

2012 FFA CDE Agronomy Lab Practical

2012 KANSAS STATE CDE AGRONOMY EVENT LABORATORY PRACTICAL

Contestant # Key Name _____ Score _____

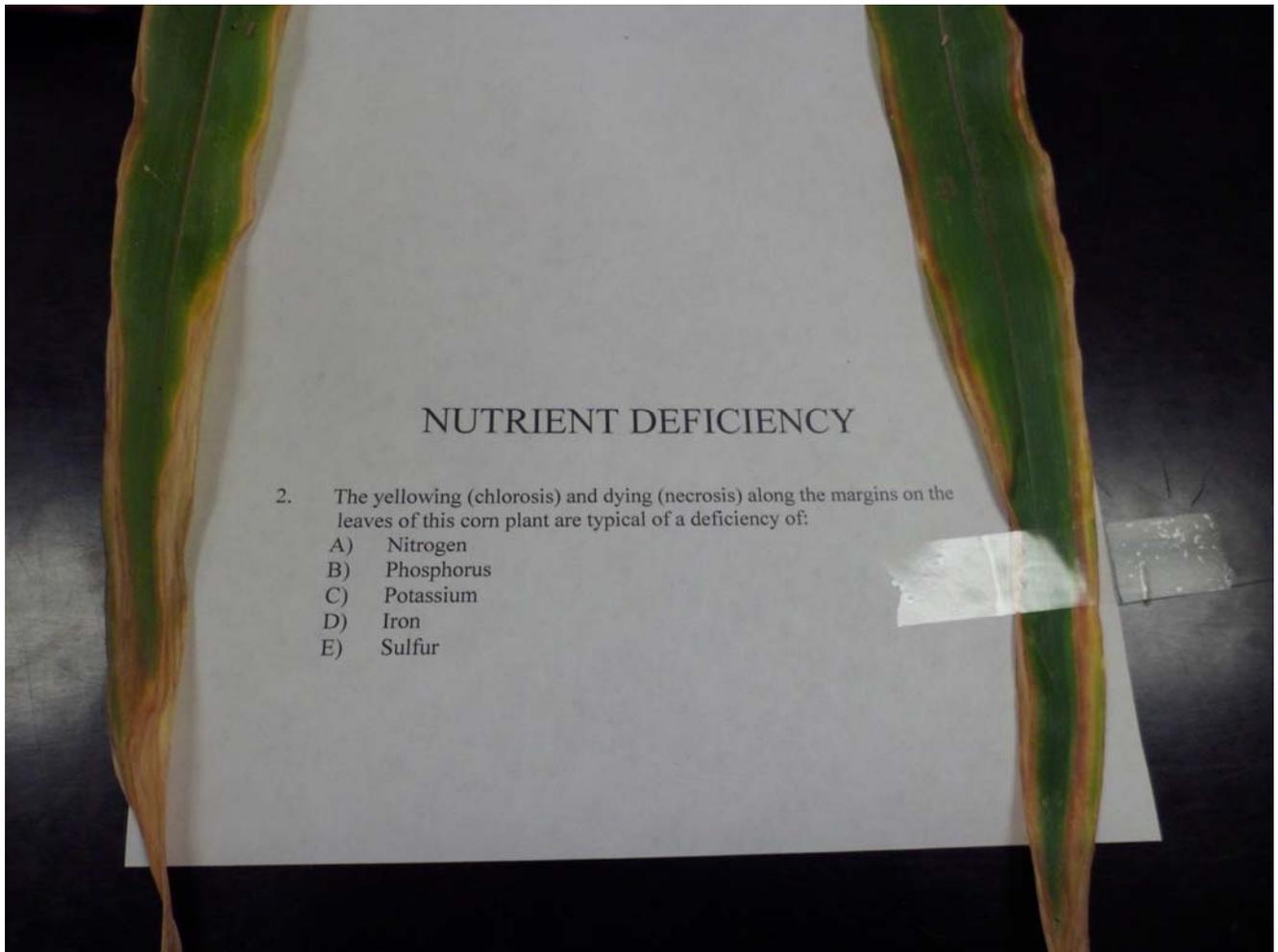
PRINT OR WRITE LEGIBLY (4 points each)

1. redroot pigweed
2. C) potassium
3. D) To: Tully (eroded)
4. F) Liberty Link
5. E) purple seed stain
6. E) Phytophthora root rot
7. C
8. D) boot
9. E) 110° and 0.25 GPM
10. hay baler
11. yellow foxtail
12. 4 -or- V4
13. D) stomata
14. B) barley yellow dwarf virus
15. velvetleaf
16. B
17. F) Cotyledon; Epigeal
18. Warning
19. D) Foundation → Registered → Certified
20. C) corn rootworm
21. field pennycress
22. D) two fungicides and one insect
23. D) chinch bug
24. A
25. Sandy clay loam
26. B
27. B) wheat
28. B) bean leaf beetle
29. C. White Clover & E. Soybean
30. C. spikelet
31. ripper -or- subsoiler
32. A) corn earworm
33. E) loose smut
34. D) R-1 (silking)
35. 40
36. Soybean
37. 12 hours

