

Agronomy Career Development Event

Mark Breeding Chair, (W.T. Chipman Middle School)
Clifford Lawson Co-Chair (Sussex Central High School)

REGISTRATION INFORMATION:

Teachers are to register for this event with Bliss Holcomb on the State Fair registration form on or before Fair registration due date.

Bliss Holcomb

DE Department of Education
John W. Collette Education Resource Center
35 Commerce Way, Suite #1
Dover, DE 19904

State Locator Code - N510

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Teachers are to have all Official FFA Agronomy CDE Certification and Waivers form done for National FFA and Big E. These forms can be found on www.ffa.org and www.theBigE.com

RULES & REGULATIONS:

- 4 team members are required to qualify for National competition.
- No more than 4 individuals are allowed to compete from any one school.
- Any communication, verbal or non-verbal, between participants during a career development event will be sufficient cause to eliminate the team member involved from the career development event. The only exception to this would be communication between team members during the team activity portion of a given career development event.
- Teams or participants arriving after the career development event has begun may be disqualified or penalized.
- Any assistance given to a team member from any source other than the career development event officials or assistants will be sufficient cause to eliminate the team from the career development event.
- Event superintendents may stop any participant if they deem their manner to be hazardous either to themselves or others. Such stoppage shall deem the individuals disqualified for that section of the career development event.
- CDE participants who start an event and do not complete the event without notifying event officials at the time of departure will be disqualified. This can affect the overall team rank and position. In some events this will also disqualify the entire team.
- Participants will not be allowed to utilize personal electronic communication devices, other than those approved by the event officials, during the entire course of the event. Participants who access personal electronic communication devices without prior approval of the event officials will be disqualified.

SPECIAL NEEDS:

Accessibility for all students: All special needs requests and appropriate documentation as outlined in the special needs request procedure must be submitted with appropriate career development event certification form by certification deadline. State FFA staff and the event superintendent will be responsible for scheduling assistance from a different school to assist participants.

EVENT FORMAT:

- Each student must have a clipboard and pencils.

The Agronomy Career Development Event will consist of 7 parts:

1. Identification of 10 Insect Specimens 200 points
2. Identification of 20 Weed Specimens 300 points
3. Identification of 10 Diseases or disorders 100 points
4. Identification of 20 Crops or Seeds 200 points
5. Judging of 3 Vegetable Classes and 3 Seed, Hay, and/or silage Classes (TDN) 300 points
6. Group Activity on Soils (Ribbon Test of 4 soils). 100 points
7. 50 question Written TEST comprised from the last three years of National FFA Tests provide by Dr. Karen Hutchison. (2007, 2008 and 2009 test years will be used)

Agronomic Disorders

ID Specimens

Causal categories: 100 Cultural
101 Biological
102 Environmental

Disorder Agents: 200 Nutritional
201 Chemical
202 Mechanical
203 Compaction
204 Fungus
205 Nematodes
206 Virus
207 Bacteria
208 Insect
209 Frost damage
210 Wind damage
211 Drought
212 Hail
213 Lightening
214 Pollution
215 Flood
216 Heat

Parts of Plant Damaged:
060 No damage
061 Fruit or flower
062 Vegetative parts
063 Vascular bundles
064 More than one area

Insect Identification

ID Specimens

Lady bird beetle adult and larvae	Aphids adult or nymph
Green Lacewing adult and larvae	Grasshoppers- adults
Stink bug adult and nymph	European corn borer larvae and adults
Japanese beetle adult	Corn earworm - larvae and adults
Striped cucumber beetle adult	True armyworm larvae and adult
Spotted cucumber beetle (Southern corn rootworm beetle) adult	Tobacco/Tomato hornworm - adult and larvae
Flea beetle - adult	Cricket- adults
Bean leaf beetle adult	Leafhoppers adults or nymphs
Colorado potato beetle adult and larvae	Wireworm adults and larvae
Mexican bean beetle adult and larvae	White grub
Alfalfa weevil adult	Honeybee
Two spotted spider mite adult	Blister beetle

Weed Identification (Plant Only)

ID Specimens

Barnyardgrass	Black nightshade	Broadleaf plantain	Buckhorn plantain
Bull thistle	Canada thistle	Common cocklebur	Wild carrot
Common lambsquarters	Common mallow	Common milkweed	Wild garlic or onion
Common mullein	Common ragweed	Crabgrass	Smartweed
Crown vetch	Curly dock	Dandelion	Field bindweed
Field dodder	Foxtail	Ground cherry	Horsenettle
Jimsonweed	Johnsongrass	Prostrate knotweed	Redrootpigweed
Morningglory	Nutsedge	Giant ragweed	Common purslane
Marestail (horseweed)	Common chickweed	Velvetleaf	Quackgrass
Burcucumber			

