

Indiana Horticulture CDE

I. Purpose

- A. This career development event teaches youth detailed knowledge of many subject matter disciplines required for the production, marketing and buying of flower, fruit, vegetable and ornamental crops.
- B. The CDE, information and identification contest is in effect a training program concerned with:
 1. Teaching individuals to recognize and identify some of our most important horticultural crops.
 2. To learn quality characteristics.
 3. To be able to answer questions or solve problems on horticultural subjects.

II. General Rules and Guidelines

- This state level CDE is open to any eligible individual or team as there is no county or area qualifying event.
- There are two divisions, Junior and Senior.
- A team may consist of 3 or 4 individuals with the 3 highest individual scores combined to make the team score.
- Scantron will be used to tabulate scores. Coaches should familiarize their contestants with the Scantron form and instructions posted on the Horticulture CDE web site. <https://extension.purdue.edu/4h/Pages/Career%20Development%20Events/Horticulture-CDE.aspx>
- There will be four stations; Quiz, Flowers and Ornamentals, Fruits & Nuts and Vegetables, and Specimen Evaluation. Contestants will have 50 minutes to complete each station. Each contestant will be provided a file folder to keep their Scantron form in when not marking answers and between stations. Answer marks for the quiz and specimen evaluation stations are to be completed before leaving that station. At the identification stations, contestants should first make sure all their specimen answer numbers have been written on their Scantron answer sheet. If a contestant is unable to get all their identification answers bubbled in prior to leaving that station, they can ask their group leader permission to do so when finished at another station or for additional time at the conclusion of their last station. All Scantron answer sheets are to be turned in to the contestant's group leader before leaving the last station room. It is contestant's responsibility to make sure their Scantron answer sheet has been completely filled in.

A. Junior Division

- I. Identification – 120 points
 - a. Vegetables – 15 specimens
 - b. Fruits and Nuts – 15 specimens
 - c. Flowers – 15 specimens
 - d. Ornamentals – 15 specimens
 - II. Quiz – 80 points
 - a. 40 true/false, multiple choice questions
- Total – 200 points

B. Senior Division

1. Rules and Regulations (rules listed in the state ag judging handbook will prevail unless listed below).
 - a. The contest has two divisions, 4-H or FFA.
 - b. The state contest will be coordinated by the State 4-H Office, Purdue Department of Youth Development & Agricultural Education, and Department of Horticulture and Landscape Architecture.
 - c. If there are any special cases that these rules do not cover, they will be acted upon

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by the general committee in charge of the contest.

2. Seniors identify 100 specimens from the study list.
3. Senior division contest will consist of 3 sections:
 - A. Specimen Evaluation – 80 points
 - 8 classes : 2 fruit & nuts, 2 vegetables, 2 ornamentals, 2 flowers & indoor plants
 - Classes are judged based on the basis of quality and condition
 - B. Identification – 200 points
ID 100 specimens
 - 25 – fruits & nuts
 - 25 – vegetables
 - 25 – flowers
 - 25 – ornamentals
 - C. Quiz – 160 points
 - 80 questions selected from reference list
 - True/false, multiple choice formatTotal – 440 points

III. Ties

1. Team ties will first be broken by the highest alternate individual score.
2. Individual ties and subsequent team ties will be broken in the following order:
 - a. Identification
 - b. Quiz
 - c. Specimen evaluation
3. If a tie remains those individuals or teams will be presented identical awards.

IV. Recognition and Awards

- The top five senior 4-H, top five senior FFA, and top five junior teams will be awarded a plaque and individual ribbons. The top ten senior 4-H, top ten senior FFA, and top ten junior individuals will be presented a ribbon.
- The top overall winning 4-H team and FFA team will receive partial payment of trip expenses (provided sponsorship is available) to represent Indiana at the NJHA National Convention and CDE Contest.
- Coaches of state winning teams in 4-H and FFA should contact William Wilder, 4 Linda Lane, Columbia City, IN, phone: 260-244-7567, cell phone: (260) 229-0400, email: bwilder34@embarqmail.com for references for the quiz given at the national level.