VEGETATIVE WEED ID



1. This weed is _____

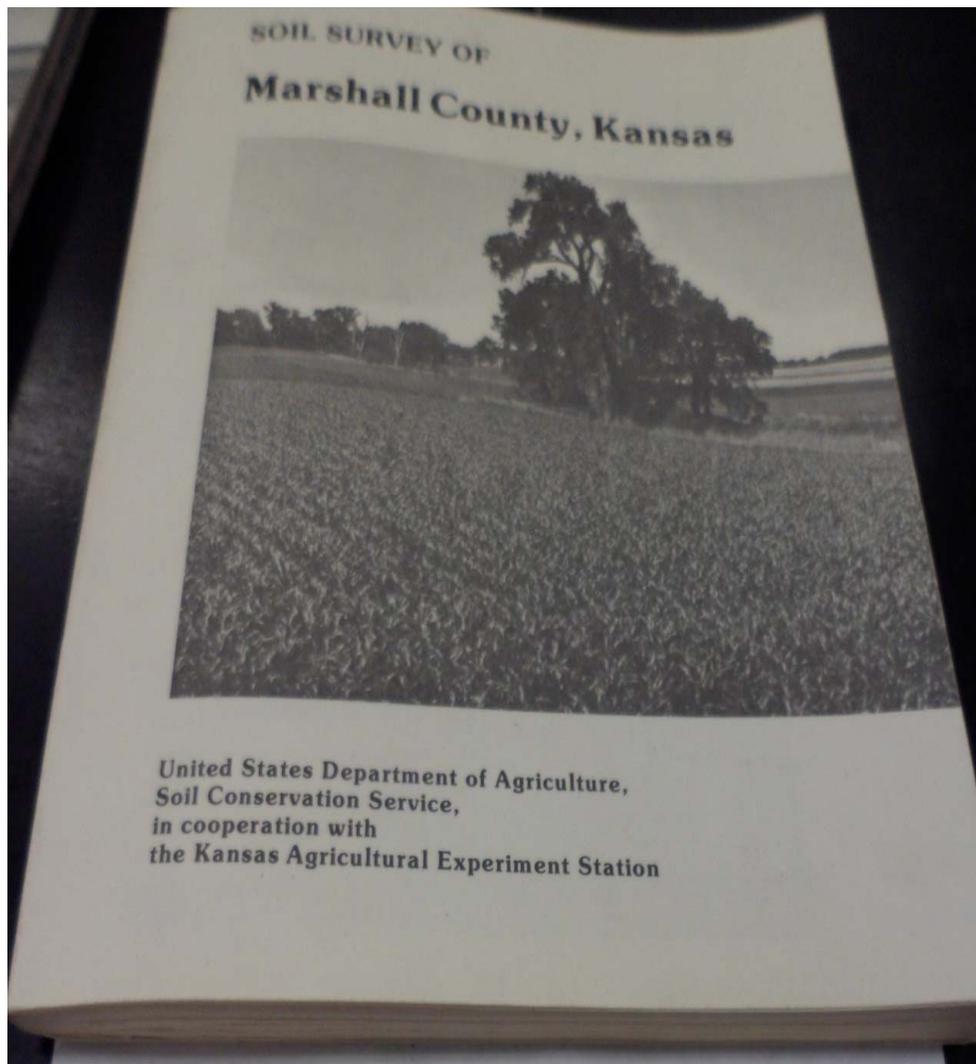


NUTRIENT DEFICIENCY

2. The yellowing (chlorosis) and dying (necrosis) along the margins on the leaves of this corn plant are typical of a deficiency of:
- A) Nitrogen
 - B) Phosphorus
 - C) Potassium
 - D) Iron
 - E) Sulfur

NUTRIENT DEFICIENCY

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- A) Nitrogen
 - B) Phosphorus
 - C) Potassium
 - D) Iron
 - E) Sulfur



RECTANGULAR SOIL SURVEY and SOIL SERIES

3. What is the dominant soil series or complex that is mapped in the legal land description: W $\frac{1}{2}$ of the SE $\frac{1}{4}$ of Section 30, T5S, R6E?

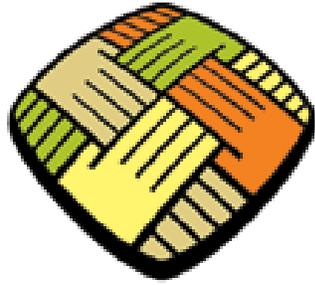
(Use Marshall County Soil Survey Map No. 64).

- A) Wb: Wymore
- B) Kc: Kipson-Sogn
- C) Ta: Tully
- D) Tb: Tully (eroded)

A



B



CLEARFIELD
production system |

C



D



E



F

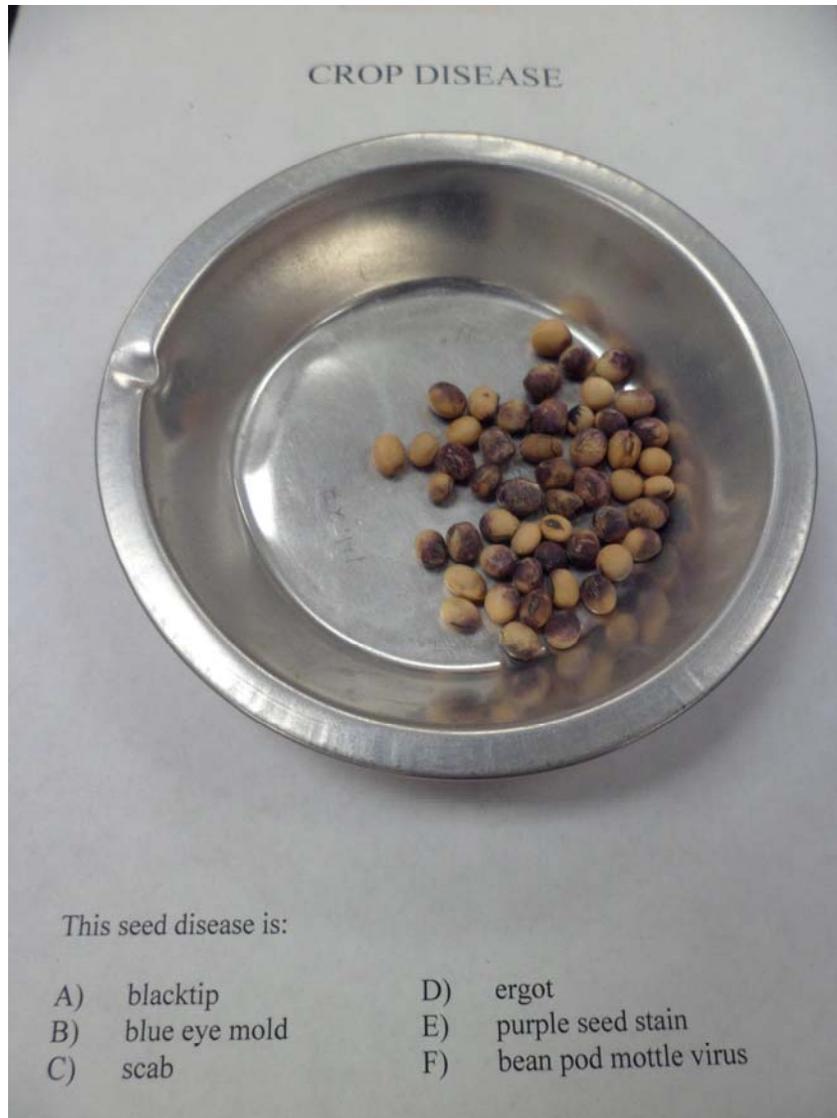


SEED BAG LABELS

4. The above symbols found on seed bags indicate the presence of herbicide and/or insect resistance traits in the seed. Which indicates crops genetically engineered for glufosinate herbicide resistance?

