

## Agronomy

### Contest Description and Rules:

Please direct questions to:

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Identification      Q 1-25  
Written exam        Q 26-75  
Lab practical        Q 76-100

### The Agronomy Contest will be in three parts:

#### **1. Identification:**

Identify selected specimens of common weed plants and seeds and crop plants and seeds. Specimens will be selected from the list below.

#### Crop Species

1. Alfalfa
2. Barley
3. Birdsfoot trefoil
4. Buckwheat
5. Canola
6. Corn
7. Cotton
8. Field bean
9. Flax
10. Grain sorghum
11. Kentucky bluegrass
12. Oat
13. Orchardgrass
14. Peanut
15. Potato
16. Red clover
17. Rice
18. Rye
19. Soybean
20. Sugarbeet

#### Weed Species

1. Plantains
2. Bull thistle
3. Canada thistle
4. Chickweed
5. Common burdock
6. Common lambsquarters
7. Dandelion
8. Eastern black nightshade
9. Field pennycress
10. Large crabgrass
11. Pennsylvania smartweed
12. Quackgrass
13. Common ragweed
14. Redroot pigweed
15. Sandbur
16. Shepherd's purse
17. Velvetleaf
18. Waterhemp
19. Wild mustard
20. Yellow foxtail

**Crop Species**

21. Sunflower
22. Timothy
23. Triticale
24. Wheat
25. White Clover

**Weed Species****2. Written Examination:**

The emphasis of the exam is on agronomic field crops including:

- i. General plant morphology/identification, growth, and reproduction (germination, emergence, root system, monocot/dicot, etc.).
- ii. Crop management including control/identification of insects, diseases, and weeds.
- iii. Soil microorganisms (ex. rhizobium, mycorrhizal, etc.)
- iv. Harvesting, storage, and quality of crops.
- v. Sprayer droplet size, name of chemistry (ex. herbicide, fungicide, etc.), fertilizer spreader, and planter.

**3. Lab Practical:**

The purpose of the lab practical is to provide experience in the identification of insects, diseases, equipment, fertilizers, and other aspects of crop production.

**Insects/Diseases**

1. Alfalfa weevil
2. Soybean Cyst Nematode
3. Black cutworm
4. Colorado potato beetle
5. Soybean Aphid
6. Granary weevil
7. Green lacewing
8. Lady beetle
9. Pea aphid
10. Potato leaf hopper

**Equipment**

1. Anhydrous ammonia applicator
2. Soil Probe
3. Chisel plow
4. Combine
5. Cultivator
6. Disk
7. Field sprayer
8. Field sprayer
9. Grain moisture
10. Moldboard plow

Diseases

1. White Mold
2. Bacteria wilt
3. Downy mildew
4. Ergot
5. Goss's Wilt
6. Northern Corn  
Leaf Blight
7. Powdery mildew
8. Smut
10. Common Corn  
Rust
11. Tarspot