

2016

PLANT SCIENCE

CROPS AND WEED SCIENCE

4-H members may only exhibit in the project in which they are enrolled and one entry per class number.

All exhibits must be labeled. Label each item with the exhibitor name, project division, exhibit class number and years in the project before entering at county fair.

All static exhibits must receive a purple ribbon at the county fair in order to be eligible for State Fair selection.

State Fair Premier 4-H Science Award is available in this area. See General Rules in State Fair Book for more details.

DIVISION — 750

CROPS

*Denotes State Fair Entry

Purple, \$3; Blue, \$2; Red, \$1.50; White, \$1

Individuals in the Crop Production, Field Crops projects may exhibit grain or plants or prepare an educational display representing their project.

IMPORTANT: A two-page (maximum) essay must accompany grain and plant exhibits. The essay must include the exhibitor's name and address, county, plant hybrid or variety, plant population, whether crop production was irrigated or dryland, and general information including farm cropping history, soil type and weather effects. The essay also must include an economic analysis of the project, listing individual expenses and income, on a per acre basis. 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. The essay counts as 50 percent of the total when judged. Essay must be the original work of the individual exhibitor. Attach the essay to the entry in a clear plastic cover such that it can be read without removing it from the cover. In addition to the essay, 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.

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. Display containers will be furnished.

Plant exhibits, with the exception of ears of corn, must be the result of the current year's project.

Corn — 10 ears or three stalks cut at ground level with no soil and bound together

Grain Sorghum — four stalks cut at ground level and bound together

Soybeans — six 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.

All plant exhibits, with the exception of ears of corn, must be the result of the current year's project.

Guidelines for all displays: The purpose of the display is to tell an educational story to those that view the display. The display is a visual representation (using pictures, charts, graphs) no larger than 24-inch by 24-inch by ¼-inch-thick 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. Each display must have a one-page essay 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 outside.

You Be the Teacher exhibits are designed to share with others what the 4-H'er learned in the project. Exhibit may be a three-dimensional display, scrapbook, charts, pictures, photographs, a file of ideas, research study, etc. A display may not exceed a total space of 12 inches deep, 15 inches wide and 10 inches high. Pictures, models, plaster, papier-mâché, etc., may be used in your exhibit. Please attach the entry tag to the upper right hand corner of the entry.

*G750001 Corn (includes yellow, white, pop, waxy, or any other type)

*G750002 Soybeans

*G750003 Oats

*G750004 Wheat

*G750005 Any other crop (includes grain sorghum, alfalfa, millets, barley, rye, triticale, amaranth, dry beans, sugar beet, mung bean, canola, forage sorghum, safflower, etc)

*G750006 Crop Production Display — 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, bioenergy, etc.

*G750007 Crop Technology Display — 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 — Display information about the uses for a crop, such as food, feed, fuel, or other products.

*G750009 Water or Soil Display — 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 — The purpose of this class is to allow youth to investigate a career in agronomy. Youth should interview 1 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.

Purple, \$2; Blue, \$1.50; Red, \$1; White, \$0.50

G750011 You Be The Teacher — Share with others what you learned in Crops and Range. Exhibit must be of an educational nature. See information in introduction to Crops and Range.

G750012 Poster pertaining to one or more of the activities listed in the soybean, corn or sorghum manual.

DIVISION — 751

WEED SCIENCE

*Denotes State Fair Entry

Purple, \$3; Blue, \$2; Red, \$1.50; White, \$1

Any individual in the Conservation, Environment 1, 2 or 3, Range, Reading the Range 1 or Using Nebraska Range 2, Crop Production, or Field Crops projects may exhibit a weed book or weed display. The book cover and at least 15 of the specimens must represent this year's work. For assistance identifying plants, participants can use Nebraska Department of Agriculture's Weeds of Nebraska and the Great Plains (1994) or Weeds of the Great Plains (2003).

Exhibits will be judged based on completeness of plant mount, accuracy of identification, label, neatness, and conformity to exhibit requirements.

Display one plant on the book cover (no label required on cover specimen). Plants must be mounted on sheets that are 11 inches wide by 14 inches high or 12 inches wide by 12 inches high. Proper plant mount should include root as well as stem and leaf tissue. Plants should be glued rather than taped and the mounts should be protected with a clear clover. Each completed mount must have the following information, typed or printed neatly:

1. Scientific name (in italic or underlined), with authority
2. Common name
3. County of collection
4. Collection date
5. Collector's name
6. Personal collection number (indicating the order that plants were collected in your personal collection)
7. Other information depending on class selected, i.e., noxious, life form.

Guidelines for all displays: The purpose of the display is to tell an educational story to those that view the display. The display is a visual representation (using pictures, charts, graphs) no larger than 24-inch by 24-inch 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. Each display must have a one-page essay 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 outside.

*G751001 Weed identification book — A collection of a minimum of 15 plant mounts including at least two weeds classified as noxious — Canada thistle, musk thistle, plumeless thistle, salt cedar, leafy spurge, purple loosestrife, diffuse knapweed, spotted knapweed, Japanese knotweed, bohemian knotweed, giant knotweed, sericea lespedeza or phragmites), and at least five weeds that are a problem primarily in lawns.

*G751002 Life Span — A collection of seven perennial, one biennial, and seven annual weeds.

*G751003 Weeds display — The purpose of this class is to allow original and creative exhibits that contain educational information about weeds, such as interesting information about a weed species, the effects of weed control, herbicide resistant weeds, what makes a weed a weed, or uses for weeds.

G751004 Weed identification board — This exhibit should display a collection of 20 weed species important to a particular county. The display board should be hinged in the middle with the total open width of 60 inches and height of 36 inches. This display should be adequately labeled.