ANSWER: A, B, C, D, E or F

CROP DISEASE



5. This seed disease is:

- A) blacktip
- B) blue eye mold
- C) scab
- D) ergot
- E) purple seed stain
- F) bean pod mottle virus

CROP DISEASE



6. This soybean disease is:

- | | |
|--------------------------------|---------------------------------|
| A) pod and stem rot of soybean | D) rust |
| B) bacterial blight of soybean | E) Phytophthora root rot |
| C) bean pod mottle virus | F) purple seed stain of soybean |



FERTILIZER

7. Which is of the above fertilizers would be a source of potassium?

ANSWER: A, B, C, or D



CROP GROWTH AND DEVELOPMENT

8. The grain sorghum plants shown here are currently at which of the following growth stages:
- A) vegetative
 - B) growing point differentiation
 - C) flag leaf emergence
 - D) boot
 - E) fully headed
 - F) half bloom (anthesis)
 - G) physiological maturity



PESTICIDE APPLICATION

9. Shown above is a flat fan sprayer nozzle tip. At standard 40 psi pressure, the angle of the spray pattern would be _____ degrees ($^{\circ}$) and the nozzle delivery rate would be _____ gallons per minute (GPM)?
- A. 110° and 25 GPM
 - B. 25° and 11 GPM
 - C. 110° and 2.5 GPM
 - D. 25° and 1.1 GPM
 - E. 110° and 0.25 GPM

EQUIPMENT



10. This piece of equipment is a (an) _____



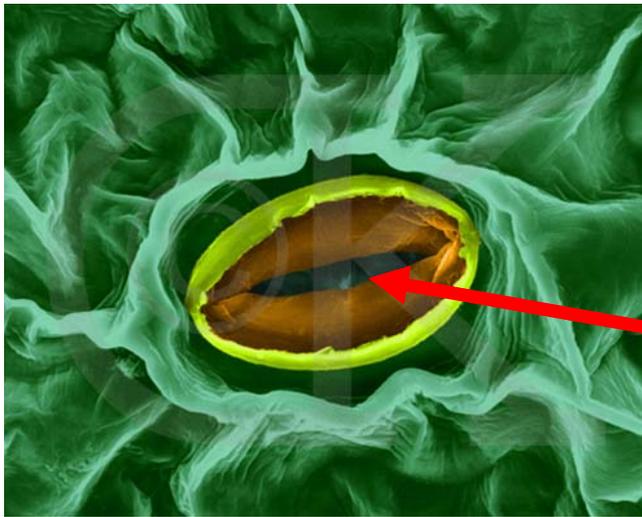
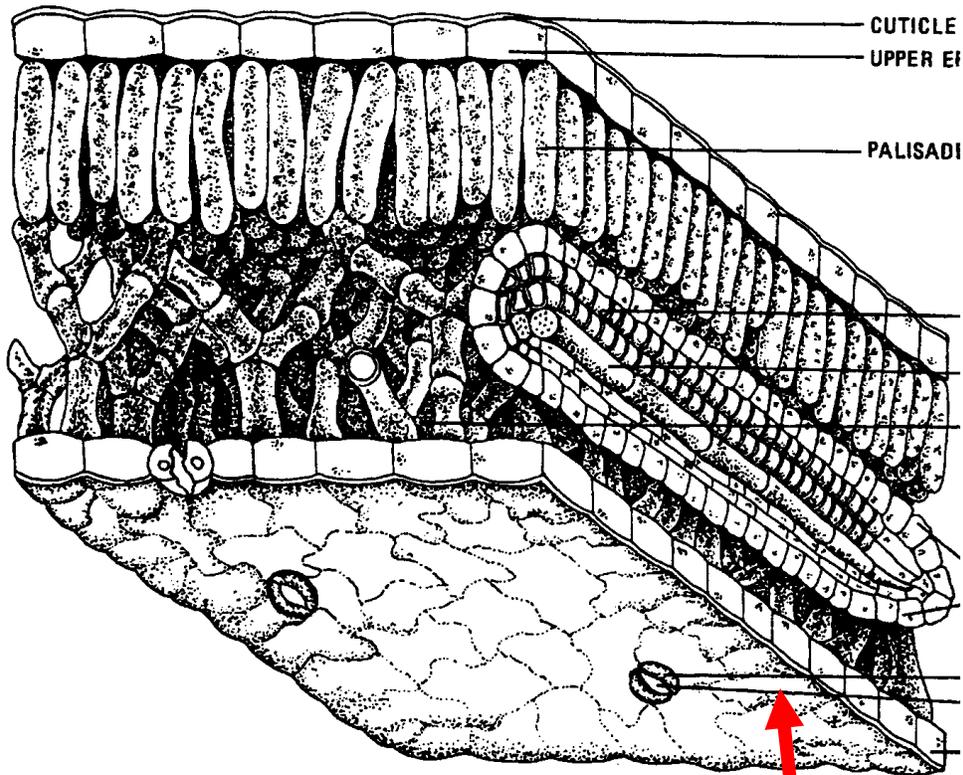
VEGETATIVE WEED ID

11. This weed is _____



CROP GROWTH AND DEVELOPMENT

12. The numerical vegetative growth stage of this corn plant is V- _____.



PLANT STRUCTURE – LEAF ANATOMY

13. The above diagrams show the anatomy of a typical plant leaf. The pore marked by the red arrows that is located in the epidermis of the plant leaf is called the:

- | | |
|------------|------------|
| A) stigma | D) stomata |
| B) stamen | E) stolon |
| C) stipule | F) sepal |

