**Updated 3/10/2023**

**Crops**

ALL grade level exhibits must have a copy of the crops record sheet in a plastic sleeve with your name clearly visible.

**ALL** crops exhibits will be judged by Clover (Gr. 3-5), Jr. (Gr. 6-8) or Sr. (Gr. 9-12)

**Alfalfa**

**Exhibit:** One flake of storable quality hay manufactured by one stroke of the plunger. Hand-cut hay will not be accepted as an exhibit.

THE FLAKE EXHIBITED IS TO BE ALFALFA, NOT ALFALFA-GRASS MIX.

**Corn**

**Exhibit:** l stalk of corn with roots cleaned and free of soil.

**Soybeans**

**Exhibit:** 10 well developed plants tied in a bundle with roots washed to show nodule development.

**OR**

A 22"x28" poster (refer to general rules and information item #3) on topics related to the soybean project.

**Wheat**

**Exhibit:**

One wide-mouth gallon jar (furnished by exhibitor) - filled with wheat grown on not less than 5 acres.

Daviess Co.

Crops Record Sheet

Record for year \_\_\_\_\_\_

Corn \_\_\_\_\_ Soybeans \_\_\_\_\_ Wheat \_\_\_\_\_ Alfalfa \_\_\_\_\_

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Clover \_\_\_\_\_ Jr. \_\_\_\_\_ Sr. \_\_\_\_\_\_

Gr. 3-5 Gr. 6-8 Gr. 9-12

Leader Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Years in this project \_\_\_\_\_\_\_\_\_\_

1. How many acres are in the 4-H project crop field? \_\_\_\_\_\_\_\_\_\_\_\_
2. Who farms this field? \_\_\_\_\_\_\_\_\_\_\_\_\_\_ How did you help? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What type of tillage was utilized to prepare the field for planting? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What date was the crop planted? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What type of planter was used to plant the crop? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Was the crop planted in rows or broadcast? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What was the row width (distance between rows)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What hybrid or variety was planted? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. How many pounds of seed were planted per acre? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. What type of fertilizer was applied to this crop? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. Was livestock manure applied to this field? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. If yes, what type of manure was utilized? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Other than manure, list the types of fertilizer utilized; \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_
8. What crop pests did you notice in your field?
   1. Weeds: \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Insects: \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Diseases: \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_
   4. Other (mites, nematodes, deer) \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_
9. What pesticides were utilized to control pests in this field?
   1. Herbicide(s) used to control weeds: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Insecticide (s) used to control insects: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Other (example fungicide or miticide): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. Have crop pests significantly lowered crop yield? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. Was the weather favorable for your crop this year? \_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. Yield:
    1. **Corn and soybeans**: What was the average yield for your crop in this field (bushels per acre)? \_\_\_\_\_\_\_; would you project this crop yielding above, below or around the average for this field? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    2. **Wheat:** What was your yield per acre? \_\_\_\_\_\_\_\_\_\_\_\_; was this above, below or around the average for this crop? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    3. **Alfalfa:** How many cuttings of alfalfa do you plan to take this year? \_\_\_\_\_\_\_\_\_\_\_\_\_ At the last cutting, how many tons per acre were harvested? \_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. Did this crop or should this crop generate a profit this year? \_\_\_\_\_\_\_\_\_\_\_\_\_
14. Please list knowledge and skills gained by taking this project: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Helpful resources: list books, publications, and magazines that you have read, meetings you have attended and people who have provided you with information relating to this project this year.

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1. Demonstrations conducted relating to this project: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

### Optional Questions for Your Crop Project:

Note: To answer **optional questions,** you may need to utilize Purdue Publications ID 179 " Corn & Soybean Field Guide" and ID 101 "Animal Manure as a Plant Nutrient Resource''.

These questions are listed to help 4-H' ers expand their knowledge on crop production.

1. Additional information relating to planting:
   1. Is this field considered highly erodible ground? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. If yes, what percent of the ground was covered with residue once this crop was planted? \_\_\_\_\_\_\_\_\_\_\_
   3. Once planted, how many days did it take to the plants to emerge? \_\_\_\_\_\_\_\_\_\_\_\_\_
   4. What is the population of this crop per acre, once emerged? \_\_\_\_\_\_\_\_\_\_\_\_\_
   5. What percent of the seeds planted produced a plant? \_\_\_\_\_\_\_\_\_\_\_\_\_
2. Additional questions on soil fertility:
   1. Was a soil test utilized in determining the amount of manure and commercial fertilizer to apply to this field? \_\_\_\_\_\_\_
   2. How much of the following nutrients were applied this year from manure and fertilizers to this field:

lbs. nitrogen per acre: \_\_\_\_\_\_\_\_\_\_\_\_\_

lbs. potassium per acre: \_\_\_\_\_\_\_\_\_\_\_\_

lbs. phosphorus per acre:

* 1. What other nutrients were included in this year’s fertilizer program? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  2. How many lbs. of Nitrogen, Potassium and Phosphorus should your crop remove per acre this year?

Nitrogen \_\_\_\_\_\_\_\_ Potassium \_\_\_\_\_\_\_\_\_\_\_ Phosphorus \_\_\_\_\_\_\_\_\_\_

* 1. According to the field’s last soil test:
     1. What was its pH? \_\_\_\_\_\_\_\_\_\_
     2. How much line did it recommend to apply? \_\_\_\_\_\_\_\_\_\_\_\_\_

1. Other than pesticides, how are pests controlled in your field?

(Ex. Tillage is a form of cultural control that reduces weeds and can help reduce diseases by moving infected crop residue into soil or beneficial insects feed upon crops pests is a type of biological control)

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1. Weather information you can keep track of:
   1. Soil temperature at planting \_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Were the soil conditions to dry, too wet, or appropriate when the field was tilled \_\_\_\_\_\_\_\_\_\_\_? When the crop was planted \_\_\_\_\_\_\_\_\_\_?
   3. How many inches of rain has fallen on this crop through harvest or when this record sheet was filled out? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. Would you describe air temperature as being too cool, too warm or appropriate for this crop? \_\_\_\_\_\_\_\_\_
   5. If poor weather has reduced crop yield, describe how it impacted the growth and development of this crop? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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* 1. Was this crop irrigated? \_\_\_\_\_\_\_\_\_\_\_\_\_ What type of irrigation system was utilized? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What suggestions do you have to make this a better record sheet for your 4-H crop project?

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