

# Nursery & Landscape

**Contact:** Taylor Belle Matheny, tmatheny@ksu.edu

**Location:** Remote/Virtual

**Contest Date:** TBD

## General Information

The contest will be entirely online in 2021. Teams of four can compete; the top three scores will count for the team total. Each of the three sections will be a count for each contestant's final score.

**A. General Knowledge Examination - (100 points) 45 minutes**

- 40 multiple choice questions over general knowledge of the horticulture industry, nursery production practices, landscape design and maintenance

**B. Plant Identification - (150 points) 45 minutes**

- 50 specimens selected from the state nursery/landscape plant list.

**C. Practicums - Three practicums (100 points total) 45 minutes**

**1. Equipment and Supplies Identification (40 points)**

- 16 items
- Includes identification of tools, containers and growing media materials

**2. Pests, Disorders, and Beneficial Insect Identification (40 points)**

- 16 items
- Includes problems associated with insects, diseases or environmental factors as well as beneficial insects

**3. Landscape Drawing (20 points)**

- 8 questions
- Evaluation or interpretation of landscape designs

*\*\*Registration for the Nursery/Landscape CDE is separate from the Floriculture CDE registration\*\**

## References for the FFA Nursery and Landscape CDE Examination

Ingels, Jack. Ornamental Horticulture: Science, Operations and Management. Third Edition, 2001  
Delmar Publishers

File Standard and Enrollment for Introduction to Horticulture, 11th Edition, Delmar Publishers.



