

**IOWA FFA FLORICULTURE  
CAREER DEVELOPMENT EVENT**

**PERSONNEL**

Tim Doud, DMACC, Horticulture..... CDE Coordinator  
Alan Spencer, Manson..... CDE Chairperson

**EVENT OBJECTIVES**

The purpose of this event is to stimulate the study and interest in production and retailing of flowers, plants, and foliage through the Agricultural Education curriculum.

1. Identify floriculture and bedding plant materials.
2. Identify and treat unhealthy plants due to pest, nutritional, mechanical or chemical injury.
3. Understand the biological and scientific principles and develop the skills underlying propagation, growth requirements, growing techniques, harvesting, marketing and maintenance of established floriculture plants.
4. Understand principles and develop skills of floral design.
5. Understand and demonstrate the use of safety procedures and practices in floriculture operations.
6. Identify and select appropriate supplies and equipment for the flower shop and greenhouse.
7. Operate and maintain appropriate equipment for floriculture operations.
8. Understand and demonstrate interpersonal skills prerequisite to successful employment in the floriculture industry.
9. Understand and demonstrate proper sales and service skills.
10. Maintain records and proper reports that are accurate and legible.

**GENERAL RULES**

1. Each school shall enter a team composed of three or four participants, with the top three scores counting for the team score. Team members must all be members of the same chapter.
2. Each participant will participate in all phases of the event.
3. Under no circumstances will any participant be allowed to touch or handle in any way any specimen in the judging and identification phases of the event. Any infraction of this policy will be sufficient cause to eliminate the team from the event. This rule does not apply to the practicums or problem-solving phases of the event.
4. No team members or advisors are to observe materials in the horticulture greenhouse at the Career Development Event site during the three weeks prior to the event date.
5. Participants shall report to the chair of the event at the event site between 8:15 a.m. and 8:45 a.m. on event day.
6. Answer sheets and other written materials will be furnished for each event phase.
7. All plant materials will be furnished for the event.
8. A special effort will be made not to use test questions or establish situations which might be termed as controversial. In developing the event, special efforts will be made to use materials which are generally accepted nationwide.
9. Exhibits will be left out following the event for viewing and photographing by FFA chapter advisors and others.

## EVENT ACTIVITIES

### **Phase I -- General Knowledge Examination – 30 minutes**

Twenty-five (25) objective type multiple choice questions will be written that cover the areas of the floriculture industry reflected in the events objectives. This phase of the event will test participants' knowledge and understanding of basic biological and scientific principles of production and marketing flowers, plant and foliage. Each participant will be allowed 30 minutes to complete this phase of the event. Each answer has a value of four (4) points.

### **Phase II – Problem-Solving/Decision-Making – 20 minutes**

Each participant will solve five problems related to the various aspects of the floriculture industry. Each problem will be worth 10 points. There will be 20 minutes allowed for this phase of the event. A problem-solving activity is defined as:

“a mental or physical activity involving the gathering or searching of information and the use of a logical solution process using commonly accepted standards and available information to solve a problem specific to a particular area of floriculture production or retailing.”

Each question will describe the situation associated with or creating a problem and list four possible solutions. The participant must decide on the BEST possible solution to the question. All materials and information necessary to solve the question will be available to the participant as he or she solves it.

Refer to sample problem from National Events Bulletin.

### **Phase III – Plant Identification – 30 minutes**

Thirty (30) specimens will be displayed for participants to identify by their common names. Each specimen will be designated by a number. Each plant will be worth five points. Each participant will be allowed 30 minutes to complete this phase of the event. All plant specimens will come from the official Floral Identification List for this contest on Form 15.

**Phase IV – Practicums – 15-30 minutes** (Each team member will perform a practicum assigned by their advisor in advance of the event, they vary in length. No team will do the same practicum twice.)

#### **Even Years**

Corsage making  
Potting plant cuttings  
Identify and control a plant disorder  
Problem-solving Activity

#### **Odd Years**

Corsage making  
Pinching plants  
Handle a hazardous situation  
Construct a dish garden

#### **Identifying and Controlling Plant Disorders Practicum (100 points)**

Each participant will be given a plant with nutritional, environmental, disease or insect disorder. If the disorder is nutritional or environmental, the participant will identify the disorder and prescribe treatment to the customer. If the disorder is caused by a disease or insect, the participant will prepare and apply a treatment for the disorder. Containers marked

with specific chemicals or chemical products (will contain water colored to resemble the products) will be available for participants to prepare their recommended treatments and apply them. In addition to the above, participants will be judged on the safety practices they follow while completing this practicum. Safety material and equipment will be provided to each participant. Twenty (20) minutes will be allowed for this practicum.