CROP DISEASE



14. This wheat disease is

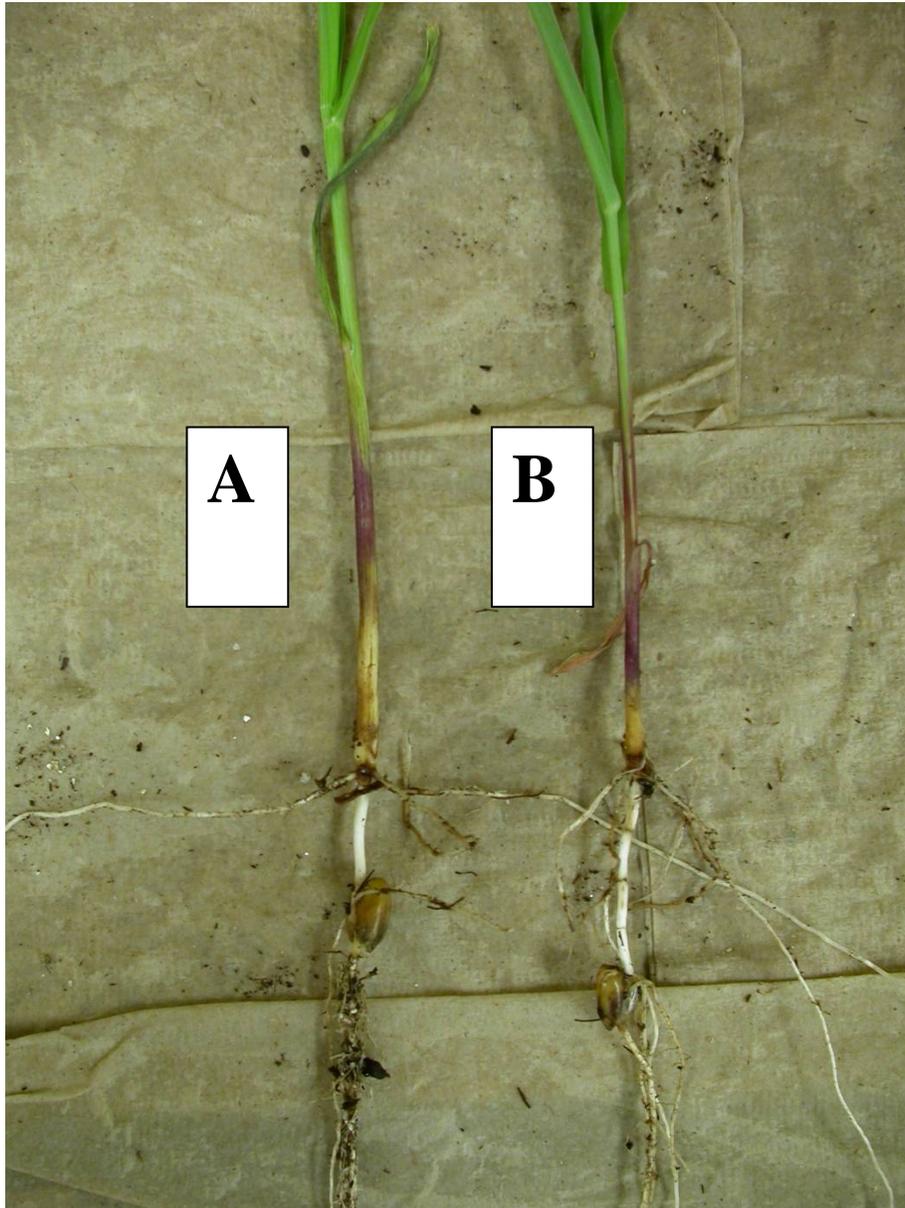
- A) loose smut of wheat
- B) barley yellow dwarf virus
- C) wheat streak mosaic virus
- D) wheat scab
- E) stem rust of wheat
- F) leaf rust of wheat



VEGETATIVE WEED ID

15. This weed is _____

CROP GROWTH AND DEVELOPMENT



16. Which of the corn seedlings shown above was planted deeper?

ANSWER: A or B

CROP STRUCTURE - SEEDLINGS



17. The structure marked by the arrow is called the _____;
The emergence type for these seedling is called _____.

- A) Coleoptile; Hypogeal
- B) Cotyledon; Hypogeal
- C) Hypocotyl; Hypogeal
- D) Endosperm; Hypogeal
- E) Coleoptile; Epigeal
- F) Cotyledon; Epigeal
- G) Hypocotyl; Epigeal
- H) Endosperm; Epigeal

HERBICIDE LABEL

This sample label is current as of 11/20/2002. The product descriptions and recommendations provided in this sample label are for background information only. Always refer to the label on the product before using Monsanto or any other agrichemical product.

21154B4-1/CG



Complete Directions for Use

EPA Reg. No. 524-445

AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS (EXCEPT AS SPECIFIED FOR INDIVIDUAL ROUNDUP READY* CROPS), DESIRABLE PLANTS AND TREES, BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.

2004-1

Not all products recommended on this label are registered for use in California. Check the registration status of each product in California before using.

Read the entire label before using this product.

Use only according to label instructions.

It is a violation of Federal law to use this product in any manner inconsistent with its labeling.

Read the "LIMIT OF WARRANTY AND LIABILITY" statement at the end of the label before buying or using. If terms are not acceptable, return at once unopened.

THIS IS AN END-USE PRODUCT. THIS COMPANY DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

1.0 INGREDIENTS

ACTIVE INGREDIENT:

*Glyphosate, N-(phosphonomethyl)glycine, in the form of its isopropylamine salt 41.0%
OTHER INGREDIENTS: 59.0%
100.0%

*Contains 480 grams per litre or 4 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its isopropylamine salt. Equivalent to 356 grams per litre or 3 pounds per U.S. gallon of the acid, glyphosate.

No license granted under any non-U.S. patent(s).

2.0 IMPORTANT PHONE NUMBERS

1. FOR PRODUCT INFORMATION OR ASSISTANCE IN USING THIS PRODUCT, CALL TOLL-FREE:

1-800-332-3111.

2. IN CASE OF AN EMERGENCY INVOLVING THIS HERBICIDE PRODUCT, OR FOR MEDICAL ASSISTANCE, CALL COLLECT, DAY OR NIGHT,

(314)-694-4000.

3.0 PRECAUTIONARY STATEMENTS

3.1 Hazards to Humans and Domestic Animals

Keep out of reach of children.

WARNING! AVISO!

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en

detalle. (If you do not understand the label, find someone to explain it to you in detail.)

CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY.

HARMFUL IF SWALLOWED OR INHALED.

Do not get in eyes or on clothing.

Avoid breathing vapor or spray mist.

FIRST AID:	Call a poison control center or doctor for treatment advice.
IF IN EYES	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.• Remove contact lenses if present after the first 5 minutes then continue rinsing eye.
IF INHALED	<ul style="list-style-type: none">• Remove individual to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.
IF SWALLOWED	<ul style="list-style-type: none">• This product will cause gastrointestinal tract irritation. Immediately dilute by swallowing water or milk. Get medical attention. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.
<ul style="list-style-type: none">• Have the product container or label with you when calling a poison control center or doctor, or going for treatment.• This product is identified as Roundup Original herbicide, EPA Registration No. 524-445.• You may also contact (314) 694-4000, collect day or night, for emergency medical treatment information.	

