

4-H Plant Science

DEPARTMENT 36 PLANT SCIENCE

Pre-Entry Deadline: July 7 (paper); July 14 (online)

TROPHIES, AWARDS, SPONSORS

Wal-Mart SuperCenter #2784 - Sr. Division Champion & Reserve Exhibitor
Earl May Garden Center - Intermediate Division Champion & Reserve Exhibitor
First State Bank Nebraska - Jr. Division Champion & Reserve Exhibitor
Gage County 4-H Council - Champion Theme Exhibit

PLANT SCIENCE THEME EXHIBITS - Division 1

SWEET THINGS HAPPEN AT THE GAGE COUNTY FAIR 4-H THEME EXHIBITS

Premium \$2.00	Non-Competitive	2015 Theme Ribbon
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Open to 4-H member enrolled in Horticulture project. Include cultivar or variety of exhibit. Entry may NOT be duplicated in other flower or vegetable classes. Poster size 8 1/2"x11".

1. Sweet Corn (5 ears in husks)
2. Sweet Potato (5)
3. Sweet Bell Pepper (5)
4. Flower with "Sweet, Love or Heart" in the Name – exhibit appropriate stems or plant (may enter twice)
5. Vegetable with "Sweet, Love, or Heart" in the Name – exhibit appropriate # on paper plate (may enter twice)
6. Sweet Leaf Stevia (potted plant)
7. Roses are Red (or any color) – 3 stems
8. Flowers or Plant in Heart-shape Vase/Planter
9. Garden Sign "I Love to Grow" (maximum 1'x3')
10. Heart-shape Leaf Design
11. Heart-shape Birdseed Cake
12. Wood Burned Heart/s in Cross Section of Tree Branch
13. Theme Exhibit of Choice

4-H/FFA FARMER'S MARKET

Wednesday, July 22 10:30 am - 12:30 pm 4-H Inc. Bldg.

4-H/FFA vegetable exhibits will be sold with proceeds to 4-H Plant Science.

Thanks to Gage County Master Gardeners for their help

HORTICULTURE & ENTOMOLOGY JUDGING CONTESTS Department 43 – 4-H Contests p. 73

HORTICULTURE PROJECT INFORMATION

Youth must be enrolled in project to exhibit. Exhibit must be the result of current 4-H/FFA project. Exhibit must be made since August 1, 2014.

Exhibitors must **enter exhibits Tuesday, July 21, 2:00 - 7:00 pm**, 4-H Inc. Building. Exhibits must conform to directions in each class.

Late, incorrect or incomplete entries will be lowered one ribbon placing.

Limit one exhibit per class per exhibitor unless otherwise stated.

Label each exhibit with Exhibitor's name on back or bottom. Label each item.

Non-Competitive Exhibits receive a rainbow ribbon and premium money designated.

4-H All-Star Champion and Reserve Champion Exhibitor Awards: Age divisions (4-H age January 1, 2015):

Sr. Division - 14 and older

Int. Division - 11-13

Jr. Division - 10 and under

Nebraska State Fair: Classes marked with an * are eligible for State Fair competition. Exhibitor must be 8 years of age by January 1, 2015 to have an exhibit selected for State Fair. **All static exhibits selected for the State Fair must receive a purple ribbon at county fair judging.** If the presence of the 4-H member is required, they must be 10 years of age by January 1, 2015.

Exhibits Released Sunday, July 26, 8:00 pm. No premium money given if exhibits are removed before deadline. Remaining exhibits should be picked up Monday, July 27.

COUNTY PLANT SCIENCE EXHIBITS - Division 3

WORM FARM

Premium Category 7

Open to 4-H member enrolled in Plant Science project.

15. Worm Farm Made by 4-H Member – Include story of how the worm farm was made, where the worms were obtained, and intended use of worm farm. Include photos.