The Plant Disorders to be used in this event will be selected from the following list of disorders:

\*Refer to the National FFA Career Development Events Handbook or see <http://www.ffa.org/programs/cde/index.html> for the online version of the Floriculture CDE Rules.

<b>Control of Plant Disorders Scorecard</b>					
(For Plants With <u>Insect</u> or <u>Disease</u> Disorders)					
	Points Possible	Needs Improvement	Good	Excellent	Member Score
Diagnosis of Problem	18	0-6	7-11	12-18	
Prescription of Treatment	18	0-6	7-11	12-18	
Preparation of Treatment	22	0-9	10-15	16-22	
Application of Treatment	22	0-9	10-15	16-22	
Followed Recommended Safety Procedures	20	0-8	9-14	15-20	
<b>Total Score</b>	<b>100</b>				

<b>Identifying and Prescribing Treatment for Plant Disorders Scorecard</b>					
(For Plants With <u>Nutritional</u> or <u>Environmental</u> Disorders)					
	Possible Points	Needs Improvement	Good	Excellent	Member Score
Diagnosis of Problem	16	0-7	7-11	12-16	
Description of Problem	20	0-9	9-14	15-20	
Discussion of Problem	24	0-11	11-17	18-24	
Prescription of Treatment	24	0-11	11-17	18-24	
Personality	16	0-7	7-11	12-16	
<b>Total Score</b>	<b>100</b>				

*Making and Packaging a Corsage Practicum (100 points)*

Make and package a \$15 corsage. The type of corsage and information about the corsage will be announced by the event assistant in charge at the beginning of the practicum. All plants and non-plant materials needed to construct and package the corsage will be provided. Each participant will be allowed 30 minutes to complete the construction of the corsage and complete an itemized bill.

<b>CORSAGE PRACTICUM SCORECARD</b>		
	<b>Possible Points</b>	<b>Participant Points</b>
Wiring and Taping	16	
Use of Ribbon	20	
Design	20	
Wearability	18	
Packaging	10	
Pricing	16	
<b>Total Points</b>	<b>100</b>	

<b>CORSAGE ITEMIZED BILL</b>			
	<b>Quantity Used</b>	<b>Unit Cost</b>	<b>Total</b>
<b><u>Plant Materials</u></b>			
Flowers			
Greens			
<b><u>Other Materials</u></b>			
Tape			
Wire			
Ribbon			
Corsage Pins			
Corsage Bag			
Box			
Card and Envelope			
<b>Total Material Cost</b>			
<b>Mark-Up=Two and one-half times the total material cost</b>			
<b>TOTAL CORSAGE COST</b>			

Pinching Plants Practicum (100 points)

A plant will be placed before each participant. Participants will be given instructions as to what they are to do to the plant by the event assistant in charge of the practicum. Participants will be judged on the procedures they follow in pinching the plant. Twenty (20) minutes will be allowed for completion of this practicum.

<b>PINCHING PLANTS SCORECARD</b>		
	<b>Possible Points</b>	<b>Participant Points</b>
Selection of Plant Parts to Pinch	23	
Use of Proper Procedure in Making Pinches	25	
Make Proper Hard Pinches	16	
Make Proper Soft Pinches	16	
Overall Effect of Making Pinches	20	
<b>Total Points</b>	<b>100</b>	

Problem-Solving (100 points)

Each participant will solve two math related floriculture problems. A problem-solving activity is defined as:

“a mental or physical activity involving the gathering or searching of information and the use of a logical solution process using commonly accepted standards and available information to solve a problem specific to a particular area of floriculture production or retailing.”

The problems will both deal with utilization of chemicals being applied to plants. A chemical is defined as either a commercial fertilizer or a pesticide.

Example of problem:

A grower plans to apply granular fertilizer to a bench containing cutting roses at the rate of one pound actual nitrogen per 1000 square feet. If a 20-10-10 fertilizer is used, how many pounds would be required to cover a bench measuring 4’ by 80’? A grower has an insect problem in their greenhouse. They decide to apply an insecticide at the rate of one ounce per 100 square feet of bench space. The insecticide is mixed with water at the rate of one ounce per 2.5 gallons of water. If the growing bench is 6’ by 120’, how many ounces of insecticide and gallons of water are required?