## Nursery and Landscape Plant Identification List

### Alphabetical by Scientific Name - 2018 ID List

- |   |  |
|---|--|
| 001. <i>Abelia x grandiflora</i> (Glossy Abelia)                              | 053. <i>Malus</i> sp. and cv. (Flowering Crabapple)      |
| 002. <i>Acer palmatum</i> cv. (Japanese Maple)                                | 054. <i>Morus</i> sp. (Mulberry)                         |
| 003. <i>Acer platanoides</i> cv. (Norway Maple)                               | 055. <i>Myrica pensylvanica</i> (Bayberry)               |
| 004. <i>Acer rubrum</i> cv. (Red Maple)                                       | 056. <i>Nandina domestica</i> (Heavenly Bamboo)          |
| 005. <i>Acer saccharinum</i> (Silver Maple)                                   | 057. <i>Narcissus pseudonarcissus</i> cv. (Daffodil)     |
| 006. <i>Acer saccharum</i> cv. (Sugar Maple)                                  | 058. <i>Pachysandra terminalis</i> (Japanese Spurge)     |
| 007. <i>Ajuga reptans</i> cv. (Carpet Bugle)                                  | 059. <i>Paeonia hybrida</i> cv. (Peony)                  |
| 008. <i>Aquilegia x hybrida</i> cv. (Columbine)                               | 060. <i>Parthenocissus tricuspidata</i> (Boston Ivy)     |
| 009. <i>Berberis</i> sp. and cv. (Barberry)                                   | 061. <i>Philadelphus coronarius</i> (Sweet Mockorange)   |
| 010. <i>Betula nigra</i> (River Birch)  | 062. <i>Picea abies</i> (Norway Spruce)                  |
| 011. <i>Buchloe dactyloides</i> (Buffalograss)                                | 063. <i>Picea pungens</i> cv. (Colorado Blue Spruce)     |
| 012. <i>Buxus</i> sp. and cv. (Boxwood)                                       | 064. <i>Pinus mugo</i> (Mugo Pine)                       |
| 013. <i>Catalpa</i> sp. (Catalpa)   | 065. <i>Pinus nigra</i> (Austrian Pine)                  |
| 014. <i>Cedrus atlantica</i> ‘Glauca’ (Blue Atlas Cedar)                      | 066. <i>Pinus ponderosa</i> (Ponderosa Pine)             |
| 015. <i>Celtis occidentalis</i> (Hackberry)                                   | 067. <i>Pinus strobus</i> (Eastern White Pine)           |
| 016. <i>Cercis canadensis</i> (Redbud)  | 068. <i>Pinus sylvestris</i> (Scots Pine)                |
| 017. <i>Chaenomeles speciosa</i> (Japanese Quince)                            | 069. <i>Platanus occidentalis</i> (Sycamore)             |
| 018. <i>Clematis hybrid</i> (Clematis)  | 070. <i>Poa pratensis</i> (Kentucky Bluegrass)           |
| 019. <i>Colchicum autumnale</i> (Crocus)                                      | 071. <i>Populus deltoides</i> (Cottonwood)               |
| 020. <i>Cornus florida</i> cv. (Flowering Dogwood)                            | 072. <i>Potentilla fruticosa</i> (Shrubby Cinquefoil)    |
| 021. <i>Cotoneaster</i> sp. (Cotoneaster)                                     | 073. <i>Prunus serrulata</i> (Japanese Flowering Cherry) |
| 022. <i>Crataegus phaenopyrum</i> (Washington Hawthorn)                       | 074. <i>Pyracantha coccinea</i> (Firethorn)              |
| 023. <i>Cynodon dactylon</i> (Bermudagrass)                                   | 075. <i>Pyrus calleryana</i> (Callery Pear)              |
| 024. <i>Echinacea purpurea</i> (Purple Coneflower)                            | 076. <i>Quercus macrocarpa</i> (Burr Oak)                |
| 025. <i>Euonymus alatus</i> (Winged Euonymus)                                 | 077. <i>Quercus palustris</i> (Pin Oak)                  |
| 026. <i>Euonymus fortunei</i> cv. (Wintercreeper)                             | 078. <i>Quercus rubra</i> (Red Oak)                      |
| 027. <i>Festuca</i> sp. (Fescue)  | 079. <i>Rhododendron</i> sp. and cv. (Azalea)            |
| 028. <i>Forsythia x intermedia</i> cv. (Border Forsythia)                     | 080. <i>Rhus</i> sp. (Sumac)                             |
| 029. <i>Fraxinus</i> sp. (Ash)  | 081. <i>Rosa</i> sp. (Landscape/Shrub Rose)              |
| 030. <i>Ginkgo biloba</i> (Ginkgo, Maidenhair Tree)                           | 082. <i>Rudbeckia hirta</i> (Rudbeckia)                  |
| 031. <i>Gleditsia triacanthos</i> var. <i>inermis</i> (Thornless Honeylocust) | 083. <i>Salix</i> sp. (Willow)                           |
| 032. <i>Gymnocladus dioicus</i> (Kentucky Coffeetree)                         | 084. <i>Sedum</i> sp. (Sedum)                            |
| 033. <i>Hedera helix</i> cv. (English Ivy)                                    | 085. <i>Sempervivum tectorum</i> (Hen and Chicks)        |
| 034. <i>Hemerocallis</i> sp. and cv. (Daylily)                                | 086. <i>Spiraea</i> sp. and cv. (Spirea)                 |
| 035. <i>Hibiscus syriacus</i> (Rose-of-Sharon)                                | 087. <i>Syringa vulgaris</i> cv. (Common Lilac)          |
| 036. <i>Hosta x hybrida</i> cv. (Plantain Lily)                               | 088. <i>Taxodium distichum</i> (Baldcypress)             |
| 037. <i>Hyacinthus orientalis</i> (Hyacinth)                                  | 089. <i>Taxus</i> sp. and cv. (Yew)                      |
| 038. <i>Hydrangea macrophylla</i> (Bignleaf Hydrangea)                        | 090. <i>Thuja occidentalis</i> cv. (American Arborvitae) |
| 039. <i>Hydrangea quercifolia</i> (Oakleaf Hydrangea)                         | 091. <i>Tilia</i> sp. (Linden)                           |
| 040. <i>Ilex</i> sp. (Holly)  | 092. <i>Tulipa</i> sp. and cv. (Tulip)                   |
| 041. <i>Iris x germanica florentina</i> cv. (Bearded Iris)                    | 093. <i>Ulmus americana</i> (American Elm)               |
| 042. <i>Juglans nigra</i> (Black Walnut)                                      | 094. <i>Ulmus parvifolia</i> (Chinese Elm)               |
| 043. <i>Juniperus</i> sp. (Juniper)   | 095. <i>Ulmus pumila</i> (Siberian Elm)                  |
| 044. <i>Koelreuteria paniculata</i> (Goldenraintree)                          | 096. <i>Viburnum</i> sp. (Viburnum)                      |
| 045. <i>Lagerstroemia indica</i> cv. (Crapemyrtle)                            | 097. <i>Vinca minor</i> (Periwinkle)                     |
| 046. <i>Leucanthemum x superbum</i> cv. (Shasta Daisy)                        | 098. <i>Weigela florida</i> cv. (Old-fashioned Weigela)  |
| 047. <i>Liquidambar styraciflua</i> (Sweetgum)                                | 099. <i>Wisteria sinensis</i> (Chinese Wisteria)         |
| 048. <i>Liriodendron tulipifera</i> (Tuliptree)                               | 100. <i>Yucca filamentosa</i> (Adam’s Needle Yucca)      |
| 049. <i>Lonicera japonica</i> (Japanese Honeysuckle)                          |  |
| 050. <i>Maclura pomifera</i> (Osage Orange)                                   |  |
| 051. <i>Magnolia x soulangiana</i> (Saucer Magnolia)                          |  |
| 052. <i>Mahonia aquifolium</i> (Oregon Grapeholly)                            |  |