V. Suggested References

- Purdue Consumer Horticulture's Plant Identification for 4-H/FFA Horticulture Contests (web only): <http://www.hort.purdue.edu/ext/senior/senior.htm>
- Purdue Hort Publications
Note: Almost all of these publications are available online at Purdue's Consumer Horticulture page, along with many others that you and your students may find helpful.
<http://www.hort.purdue.edu/ext/conhort.html>
For others please consult Purdue Extension publications website or your County Extension Office: <http://www.the-education-store.com>
- NJHA website – www.njha.org

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Indiana 4-H/FFA State Horticulture CDE Publication List

Plant Nomenclature

HO-179 Home, Yard, and Garden Publications List

Environment and Horticulture Plants

HO-014 Starting Seeds Indoors
HO-090 Winter Garden Calendar
HO-091 Spring Garden Calendar
HO-092 Summer Garden Calendar
HO-093 Autumn Garden Calendar
HO-203 Effects of Cold Weather on Horticultural Plants in Indiana
HO-222 Landscape Plants for Shady Areas
HO-223 Landscape Plants for Areas with Full Sun
HO-224 Landscape Plants for Acid Soils
HO-225 Landscape Plants for Sandy Soils
HO-226 Landscape Plants for Moist to Slightly Moist Areas
HO-227 Landscape Plants for Wet Areas
AY-14: Improving Lawns in the Shade
AGRY-98-03: Maintaining Lawns on Sandy Soils

Plant Nutrition

HO-014 Starting Seeds Indoors
HO-173 A Guide to Flowering and Why Plants Fail to Bloom
HO-217 Weed Control for the Garden & Landscape
ID-184 Diagnosing Herbicide Injury on Garden and Landscape Plants
ID-146 Controlling Pests in the Home Fruit Planting
HO-140 Fertilizing Woody Plants
HO-222 Landscape Plants for Shady Areas
HO-223 Landscape Plants for Areas with Full Sun
HO-224 Landscape Plants for Acid Soils
HO-225 Landscape Plants for Sandy Soils
HO-226 Landscape Plants for Moist to Slightly Moist Areas
HO-227 Landscape Plants for Wet Areas

Vegetables

HO-090 Winter Garden Calendar
HO-091 Spring Garden Calendar
HO-092 Summer Garden Calendar
HO-093 Autumn Garden Calendar
HO-014 Starting Seeds Indoors
HO-008 Growing Cucumbers, Melons, Squash, Pumpkins, and Gourds
HO-014 Starting Seeds Indoors
HO-026 Tomatoes
HO-028 Growing Herbs
HO-029 Leafy Greens for the Home Garden
HO-032 Home Gardener's Guide

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HO-053 Hotbeds and Cold Frames
HO-062 Potatoes
HO-066 The Fall Vegetable Garden
HO-067 Onions and Their Relatives
HO-096 Asparagus
HO-097 Rhubarb
HO-098 Growing Sweet Corn
HO-124 Small Plot and Intensive Vegetable Gardening
HO-125 Storing Vegetables and Fruits at Home
HO-135 Gourds
HO-136 The Sweet Potato
HO-175 Growing Beans in the Home Vegetable Garden
HO-186 Indiana Vegetable Planting Calendar
HO-187 Chinese Vegetables
HO-200 Container and Raised Bed Gardening
ID-316 Organic Vegetable Gardening

Garden Flowers

HO-001 New Plants from Layering
HO-014 Starting Seeds Indoors
HO-037 New Plants From Cuttings
HO-053 Hotbeds and Cold Frames
HO-090 Winter Garden Calendar
HO-091 Spring Garden Calendar
HO-092 Summer Garden Calendar
HO-093 Autumn Garden Calendar
HO-173 A Guide to Flowering and Why Plants Fail to Bloom
HO-200 Container and Raised Bed Gardening
HO-203 Effects of Cold Weather on Horticultural Plants in Indiana
HO-217 Weed Control for the Garden & Landscape
HO-011 Narcissus
HO-016 Daylilies
HO-061 Growing Perennial Flowers
HO-076 The Peony: State Flower of Indiana
HO-077 Garden Chrysanthemums
HO-079 Perennial Flowers
HO-080 Annual Flowers
HO-085 Winter Storage of Geranium, Canna, Gladiolus, Caladium, and Begonia
HO-086 Flowering Bulbs
HO-099 Growing Annual Flowers
HO-126 Hanging Baskets
HO-128 Roses
HO-010 African Violet Care
HO-073 The Poinsettia
HO-222 Landscape Plants for Shady Areas
HO-223 Landscape Plants for Areas with Full Sun
HO-224 Landscape Plants for Acid Soils
HO-225 Landscape Plants for Sandy Soils
HO-226 Landscape Plants for Moist to Slightly Moist Areas

