



## 2010 4-H HORTICULTURE JUDGING GUIDE

The 2010 Horticulture Judging contest will have junior and senior levels. The top 10 senior judges from the county contests will be eligible to participate in the state contest at the Delaware State Fair. **Top seniors from the state contest, age 15 (as of January 1), will be eligible for participation on the State Horticulture judging team.**

**Changes for 2010 – The pest identification category will be insects.**

**Pick lists will be used in junior contests. No pick lists will be used in senior contests.**

### CONTEST CATEGORIES

#### **A. Ornamental Quality Judging**

1. Bedding plants
2. Potted plants
3. Hanging baskets
4. Container woody plants or perennials

#### **B. Vegetable and Fruit Quality Judging**

**C. Identification** - note that in marked identification sections, only a portion of the section will be used each year. See the appropriate section.

1. Vegetables and fruits
2. Flowers and houseplants (bedding plants, garden cut flowers, perennial flowers, houseplants)
3. Landscape plants (ground covers, perennial grasses, shrubs, and trees including native plants)
4. Pests (insects, diseases, weeds)
5. Equipment and supplies

### NECESSARY EQUIPMENT

A clipboard or notebook and two sharpened pencils are all the equipment each 4-H'er needs.

### TRAINING

Training 4-H'ers to participate in Horticulture Judging should be fun for all, as well as educational. Suggested training activities include:

1. Take field trips to supermarkets, roadside stands, garden centers, public gardens, or gardening events to study vegetable, flower, and landscape plant quality judging and identification. You can also identify horticultural tools and supplies.
2. Hold training sessions in neighborhood gardens. Use these sessions to teach identification of vegetables, flowers, landscape plants, and pests in a hands-on setting. You can also harvest vegetables and flowers and use them to teach and practice judging. Consider using a well-landscaped area to teach about landscaping principles. Also take this as an opportunity to practice horticultural skills.

3. Collect various flowers, vegetables, landscape plant, and pest samples or have members bring in specimens from home for a training session.
4. Collect garden catalogs and use the photographs to teach identification. Make use of reference books, extension materials, and trade publications as training materials.
5. Invite Master Gardeners, garden club members, or horticulture professionals to speak to 4-H'ers.
6. Involve older 4-H'ers and teens in assisting with training. They can bring items to meetings, assist in teaching, arrange tours and make phone calls.

## **CONTEST SPECIFICS**

The following are guidelines for the state horticultural judging contest. 4-H agents and leaders running county contests have the option to set up an abbreviated contest with fewer categories to choose county representatives. However, training for the state contest should cover the full scope.

### **A. ORNAMENTAL JUDGING**

Ornamental judging will include 5 categories: bedding plant packs, potted annual plants, hanging baskets, container perennials, and container woody ornamentals. Juniors will judge bedding plant packs only whereas seniors will judge in more than one category. Senior level contestants will also be required to give oral reasons for one of the categories.

1. **Bedding plant packs** - junior and senior level contestants will judge four bedding plant packs of the same variety.

#### ***Judging Criteria:***

- a. Each pack should contain one plant in each cell. Sometimes an otherwise quality pack contains empty cells where the original seedling died. This problem can go unnoticed because the surrounding plants fill in over the vacant cell.
- b. Plants should be centered in each cell to allow adequate space for even, full growth.
- c. All plants in a pack should be approximately the same size.
- d. Plants should not be overgrown. "Leggy" plants may not perform well when planted out.
- e. Plants in cells should not be root bound. Excessive amounts of roots should not be growing out of the bottom of the container as this is a good indicator of overgrowth.
- f. Plants should be free of disease symptoms, insect damage, visible pesticide residue, and soil on the foliage.
- g. Plants should be all the same variety in one pack. If the variety is supposed to be a single color, all plants in that pack should be the same color.
- h. All cells in a pack should be uniformly filled with potting soil, no more than 1/4 inch below the rim.

- i. All plants in a pack should have sturdy stems, balanced arrangement of the leaves, healthy foliage color and foliage the size and shape characteristic of the plant.
  - j. If the plants have flowers, they should match the label description and be characteristic of the plant. Note that it is better to buy bedding plants in bud rather than bloom. Non-blooming plants settle in and grow better than blooming plants.
2. **Potted plants** - Senior contestants will judge 4 potted plants of the same species and variety in bloom.

***Judging Criteria:***

- a. Plants should be free of disease symptoms, insect damage, physical damage, visible pesticide residue, and soil on the foliage.
  - b. Plants should have sturdy stems, healthy foliage color and foliage the size and shape characteristic of the plant.
  - c. Plants should be full and of balanced shape (not lopsided).
  - d. Blooms should be full and well shaped. Bloom color should match labels. There should be no spent blooms on the plant.
  - e. Plants should not be overgrown or “leggy”.
  - f. Plants in should not be root bound. Excessive amounts of roots should not be growing out of the bottom of the container as this is a good indicator of overgrowth.
  - g. All pots should be uniformly filled with potting soil, no more than ½ inch below the rim. Pots should be unbroken and clean.
3. **Hanging Baskets** – Senior contestants will judge 4 flowering hanging baskets of the same variety.