MAMMOTH CHOICE MIX SWEET PEA

Premium Category 7

Open to 4-H member enrolled in project at Extension Office. Pick up seeds at Extension Office. Indicate cultivar or variety on entry tag

20. Mammoth Choice Mix Sweet Pea - 3 stems with blossoms
21. Potted Plant
22. Photograph - 5"x7" project photo mounted on 8" x 10" poster board; include caption
23. Write a Story, Essay or Poem about project experience/s. Include picture/s. Exhibit in a clear plastic report cover.
24. Exhibit of Choice - Focus on some aspect of the project

CANDY SHOWERS SNAPDRAGON

Premium Category 7

Open to 4-H member enrolled in project at Extension Office. Pick up plants at Countryside Greenhouse. Indicate cultivar or varieties on entry tag.

25. Candy Showers Snapdragon Hanging Basket
26. Cut Flowers – 5 stems
27. Photograph - 5"x7" project photo mounted on 8" x 10" poster board; include caption
28. Write a Story, Essay or Poem about project experience/s. Include picture/s. Exhibit in a clear plastic report cover.
29. Exhibit of Choice - Focus on some aspect of the project

SWEET 'N EARLY HYBRID CANTALOUPE

Premium Category 7

Open to 4-H member enrolled in project at Extension Office. Pick up seed from Extension Office. Indicate cultivar or variety on entry tag.

30. Sweet 'N Early Hybrid Cantaloupe – 2 on a plate
31. Photograph - 5"x7" project photo mounted on 8" x 10" poster board; include caption
32. Write a Story, Essay or Poem about project experience/s. Include picture/s. Exhibit in a clear plastic report cover.
33. Exhibit of Choice - Focus on some aspect of the project

MINIATURE FAIRY GARDEN - BATTERY BOX

Premium Category 7

Open to 4-H member enrolled in project at Extension Office. Workshop for participants by Shirley Shaffer, Master Gardener, May 14, 5:30 pm, Extension Meeting Room. Indicate cultivar or variety names on entry tag. Battery boxes provided by **Accuma Corporation**. Support dollars provided by **Elaine Nelson Memorial**.

36. Battery Box Fairy Garden
37. Photograph - 5"x7" project photo mounted on 8" x 10" poster board; include caption.
38. Write a Story, Essay or Poem about project experience/s. Include picture/s. Exhibit in a clear plastic report cover.
39. Exhibit of Choice - Focus on some aspect of the project

VOTER'S CHOICE

Vote for your favorite miniature fairy garden in the 4-H Building,

NIKKI GREEN BUSH BEAN

Premium Category 7

Open to 4-H member enrolled in project at Extension Office. We celebrate Nicky Stoner, Extension Educator. Pick up seed at Extension Office. Indicate cultivar or variety on entry tag.

40. Nikki Green Bush Bean – Exhibit 12 on a plate
41. Photograph - 5"x7" project photo mounted on 8" x 10" poster board; include caption
42. Write a Story, Essay or Poem about project experience/s. Include picture/s. Exhibit in a clear plastic report cover.
43. Exhibit of Choice - Focus on some aspect of the project

CHOCOLATE SUNFLOWER

Premium Category 7

Open to 4-H member enrolled in project at Extension Office. We celebrate Jane Esau, Gage County 4-H (Kansas native, lover of sunflowers and chocolate). Pick up seed from Extension Office. Indicate cultivar or variety on entry tag.

44. Chocolate Sunflower – 3 stems
45. Potted Plant
46. Photograph - 5"x7" project photo mounted on 8" x 10" poster board; include caption
47. Write a Story, Essay or Poem about project experience/s. Include picture/s. Exhibit in a clear plastic report cover.
48. Exhibit of Choice - Focus on some aspect of the project

POTATO BOX

Premium Category 7

Open to 4-H member enrolled in project at Extension Office; direction sheet at Extension Office. Indicate cultivar or varieties on entry tag.

49. Potatoes – 5 on a plate
50. Photograph - 5"x7" project photo mounted on 8" x 10" poster board; include caption
51. Write a story, essay, or poem about project experiences. Include picture/s. Exhibit in a clear plastic report cover.
52. Exhibit of choice- Focus on some aspect of the project.

