

# **Introduction to Horticulture CDE**

#### **Purpose**

The Introduction to Horticulture Career Development Event is unique to North Carolina. The event is designed to allow students to demonstrate their proficiency in plant identification, weed and pest identification, and general horticultural knowledge.

### Superintendent

The superintendent for this event is Mrs. Sherilee Deal, Agriculture Education Curriculum Coordinator, 444 Bristol Dr, Statesville, NC 28677. Phone: 704.796.5736, Email: sdeal2@ncsu.edu

### **Eligibility**

This event is open to FFA members in good standing. The following students are eligible to participate in the regional event:

- Students currently enrolled in Horticulture I
- Students who have completed Horticulture I only
- Students currently enrolled in a level two horticulture course at the time of the regional qualifying event

Students who have completed any level two horticulture course at the time of the regional qualifying event are not eligible to participate.

Any student eligible to participate at the regional level is also eligible to participate in the state event if they qualify according to regional guidelines.

Teams shall consist of four members. Only the top three scores will count towards the team total. No alternates are allowed in state events. Any alternate found participating in a state event will result in team disqualification.

The use or possession of cellular phones or any other mobile electronic communication device is prohibited during any state-level career development event. Any violation of this rule by any team member will result in total team disqualification.

FFA members participating in career development events that require the use of calculators may only use non-programmable/graphing calculators that do not have the ability to communicate with other calculators. Calculators will be screened prior to the start of a CDE for acceptability. Students caught using data stored on a calculator or communicating with other calculators will result in a total team disqualification for the event.

Any member found cheating in any state-level career development event will result in total team disqualification for that event.



The North Carolina FFA Association, in keeping with the FFA mission and purposes, does not permit the use of tobacco products, e-cigarettes, vapes, or Juuls at any FFA facility or at any FFA activity.

At the North Carolina FFA State Convention, participation in more than one FFA CDE is permitted as long as events are not being held concurrently and no special provisions are required to facilitate participation with the exception that parliamentary procedure and public speaking and parliamentary procedure and Creed speaking which are held concurrently will allow dual participation and special provisions for flighting.

In compliance with the Americans with Disabilities Act, North Carolina FFA will honor requests for reasonable accommodations made by individuals with disabilities. Please direct accommodation requests through the CDE/LDE Accommodation Request Form. If the accommodation can be made for all and/or doesn't provide an unfair advantage, then every effort will be made to provide the accommodation. Requests can be accommodated more effectively if notice is provided at least 10 days before the event.

### **Middle School Participation**

Middle school students and teams may participate in any Career Development Event or Leadership Development Event. The top three middle school participants will be recognized. Middle school participants should designate during registration.

### **State Career Development Event Participation**

The appropriate number of teams based on event participation from each region are eligible to compete in the state career development event. The top three individuals in the regional event are eligible to participate in the state event as individuals regardless of their team placing. Teams and individuals advancing to state event participation must be certified by the regional FFA advisor.

#### **Dress Code**

Participants are required to follow the North Carolina FFA Career Development Event Dress Code. Participants are allowed to wear long pants, an appropriate shirt with a collar, or an appropriate high school or FFA t-shirt.

The North Carolina FFA Association strives to promote a positive image at all Official FFA Events. The dress code policy was established to address the issue of appropriate attire at all Official FFA Events. Members should adhere to this policy for all events. A ten percent reduction will be applied to all individual scores from a chapter if a participant from that chapter violates the dress code during that career event.



### **Procedures for Administering the Event**

Any communication between participants during the event will result in both individuals getting a zero on that phase of the event. If an individual is suspected of cheating, the participant will be given a personal quiet warning on the first offense and a zero on that phase of the event for any second offense in addition to the team being disqualified.

Participants are allowed and encouraged to bring and use clipboards in order to hold event score cards. Clipboards should be examined by an official prior to the event to determine that they are free of written materials.

### **Regional Event Set-Up**

The event coordinator will have the responsibility in setting up the career development event, choosing career development event officials, judges, and materials. Regions may purchase Horticulture CDE #105482 scan sheets for participants to use if they wish. Scan sheets will not be provided from the state for regional use. Students will also be given a copy of the plant list to reference the correct number for bubbling purposes. Students will not need to memorize the Plant ID #.

#### Part 1: Identification (60 points)

- 20 minutes are allotted for this portion.
- 20 different plants will be chosen from the current PLANT IDENTIFICATION BASE list of ID plants and each plant will be numbered.
- Each participant will be assigned a plant to begin the identification portion of the event. Each participant will remain at each plant for one minute then progress on to the next plant.
- No participant will be permitted to return to a plant a second time.
- Each plant will be worth 3 points.
- Event officials will grade papers.
- Grading will be done by awarding 3 points for each plant correctly identified; if it is observed that a participant uses the same number twice, both numbers will be marked incorrect.

#### Part 2: Knowledge Test (25 points)

- 25 minutes are allotted for this portion.
- A written test will be made of questions from: Horticulture Today. Goodheart-Willcox.
- Chapters 7-12 will be used each year. The following rotation will be used for remaining chapters.
  - Even years Chapters 13-17
  - Odd years Chapters 29-33
- Copies of written tests will not be made available to teachers.