Crop or Seed Identification Unless Specified

ID Specimens

Alfalfa	Barley	Bean,lima (seed only)	Bermudagrass
Broccoli (plant only)	Cantaloupe	Cauliflower (plant only)	Corn (plant only)
Corn, dent (seed only)	Corn, sweet (seed only)	Cucumber	Kentucky bluegrass
Oats Orchardgrass	Peas	Popcorn (seed only)	Potato (plant only)
Red clover	Sorghum	Soybean	Squash
Strawberry (plant only)	Sudangrass	Sunflower	Sweet clover
Tall fescue	Timothy	Tobacco	Tomato
Watermelon	Rye (cereal)	Wheat, red (seed only)	White, clover

Group Activity

Soil Component

1. Students will identify 4 soil types using the ribbon test.

Judging

1. Judging of 3 Vegetable Classes and 3 Seed, Hay, and/or silage Classes (TDN) using the standard FFA placing card

TIEBREAKERS:

If ties occur for team awards the following events will be used to determine the placings:

1. Soils Team Activity
2. Total Written Exam

If ties occur for individual awards the following events will be used to determine the placings:

1. Written Exam
2. Plant and Seed Identification

Answer response sheets and the soil flow chart/ribbon test instructions will be provided by the chairman.

OFFICIAL DRESS:

- FFA t-shirt, jeans/shorts, any type of shoes must be worn.
- Each student needs to have a clipboard and No. 2 pencils.

AWARDS:

*The First place winning team goes on to National Convention and the second place winning team compete at the Big E. Awards will be presented at annual FFA Fair awards breakfast.

* Prize Money will be awarded to the top 10 individuals and is provide by the Delaware Crop Improvement Association.

1 st	\$125.00	and a FFA Agronomy Gold CDE pin
2 nd	\$100.00	and a FFA Agronomy Silver CDE pin
3 rd	\$ 75.00	and a FFA Agronomy Bronze CDE pin
4 th	\$ 55.00	
5 th	\$ 40.00	
6 th	\$ 25.00	
7 th	\$ 25.00	
8 th	\$ 25.00	
9 th	\$ 15.00	
10 th	\$ 15.00	

OFFICIAL RESOURCE AND REFERENCE MATERIALS:

This list of references is not intended to be inclusive. Other sources may be utilized and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

Ohio Curriculum Materials

Ohio Agronomy Guide

Plant Mounts

Seed Sets

Plant Mounts

University of Arizona, College of Agriculture -

Plant Growth and Development

Plant Production Management

Weeds

Insects

Purdue Extension 888-EXT-INFO

Corn and Soybean Field Guide

Forage Field Guide

Pest Management Manual #IPM-1

NASCO References

Oklahoma State University, Cooperative Extension Service –

L-216 Corn Kernel damage

L- 215 Soybean Kernel damage

L- 213 Wheat Kernel damage

Kansas State University, Agronomy Department

Grain Grading Manual for wheat, corn and soybean

University of Illinois– 217-333-2007

Crop Plant Booklet

Weed Plant Booklet

Field Scouting Manual

Soybean Diseases I&II Color Plate Sheets

Corn Diseases I&II Color Plate Sheets

Wheat Diseases I&II Color Plate Sheets

USDA web site for the National Organic Program

<http://www.ams.usda.gov/nop/indexIE.htm>

Iowa State University 515-294-5247

How a Corn Plant Develops #48

How a Soybean Plant Develops #53

University of Minnesota 612-625-8173

Herbicide Mode of Action and Injury Symptoms #377

Weed Science Society of America

www.ussa.org

CD Available to assist with plant identification.

Agronomic/Vegetable Crops Career Development Event

CROP OR SEED IDENTIFICATION

- | | | | |
|---|-------|----------------------------|------------------------------|
| A | _____ | 1. Alfalfa | 16. Bean, lima (seed only) |
| B | _____ | 2. Broccoli | 17. Cauliflower (plant only) |
| C | _____ | 3. Corn, sweet (seed only) | 18. Cucumber |
| D | _____ | 4. Oats | 19. Peas |
| E | _____ | 5. Red clover | 20. Soybean |
| F | _____ | 6. Strawberry | 21. Sunflower |
| G | _____ | 7. Timothy | 22. Watermelon |
| H | _____ | 8. White, clover | 23. Bermudagrass |
| I | _____ | 9. Barley | 24. Potato (plant only) |
| J | _____ | 10. Cantaloupe | 25. Squash |
| K | _____ | 11. Corn, dent (seed only) | 26. Corn (plant only) |
| L | _____ | 12. Orchardgrass | 27. Kentucky bluegrass |
| M | _____ | 13. Sorghum | 28. Sweet clover |
| N | _____ | 14. Sundangrass | 29. Tall fescue |
| O | _____ | 15. Tomato | 30. Cereal rye |
| P | _____ | | 31. Tobacco |
| Q | _____ | | |
| R | _____ | | |
| S | _____ | | |
| T | _____ | | |