DOMESTIC ANIMALS: This product is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear: long-sleeved shirt and long pants, shoes plus socks, and protective eyewear.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

3.2 Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

3.3 Physical or Chemical Hazards

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

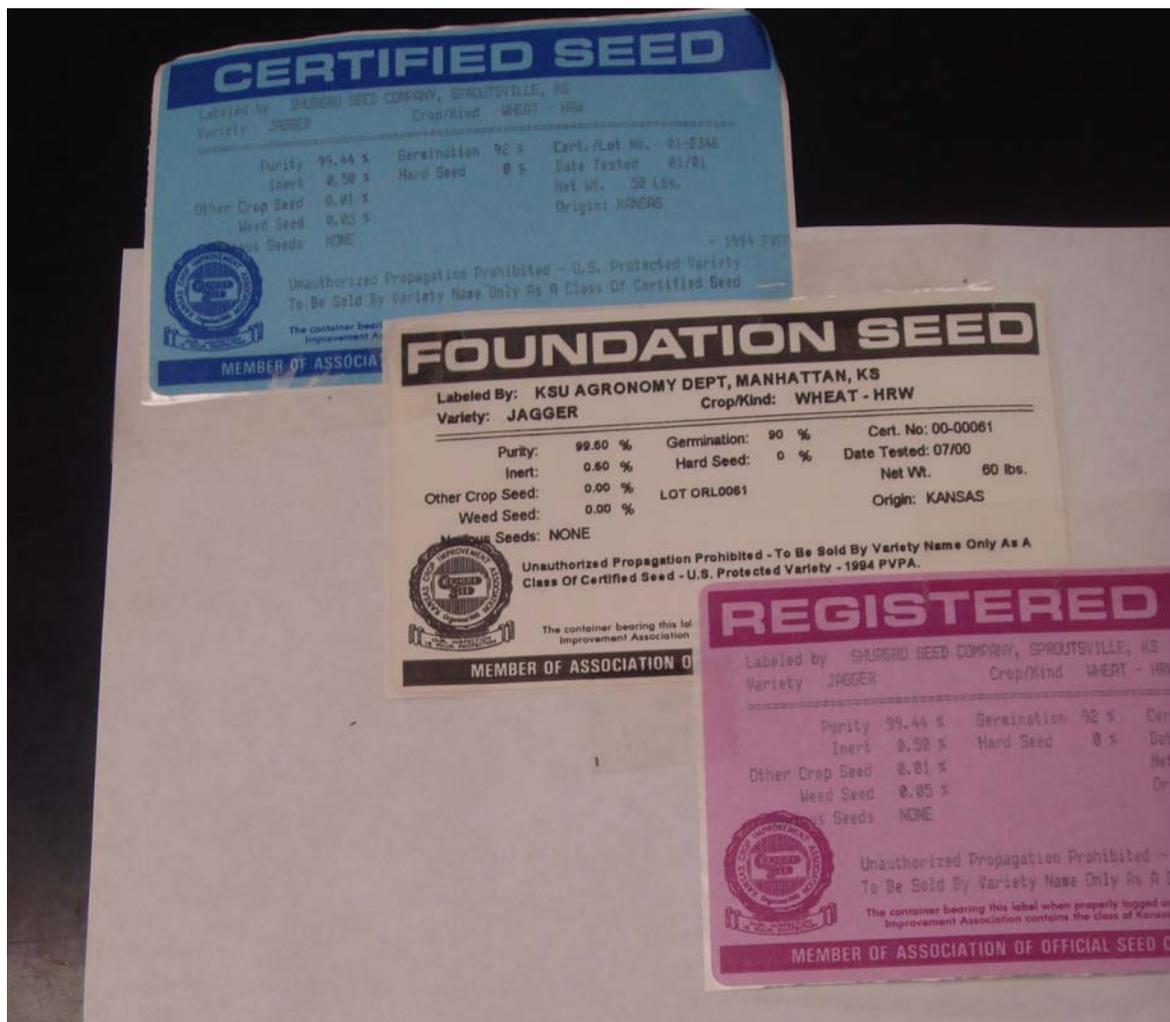
DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions for Use on this label or in separately published Supplemental Labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

18. The signal word on this herbicide is: _____

SEED BAG LABELS



19. Shown are three standard tags that may be found on pedigreed seed regulated by state crop improvement associations. The correct order of generation of production for these three seed classes is:

- A. Certified → Registered → Foundation
- B. Foundation → Certified → Registered
- C. Registered → Certified → Foundation
- D. Foundation → Registered → Certified
- E. Certified → Foundation → Registered
- F. Registered → Foundation → Certified

CROP INSECT



20. This insect is

- | | |
|---------------------|------------------------|
| A) corn earworm | D) fall armyworm |
| B) green cloverworm | E) black cutworm |
| C) corn rootworm | F) European corn borer |



VEGETATIVE WEED ID

21. This weed is _____

CORN SEED BAG LABEL



22. The seed protectant (seed treatment) on this hybrid corn seed contains:
- A. one fungicide
 - B. one insecticide
 - C. one fungicide and one insecticide
 - D. two fungicides and one insecticide
 - E. one fungicide and two insecticides
 - F. five fungicides and two insecticides

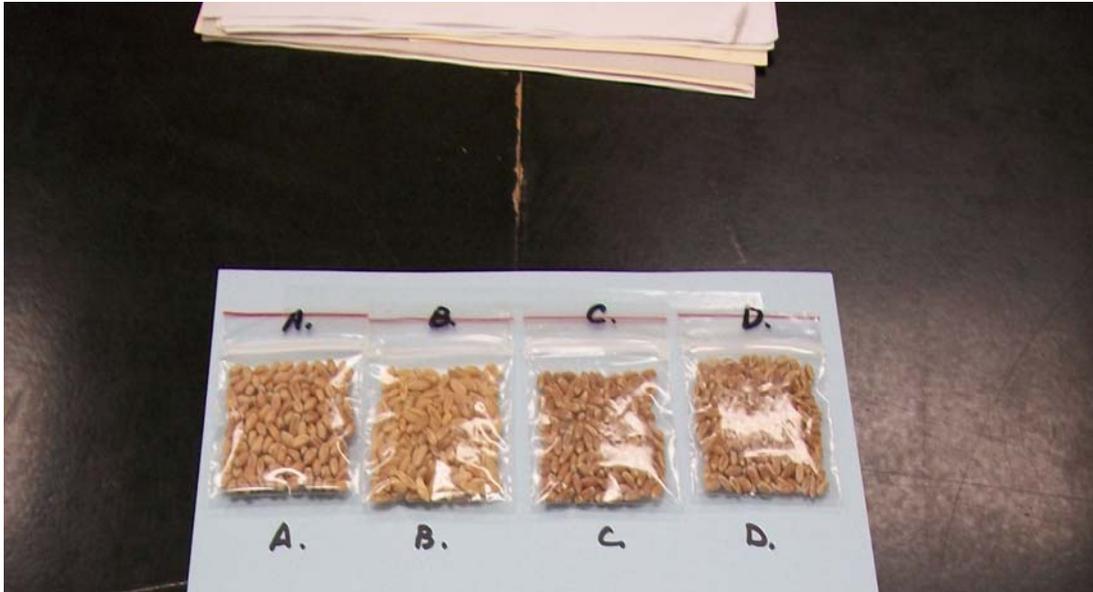
CROP INSECT



23. This insect is:

- A) alfalfa weevil
- B) lady beetle
- C) blister beetle
- D) chinch bug
- E) aphid
- F) lacewing