WHITE SATIN CARROT – STATEWIDE GARDEN PROJECT

Premium Category 7

Open to 4-H member enrolled in project at Extension Office. Pick up seeds at Extension Office. Indicate cultivar or variety on entry tag.

- * 54. White Satin Carrot – Unique variety features white roots and offers two harvests in one year. Exhibit 5 roots/carrots.
55. Photograph - 5"x7" project photo mounted on 8" x 10" poster board; include caption
56. Story, Essay or Poem - Write about project experiences. Include things you could change next time. Include picture/s. Exhibit in a clear plastic report cover.
57. Exhibit of Choice - Focus on some aspect of the project
- * 58. Educational exhibit based on what was learned from project. Present information on poster 14"x22", either vertical or horizontal, or in a clear plastic report cover. Exhibitor's name, age, address and county must be on the back of poster of report cover.

CROPS OF AMERICA: HARD RED WINTER WHEAT

Premium Category 7

Open to 4-H member enrolled in project at Extension Office. Pick up at Extension Office the planted containers of wheat; varieties are Turkey Red and Freeman. Indicate cultivar or variety on entry tag. Buckets provided by Beatrice Bakery Company. Note: Bread Workshop exhibits listed in Healthy Lifestyles Department 39, You're the Chef project.

59. Exhibit plants in container (may enter once per variety)
60. Photograph - 5"x7" project photo mounted on 8" x 10" poster board; include caption
61. Write a Story, Essay or Poem about project experience/s. Include picture/s. Exhibit in a clear plastic report cover.
62. Exhibit of Choice - Focus on some aspect of the project

VEGETABLE & FLOWER ART

Premium Category 7

Open to 4-H member enrolled in Plant Science project. Exhibit on heavy plate or base.

66. Vegetable Art Creature - Design creature using vegetable/s. Ex: zucchini penguin, green pepper frogs, mushroom people, green pepper pig, cauliflower sheep, corn ear duck, red pepper rabbit, etc.
67. Fruit, Vegetable & Flower Creation - Original design using fruit/s, vegetable/s and/or flower/s
68. Sensational Centerpiece - In a glass vase/container, use small vegetables, cherry tomatoes, small fruits, lemons, limes, kernels of corn/grain, jelly beans, candy, etc. as a filler between the outer vase and inner vase. Fill inner vase with water and cut flower arrangement, grown or purchased.

PRESSED FLOWER ART

Premium Category 7

Open to all 4-H members. Flower/s may be grown by self or others or purchased.

69. Framed
70. Card with Dried Flower/s (minimum 3 examples) in ziploc bag
71. Handmade Paper with Dried Flower/s (minimum 3 examples) in ziploc bag
72. Flower Press made by 4-H member
73. Exhibit of Choice

FLORICULTURE & HOUSEPLANTS - Division 4

World of Flowers

Annual Flowers

Houseplants

Follow guidelines in 4-H "Preparing Cut Flowers for Exhibits" 4-H227 (revised 7/20/12).

Free download: <http://4h.unl.edu/web/4hcurriculum/PreparingCutFlowers>

A perennial is defined as a plant of which the crown overwinters. An annual is a plant that grows from seed each season, whether self-seeded or planted by the gardener. A biennial is a plant that germinates, grows and overwinters as a crown, blooms the following year and dies. Foliage will be considered in judging exhibit. The cultivar or variety name must be included on each exhibit.

Eat, Sleep, 4-H, Repeat.

Cut Flowers

All 3 or 5 stems of cut flowers should be the same cultivar and color; DO NOT mix cultivars and colors. Flowers must be grown by exhibitor. Containers will not be judged, however, they should be clear glass containers that won't tip over and of adequate size to display blooms.