AGRONOMIC DISORDERS

100 points

**DELAWARE AGRONOMY CDE
AGRONOMIC DISORDERS PRACTICUM**

	MEMBER ANSWER	POSSIBLE POINTS	MEMBER SCORE	POSSIBLE ANSWERS
1. Causal Category #:		3		Causal Category
Agent #:		4		
Part of Plant Damaged #:		3		
2. Causal Category #:		3		100 Cultural
Agent #:		4		101 Biological
Part of Plant Damaged #:		3		103 Environmental
3. Causal Category #:		3		Disorder Agents
Agent #:		4		200 Nutritional
Part of Plant Damaged #:		3		201 Chemical
4. Causal Category #:		3		202 Mechanical
Agent #:		4		203 Compaction
Part of Plant Damaged #:		3		204 Fungus
5. Causal Category #:		3		205 Nematodes
Agent #:		4		206 Virus
Part of Plant Damaged #:		3		207 Bacteria
6. Causal Category #:		3		208 Insect
Agent #:		4		209 Frost damage
Part of Plant Damaged #:		3		210 Wind damage
7. Causal Category #:		3		211 Drought
Agent #:		4		212 Hail
Part of Plant Damaged #:		3		213 Lightning
8. Causal Category #:		3		214 Pollution
Agent #:		4		215 Flood
Part of Plant Damaged #:		3		216 Heat
9. Causal Category #:		3		Parts of Plant Damaged
Agent #:		4		060 No Damage
Part of Plant Damaged #:		3		061 Fruit or Flower
10. Causal Category #:		3		062 Vegetative Parts
Agent #:		4		063 Vascular Bundles
Part of Plant Damaged #:		3		064 More than one area
Total Score:		100		

NAME: _____

CHAPTER: _____

Agronomic/Vegetable Crops Career Development Event

INSECTS

- | | | |
|---|-------|--|
| A | _____ | 1. Lady bird beetle - adult and larvae |
| B | _____ | 2. Stink bug - adult and nymph |
| C | _____ | 3. Striped cucumber beetle/Southern corn rootworm beetle - adult |
| D | _____ | 4. Flea beetle - adult |
| E | _____ | 5. Colorado potato beetle - adult and larvae |
| F | _____ | 6. Alfalfa weevil - adult |
| G | _____ | 7. Aphids - adult or nymph |
| H | _____ | 8. European corn borer - larvae and adults |
| I | _____ | 9. True armyworm - larvae and adult |
| J | _____ | 10. Cricket - adults |
| | | 11. Wireworm - adults and larvae |
| | | 12. Green Lacewing - adult and larvae |
| | | 13. Japanese beetle - adult |
| | | 14. Spotted cucumber beetle - adult |
| | | 15. Bean leaf beetle - adult |
| | | 16. Mexican bean beetle - adult and larvae |
| | | 17. Two spotted spider mite - adult |
| | | 18. Grasshoppers - adults |
| | | 19. Corn earworm - larvae and adults |
| | | 20. Tobacco/Tomato hornworm - adult and larvae |
| | | 21. Leafhoppers - adults or nymphs |
| | | 22. White grub |
| | | 23. Honeybee |
| | | 24. Blister beetle |

Agronomic/Vegetable Crops Career Development Event

WEED LIST (Plant Only)

A _____	1. Barnyardgrass	17. Broadleaf plantain
B _____	2. Bull thistle	18. Common cocklebur
C _____	3. Common mallow	19. Common mullein
D _____	4. Crown vetch	20. Dandelion
E _____	5. Field dodder	21. Foxtail
F _____	6. Horsenettle	22. Johnsongrass
G _____	7. Nutsedge	23. Common purslane
H _____	8. Wild carrot	24. Black nightshade
I _____	9. Buckhorn plantain	25. Canada thistle
J _____	10. Common lambsquarters	26. Common milkweed
K _____	11. Common ragweed	27. Crabgrass
L _____	12. Curly dock	28. Field bindweed
M _____	13. Groundcherry	29. Jimsonweed
N _____	14. Prostrate knotweed	30. Morningglory
O _____	15. Puncturevine	31. Redroot pigweed
P _____	16. Smart weed	32. Wild garlic or onion
Q _____		33. Maretail (horseweed)
R _____		34. Common chickweed
S _____		35. Velvetleaf
T _____		36. Quackgrass

Standard FFA Placing Card	Placings	Check Placing
Contest: _____	1-2-3-4	
	1-2-4-3	
	1-3-2-4	
Class Name: _____	1-3-4-2	
	1-4-2-3	
Class No.: _____	1-4-3-2	
	2-1-3-4	
Contestant Name: _____	2-1-4-3	
	2-3-1-4	
Contestant No. _____	2-3-4-1	
	2-4-1-3	
	2-4-3-1	
	3-1-2-4	
	3-1-4-2	
	3-2-1-4	
Score _____	3-2-4-1	
	3-4-1-2	
	3-4-2-1	
	4-1-2-3	
	4-1-3-2	
	4-2-1-3	
	4-2-3-1	
	4-3-1-2	
	4-3-2-1	