**Introduction to Horticulture CDE**

**Purpose**

The Introduction to Horticulture Career Development Event is unique to North Carolina in which only first-year horticulture students may participate. The event is designed to allow students to demonstrate their proficiency in plant identification, weed, and pest identification and general horticultural knowledge.

**Sponsor**

The Introduction to Horticulture CDE is sponsored by the North Carolina FFA Foundation.

**Superintendent**

Comments and questions may be directed to Mr. Jason Davis, State FFA Coordinator, Department of Agricultural and Human Sciences, NCSU, Campus Box 7654, Raleigh, NC 27695-7654.   
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**Eligibility**

This event is open to FFA members in good standing who are enrolled in or have taken Horticulture I. Students cannot compete if they are currently enrolled in or have taken Horticulture II. Teams advancing to state event participation must be certified by the regional FFA advisor. Members of a previous state winning team are ineligible.

The top three individuals in the regional event are eligible to participate in the state event as individuals regardless of their team placing.

**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, Personal Digital Assistants (PDA’s) 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.

At the North Carolina FFA State Convention, participation in more than one FFA CDE event is permitted as long as events are not being held concurrently and no special previsions 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.

**State Career Development Event Participation**

The appropriate numbers 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. A ten percent reduction in the total team score will be taken if a participant violates the dress code. Participants are allowed to wear long pants, an appropriate shirt with a collar or an appropriate high school or FFA t-shirt.

**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 host school will have the responsibility in setting up the career development event, choosing career development event officials, judges and materials according to the following:

**Part 1: Identification (40 points)**

* 20 minutes are allotted for this portion
* Twenty different plants will be chosen from the current list of ID plants and each plant will be numbered.
* Each contestant will be assigned a plant to begin the identification portion of the event. Each contestant will remain at each plant for one minute then progress on to the next plant.
* No contestant will be permitted to return to a plant for a second time.
* Each plant will be worth 2 points.
* Event officials will grade papers.
* Grading will be done by giving 2 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 (50 points)**

* 25 minutes are allotted for this portion
* A written knowledge test will be made up of 50 items from the Horticulture I VoCATS Bank.
* Copies of written tests will not be made available to teachers.

**Part 3: Practicum (10 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 2 points per pest for a total of 10 points.

**Regional Event Scoring**

*Maximum Score 100*

Identification 40

Knowledge Test 50

Practicum 10

**State Event Set-Up**

The State FFA Coordinator or horticulture consultant shall be responsible for setting up the event, choosing event officials, judges and materials according to the following:

**Part 1: Identification (80 points)**

* 40 minutes are allotted for this portion
* Forty different plants will be chosen from the current list of ID plants and each plant will be numbered.
* Each participant will be assigned a plant to begin identification.
* 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 2 points.
* Grading will be done by giving 2 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 (100 points)**

* A written test will be made up from the North Carolina VoCATS Horticulture I item bank.
* Each question will be valued at one point.
* Copies of written tests will not be made available to teachers.
* 50 minutes are allotted for this portion

**Part 3: Practicum (20 points)**

* The practicum will consist of the identification of five pests in addition to 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 five pests to identify.
* Questions will be based on pest management using the NC Chemical Manual (At least 15 identical chemical manuals are recommended for use during this portion of the practicum.).
* Each identified pest is worth two points, and each multiple-choice question is worth two points.
* No participants will be given extra time.
* 30 minutes are allotted for this portion

**Time Summary**

Identification 40 Minutes

Knowledge Test 50 Minutes

Practicum 30 Minutes

**State Event Scoring**

*Maximum Score 200*

Identification 80

Knowledge Test 100

Practicum 20

**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 following awards will be presented annually at the state FFA convention provided sponsorship is available:

State Winning Team

*First place team plaque*

Second Place Team

*Second place team plaque*

Third Place Team

*Third place team plaque*

High Scoring Individual

*Plaque*

### Official Plant Identification List

**NC FFA Introduction to Horticulture Career Development Event**

Plant specimens will be numbered 1‑20 for the Regional Event and 1‑40 for the State Event. Contestant is to write the appropriate number in the space beside the name of the specimen.