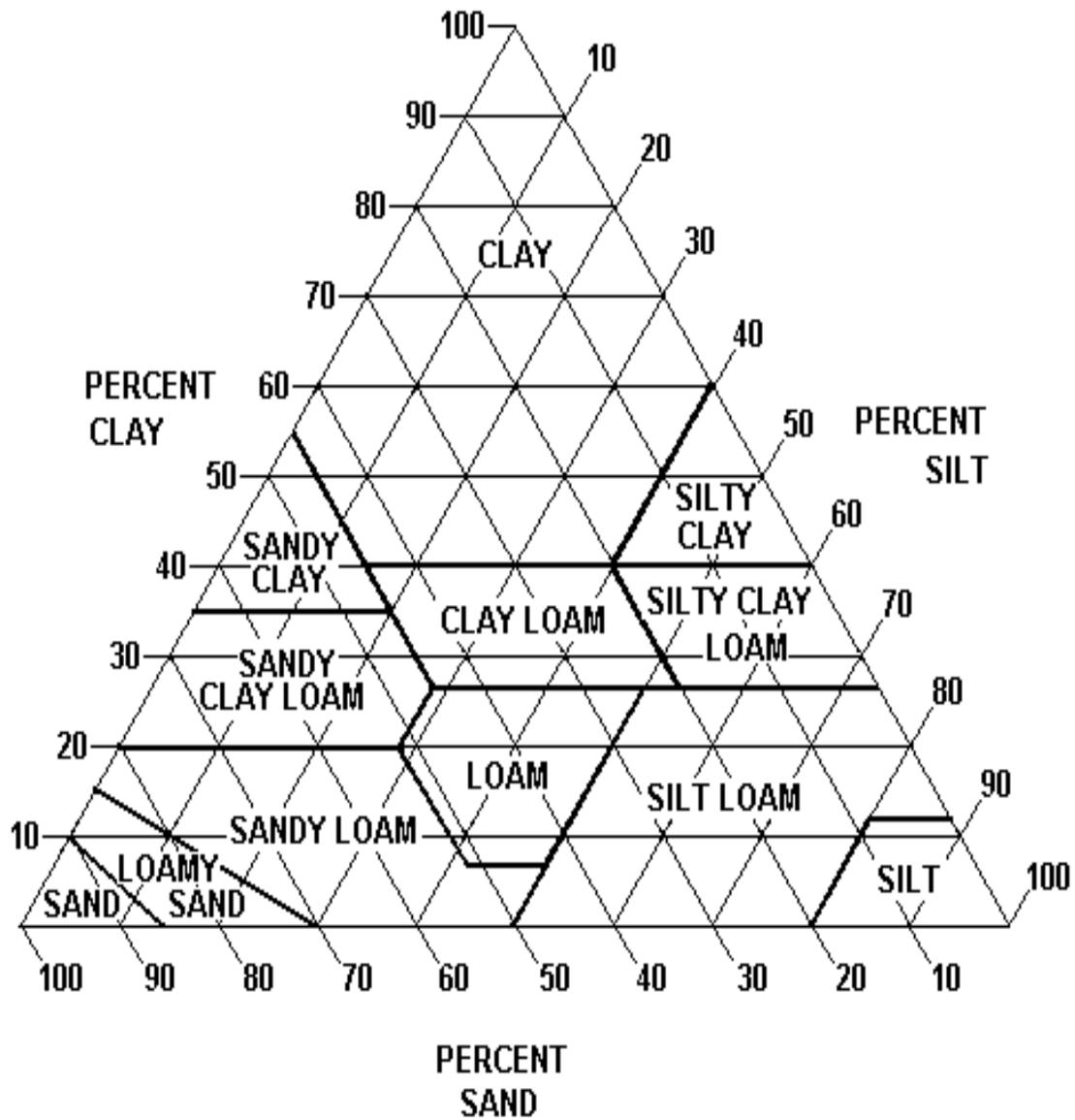
CROP PRODUCTS and CROP QUALITY



24. Which of the above wheat samples would typically be used to make the food product displayed?

ANSWER: A, B, C, or D

SOIL TEXTURE



25. The correct soil textural class for a soil with 30 % clay, 10 % silt, and 60 % sand is a _____.

PLANT STRUCTURE – DICOT LEAVES



26. Which of the plants shown have a palmately compound leaf type with alternate leaf arrangement?

Answer: A, B, or C.

CROP PRODUCTS



27. What crop is the above feed ingredient made from?

- A) Corn
- B) Wheat
- C) Alfalfa
- D) Soybean
- E) Cotton
- F) Grain Sorghum

CROP INSECT



28. This insect is:

- | | |
|---------------------|------------------------|
| A) blister beetle | D) chinch bug |
| B) bean leaf beetle | E) stinkbug |
| C) lady bug | F) corn rootworm adult |

BASIC CROP SCIENCE



29. Which of the crops displayed can perform symbiotic nitrogen fixation and therefore the seeds should be inoculated when they are planted.

There may be more than one answer. List all that apply.

- A. Cotton
- B. Grain Sorghum
- C. White Clover
- D. Smooth Bromegrass
- E. Soybean
- F. Sunflower

PLANT STRUCTURE - GRASS FLOWERS



30. The entire structure within the circle is called the:

- A. glume
- B. floret
- C. spikelet
- D. lemma
- E. awn (beard)
- F. palea

EQUIPMENT



31. This piece of equipment is a (an)_____.

CROP INSECT



32. This insect is

- | | |
|---------------------|------------------------|
| A) corn earworm | D) fall armyworm |
| B) green cloverworm | E) black cutworm |
| C) corn rootworm | F) European corn borer |

CROP DISEASE



33. This disease of wheat is:

- | | |
|--------------|---------------|
| A) leaf rust | D) scab |
| B) stem rust | E) loose smut |
| C) blacktip | F) ergot |

CROP GROWTH AND DEVELOPMENT



34. The corn plant shown here is currently at which of the following growth stages:
- A) V-11 (vegetative)
 - B) V-14 (vegetative)
 - C) V-T (tasseling)
 - D) R-1 (silking)
 - E) R-3 (milk stage)
 - F) R-6 (physiological maturity)

SOIL TEST INTERPRETATION

GENERAL INFORMATION:

Producer: Willie Wildcat Date: 4/30/12

Address: Bill Snyder Family Stadium

City, State: Manhattan, KS

County: Riley Region: Northeast

Tillage: No-till Lime Incorporation Depth (in): 0.67

Irrigation: No Years to build soil test: 4

*Must enter full county name.