Premium Category 7

- *75. Annuals and Biennials - Five (5) stems of a single variety (cultivar) unless otherwise noted: Aster, Bachelor Buttons, Belles of Ireland, Browallia, Calendula, Celosia - crested or plume (3 stems), Cosmos, Dahlia, Dianthus, Foxglove, Gladiolus (3 stems), Gomphrena, Hollyhock (3 stems), Marigold, Pansy, Petunia, Salvia, Snapdragon, Statice, Sunflower (under 3" diameter - 5 stems, 3 " or more in diameter - 3 stems), Vinca, Zinnia, Other (under 3" diameter - 5 stems; 3" or more in diameter - 3 stems). May enter class maximum 4 times, MUST BE DIFFERENT flowers; may not duplicate in class # 77.
- *76. Cut Flower Perennials - Five (5) stems of a single variety (cultivar) unless otherwise noted: Achillea/Yarrow, Chrysanthemum, Coneflower, Coreopsis, Daisy, Gaillardia, Helianthus, Liatris (3 stems), Lilies (not Daylilies) (3 stems), Platycodon, Rose (3 stems), Rudbeckia/Black-eyed Susan, Sedum, Statice, Other (under 3" diameter - 5 stems; 3" or more in diameter - 3 stems). May enter class maximum 4 times, MUST BE DIFFERENT flowers; may not duplicate in class # 77.

Premium Category 6

- *77. Flower Garden Collection of 5 Different Flowers - Display in a box or other holder not more than 18" in any dimension. Each flower in collection should be exhibited with the number specified above. Do not duplicate entries in classes # 75 & # 76. (Boxes will not be returned from exhibits entered at State Fair).
78. Dried Flower Arrangement - Materials may be grown by 4-H member or purchased. May include topiary.
79. Cut Flower Arrangement - Flowers can be grown by 4-H member or purchased. May include topiary.

Flower Educational Exhibits

Premium Category 6

- *80. Flower Notebook - Exhibit pictures of flowers grown in Nebraska; must be at least 10 different species of annuals and/or biennials and 10 different species of perennials hardy to Nebraska. Bulbs may be included in a separate section. May show more than one cultivar of the same species, but they will only count as one species. Notebook must be the result of current year's work. Pictures from garden catalogs, hand drawn pictures, or photographs may be used. Each species/cultivar must be labeled with correct common name and scientific name, height and spread of the plant, and the growing conditions (ex: needs full sun and dry sandy soil) the species prefers. In addition to this information, bulbs should be labeled as spring or summer flowering. Give proper credit by listing the sources of pictures and information used. The 4-H member's name, age, years in the project/s, address and county must be on the back of the notebook.

Premium Category 7

- *81. Flower Garden Poster - 14"x22"x2" poster (3-dimensional, if needed) illustrating skill or project you have done or learned in a 4-H flowers or houseplant project. Might show a special technique used or equipment incorporated in the garden. Refer to 4-H horticulture project manuals, but use your own creativity. Label on the back of the poster: Member's name, age, address, county and years in the project/s.
- *82. Flower Gardening History Interview - Handwritten or typed account of a gardening history interview whose flower garden has inspired you. Maximum 4 pages of text and 2 pages of pictures (include photo of the person you interviewed) of their flower garden if the individual is still gardening. Protect with clear report cover. Label on back: Member's name, age, address, county and years in the project/s.
- *83. Flower Garden Promotion Poster - 14"x22", horizontal or vertical, promoting flower gardening. May be any medium: watercolor, ink, crayon, etc. No 3-dimensional. Posters using copyrighted materials will not be accepted. Label on the back of the poster: Member's name, age, address, county and years in the project/s.

Container Grown Houseplants

Choice of container and soil quality will be considered in judging. Each houseplant must be identified by listing the names on the entry tag or on a card attached to container. Houseplants should be grown in display container minimum of 6 weeks. Plants grown as houseplants must be used. See NebGuide G1853 or online:

<http://www.ianrpubs.unl.edu/epublic/live/g1853/build/g1853.pdf>

Containers of annual flowers or annual plants will be disqualified. Container grown houseplants shall be in pots no greater than 12" in diameter (inside opening measurement). Dish gardens, fairy or miniature gardens, desert gardens and terrariums may be up to 12" in diameter (inside opening measurement). Each exhibit must include a saucer to catch drainage water. Label container and saucer with: Member's name, age, address, county, and years in the project/s.