Make a Dish Garden (100 points)

Each participant will make a \$25 dish garden. All plant materials, growing media and containers will be provided. Twenty (20) minutes will be allowed for each participant to make his/her dish garden and complete the itemized bill. At the beginning of the practicum, participants will be provided the RETAIL price of plants and other materials they will use in their dish gardens by the event assistant. The MARKUP will be built into the retail price of the plants and other materials used in the dish garden. When the participants have determined the TOTAL DISH GARDEN COST, he/she has included the markup.

<b>Making a Dish Garden Scorecard</b>					
	Points Possible	Needs Improvement	Good	Excellent	Member Score
Selection of Plant Materials	11	0-4	5-8	9-10	
Preparation of Plant Materials	10	0-3	4-7	8-10	
Use of Growing Media	13	0-5	6-9	10-13	
Use of Other Materials	16	0-6	7-11	12-16	
Design	20	0-8	9-14	15-20	
Attractiveness	17	0-7	8-12	13-17	
Pricing	13	0-5	6-9	10-13	
Total Score	100				

Potting Plant Cuttings (100 points)

Plant five rooted cuttings in the pot provided. (Each participant will be given 20 cuttings from which to select five: a 5 \_ to 6 inch pot; a 1:1 soil mixture at the correct moisture level; and a marking pencil). Fifteen (15) minutes will be allowed for completion of this practicum including the judging of the potted plant cuttings.

<b>Plant Potting Practicum Scorecard</b>					
	Points Possible	Needs Improvement	Good	Excellent	Member Score
<b>Potting Process</b>	<b>70</b>				
Selection of Cuttings	14	0-5	6-9	10-14	
Filling Pot with Soil	6	0-1	2-5	6	
Placing of Cuttings	8	0-2	3-5	6-8	
Covering Cutting Rooted Ends	24	0-10	11-17	18-24	
Labeling of Pot	12	0-4	5-8	9-12	
Watering of Potted Cuttings	6	0-2	3-5	6	
<b>Potting Product</b>	<b>30</b>				
Depth of Planting	7	0-2	3-4	5-7	
Correct Soil Level in Pot	7	0-2	3-4	5-7	
Cutting Arrangement & Angle	6	0-2	3-4	5-6	
Firmness of Soil	5	0-1	2-3	4-5	
General Appearance (Freedom from handling damage)	5	0-1	2-3	4-5	
<b>Total Score</b>	<b>100</b>				

Handling of Hazardous Situation (100 points)

Each participant will be presented with a hazardous situation that could develop in a floriculture business. The participant will be asked to resolve the problem. The participant will be evaluated on his/her understanding of the problem and procedures and practices followed in resolving the problem. Twenty (20) minutes will be allowed. The following hazardous material spill report form will be used by contestants for this practicum.

<b>Hazardous Situation Scorecard</b>					
	Points Possible	Needs Improvement	Good	Excellent	Member Score
Utilize Proper Personal Safety Precautions	27	0-10	11-19	20-27	
Utilize Proper Safety Procedures in Cleaning up the Situation	33	0-14	15-24	25-33	
Proper Disposal of Problem Materials	25	0-9	10-15	16-25	
Utilize Proper Follow-up Procedures	15	0-4	5-10	11-15	
<b>Total Score</b>	<b>100</b>				

## Hazardous Material Spill Report Form

Name of Employee:	Date and Time of Spill:
Exact Location of Spill:	Length of Exposure to the Environment:
Specific Name of Product Spilled:	Active Ingredient(s):
Cause of Spill:	Name(s) of Individual(s) Responsible for Cleanup and Name(s) of Other Individuals Exposed:
Actions Taken for Containment and Cleanup: (be specific)	
Employee Signature:	Date:

**Phase V – Team Event** – 20 minutes (all four team members working together)

Each team will perform a task normally performed in some phase of the floriculture industry that requires team work. The task will be **filling a sales order**. The team will receive a phone order and then have 20 minutes in which to fill out a sales ticket/invoice including: name, billing address, costs, specific arrangement; the construction of the order; and packaging and delivery within the time frame. It is up to the team to best utilize its human resources. This phase of the event is worth 100 points per team.