***Judging Criteria:***

- a. Plants should be free of disease symptoms, insect damage, physical damage, visible pesticide residue, and soil on the foliage.
- b. Plants should be sturdy, have healthy foliage color and foliage the size and shape characteristic of the plant.
- c. Baskets should be full and of balanced shape (not lopsided).
- d. Blooms should be full and well shaped. Bloom color should match labels. There should be no spent blooms on the plant.
- e. Plants should not be overgrown, root bound, or in decline.
- f. All baskets should be uniformly filled with potting soil, no more than ¾ inch below the rim. Baskets should be clean and free from cracks.

**4. Container Woody Ornamentals or Perennials** - Senior contestants will judge 4 container woody ornamentals or perennials of the same species and variety.

***Judging Criteria:***

- a. Plants should be free of disease symptoms, insect damage, physical damage, visible pesticide residue, and other defects.
- b. Plants should have sturdy stems, healthy foliage color and foliage the size and shape characteristic of the plant.
- c. Plants should be full and of balanced shape (not lopsided).
- d. If in bloom, blooms should be full and well shaped. Bloom color should match labels. There should be no spent blooms on the plant.
- e. Plants should not be overgrown, “leggy”, or in decline. Containers should be adequately filled with potting soil. Plant size should match container size.
- f. Excessive amounts of roots should not be growing out of the bottom of the container or spiraling in the bottom of the container as this is a good indicator of overgrowth.

**B. VEGETABLE JUDGING**

NOTE THAT SENIORS WILL ONLY NEED TO JUDGE  
TWO CLASSES OF VEGETABLES

Junior contestants will judge 1-2 vegetable classes while senior contestant will judge 2 classes. Seniors will be required to give oral reasons for one of the classes.

Vegetable judging exhibits must be true to the variety type, have proper form, have good market quality (correct size, proper maturity or ripeness, ready for eating,) be uniform in size, color and shape, be in good condition (fresh and free from defects, damage, disease symptoms, insect injury, or visible pesticide residues), and be presented well (clean, trimmed, neat, well placed, proper number of items).

Judging tips: All exhibits should be examined close up and from a distance. Save judging time by first placing the obviously best and poorest exhibits, then deciding the intermediate positions.

Vegetables used in judging will be selected from the following list (\* items with an asterisk would be those used for the junior level):

Potatoes*	Beets
Tomatoes (green or ripe)*	Cabbage
Onions	Sweet Corn*
Peppers*	Snap Beans (green or wax)*
Carrots*	Cantaloupe
Summer squash	Watermelon
Lima beans	Pumpkin/winter squash
Cucumbers*	

Guide for scoring in vegetable classes:

<u>Market Quality</u>	<u>40 total</u>
Overall appearance	10
Maturity/ripeness	10
Freshness/firmness	10
Form	10
<u>Condition</u>	<u>25 total</u>
Freedom from deformity/defects	10
Freedom from injury	10
Absence of disease	5
<u>Presentation</u>	<u>30 total</u>
Uniformity of size, shape, color	10
Within size limits	5
Display	10
Proper number of items	5
<u>True to Type</u>	<u>5 total</u>

***Judging Criteria:***

**Market Quality** -The exhibit should have good overall product appearance (be appealing to the consumer), be of proper maturity (not too young or old), be at the proper stage of ripeness (ready to eat), be fresh (showing no shrink, wilt, or desiccation), be of proper firmness, and have good form (proper size, shape, color). Points are deducted if exhibits don't meet quality criteria.

**Condition** - Exhibit should be free from defects or damage such as bruising, cracks, tears, splits, deformities (catfacing, hollow heart, curling, stubbing, off colors, etc.), insect feeding, and diseases (spots, rots, etc) which affect the usability and appearance of the vegetable. Points are deducted because of defects or damage present.