Premium Category 6

- *84. Flowering Potted Houseplant/s that are blooming for exhibition
- *85. Foliage Potted Houseplant/s of all the same variety
- *86. Hanging Basket of Flowering or Foliage Houseplants
- *87. Terrarium - Transparent container, partially or completely enclosed; sealed or unsealed
- *88. Dish Garden - Open/shallow container featuring a variety of houseplants, excluding cacti and succulents
- *89. Desert Garden - Open/shallow container featuring cacti and/or succulents grown as houseplants
- *90. Miniature Fairy Garden - A miniature "scene" contained in an open container and featuring miniature or small, slow growing houseplants. Garden needs to have an imaginative theme and miniature accessories (ex: bench, fence made from tiny twigs, small shell for a bath tub, etc.)
91. Hanging Basket or Planter/Pot of Outdoor Plant/s

EVERYONE A GARDENER - Division 5

Follow guidelines in "Selecting and Preparing Vegetables, Herbs and Fruits for Exhibit" 4-H 226 (revised June 2013). Free download:

<http://4h.unl.edu/web/4hcurriculum/PreparingVegetablesHerbsandFruit>

Vegetables

Paper plates will be provided for exhibits. Cultivar or variety name must be on entry tag. Vegetables must be grown by exhibitor.

Number to Exhibit:

Twelve (12) each: Lima Beans, Snap Beans, Wax Beans, Salad Tomatoes (under 2" diameter), Brussels Sprouts.

Five (5) each: Beets, Carrots, Kohlrabi, Okra, Onions (Yellow, Red, White), Parsnips, Potatoes (White, Red, Russet, Other), Radish, Rhubarb, Sweet Corn (in husks), Swiss Chard, Red Tomatoes (2" diameter and larger), Roma or Sauce-type Tomatoes, Turnips, Bell Peppers, Sweet (Non-Bell) Peppers, Jalapeno Peppers, Hot (Non-Jalapeno) Peppers, Pickling Cucumbers, Miniature Pumpkins (Jack Be Little type), Gourds (Mixed Types, Single Variety).

Two (2) each: Broccoli, Cabbage (green, red), Cauliflower, Slicing Cucumbers, Eggplant, Muskmelon/Cantaloupe, Summer Squash (green, white, yellow), Winter Squash (Acorn, Butternut, Buttercup, Other), Watermelon, Pumpkin, Rutabaga.

Any Other Vegetable than above classes - 2, 5, or 12

Premium Category 7

- *95. Individual Vegetable Display - May enter class maximum 4 times, MUST BE DIFFERENT vegetable (see numbers to exhibit above); may not duplicate in class # 96 & # 97.

Premium Category 6

- *96. Vegetable Garden Collection - Exhibit five kinds of vegetables displayed in box not more than 24" in any dimension. Showmanship will be considered in judging, but plastic grass, cotton, figurines, etc. should not be used. Exhibit number of vegetables shown above. Must be vegetables not exhibited in class # 95 & #97.
- *97. Cultivar Vegetable Collection - Exhibit a collection of 5 cultivars from a single exhibit; for example, 5 cultivars of all types of peppers or squash or onions or tomatoes, etc.

Display in a box maximum 24" in dimension. Showmanship will be considered in judging, but plastic grass, cotton, figurines, etc. should not be used. Exhibit number of vegetables shown above.

Herbs

Premium Category 7

- *98. Individual Herb - Those grown mainly for seed, such as dill and caraway, should be exhibited on a paper plate. Those grown for their leaves, such as basil, parsley, etc., should be exhibited in a glass container of water. Exhibit 5 each: Basil, Dill (dry), Garlic (bulbs), Mint, Oregano, Parsley, Sage, Thyme, Any other Herb. Herbs must be grown by 4-H member. May enter class 4 times, MUST BE DIFFERENT herb. Must be herbs not exhibited in class # 99. No potted herb plants. Cultivar or variety name must be on entry tag.