CROP INFORMATION:

Field ID	Total Sample Depth (in)	Intended Crop	Yield Goal (bushels or T/acre)	Second Crop	Yield Goal (bushels or T/acre)	Third Crop	Yield Goal (bushels or T/acre)	Previous Crop
1	24	Grain Sorghum	80					Wheat

If field is no-till, alfalfa or grass time incorp. should be set at 2 in.

SOIL TEST RESULTS:

Lab Number	Field ID	pH	SMP Buffer pH	Organic Matter %	Nitrate-N ppm (surface or profile) ¹	Mehlich 3 P ppm	NH ₄ OAc Ext. K ppm	DTPA		Sulfur ppm	Chloride ppm	Boron ppm
								Zn ppm	Fe ppm			
	1	6.5	6.2	1.6	11	7	110					

*Enter profile NO₃-N value if 0-24" sample was submitted, otherwise enter the NO₃-N value for the surface sample.

Grain Sorghum P and K Recommendations
Phosphorus Sufficiency Recommendations for Grain Sorghum

Bray P1 Soil Test (ppm)	40	80	120	160	200
0-5	50	58	66	65	70
5-10	35	40	45	45	50
10-15	20	25	25	30	30
15-20	10	10	10	15	15
20+	0 ¹				

1 Crop Removal² 16 32 48 64 80

G. Sorghum Sufficiency P Rec = $[50 + (0.14 \times \text{Yield Goal}) - (\text{Bray P} \times 0.25)]$
 If Bray P is greater than 20 ppm, then only 0 P or NPKS source fertilizer.
 If Bray P is less than 20 ppm, then the minimum P Recommendation.
 H. Sorghum Sufficiency K Rec = $[80 + (0.17 \times \text{Yield Goal}) - (\text{Soil K} \times 0.15)]$
 If Soil K is greater than 100 ppm, then only 0 NPKS or 100% source.
 If Soil K is less than 100 ppm, then the minimum K Recommendation.

Phosphorus Build-Maintenance Grain Sorghum Rec

Bray P1 Soil Test (ppm)	4-Year Build Time Frame Yield (Bu/A)		
	40	120	200
0-5	95	127	159
5-10	72	104	136
10-15	50	82	114
15-20	27	59	91
20-30*	16	48	80
30+	0 ¹	0 ¹	0 ¹

Potassium Build-Maintenance Grain Sorghum Rec

Exch. K Soil Test (ppm)	4-Year Build Time Frame Yield (Bu/A)		
	40	120	200
0-40	258	279	300
40-80	168	189	210
80-130	67	87	108
130-160*	10	31	52
160+	0	0	0

Phosphorus Build-Maintenance Rec = $[120 - \text{Current P Soil}]$ Years To Build
 Potassium Build-Maintenance Rec = $[130 - \text{Current K Soil}]$ Years To Build

1 Crop P & K recommendations are for the total amount of 20% of total or a band is recommended.
 2 Application of a NP, NPK or NPKS source fertilizer may surface crop residues. Do not exceed N = K₂O guideline.
 3 Crop removal numbers provided for competitive plants nutrient applications, soil test levels are expected to be recommended amounts of P₂O₅ and K₂O.
 4 Test six and eight year timeframes below are optional.

SOIL TEST INTERPRETATION

Use the results provided on the above Soil Test Report for soil phosphorus level (ppm) and the K-State Fertilizer Recommendation booklet provided to answer this question.

35. The Phosphorus Sufficiency Recommendation for Grain Sorghum with a yield goal of 80 bushels per acre is _____ pounds P₂O₅ per acre.

Use the results provided on the above Soil Test Report for soil phosphorus level (ppm) and the K-State Fertilizer Recommendation booklet provided to answer this question.

35. The Phosphorus Sufficiency Recommendation for Grain Sorghum with a yield goal of 80 bushels per acre is _____ pounds P₂O₅ per acre.