## Nursery and Landscape Plant Identification List

### Alphabetical by Common Name - 2018 ID List

- |  |   |
|--|---|
| 001. Abelia, Glossy ( <i>Abelia x grandiflora</i> )                              | 060. Ivy, Boston ( <i>Parthenocissus tricuspidata</i> )   |
| 090. Arborviate, American ( <i>Thuja occidentalis</i> cv.)                       | 033. Ivy, English ( <i>Hedera helix</i> cv.)              |
| 029. Ash ( <i>Fraxinus</i> sp.)  | 043. Juniper ( <i>Juniperus</i> sp.)                      |
| 079. Azalea ( <i>Rhododendron</i> sp. and cv.)                                   | 087. Lilac, Common ( <i>Syringa vulgaris</i> cv.)         |
| 088. Baldcypress ( <i>Taxodium distichum</i> )                                   | 036. Lily, Plantain ( <i>Hosta x hybrida</i> cv.)         |
| 056. Bamboo, Heavenly ( <i>Nandina domestica</i> )                               | 091. Linden ( <i>Tilia</i> sp.)                           |
| 009. Barberry ( <i>Berberis</i> sp. and cv.)                                     | 051. Magnolia, Saucer ( <i>Magnolia x soulangiana</i> )   |
| 055. Bayberry ( <i>Myrica pensylvanica</i> )                                     | 002. Maple, Japanese ( <i>Acer palmatum</i> cv.)          |
| 023. Bermudagrass ( <i>Cynodon dactylon</i> )                                    | 003. Maple, Norway ( <i>Acer platanoides</i> cv.)         |
| 010. Birch, River ( <i>Betula nigra</i> )  | 004. Maple, Red ( <i>Acer rubrum</i> cv.)                 |
| 070. Bluegrass, Kentucky ( <i>Poa pratensis</i> )                                | 005. Maple, Silver ( <i>Acer saccharinum</i> )            |
| 012. Boxwood ( <i>Buxus</i> sp. and cv.)   | 006. Maple, Sugar ( <i>Acer saccharum</i> cv.)            |
| 011. Buffalograss ( <i>Buchloe dactyloides</i> )                                 | 061. Mockorange, Sweet ( <i>Philadelphus coronarius</i> ) |
| 007. Bugle, Carpet ( <i>Ajuga reptans</i> cv.)                                   | 054. Mulberry ( <i>Morus</i> sp.)                         |
| 013. Catalpa ( <i>Catalpa</i> sp.)   | 076. Oak, Burr ( <i>Quercus macrocarpa</i> )              |
| 014. Cedar, Blue Atlas ( <i>Cedrus atlantica</i> ‘Glaucua’)                      | 077. Oak, Pin ( <i>Quercus palustris</i> )                |
| 073. Cherry, Japanese Flowering ( <i>Prunus serrulata</i> )                      | 078. Oak, Red ( <i>Quercus rubra</i> )                    |
| 072. Cinquefoil, Shrubby ( <i>Potentilla fruticosa</i> )                         | 050. Orange, Osage ( <i>Maclura pomifera</i> )            |
| 018. Clematis ( <i>Clematis</i> hybrid)  | 075. Pear, Callery ( <i>Pyrus calleryana</i> )            |
| 032. Coffeetree, Kentucky ( <i>Gymnocladus dioicus</i> )                         | 059. Peony ( <i>Paeonia hybrida</i> cv.)                  |
| 008. Columbine ( <i>Aquilegia x hybrida</i> cv.)                                 | 097. Periwinkle ( <i>Vinca minor</i> )                    |
| 024. Coneflower, Purple ( <i>Echinacea purpurea</i> )                            | 065. Pine, Austrian ( <i>Pinus nigra</i> )                |
| 021. Cotoneaster ( <i>Cotoneaster</i> sp.)                                       | 067. Pine, Eastern White ( <i>Pinus strobus</i> )         |
| 071. Cottonwood ( <i>Populus deltoides</i> )                                     | 064. Pine, Mugo ( <i>Pinus mugo</i> )                     |
| 053. Crabapple, Flowering ( <i>Malus</i> sp. and cv.)                            | 066. Pine, Ponderosa ( <i>Pinus ponderosa</i> )           |