Premium Category 6

- *99. Herb Garden Display - Display 5 different herbs, 5 each, in a box or other holder not more than 18" any dimension. Must be herbs not exhibited in class # 98. Cultivar or variety name must be on entry tag.

Fruits

Premium Category 7

- *100. Individual Fruit - Exhibit on paper plate. Fruit will be judged for the stage of maturity normal for that season and growing location. Emphasis will be placed on how well fruit approaches market quality. Amount to exhibit: 1 pint: Strawberries (everbearers), Wild Plums, Other small Fruit or Berries; 2 bunches: Grapes; Five (5) each: Apples, Pears, Other Fruit or Nuts. Fruit must be grown by 4-H member. May enter class 3 times, MUST BE DIFFERENT fruits. Cultivar or variety name must be on entry tag.

Educational Exhibits

Premium Category 7

- *101. Garden Promotion Poster - Promote vegetable or herb gardening, 14"x22", either vertical or horizontal. Poster may be in any medium; no 3-dimensional. No copyrighted materials. Label back of poster with Member's name, age, address, county and years in the project/s.
- *102. Educational Vegetable or Herb Garden Poster - 14"x22"x2" poster (3-dimensional, if needed) either vertical or horizontal, illustrating a skill or project the 4-H member has done or learned about in a 4-H vegetable gardening project. Might show a special technique used or equipment incorporated in the garden (ex: drip irrigation system, composting, or special techniques learned). Refer to 4-H horticulture project manuals, but use your own creativity. Label poster with: member's name, age, address, county, and years in the project/s.
- *103. Vegetable and/or Herb Gardening History Interview - Handwritten or typed account of a gardening history interview of someone whose vegetable or herb garden has inspired you. Maximum 4 pages of text and 2 pages of pictures (include photo of the person you interviewed) of their garden if the individual is still gardening. Protect with clear report cover. On the back, label with name, age, address, county and years in the project/s.

Premium Category 6

- *104. Vegetable Seed Display - Display must include seeds representing the following families: Cucurbit, Brassica (cabbage), Solanaceous (nightshade), and Legume (pea) families plus representatives from five other families. Group seeds by family and type. Glue seeds or otherwise fasten clear containers of seeds to a board or poster mat board no larger than 22"x24". Label each group and each individual vegetable type with the common and scientific names. Use only one variety or cultivar of each vegetable, except for beans where several examples of beans may be shown. Attach a card to the back of display explaining why and how it is important to know which vegetables are related; site references on where the scientific name information was found. On the back, label with name, age, address, county and years in the project/s.
- *105. World of Vegetables Notebook - Choose a favorite foreign cuisine and learn what vegetables and/or herbs are common to it (ex: Mexican, African, Chinese, Italian, etc.) Include a handwritten report telling about a minimum of 5 vegetables and/or

herbs from each country chosen. Include the scientific and common names, pictures from your garden or seed catalogs; tell how they are grown, and how the foods are used. Also list a source for buying the seed or plants. Favorite recipes using some or all of the vegetables described may be included. Give proper credit by listing the source of pictures and information used. Protect in a clear report cover or small 3-ring notebook. Label with name, age, address, county, and years in the project on back cover of report or notebook.

CROP PRODUCTION - Division 6

Premium Category 7

106. Poster - 14"x22"
107. You Be the Teacher - Educational notebook, display, collection of materials that relate to project. Include 8 1/2"x11" page describing exhibit and summary of learning.

Premium Category 4

4-H member in Field Crops projects may exhibit grain or plants or prepare an educational display representing their project.

The purpose of these exhibits is to demonstrate the benefits from the study and application of crop, range and soil sciences to solving problems in management, conservation, sustainability and environmental protection.

