

Nursery Management

Synthesize the principles of taxonomic systems to classify plants. [AFNR.HS.24.1](#)

- a** Classify plants in a variety of areas (e.g., taxonomy, life cycle, plant use, structure). [AFNR.HS.24.1.A](#)
- b** Describe how classification is used globally in plant identification. [AFNR.HS.24.1.B](#)
- c** Identify landscape plants, using cultivars or varieties in a scientific name and the corresponding common name. [AFNR.HS.24.1.C](#)
- d** Categorize plants by their purpose (e.g., floral plants, landscape plants, house plants). [AFNR.HS.24.1.D](#)

Apply methods of plant propagation for plant reproduction. [AFNR.HS.24.2](#)

- a** Demonstrate sowing techniques and provide favorable conditions for seed germination. **AFNR.HS.24.2.b** Explain the methods of asexual propagation and identify which species and varieties are best suited to each method. **AFNR.HS.24.2.c** Develop a schedule for propagation to meet seasonal production demands. [AFNR.HS.24.2.A](#)
- b** Explain the methods of asexual propagation and identify which species and varieties are best suited to each method. **AFNR.HS.24.2.c** Develop a schedule for propagation to meet seasonal production demands. [AFNR.HS.24.2.B](#)
- c** **AFNR.HS.24.2.c** Develop a schedule for propagation to meet seasonal production demands. [AFNR.HS.24.2.C](#)

Explain the influence of environmental factors, nutrients, and soil on plant growth through the plant management plans. [AFNR.HS.24.3](#)

- a** Identify environmental factors involved in ornamental plant production including soils, water, pests, and human actions. [AFNR.HS.24.3.A](#)
- b** Describe the desired characteristics of an ideal growing medium. [AFNR.HS.24.3.B](#)
- c** Explain the techniques of soil sampling and relate this process to testing the growing medium and interpreting the results to recommend fertilizer applications and pH treatment. [AFNR.HS.24.3.C](#)
- d** Evaluate how heat, humidity, and light affect the heating, cooling, and ventilation systems of a greenhouse. [AFNR.HS.24.3.D](#)
- e** **AFNR.HS.24.3.e** Develop a water management plan for field production, nursery, or a controlled environment. [AFNR.HS.24.3.E](#)

f AFNR.HS.24.3.f Analyze the deficiency symptoms of the major plant nutrients and investigate the economic impacts of those deficiencies. AFNR.HS.24.3.F

Differentiate between field production, nursery, and greenhouse or controlled environment production and the plants produced in each. AFNR.HS.24.4

a Describe in the correct order the steps utilized in integrated pest management (IPM) in relation to horticultural crops and landscapes. AFNR.HS.24.4.A

b Identify common plant pests (insects and diseases) for horticultural crops and describe the damage inflicted to the plants. AFNR.HS.24.4.B

c Explain the types of pest control methods and classification of herbicides and discuss the appropriate uses and safety measures for each type. AFNR.HS.24.4.C

d Determine best management practices (BMP) for soil amendments, fertilizers, and pesticides. AFNR.HS.24.4.D

e Plan for common greenhouse and nursery production materials needed based on spacing and crop requirements. AFNR.HS.24.4.E

f Compare and contrast the different types of technologies and equipment used for production. AFNR.HS.24.4.F

Analyze how nursery plants are grown and managed. AFNR.HS.24.5

a Identify the various types of root production methods and compare the quality of the resulting plants. AFNR.HS.24.5.A

b Describe the differences between bare root, containerized, balled, and burlapped plants. AFNR.HS.24.5.B

c Use ANSI Standards to evaluate whether plants in various categories (evergreen, shrub) meet the standard. AFNR.HS.24.5.C

d Describe how the timing of transplanting affects plant quality. AFNR.HS.24.5.D

e Analyze production and delivery schedules for specific plant types and the associated labor required. AFNR.HS.24.5.E

f Interpret the reasons, methods, and timing for pruning woody and herbaceous plants for optimal plant growth. AFNR.HS.24.4.F