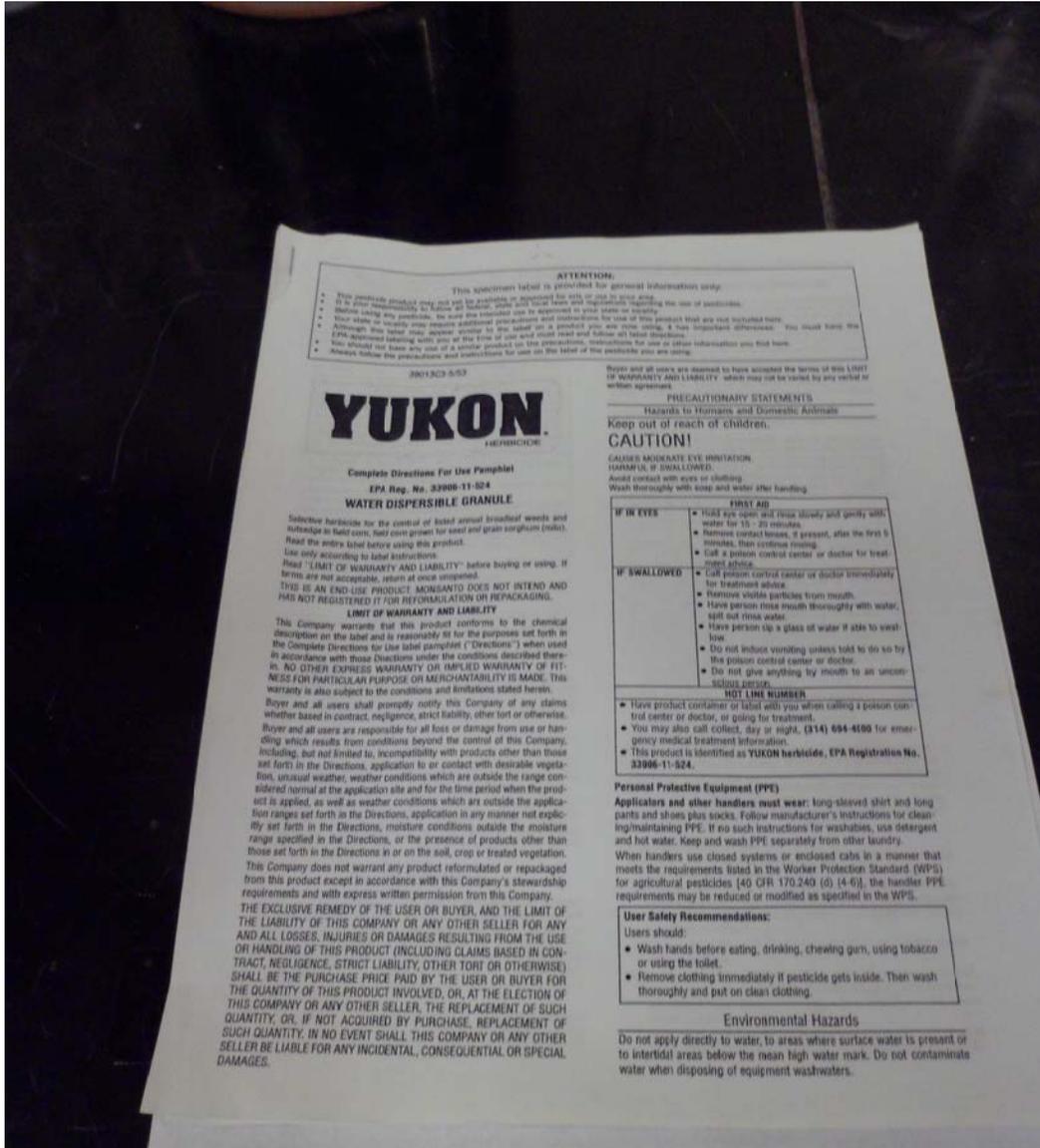
BASIC CROP SCIENCE



36. Which of the above crop seeds would be most sensitive to damage to its germination potential during rough handling, augering and transporting?

Answer: identify the seed

HERBICIDE LABEL



ATTENTION:
 This specimen label is provided for general information only.
 • This pesticide product may not yet be available or approved for sale or use in your area.
 • It is your responsibility to follow all federal, state and local laws and regulations regarding the use of pesticides.
 • Before using any pesticide, be sure the intended use is approved in your state or locality.
 • Your state or locality may require additional precautions and instructions for use of this product that are not included here.
 • Although this label may appear similar to the label on a product you are now using, it has important differences. You must know the EPA registration number and other information on the label on a product you are using and follow all label directions.
 • You should not have any part of a pesticide product on the production, instructions for use or other information you find here.
 • Always follow the production and instructions for use on the label of the pesticide you are using.

38013C3 5/83
YUKON
 HERBICIDE

Complete Directions for Use Pamphlet
 EPA Reg. No. 33906-11-524
WATER DISPERSIBLE GRANULE

Selective herbicide for the control of listed annual broadleaf weeds and
 subgrasses in field corn, field corn grown for seed and grain sorghum (milo).
 Read the entire label before using this product.
 Use only according to label instructions.

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If
 terms are not acceptable, return at once unopened.
**THIS IS AN END-USE PRODUCT. MORGANTO DOES NOT INTEND AND
 HAS NOT REGISTERED IT FOR REFORMULATION OR REPACKAGING.**

LIMIT OF WARRANTY AND LIABILITY
 This Company warrants that this product conforms to the chemical
 description on the label and is reasonably fit for the purposes set forth in
 the Complete Directions for Use label pamphlet ("Directions") when used
 in accordance with those Directions under the conditions described there-
 in. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FIT-
 NESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This
 warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims
 whether based in contract, negligence, strict liability, other tort or otherwise.
 Buyer and all users are responsible for all loss or damage from use or han-
 dling which results from conditions beyond the control of this Company,
 including, but not limited to, incompatibility with products other than those
 set forth in the Directions, application to or contact with desirable vegeta-
 tion, unusual weather, weather conditions which are outside the range con-
 sidered normal at the application site and for the time period when the prod-
 uct is applied, as well as weather conditions which are outside the applica-
 tion ranges set forth in the Directions, application in any manner not explic-
 itly set forth in the Directions, moisture conditions outside the moisture
 range specified in the Directions, or the presence of products other than
 those set forth in the Directions in or on the soil, crop or treated vegetation.
 This Company does not warrant any product reformulated or repackaged
 from this product except in accordance with this Company's stewardship
 requirements and with express written permission from this Company.

**THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF
 THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY
 AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE
 OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CON-
 TRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE)
 SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR
 THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF
 THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH
 QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF
 SUCH QUANTITY, IN NO EVENT SHALL THIS COMPANY OR ANY OTHER
 SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL
 DAMAGES.**

Buyer and all users are deemed to have accepted the terms of this LIMIT
 OF WARRANTY AND LIABILITY when they may not be signed by any verbal or
 written agreement.

PRECAUTIONARY STATEMENTS
 Hazards to Humans and Domestic Animals
Keep out of reach of children.
CAUTION!

CAUSES MODERATE EYE IRRITATION
 HARMFUL IF SWALLOWED.
 Avoid contact with eyes or clothing.
 Wash thoroughly with soap and water after handling.

FIRST AID	
IF IN EYES	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
IF SWALLOWED	<ul style="list-style-type: none"> Call poison control center or doctor immediately for treatment advice. Remove visible particles from mouth. Have person rinse mouth thoroughly with water, spit out rinse water. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER	
<ul style="list-style-type: none"> Have product container or label with you when calling a poison control center or doctor, or going for treatment. You may also call collect, day or night, (314) 694-6100 for emergency medical treatment information. This product is identified as YUKON herbicide, EPA Registration No. 33906-11-524. 	

Personal Protective Equipment (PPE)
Applicators and other handlers must wear: long-sleeved shirt and long
 pants and shoes plus socks. Follow manufacturer's instructions for clean-
 ing/maintaining PPE. If no such instructions for washables, use detergent
 and hot water. Keep and wash PPE separately from other laundry.
 When handlers use closed systems or enclosed cabs in a manner that
 meets the requirements listed in the Worker Protection Standard (WPS)
 for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE
 requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations:
 Users should:
 • Wash hands before eating, drinking, chewing gum, using tobacco
 or using the toilet.
 • Remove clothing immediately if pesticide gets inside. Then wash
 thoroughly and put on clean clothing.

Environmental Hazards
 Do not apply directly to water, to areas where surface water is present or
 to intertidal areas below the mean high water mark. Do not contaminate
 water when disposing of equipment washwaters.

37. What is the REI for this herbicide? _____