Grain or Plant Exhibits: A two page (maximum) essay must accompany grain and plant exhibits. The essay must include the exhibitors 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. 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 decisions on 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. Essay counts as 50% of the score. Essay must be the original work of the exhibitor. Attach essay to the entry in a clear plastic cover 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 (i.e., corn or soybeans) may be from the previous year's project.

Plant exhibits: With the exception of ears of corn, must be the result of the current year's project. Grain Sorghum - 4 stalks (cut at ground level and bound together). Small grains (oats, barley, wheat, triticale) - sheaf of heads 2" in diameter at top, tie with stems about 24" long.

* 108. Corn - 10 ears or 3 stalks (cut at ground level with no roots or soil and bound together); includes yellow, white, pop, waxy, or any other type

* 109. Soybeans - 6 stalks (cut at ground level and bound together)

* 110. Oats

* 111. Wheat

* 112. Other Crops (grain sorghum, alfalfa, millets, barley, rye, triticale, amaranth, dry beans, sugar beet, mung bean, canola, forage sorghum, safflower, etc.). Sheaf of stems 3" in diameter at top, tied with stems cut at ground level or half size small square bale.

Displays: Purpose of the display is to tell an educational story. Display is a visual representation (pictures, charts, graphs) no larger than 28" wide x 28" tall on plywood or poster board. The display should be neatly titled. Label with exhibitor's name, address and county on back side. Explain pictures and graphs clearly and concisely. 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.

* 113. Crop Production Display - Purpose of this class is to allow original, creative exhibits that contain educational information about crop production aspects, such as crop scouting, alternative crops, etc.

* 114. Crop Technology Display - Information about aspects of technology used in crop production, such as genetic engineering, crop breeding, GPS, yield mapping, computers, etc.

- * 115. Crop End Use Display - Information about the uses for a crop, such as food, feed, fuel or other products.
- * 116. Water or Soil 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.
- * 117. Career Interview Display - Investigate a career in agronomy. Interview 1 person who 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.

WEED SCIENCE - Division 7

Premium Category 5

4-H member enrolled in the Conservation, Environment 1,2, or 3, Reading the Range 1 or Using Nebraska Range 2, or Crop Production, Field Crops projects may exhibit a weed book or weed display. The book cover and at least 15 of specimens must be this year's work. For assistance identifying plants, refer to Nebraska Department of Agriculture's Weeds of Nebraska and the Great Plains (1994) or Weeds of the Great Plains (2003). Judging based on completeness of plant mount, accuracy of identification, label, neatness, and conformity to exhibit requirements.

Books - Display one plant on the book cover (no label required on cover specimen). Plants must be mounted on sheets that are no larger than 14" wide x 14" 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 cover. Each completed mount must have the following information in the lower right corner of the mounting sheet: 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 exhibited (ex: noxious, life form). This information should be typed or printed neatly.

- * 118. Weed Identification Book - A collection of a minimum of 15 plant mounts, including at least 2 of the following prohibited noxious weeds (Canada thistle, musk thistle, plumeless thistle, salt cedar, leafy spurge, purple loosestrife, diffuse knapweed, spotted knapweed, Japanese knapweed, bohemian knotweed, giant knotweed, sericea lespedeza or phragmites), and at least 5 weeds that are a problem primarily in lawns.
- *119. Life Span Book - A collection of 7 perennial, 1 biennial, and 7 annual weeds.
Displays - Purpose of display is to tell an educational story. The display is a visual Presentation (pictures, charts, graphs) no larger than 28"x28" plywood or poster board. The display should be neatly titled. Label with exhibitor's name, address and county on back side. Explain pictures and graphs clearly and concisely. Must have a one page essay explaining why 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.
- *120. Weed Display Book - Purpose of this class is to allow original, 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.
Displays: Purpose of the display is to tell an educational story. Display is a visual representation (pictures, charts, graphs) no larger than 28" wide x 28" tall on plywood or poster board. The display should be neatly titled. Label with exhibitor's name, address and county on back side. Explain pictures and graphs clearly and concisely. 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.
- *121. Weed Display - Purpose of this class is to allow original, 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.