Admire the scientific approach in growing plants in nursery business operation*

*We had the opportunity to see the application of Best Management Practices that was discussed in the weekly classroom discussions as well as the hands-on experience.*

*It opened my eyes on the importance of customer service.*

*It is a great opportunity to learn about the handling and management of plants and factors to consider during nursery production*

*The production practices were neat and well organized. Excellent supply chain with minimal wastage*

*It made me think of getting into nursery business*

*It was a great experience to see a full fledge nursery production and machineries for efficiency.*

*I could learn everything about nursery production. If I don't see the know-how and the end goal is, there is will not ne a good perspective or excitement.*

*Practical knowledge and application of what is learnt in the class. It was very informative*





# Conservation Practices in Container Nursery/Greenhouse Production Field Training and Visits