Contestant Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Contestant #\_\_\_\_\_\_\_\_\_\_\_\_\_\_Score\_\_\_\_\_\_\_\_\_

\_\_\_\_Abelia X grandiflora/Glossy Abelia

\_\_\_\_\_Acer palmatum/Japanese Maple

\_\_\_\_\_Acer rubrum/Red Maple

\_\_\_\_\_Ageratum mexicanum/Ageratum

\_\_\_\_\_Ajuga reptans/Ajuga

\_\_\_\_\_Aracaria heterophylla/Norfolk Island Pine

\_\_\_\_\_Asparagus densiflorus ‘Spengeri”/

Sprengeri Fern

\_\_\_\_\_Aucuba japonica/Japanese Aucuba

\_\_\_\_\_Begonia X semperflorens-cultorum/

Wax Begonia

\_\_\_\_\_Berberis thumbergii/Japanese Barberry

\_\_\_\_\_Betula nigra/River Birch

\_\_\_\_\_Buxus sempervirens/Common Boxwood

\_\_\_\_\_Canna X generalis/Canna

\_\_\_\_\_Cercis canadensis/Eastern Red Bud/

Judas Tree

\_\_\_\_\_Chlorophytum comosum cv./Spider Plant

\_\_\_\_\_Chrysantheum morifolium or Dendranthema

X grandiflora/Florist Chrysantheum

\_\_\_\_\_Chrysantheum X superbum/Shasta Daisy

\_\_\_\_\_Coleus X hybridus/Coleus

\_\_\_\_\_Cornus florida/Flowering Dogwood

\_\_\_\_\_X Cupressocyparis leylandii/Leyland Cypress

\_\_\_\_\_Dieffenbachia maculata/Dumbcane

\_\_\_\_\_Epipremnum aureum cv./Golden Pothos

\_\_\_\_\_Euonymus alata/Winged Enonymus

\_\_\_\_\_Euonymus japonica or ‘Variegata’/

Evergreen Euonymus

\_\_\_\_\_Euphorbia pulcherrima cv./Poinsettia

\_\_\_\_\_Ficus benjamina/Weeping or Benjamin Fig

\_\_\_\_\_Ficus elastica ‘Decora’/Decora Rubber Plant

\_\_\_\_\_Forsythia X intermedia/Border Forsythia

\_\_\_\_\_Hedera helix/English Ivy

\_\_\_\_\_Hemerocallis cv./Day Lily

\_\_\_\_\_Hosta sp./Hosta

\_\_\_\_\_Ilex X attenuata ‘Fosteri’/Fosteri Holly

\_\_\_\_\_Ilex cornuta ‘Dwarf Burford’/

Dwarf Burford Holly

\_\_\_\_\_Ilex crenata ‘Helleri’/Helleri Holly

\_\_\_\_\_Ilex vomitoria ‘Nana’/Dwarf Yaupon

\_\_\_\_\_Impatiens/Impatiens Cultivars and Hybrids

\_\_\_\_\_Iris X germanica var. florentine/Bearded Iris

\_\_\_\_\_Juniperus conferta/Shore Juniper

\_\_\_\_\_Juniperus horizontalis ‘Plumosa,’ ‘Bar Harbor,’

or ‘Wiltonii’/Creeping Juniper

\_\_\_\_\_Lagerstroemia indica cv./Crape Myrtle

\_\_\_\_\_Ligustrum japonicum cb./Japanese Privet

\_\_\_\_\_Liquidambar styraciflua/Sweetgum

\_\_\_\_\_Liriope muscari/Liriope (Green or

Varigated cv.)

