

AGRONOMY

GENERAL INFORMATION:

- A. The purpose of these exhibits is to demonstrate to the public the benefits from the study and application of crop, wee, range and soil sciences to solving problems in management, conservation, sustainability, and environmental protection. For guidelines on specific projects, refer to appropriate project manuals.
- B. IMPORTANT: A completed Crop Production Worksheet (available at <https://cropwatch.unl.edu/Youth/Documents/Crop%20Production%20Project%20Worksheet%20Final.pdf>) must accompany grain and plant exhibits or it will automatically be deducted a ribbon placing. The worksheet must include the exhibitor's name and address, county, plant hybrid or variety, plant population, whether crop production irrigated or dryland, and general information including farm cropping history, soil type and weather effect. **The worksheet also must include an economic analysis of the project, listing individual expenses and income, on a per acre basis acre.** Other topics to discuss are the selection of variety or hybrid, impacts of tillage and conservation practices, inputs (fuel, fertilizer, irrigation, labor, pesticides, etc.) any observations made during the growing season, and what you learned from your crops project.
- C. The worksheet counts as 50% of the total when judged. Worksheet must be the original work of the individual exhibitor. Attach the worksheet to the entry in a clear plastic cover such that it can be read without removing it from the cover. In addition to the worksheet, grain and plant exhibits will be judged on condition, appearance (i.e. disease and insect damage, grain fill), uniformity (size, shape, color, maturity), and quality of exhibit.
- D. Grain exhibits must be one gallon per sample. Grain exhibits harvested in the fall (e.g., corn or soybeans) may be from the previous year's project and brought in an appropriate sized box/container for display. NEW: Place in a clear container so it can be viewed and displayed.
- E. Plant exhibits with the exception of ears of corn, must be the result of the current year's project. Corn 10 ears or 3 stalks (cut at ground level with no roots or soil and bound together); Grain Sorghum - 4 stalks (cut at ground level and bound together); Soybeans- 6 stalks (cut at ground level and bound together); Small grains (oats, barley, wheat, triticale) - sheaf of heads 2 inches in diameter at top tie with stems about 24 inches long. Other crops (alfalfa, millet, etc.) - sheaf of stems 3 inches in diameter at top tied with stems cut at ground level or half size small square bale.

GRAINS

- *G750001 **Corn** – (SF264) - (includes yellow, white, pop, waxy, or any other type)
- *G750002 **Soybeans** - (SF264)
- *G750003 **Oats** - (SF264)
- *G750004 **Wheat** - (SF264)
- *G750005 **Any other crop** - (SF264) (includes grain sorghum, alfalfa, millets, barley, rye, triticale, amaranth, dry beans, sugar beet, mung bean, canola, forage sorghum, safflower, etc.)

Displays

- A. The purpose of the display is to tell an educational story to those that view the display. The display is a visual representation (pictures, charts, graphs) no larger than 28 inches wide by 28 inches tall on plywood or poster board. The display should be neatly titled. Make sure to label display with exhibitor's name, address, and county on back side. Explain pictures and graphs clearly and concisely. Consider creativity and neatness. Refer to scoresheet SF259.
- B. Each display must have a one-page essay (minimum) explaining why the exhibitor chose the area of display and what they learned from their project. Include any references used. The essay should be in a clear plastic cover with the exhibitor's name on the outside. If a display does not have an essay, it will automatically be deducted one ribbon placing.

- *G750006 **Crop Production Display** – (SF259) - The purpose of this class is to allow original and creative exhibits that contain educational information about crop production aspects, such as crop scouting, alternative crops, etc.
- *G750007 **Crop Technology Display** – (SF259) - Display information about aspects of technology used in crop production, such as genetic engineering, crop breeding, GPS, yield mapping, computers, etc.

***G750008** **Crop End Use Display** – (SF259) - Display information about the uses for a crop such as food, feed, fuel or other products (i.e. corn can be processed into livestock feed, ethanol, plastics, etc. or soybeans can be processed into bio-diesel, pet bedding, crayons, oil, etc.). This should not be about the process of crop production but focus on an end product(s).

***G750009** **Water or Soil Display** – (SF259) - Display information about water or soils, such as how soils are being used for crop production, range, conservation, wildlife, or wetland use, or ways to protect or conserve water and soil resources.

***G750010** **Career Interview Display** – (SF259) - The purpose of this class is to allow youth to investigate a career in agronomy. Youth should interview one person that works with crops about such topics as what parts of their job do they enjoy or dislike, why did they choose that career, what was their education, etc. Include a picture of the person interviewed.

Special Agronomy Project

- A. Youth experience a crop that is grown, was grown or has the potential to be grown in Nebraska by growing it, researching traits of that crop and determine viability of that crop in the part of the state they live.
- B. Each year seeds will be mailed to extension offices or ag ed classrooms across the state, as ordered by that location. Offices will distribute to youth on a first come – first serve basis. A different seed will be selected every year.
- C. Youth will grow seeds in their garden or pots. Written resources materials will be available for youth, in addition to virtual, live or recorded videos/field trips.
- D. Youth will be eligible to enter an exhibit at both the county and/or state fair in the agronomy project area.

The crop of the year for 2024 is Sugar Beets.

***G750011** **Special Agronomy Project** – Educational Exhibit – (SF259) – Educational exhibit based on what was learned from the project. Present information on a poster 14 inchesx22 inches either vertical or horizontal arrangement in a clear plastic report cover. The 4-H member’s name, age, and county must be on the back of the poster or report cover. Each display must have a one-page essay (minimum) explaining why the exhibitor chose the area of display and what they learned from their project. Include any references used.

***G750012** **Special Agronomy Project** – Video Presentation – 4-H exhibitor designs a multimedia presentation related to the crop. This could include narration of the growing process, presenting facts about the crop or any other innovative multimedia practices. The presentations should be at least 2 minutes in length and no more than 5 minutes in length, appropriate graphics, sound and either a video clip, animation or voice over and/or original video clip. Any of the following formats will be accepted: mp4, .mov, .ppt, or .avi.

***G750013** **Special Agronomy Project** – Freshly Harvested crop – Plant exhibits must be the result of the current year’s project. Depending on the type of crop selected for the current year.

Corn – 10 ears or 3 stalks (cut at ground level with no roots or soil and bound together)

Grain Sorghum – 4 stalks (cut at ground level and bound together)

Soybeans – 6 stalks (cut at ground level and bound together)

Small grains (oats, barley, wheat, triticale) – sheaf of heads 2 inches in diameter at top tie with stems about 24 inches long.

Other crops (alfalfa millet, etc.) – sheaf of stems 3 inches in diameter at top tied with stems cut at ground level.

Supporting documentation (1/2 to 1 page in length) should include the following: Economic analysis and/or research that supports feasibility of this crop in Nebraska or how the crop has evolved over time.

- Other topics to discuss are past/current commercial production of this crop. This includes: the selection of variety or hybrid, impacts of tillage and conservation practices, inputs (fuel, fertilizer, irrigation, labor, pesticides, etc.), any observations made during the growing season about this crop and what you learned from your crops project. This ½ to 1 page summary counts as 50% of the total when judged.
- In addition to the summary, grain and plant exhibits will be judged on condition, appearance, (i.e. disease and insect damage, grain fill), uniformity (size, shape, color, maturity), and quality of exhibit.