#### Part 3: Practicum (15 points)

- 5 minutes are allotted for this portion.
- Each participant will be asked to identify 5 pests.
- Officials will rotate students through 5 pest identification stations.
- To expedite the practicum process, the event coordinator may provide more than one set of five pests to identify.
- Students may earn a maximum of 3 points per pest for a total of 15 points.

Regional Event Scoring

Maximum Score	100
Identification	60
Knowledge Test	25
Practicum	15

### **State Event Set-Up**

The event coordinator shall be responsible for setting up the event, choosing event officials, judges, and materials. At the state level, students will use the Horticulture CDE #105482 scan sheet to bubble in their answers. Students will also be given a copy of the plant list to reference the correct number for bubbling purposes. Students will not need to memorize the Plant ID #.

### Part 1: Identification (120 points)

- 40 minutes are allotted for this portion
- 40 different plants will be chosen from the current PLANT IDENTIFICATION BASE list of ID plants and each plant will be numbered.
- Each participant will be assigned a plant to begin the identification portion of the event. Each participant will remain at each plant for one minute then progress on to the next plant.
- No participant will be permitted to return to a plant a second time.
- Each plant will be worth 3 points.
- Grading will be done by awarding 3 points for each plant correctly identified; if it is observed that a participant uses the same number twice, both numbers will be marked incorrect.
- Teachers will grade the papers but should not grade papers of their own team.

#### Part 2: Knowledge Test (25 points)

- 30 minutes are allotted for this portion.
- A written test will be made of questions from: *Horticulture Today*. Goodheart-Willcox.
- Chapters 7-12 will be used each year. The following rotation will be used for remaining chapters.
  - Even years Chapters 13-17
  - Odd years Chapters 29-33
- There will be 25 questions; each question will be valued at one point.
- Copies of written tests will not be made available to teachers.



#### Part 3: Practicum (55 points)

- 30 minutes are allotted for this portion.
- The practicum will consist of the identification of ten pests, as well as five multiple-choice questions related to any of the pests identified on the practicum identification list.
- To expedite the practicum process, the event coordinator may provide more than one set of ten pests to identify.
- Questions will be based on pest management using the NC Chemical Manual. A digital manual may be used.
- Each identified pest is worth 3 points, and each multiple-choice question is worth 5 points.
- No participants will be given extra time.

State Event Time Summary

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Identification	40 Minutes
Knowledge Test	30 Minutes
Practicum	30 Minutes
State Event Scoring	
Maximum Score	200
Identification	120
Knowledge Test	25
Practicum	55

# Procedure for Determining the State Event Winner When Scores are Tied

In the event a tie score exists, apply the following methods in sequential order until the tie is broken:

- 1. Compare the alternate scores. The lowest team member score is the alternate score.
- 2. Compare the total team scores for the knowledge followed by the identification component. The higher scoring team will be determined the winner.
- 3. If these methods fail to break a tie, co-winners will be declared.

#### State Awards

The awards for the state event will be presented annually at the state FFA convention to include a team 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> place plaque. The high scoring individual will receive a plaque.

#### References

Riedel, Jodi Songer, and Elizabeth Driscoll. *Horticulture Today*. Goodheart-Willcox Company, Inc., 2017.