| 045. Crapeyrtle ( <i>Lagerstroemia indica</i> cv.)                               | 068. Pine, Scots ( <i>Pinus sylvestris</i> )              |
| 019. Crocus ( <i>Colchicum autumnale</i> )                                       | 017. Quince, Japanese ( <i>Chaenomeles speciosa</i> )     |
| 057. Daffodil ( <i>Narcissus pseudonarcissus</i> cv.)                            | 016. Redbud ( <i>Cercis canadensis</i> )                  |
| 046. Daisy, Shasta ( <i>Leucanthemum x superbum</i> cv.)                         | 035. Rose-of-Sharon ( <i>Hibiscus syriacus</i> )          |
| 034. Daylily ( <i>Hemerocallis</i> sp. and cv.)                                  | 081. Rose, Landscape/Shrub ( <i>Rosa</i> sp.)             |
| 020. Dogwood, Flowering ( <i>Cornus florida</i> cv.)                             | 082. Rudbeckia ( <i>Rudbeckia hirta</i> )                 |
| 093. Elm, American ( <i>Ulmus americana</i> )                                    | 084. Sedum ( <i>Sedum</i> sp.)                            |
| 094. Elm, Chinese ( <i>Ulmus parvifolia</i> )                                    | 086. Spirea ( <i>Spiraea</i> sp. and cv.)                 |
| 095. Elm, Siberian ( <i>Ulmus pumila</i> )                                       | 063. Spruce, Colorado Blue ( <i>Picea pungens</i> cv.)    |
| 025. Euonymus, Winged ( <i>Euonymus alatus</i> )                                 | 062. Spruce, Norway ( <i>Picea abies</i> )                |
| 027. Fescue ( <i>Festuca</i> sp.)  | 058. Spurge, Japanese ( <i>Pachysandra terminalis</i> )   |
| 074. Firethorn ( <i>Pyracantha coccinea</i> )                                    | 080. Sumac ( <i>Rhus</i> sp.)                             |
| 028. Forsythia, Border ( <i>Forsythia x intermedia</i> cv.)                      | 047. Sweetgum ( <i>Liquidambar styraciflua</i> )          |
| 030. Ginkgo, Maidenhair Tree ( <i>Ginkgo biloba</i> )                            | 069. Sycamore ( <i>Platanus occidentalis</i> )            |
| 044. Goldenraintree ( <i>Koelreuteria paniculata</i> )                           | 092. Tulip ( <i>Tulipa</i> sp. and cv.)                   |
| 052. Grapeholly, Oregon ( <i>Mahonia aquifolium</i> )                            | 048. Tuliptree ( <i>Liriodendron tulipifera</i> )         |
| 015. Hackberry ( <i>Celtis occidentalis</i> )                                    | 096. Viburnum ( <i>Viburnum</i> sp.)                      |
| 022. Hawthorn, Washington ( <i>Crataegus phaenopyrum</i> )                       | 042. Walnut, Black ( <i>Juglans nigra</i> )               |
| 085. Hen and Chicks ( <i>Sempervivum tectorum</i> )                              | 098. Weigela, Old-fashioned ( <i>Weigela florida</i> cv.) |
| 040. Holly ( <i>Ilex</i> sp.)  | 083. Willow ( <i>Salix</i> sp.)                           |
| 031. Honeylocust, Thornless ( <i>Gleditsia triacanthos</i> var. <i>inermis</i> ) | 026. Wintercreeper ( <i>Euonymus fortunei</i> cv.)        |
| 049. Honeysuckle, Japanese ( <i>Lonicera japonica</i> )                          | 099. Wisteria, Chinese ( <i>Wisteria sinensis</i> )       |
| 037. Hyacinth ( <i>Hyacinthus orientalis</i> )                                   | 089. Yew ( <i>Taxus</i> sp. and cv.)                      |
| 038. Hydrangea, Bigleaf ( <i>Hydrangea macrophylla</i> )                         | 100. Yucca, Adam’s Needle ( <i>Yucca filamentosa</i> )    |
| 039. Hydrangea, Oakleaf ( <i>Hydrangea quercifolia</i> )                         |   |
| 041. Iris, Bearded ( <i>Iris x germanica florentina</i> cv.)                     |   |