<b>Team Activity Scorecard</b>					
	Points Possible	Needs Improvement	Good	Excellent	Member Score
Established Team Leadership Role	8	0-2	3-4	5-8	
Member Participation in Planning of Activity	16	0-3	4-9	10-16	
Developed a Workable Plan	20	0-5	6-12	13-20	
Member Responsibilities were Outlined and Assigned	8	0-2	3-4	5-8	
Materials were Organized Prior to Commencing Activity	8	0-2	3-4	5-8	
Member Participation in Carrying Out Activity Functions	15	0-3	4-8	9-15	
Followed Proper Procedures in Carrying Out Activity	15	0-3	4-8	9-15	
Quality of Activity Product	10	0-4	5-7	8-10	
<b>Total Score</b>	<b>100</b>				

**The following equipment should be brought by each school for use in this CDE:**

Floral Knives
Wire Cutters
Scissors
Calculators
Clipboard
Pencils

\*\*\*For further information concerning specifics of these newer activities/events, advisors should refer to the new Career Development Events booklet.

<b>Sample Schedule of Events/Activities</b>				
<b>Event begins at 9:00 a.m.</b>				
<b>Time Frame</b>	<b>Group 1</b>	<b>Group 2</b>	<b>Group 3</b>	<b>Group 4</b>
8:45 to 8:55 a.m.	Directions are given to all participants and divided into groups.			
9:00 to 9:20 a.m.	Half ( ) teams will do Problem-Solving and _ teams do Team Event.			
9:30 to 9:50 a.m.	Half ( ) teams will do Problem-Solving and _ teams do Team Event.			
<b>Participants are divided into groups according to participant number.</b>				
10:00 to 10:30 a.m.	Practicum	Practicum	Plant ID	Plant ID
10:40 to 11:10 a.m.	Plant ID	Plant ID	Practicum	Practicum
11:20 to 11:50 a.m.	All participants will take examination.			
1:00	Awards Presentation			



## SCORING AND RANKING OF TEAMS AND PARTICIPANTS

<u>Phases</u>	<u>Scoring</u>
General Knowledge Test.....	100 points
Problem Solving.....	50 points
Plant Identification.....	150 points
Practicum.....	100 points
<b><u>Total Individual Score</u></b> .....	<b><u>400 points</u></b>
3 participants total score possible.....	<b><u>1200 points</u></b>
Team Event.....	100 points
<b><u>Total Team Score Possible</u></b>	<b><u>1300 points</u></b>

1. Team scores will be the sum of the scores of the three (3) top team members. The total of the possible points is 1,300.
2. To determine the individual and team winners, the participants will be ranked on the basis of the total score for all five (5) activity areas.
3. If there is a tie in the total point score of an individual or team it shall be broken: (a) first by the score on problem-solving activities; (b) second on the score for general knowledge questions; and (c) third on the total score for practicums.
4. Teams will be ranked into groups: “Gold,” “Silver,” or “Bronze.” Teams which do not have three members will be listed as “Participants.” Teams which violate any rule will also receive a “Participation” rating.
5. The overall winning team will be designated the “Iowa Champion FFA Floriculture Team,” and will represent Iowa in the National FFA Floriculture event in Louisville in October.

### REFERENCES

1. Introductory Horticulture, 5<sup>th</sup> Edition, Reiley and Shry, Delmar Publishers Inc., 2 Computer Drive, West, Box 15015, Albany, New York 12212-5015 (newer edition acceptable).
2. National FFA Career Development Events – 2001-2005 (National FFA Organization rules).

### AWARDS

Awards listed below are at the discretion of the sponsor and pending availability of sponsorship. It is vitally important that participants write thank you letters to sponsors in order to retain their support. A thank you list naming current sponsors will be provided to each participating chapter at the event site.

Awards sponsored through the National FFA Foundation:

Champion Team ..... Plaque

Awards sponsored through the Iowa FFA Foundation:

Champion Team..... ..Cash award for travel to the National FFA Floriculture CDE  
 Reserve Champion Team..... Plaque  
 Top 10 Teams ..... Rosettes

Members of Top 10 Teams.....	Rosettes
Top 10 Individuals.....	Rosettes
1 <sup>st</sup> and 2 <sup>nd</sup> Place Individuals.....	Trophies
Top Team and Top Individual.....	Trophies
a. General Knowledge Examination	
b. Problem-Solving/Decision-Making	
c. Identification of Plant Materials	
d. Practicum	
Team Activity Top Team.....	Trophy

The Iowa FFA Association will award certificates to all Floriculture teams and participants.