		Plant Identifi	cat	ion -	Base List	
Plant #	Botanical Name	Common Name	Р	Plant #	Botanical Name	Common Name
101	Abelia x grandiflora	Glossy Abelia	14	41	Iris x germanica var florentina	Bearded Iris
102	Acer palmatum	Japanese Maple	14	42	Juniperus conferta	Shore Juniper
103	Acer rubrum	Red Maple	14	43	Juniperus horizontalis	Creeping Juniper
104	Ageratum houstonianum	Ageratum	14	44	Lagerstroemia indica	Crepe Myrtle
105	Ajuga reptans	Carpet Bugle	14	45	Leucanthemum x superbum	Shasta Daisy
106	Antirrhinum majus	Snapdragon	14	46	Ligustrum japonicum	Japanese Privet
107	Araucaria heterophylla	Norfolk Island Pine	14	47	Liquidambar styraciflua	Sweetgum
108	Asparagus densiflorus 'Sprengeri'	Sprengeri Fern	14	48	Liriope muscari	Lilyturf
109	Astilbe hybrida	Astilbe Hybrids	14	49	Magnolia grandiflora	Southern Magnolia
110	Aucuba japonica	Japanese Aucuba	1:	50	Malus species	Flowering Crabapple
111	Begonia x semperflorens-cultorum	Wax Begonia	1:	51	Maranta leuconeura	Prayer Plant
112	Berberis thunbergii	Japanese Barberry	1:	52	Myrica cerifera	Wax Myrtle
113	Betula nigra	River Birch	1	53	Nandina domestica	Dwarf Nandina
114	Buddleia davidii	Butterfly Bush	1:	54	Narcissus pseudonarcissus	Daffodil
115	Buxus sempervirens	Common Boxwood	1	55	Nephrolepis exaltata	Boston Fern
116	Camellia japonica	Common Camellia	1:	56	Ophiopogon japonicus	Mondo Grass
117	Canna x generalis	Canna	1:	57	Paeonia hybrid	Peony
118	Catharanthus roseus	Vinca or Periwinkle	1:	58	Pelargonium peltatum	Ivy Leaf Geranium
119	Cercis canadensis	Eastern Red Bud	1:	59	Pelargonium x hortorum	Geranium
120	Chlorophytum comosum	Spider Plant	16	60	Pennisetum species	Purple Fountain Grass
121	Chrysanthemum morifolium	Florist Chrysanthemum	10	61	Petunia hybrida	Petunia
122	Clematis x jackmanii	Clematis	16	62	Philodendron scandens oxycardium	Parlor Ivy
123	Cornus florida	Flowering Dogwood	16	63	Prunus serrulata 'Kwanzan'	Japanese Flowering Cherry
124	x Cupressocyparis leylandii	Leyland Cypress	10	64	Pyrus calleryana 'Bradford'	Bradford Pear
125	Dieffenbachia maculata	Spotted Dumbcane	16	65	Quercus palustris	Pin Oak
126	Dracaena species	Dracaena	10	66	Quercus phellos	Willow Oak
127	Echinacea purpurea	Cone Flower	16	67	Rhododendron catawbiense	Catawba Hybrid Rhododendron
128	Epipremnum aureum	Golden Pothos	10	68	Rhododendron kiusianum	Azalea
129	Euonymus alata	Winged Euonymus	16	69	Rosa species	Shrub Rose/Landscape Rose
130	Ficus benjamina	Benjamin or Weeping Fig	1	70	Salvia splendens	Salvia
131	Ficus elastica 'Decora'	Decora Rubber Plant	1	71	Schefflera arboricola or S.actinophylla	Schefflera
132	Forsythia x intermedia	Border Forsythia	1	72	Sedum species	Sedum
133	Gardenia jasminoides	Gardenia	1	73	Solenostemon scutellarioides	Coleus
134	Hedera helix	English Ivy	1	74	Spathiphyllum cvs.	Peace Lily
135	Hemerocallis	Day Lilly	1	75	Tagetes species	Marigold
136	Hosta species	Hosta	1	76	Tradescantia zebrina	Wandering Jew
137	Hydrangea macrophylla	French Hydrangea	1	77	Tulipa species	Tulip
138	llex cornuta	Chinese Holly	1	78	Verbena hybrida	Garden Verbena
139	llex crenata	Japanese Holly	1	79	Viola x wittrockiana	Pansy
140	Impatiens hybrid	Impatiens	18	80	Zinnia elegans	Zinnia

### **North Carolina FFA Association**

# **Introduction to Horticulture Practicum - State Pest ID List**

	Contestant Name	Contestant #	Score
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Pest specimens will be numbered 1-10. Contestant uses the number beside the weed, disease or pest to identify each pest specimen. <u>Each correctly identified pest is worth three points.</u>

	Weed Identification
201	Buckhorn Plantain
202	Broadleaf Plantain
203	Crabgrass
204	Chickweed
205	Dandelion
206	Goose grass
207	Henbit
208	Oxalis
209	Spurge (prostrate)
210	White Clover
211	Wild Garlic
212	Yellow Nutsedge

Dis	ease Identification
213	Black Spot
214	Chlorosis
215	Damping off
216	Fire blight
217	Powdery Mildew
218	Root Rot
219	Rust

Ins	sect Identification
220	Aphid
221	Bagworms
222	Caterpillar
223	Japanese Beetle
224	Lacebug
225	Mealybug
226	Scale
227	Spider Mites
228	Thrips
229	White Fly





### HORTICULTURE CDE# 105482

Incorrect Marks Correct Mark

#### Team Name

This sheet is for demonstration and practice only. You must use a real scan sheet for actual competition.

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8	2143	00000000	2143	8
9	2314	00000000	2314	9
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11	2413	00000000	2413	11
12	2431	00000000	2431	12
13	3124	00000000	3124	13
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# Introduction to Horticulture – (REGIONAL) Scorecard

Name:	Chapter:	Contestant No:
Plant Iden	tification	
Plant 1		Plant 11
Plant 2		Plant 12
Plant 3		Plant 13
Plant 4		Plant 14
Plant 5		Plant 15
Plant 6		Plant 16
Plant 7		Plant 17
Plant 8		Plant 18
Plant 9		Plant 19
Plant 10		Plant 20
TOTAL SO	ORE (3 pts. each):/	60 points



\_\_\_\_Root Rot

# Introduction to Horticulture - Pest ID List - (REGIONAL) Practicum

Contestant Name	Contestant #	Score
Pest specimens will be numbered 1-5. Contestant space beside the name of the specimen. Each		
Weeds		
Buckhorn PlantainBroadleaf PlantainCrabgrassChickweedDandelionGoose grassHenbitOxalisSpurge (prostrate)White CloverWild GarlicYellow Nutsedge	Insects AphidBagworCaterpilJapanesLacebusMealybusScaleSpider IThripsWhite F	lar se Beetle g ugs Mites
Diseases Black Spot Chlorosis Damping off Fire blight Powdery Mildew		