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HO-227 Landscape Plants for Wet Areas

Fruit and Nut Production

HO-090 Winter Garden Calendar
HO-091 Spring Garden Calendar
HO-092 Summer Garden Calendar
HO-093 Autumn Garden Calendar
HO-193 Black Walnut Toxicity
HO-009 Growing Cherries in Indiana
HO-017 Currants and Gooseberries
HO-044 Raspberries
HO-045 Growing Grapes
HO-046 Growing Strawberries
HO-065 Fertilizing Blueberries
HO-095 Home Storage of Apples
HO-108 Persimmons
HO-109 Fertilizing Fruit in Small Areas
HO-121 Fertilizing Small Fruits
HO-125 Storing Vegetables and Fruits at Home
HO-165 Apple Cultivars for Indiana
HO-174 Pollination of Fruits and Nuts
HO-190 Fruits and Nuts for Edible Landscaping
HO-220 Growing Pawpaws
HO-221 Grape Varieties for Indiana
ID-146 Controlling Pests in the Home Fruit Planting

Turf

AY-3: Establishing Lawn Areas From Seed
AY-20: Seeding a Turf Area in the Spring
AY-25: Purchasing Quality Grass Seed for Your Lawn
AY-28: Establishing a Lawn from Sod
AY-2: Don't Bag It
AY-7: Irrigation Practices for Homelawns
AY-8: Mowing, Thatching, Aerifying, and Rolling Turf
AY-14: Improving Lawns in the Shade
AY-18: Soil Testing for Lawns
AY-22: Fertilizing Established Lawns
AGRY-98-03: Maintaining Lawns on Sandy Soils
AY-10: Control of Crabgrass in Homelawns
BP-125-W Seasonal Activity of Turfgrass Pathogens
E-61 Turf Insect Management

Landscaping

HO-090 Winter Garden Calendar
HO-091 Spring Garden Calendar
HO-092 Summer Garden Calendar
HO-093 Autumn Garden Calendar
HO-200 Container and Raised Bed Gardening
ID-182 Managing Yard Wastes; Clippings and Compost

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HO-079 Perennial Flowers
HO-080 Annual Flowers
HLA-001 Spreading Ornamental Plants: Virtues & Vices
HO-004 Pruning Ornamental Trees and Shrubs
HO-021 Annual and Perennial Vines
HO-027 Hedges
HO-060 Garden Mulches--*Out of print.*

Please see the Iowa State Publication PPA-45: Using Mulches in Managed Landscapes.

HO-100 Planting Landscape Trees and Shrubs
HO-105 Ground Covers
HO-140 Fertilizing Woody Plants
HO-142 Roadside De-Icing Salts and Ornamental Plantings
HO-190 Fruits and Nuts for Edible Landscaping
HO-193 Black Walnut Toxicity
HO-201 Landscape Tree Appraisal
HO-211 Living Christmas Trees for the Holidays and Beyond
HO-219 Ornamental Grasses for Indiana Landscapes
HO-222 Landscape Plants for Shady Areas
HO-223 Landscape Plants for Areas with Full Sun
HO-224 Landscape Plants for Acid Soils
HO-225 Landscape Plants for Sandy Soils
HO-226 Landscape Plants for Moist to Slightly Moist Areas
HO-227 Landscape Plants for Wet Areas

Managing Tree and Shrubs in the Landscape

ID-182 Managing Yard Wastes; Clippings and Compost
HO-009 Growing Cherries in Indiana
HO-108 Persimmons
HO-165 Apple Cultivars for Indiana
HO-190 Fruits and Nuts for Edible Landscaping
HO-004 Pruning Ornamental Trees and Shrubs
HO-027 Hedges
HO-100 Planting Landscape Trees and Shrubs
HO-201 Landscape Tree Appraisal
HO-211 Living Christmas Trees for the Holidays and Beyond
HO-222 Landscape Plants for Shady Areas
HO-223 Landscape Plants for Areas with Full Sun
HO-224 Landscape Plants for Acid Soils
HO-225 Landscape Plants for Sandy Soils
HO-226 Landscape Plants for Moist to Slightly Moist Areas
HO-227 Landscape Plants for Wet Areas

