



## Tennessee Specific Industry Certification Horticulture Science Content Area Resource

This Tennessee Specific Industry Certification (TSIC) resource provides additional guidance as you prepare your horticulture science instructional materials. The general knowledge and skills are provided as a guide for developing lessons and lab activities that lead to deeper understanding of content. The list of sample terms are just that, a list of industry-specific terms that will build each student's knowledge base for this content area.

### ***General knowledge and skills for Growing Media***

- Explain the advantages of a good artificial growing media verses soil.
- Describe the building blocks for plant growth.
- Explain the difference between regular and time-released fertilizers.
- Explain to a customer the difference and importance of micronutrients and macronutrients.
- Explain how nutrient application rates are impacted by soil texture.
- Explain characteristics of the different soil horizons.
- Explain what could be responsible for rapid foliage growth and green color.
- Describe the characteristics between the different soil types and their impact on plant growth.

### ***Sample terms associated with content area:***

- A Horizon
- Alkaline
- Animal waste
- Artificial media
- Auxin
- B Horizon
- Bluebells
- Boron
- Buffer capacities.
- C Horizon
- Calcium
- Carbon
- Chlorine
- Chlorophyll
- Clay
- Clay loam
- Clay soils
- Clayey soil
- Coarse texture
- Coir
- Compost
- Container media
- Copper
- Crushed stone.
- Cubic feet
- Cubic yard
- D Horizon
- Desert
- Eucalyptus
- Fertilizer
- Fine texture
- Forest
- Foxglove
- Grassland
- Green manure
- Hill placement
- Hosta
- Hydrangea
- Hydrogen
- Hydroponic saturation
- Immobile micronutrient
- Inorganic fertilizer
- Iris
- Iron



## Tennessee Specific Industry Certification Resource Topics and Terms

- Juniper
- Lavender
- Lilac
- Lime
- Loamy soil
- Macronutrient
- Magnesium
- Manganese
- Manure
- Molybdenum
- Nickel
- Nitrogen
- Organic fertilizer
- Organic matter
- Peat moss
- Peony
- Perlite
- Permeability
- pH
- Phosphorus
- Pine bark
- Plant nutrition
- Plant residues
- Potassium
- Protein synthesis
- Rock wool
- Rose
- Sand
- Silt loam
- Clay loam
- Sandy clay
- Sandy loam
- Sandy soil
- Shrinkage in media
- Silty Soil
- Soil
- Soil texture
- Soilless growing medium
- Sterile
- Straw
- Sulfur
- Thyme
- Time release fertilizer
- Topsoil I
- Tryptophan
- Tundra
- Vermiculite
- Water holding capacity (WHC)
- Weed killers
- Wilting
- Wood chips
- Zinc