\_\_\_\_\_Magnolia grandiflora/Southern Magnolia

\_\_\_\_\_Malus sp. or cv./Flowering Crabapple

\_\_\_\_\_Maranta leuconeura var. kerchoviana/

Prayer Plant

\_\_\_\_\_Myrica cerifera/Wax Myrtle

\_\_\_\_\_Nandina domestica/Heavenly Bamboo

Or Dwarf Nandina

\_\_\_\_\_Nephrolepis exaltata cv./Boston Fern

\_\_\_\_\_Ophiopogon japonicus/Mondo Grass

\_\_\_\_\_Pelargonium X hortorum/Geranium

\_\_\_\_\_Pelargonium peltatum/Ivy Leaf Geranium

\_\_\_\_\_Petunia sp/Petunia

\_\_\_\_\_Philodendron scandens var. oxycardium/

Parlor Ivy

\_\_\_\_\_Pinus mugo var. mugo/Mugo Pine

\_\_\_\_\_Pinus strobus/Eastern White Pine

\_\_\_\_\_Pinus Taeda/Loblolly pine

\_\_\_\_\_Plectranthus australis/Swedish Ivy

\_\_\_\_\_Prunus serrulata ‘Kwanzan’/

Japanese Flowering Cherry

\_\_\_\_\_Pyrus calleryana ‘Bradford’/Bradford Pear

\_\_\_\_\_Quercus palustris/Pin Oak

\_\_\_\_\_Quercus phellow/Willow Oak

\_\_\_\_\_Rhododendron catawbiense/Catawba Hybrid

Rhododendron

\_\_\_\_\_Rhododendron kiusianum or Rhododendron

obtusum japonicum/azalea

\_\_\_\_\_Saintpaulia ionantha/Africal Violet

\_\_\_\_\_Salvia splendens/Salvia

\_\_\_\_\_Schefflera arboricola/Dwarf Schefflera

\_\_\_\_\_Spathiphyllum cvs./Peace Lily

\_\_\_\_\_Tagetes erecta/Africal Marigold

\_\_\_\_\_Tradescantia zebrina/Purple Wandering Jew

\_\_\_\_\_Viola X wittrockiana/Pansy

### North Carolina FFA Association

### Introduction to Horticulture Practicum – Pest ID List

Contestant Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Contestant #\_\_\_\_\_\_\_\_\_\_\_Score\_\_\_\_\_\_\_\_\_\_

Pest specimens will be numbered 1-5. Contestant is to write the appropriate number in the space beside the name of the specimen. Each correctly identified pest is worth two points for a total of ten points for the pest identification portion of the event.

# Weeds

\_\_\_\_\_\_Buckhorn Plantain

\_\_\_\_\_\_Broadleaf Plantain

\_\_\_\_\_\_Crabgrass

\_\_\_\_\_\_Chickweed

\_\_\_\_\_\_Dandelion

\_\_\_\_\_\_Goose grass

\_\_\_\_\_\_Henbit

\_\_\_\_\_\_Oxalis

\_\_\_\_\_\_Spurge (prostrate)

\_\_\_\_\_\_White Clover

\_\_\_\_\_\_Wild Garlic

\_\_\_\_\_\_Yellow Nutsedge

Diseases

\_\_\_\_\_\_Black Spot

\_\_\_\_\_\_Chlorosis

\_\_\_\_\_\_Damping off

\_\_\_\_\_\_Fireblight

\_\_\_\_\_\_Powdery Mildew

\_\_\_\_\_\_Root Rot

\_\_\_\_\_\_Rust

Insects

\_\_\_\_\_\_Aphid

\_\_\_\_\_\_Bagworms

\_\_\_\_\_\_Caterpillar

\_\_\_\_\_\_Japanese Beetle

\_\_\_\_\_\_Lacebug

\_\_\_\_\_\_Mealybugs

\_\_\_\_\_\_Scale

\_\_\_\_\_\_Spider Mites

\_\_\_\_\_\_Thrips

\_\_\_\_\_\_White Fly