Plant Propagation

HO-001 New Plants from Layering
HO-037 New Plants From Cuttings
HO-010 African Violet Care
HO-073 The Poinsettia

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Greenhouse Structure

HO-014 Starting Seeds Indoors
HO-053 Hotbeds and Cold Frames
HO-200 Container and Raised Bed Gardening
HO-203 Effects of Cold Weather on Horticultural Plants in Indiana
HO-013 Terrariums
HO-024 Planting Your Aquarium
HO-039 Indoor Plant Care
HO-019 Forcing Bulbs for Indoor Bloom
HO-023 Forcing Branches for Winter Color

Commercial Horticulture Production

HO-102 Preserving Plant Materials
HO-073 The Poinsettia
HO-019 Forcing Bulbs for Indoor Bloom
HO-022 Holiday Greens
HO-023 Forcing Branches for Winter Color
HO-102 Preserving Plant Materials
HO-126 Hanging Baskets
HO-158 Add Hours to Your Flowers
HO-009 Growing Cherries in Indiana
HO-165 Apple Cultivars for Indiana
HO-221 Grape Varieties for Indiana
HO-211 Living Christmas Trees for the Holidays and Beyond
HO-186 Indiana Vegetable Planting Calendar
ID-316 Organic Vegetable Gardening

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HORTICULTURE JUDGING IDENTIFICATION - JUNIOR

Vegetables

- 001 Asparagus
- 002 Bean
- 003 Beet
- 004 Cabbage
- 005 Carrot
- 006 Cauliflower
- 007 Celery
- 008 Corn
- 009 Cucumber
- 010 Lettuce
- 011 Muskmelon
- 012 Onion
- 013 Peas
- 014 Pepper
- 015 Potato (Irish)
- 016 Radish
- 017 Spinach
- 018 Squash
- 019 Tomato
- 020 Watermelon

Flowers

- 041 African Violet
- 042 Begonia
- 043 Cactus
- 044 Celosia
- 045 Chrysanthemum
- 046 Coleus
- 047 Daffodil
- 048 Daylily
- 049 Dianthus
- 050 Geranium
- 051 Gladiolus
- 052 Marigold
- 053 Pansy
- 054 Peony
- 055 Petunia
- 056 Philodendron
- 057 Poinsettia
- 058 Snapdragon
- 059 Tulip
- 060 Zinnia

Fruits and Nuts

- 021 Apple
- 022 Apricot
- 023 Avocado
- 024 Banana
- 025 Blackberry
- 026 Blueberry
- 027 Cherry
- 028 English walnut
- 029 Grape
- 030 Grapefruit
- 031 Lemon
- 032 Orange
- 033 Peach
- 034 Pear
- 035 Pecan
- 036 Persimmon
- 037 Pineapple
- 038 Plum
- 039 Raspberry
- 040 Strawberry

Ornamentals

- 061 Arborvitae
- 062 Birch
- 063 Dogwood
- 064 English Ivy
- 065 Euonymus
- 066 Forsythia
- 067 Holly
- 068 Honey locust
- 069 Juniper
- 070 Lilac
- 071 Maple
- 072 Oak
- 073 Periwinkle
- 074 Pine
- 075 Redbud
- 076 Spruce
- 077 Sweetgum
- 078 Tulip Tree
- 079 Willow
- 080 Yew