## Nursery/Landscape Equipment and Supplies Practicum Identification List

No.	Item Name	
1.	hoe and blade pruner	hose repair coupling
2.	ball cart (b&B truck)	impact sprinkler
3.	bark mulch	landscape fabric
4.	bow saw	leaf rake
5.	broadcast (cyclone) spreader	loppers
6.	bubbler head, irrigation	mattock
7.	bulb planter	measuring wheel
8.	bunker rake	mist nozzle (mist bed)
9.	burlap	mower blade balancer
10.	compressed air sprayer tank pressurized	nursery container
	core aerator	oscillating sprinkler
12.	chain saw	peat moss
	cut off machine	pick
14.	drip emitter, irrigation	planting/earth/soil auger
	drill bit	pole pruner
16.	edger (power or hand)	polyethylene pipe
17.	edging	pop up irrigation head
18.	erosion netting	post hole digger
19.	fertilizer injector	power blower
20.	fertilizer tablet	power hedge trimmer
21.	garden (spading) fork	pot in pot units
22.	garden (bow) rake	pump sprayer tank not pressurized
23.	grafting band	propagation mat
24.	grafting knife	pruning saw
25.	granular fertilizer	reel mower
26.	gravity (drop) spreader	resin coated fertilizer
27.	ground (pelleted) limestone	rotary mower
28.	hedge shears	rototiller
	hook and blade (bypass) pruners	round point shovel
	hose end repair fitting	scoop shovel
	hose end sprayer	shade fabric
	hose end washer	sharpening stone
		siphon proportioner
		soaker hose
		soil sampling tube
		solenoid valve
		spade
		sphagnum moss
		square point (flat) shovel
		string trimmer
		thatch rake
		tree aliper
		tree rap
		troel
		vertical mower
		water breaker
		wire tree basket



## Identification List

### Insects

1. Aphid
2. Bagworm
3. Borer
4. Leafhopper
5. Leaf Miner
6. Scale
7. Spider Mite
8. Snail/Slug
9. Hite
10. White Grub

### Diseases

11. Anthracnose
12. Apple Scab
13. Black Spot
14. Botrytis
15. Canker
16. Cedar Apple Rust
17. Crown Gall
18. Fireblight
19. Powdery Mildew
20. Root Rot

### Weeds

21. Annual Bluegrass
22. Broadleaf Plantain
23. Buckthorn Plantain
24. Chickweed
25. Crabgrass
26. Dandelion
27. Henbit
28. Nutsedge
29. Alis
30. Purslane
31. Clovers

### Physiological Problems

32. Frost/Freeze Injury
33. Iron Deficiency
34. Leaf Scorch (drought/winter burn)
35. Nitrogen Deficiency
36. Potassium Deficiency
37. String Trimmer Injury
38. Sunburn

### Beneficial Insects

39. Praying Mantis
40. Lady Beetle
41. Paper Wasp
42. Lacewing
43. Spider