# FLORAL IDENTIFICATION

# FORM 15

Participant Name: \_\_\_\_\_

Participant Number: \_\_\_\_\_

No. COMMON NAME/TECHNICAL NAME

- \_\_\_\_\_ - Silver Vase Bromeliad/Aechmea fasciata
- \_\_\_\_\_ - Chinese Evergreen/Algaonema commutatum maculatum
- \_\_\_\_\_ - Ageratum/Ageratum houstonianum
- \_\_\_\_\_ - Peruvian lily/Alstroemeria aurantiaca
- \_\_\_\_\_ - Snapdragon/Antirrhinum majus
- \_\_\_\_\_ - Norfolk Island Pine/Araucarie heterophylla
- \_\_\_\_\_ - Sprenger's Asparagus Fern/Asparagus densiflorus 'Sprengeri'
- \_\_\_\_\_ - Asparagus Fern/Asparagus setaceus
- \_\_\_\_\_ - Wax Begonia/Begonia x semperflorens – cultorum cv.
- \_\_\_\_\_ - Schefflera, Octopus Tree/Brassaia actinophylla
- \_\_\_\_\_ - Dwarf Schefflera/Brassaia arboricola
- \_\_\_\_\_ - Fancy Leaved Caladium/Caladium x hortulanum
- \_\_\_\_\_ - Madagascar periwinkle/Catharanthus roseus
- \_\_\_\_\_ - Parlor Palm/Chamaedorea elegans
- \_\_\_\_\_ - Cockscomb/Celosia cristata
- \_\_\_\_\_ - Spider Plant/Chlorophytum comosum
- \_\_\_\_\_ - Florist's Chrysanthemum/Chrysanthemum x morfolium
- \_\_\_\_\_ - Grape Ivy/Cissus rhombifolia
- \_\_\_\_\_ - Croton/Codiaeum variegatum pictum
- \_\_\_\_\_ - Coleus/Coleus x hybridus
- \_\_\_\_\_ - Jade Plant/Crassula argentea
- \_\_\_\_\_ - Florist's Cyclamen/Cyclamen x persicum cv.
- \_\_\_\_\_ - Carnation/Dianthus caryophyllus
- \_\_\_\_\_ - Corn Plant Dracaena/Dracaena fragrans Massangeana'
- \_\_\_\_\_ - Red Edged Dracana/Dracena marginata
- \_\_\_\_\_ - Golden Pothos, Devil's Ivy/Epipremnum aureum
- \_\_\_\_\_ - Poinsettia/Euphorbia pulcherrima
- \_\_\_\_\_ - Benjamin Fig/Ficus benjamina
- \_\_\_\_\_ - Rubber Plant/Ficus elastica
- \_\_\_\_\_ - Freesia/Freesia x hybrida
- \_\_\_\_\_ - Garden Gladiolus/Gladiolus x hortulanus
- \_\_\_\_\_ - English ivy/Hedera helix
- \_\_\_\_\_ - Impatiens/Impatiens wallerana
- \_\_\_\_\_ - Kalanchoe/Kalanchoe blossfeldiana
- \_\_\_\_\_ - Garden (Hybrid) lily/Lilum x hybridum
- \_\_\_\_\_ - Sweet Alyssum/Lobularia maritima
- \_\_\_\_\_ - Prayer Plant/Maranta leuconeura
- \_\_\_\_\_ - Boston Fern/Nephrolepis exaltata
- \_\_\_\_\_ - Geranium/Pelargonium x hortorum
- \_\_\_\_\_ - Emerald Ripple Peperomia/Peperomia caperata 'Emerald Ripple'
- \_\_\_\_\_ - Common Garden Petunia/Petunia x hybrida
- \_\_\_\_\_ - Heartleaf Philodendrom/Philodendron scandens
- \_\_\_\_\_ - Aluminum Plant/Pilea cadierei
- \_\_\_\_\_ - Azalea/Rhododendron spp.
- \_\_\_\_\_ - African Violet/Saintpaulia ionantha
- \_\_\_\_\_ - Salvia/Salvia splendens
- \_\_\_\_\_ - Snake Plant/Sansevieria trifasciata
- \_\_\_\_\_ - Dusty Miller/Senecio cineraria
- \_\_\_\_\_ - Gloxinia/Sinningia speciosa
- \_\_\_\_\_ - Nephthytis/Syngonium podophyllum
- \_\_\_\_\_ - African Marigold/Tagetes erecta