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HORTICULTURE JUDGING IDENTIFICATION – SENIOR

Flowers & Indoor Plants

- 001 African Violet
- 002 Ageratum
- 003 Amaryllis
- 004 Bachelor Button
- 005 Begonia
- 006 Boston Fern
- 007 Cactus
- 008 Canna
- 009 Chrysanthemum
- 010 Celosia
- 011 Coleus
- 012 Columbine
- 013 Cosmos
- 014 Crocus
- 015 Cyclamen
- 016 Daffodil
- 017 Dahlia
- 018 Daylily
- 019 Dianthus
- 020 Dracena
- 021 Dumbcane/Dieffenbachia
- 022 Geranium
- 023 Gladiolus
- 024 Gloxinia
- 025 Hosta
- 026 Hyacinth
- 027 Impatiens
- 028 Iris
- 029 Jade
- 030 Lily (Easter, Asiatic, Oriental)
- 031 Marigold
- 032 Nasturtium
- 033 Orchid
- 034 Pansy
- 035 Peony
- 036 Peperomia
- 037 Petunia
- 038 Philodendron
- 039 Poinsettia
- 040 Portulaca
- 041 Rose
- 042 Ficus
- 043 Salvia
- 044 Schefflera
- 045 Snakeplant/Sansevieria
- 046 Snapdragon
- 047 Sweet Alyssum
- 048 Tulip
- 049 Zinnia

Fruits & Nuts

- 051 Almond
- 052 Apple
- 053 Apricot
- 054 Avocado
- 055 Banana
- 056 Blackberry
- 057 Black walnut
- 058 Blueberry
- 059 Brazil Nut
- 060 Butternut
- 061 Carambola (Starfruit)
- 062 Cashew
- 063 Cherry
- 064 Chestnut
- 065 Coconut
- 066 Cranberry
- 067 Currant
- 068 Date
- 069 Elderberry
- 070 English walnut
- 071 Fig
- 072 Filbert
- 073 Gooseberry
- 074 Grape
- 075 Grapefruit
- 076 Hickory Nut
- 077 Kiwi
- 078 Kumquat
- 079 Lemon
- 080 Lime
- 081 Macadamia Nut
- 082 Mango
- 083 Mulberry
- 084 Nectarine
- 085 Orange
- 086 Papaya
- 087 Peach
- 088 Pear
- 089 Pecan
- 090 Persimmon
- 091 Pineapple
- 092 Plum
- 093 Pomegranate
- 094 Raspberry
- 095 Strawberry
- 096 Tangerine

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Ornamentals

- 101 Arborvitae
- 102 American Planetree
- 103 Ash
- 104 Azalea, Rhododendron
- 105 Barberry
- 106 Basswood, Linden
- 107 Beech
- 108 Birch
- 109 Boxwood
- 110 Camellia
- 111 Cotoneaster
- 112 Cottonwood/Poplar
- 113 Dogwood
- 114 Elm
- 115 English Ivy
- 116 Euonymus
- 117 Fir
- 118 Forsythia
- 119 Ginkgo
- 120 Hawthorn
- 121 Hemlock
- 122 Holly
- 123 Honey Locust
- 124 Hydrangea
- 125 Juniper
- 126 Lilac
- 127 Magnolia
- 128 Mahonia
- 129 Maple
- 130 Oak
- 131 Pachysandra
- 132 Periwinkle (Vinca spp.)
- 133 Pine
- 134 Pittosporum
- 135 Potentilla
- 136 Privet
- 137 Redbud
- 138 Spirea
- 139 Spruce
- 140 Sweetgum
- 141 Tulip Tree (Tulip Poplar)
- 142 Viburnum
- 143 Willow
- 144 Wisteria
- 145 Yew (Taxus spp.)

Vegetables

- 151 Artichoke (Globe/Jerusalem)
- 152 Asparagus
- 153 Basil
- 154 Bean
- 155 Beet
- 156 Broccoli
- 157 Brussels Sprouts
- 158 Cabbage
- 159 Carrot
- 160 Cauliflower
- 161 Celery
- 162 Chayote
- 163 Chinese Cabbage
- 164 Chives
- 165 Collard
- 166 Corn
- 167 Cucumber
- 168 Dill
- 169 Eggplant
- 170 Endive (Belgian, escarole)
- 171 Garlic
- 172 Kale
- 173 Kohlrabi
- 174 Leek
- 175 Lettuce
- 176 Muskmelon
- 177 Mustard
- 178 Okra
- 179 Onion
- 180 Parsley
- 181 Parsnip
- 182 Peas
- 183 Pepper
- 184 Potato (Irish)
- 185 Potato (Sweet)
- 186 Pumpkin
- 187 Radish
- 188 Rhubarb
- 189 Rutabaga
- 190 Sage
- 191 Spinach
- 192 Squash
- 193 Swiss Chard
- 194 Tomato
- 195 Turnip
- 196 Watermelon

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