**Presentation** - All vegetables in the exhibit should be uniform in size, shape and color for highest scoring. Single item exhibits (such as cabbage, melons) should be have a uniform shape (not lopsided) and color throughout. Exhibit items should fall within size requirements and the proper number should be exhibited as follows:

<u>Vegetable</u>	<u>No. To Exhibit</u>	<u>Size</u>
Beets (without tops)	5	1-1/2" - 3" dia.
Cabbage	1	2 - 5 lbs.
Cantaloupe	1	variable
Carrots (without tops)*	5	3/4 - 1-1/2" dia.
Lima beans	12	variable
Onions (unpeeled without tops)*	5	over 2" dia.
Peppers*	3	over 3" long
Potatoes	5	2 - 4" dia.
Pumpkin or winter squash	1	variable
Slicing cucumbers*	3	under 2-3/8" dia.; 6-9" in length
Snap beans (green or wax)*	12	variable

<b>Vegetable</b>	<b>No. To Exhibit</b>	<b>Size</b>
Sweet Corn (in husks)	3	variable
Tomatoes (green)*	5	2 - 3" dia.
Tomatoes (ripe)*	5	2 - 3" dia.
Summer squash		
Yellow	3	6 - 8" long
Zucchini	3	8 - 12" long
Scallop	3	3 - 6" dia.
Watermelon	1	variable

Also included in presentation are display practices that enhance the appearance of the exhibit. This includes washing or cleaning all vegetables; trimming foliage tops of carrots, beets and onions to about 1 inch; removing only the outer scales of onions; leaving stems on cucumbers, peppers, pumpkins, and green tomatoes, removing stems on ripe tomatoes; trimming the stump off cabbages, but leaving several wrapper leaves. In addition, items should be centered on plates and neatly arranged. Points should be deducted if exhibits don't meet presentation criteria.

**True to Type** - Each variety of vegetable has unique characteristics, whether it be color, size or shape; those characteristics should be evident in the exhibit. For example, a variety of scallop type summer squash is distinctly different from a variety of zucchini squash.

**C. IDENTIFICATION: NOTE CATEGORIES THAT WILL BE USED IN 2010**

4-H'ers will be asked to identify common vegetables, fruits, ornamentals and pests from the lists that follow. Both photographs and actual samples may be used. The junior contest will be taken from those items with an asterisk (\*).

**Category 1 - Vegetables and fruits**

- |                     |                |                     |
|---------------------|----------------|---------------------|
| 1. Apple*           | 15. Garlic     | 29. Rhubarb         |
| 2. Asparagus        | 16. Grape*     | 30. Snap Beans*     |
| 3. Beets            | 17. Kale       | 31. Spinach         |
| 4. Blueberry        | 18. Lettuce    | 32. Strawberry*     |
| 5. Broccoli*        | 19. Lima Beans | 33. Summer Squash   |
| 6. Brussels Sprouts | 20. Nectarine  | 34. Sweet Corn*     |
| 7. Cabbage*         | 21. Okra*      | 35. Sweet Peppers*  |
| 8. Cantaloupe*      | 22. Onions*    | 36. Sweet Potatoes  |
| 9. Carrots*         | 23. Peach*     | 37. Turnips         |
| 10. Cauliflower     | 24. Pear*      | 38. Watermelon*     |
| 11. Celery          | 25. Peas*      | 39. White Potatoes* |
| 12. Cherry*         | 26. Plum       | 40. Winter Squash   |
| 13. Cucumbers*      | 27. Radish     |                     |
| 14. Eggplant*       | 28. Raspberry  |                     |

### Category 2 – Annual and Perennial Flowers and Indoor Plants

- |                               |                |                   |
|-------------------------------|----------------|-------------------|
| 1. Ageratum                   | 10. Heuchera   | 19. Salvia*       |
| 2. Bachelor Button            | 11. Impatiens* | 20. Sansserviera  |
| 3. Begonia*                   | 12. Marigold*  | 21. Snapdragon*   |
| 4. Black Eyed Susan           | 13. Nasturtium | 22. Sweet Alyssum |
| 5. Celosia                    | 14. Oxalis     | 23. Verbena       |
| 6. Coleus                     | 15. Pansy*     | 24. Vinca         |
| 7. Cosmos                     | 16. Petunia*   | 25. Zinnia        |
| 8. Dianthus                   | 17. Phlox      |                   |
| 9. Geranium<br>(Pelargonium)* | 18. Portulaca  |                   |

### Category 3 - Landscape Plants – Trees

- |                         |                       |                    |
|-------------------------|-----------------------|--------------------|
| 1. American Planetree   | 11. Eastern Red Cedar | 21. Maple (Red)*   |
| 2. American sycamore    | 12. Elm               | 22. Oak (Pin)      |
| 3. Arborvitae (Eastern) | 13. Fir (Concolor)*   | 23. Pear (Callery) |
| 4. Ash                  | 14. Hawthorn          | 24. Pine (White)*  |
| 5. Bald Cypress         | 15. Hemlock           | 25. Poplar         |
| 6. Beech                | 16. Holly (American)* | 26. Redbud*        |
| 7. Birch (River)        | 17. Hornbeam          | 27. Spruce (Blue)* |
| 8. Cherry*              | 18. Leyland Cypress*  | 28. Sweetgum*      |
| 9. Crabapple            | 19. Linden            | 29. Willow*        |
| 10. Dogwood*            | 20. Magnolia*         | 30. Witch Hazel    |

### Category 4 - Pests: Insects

- |                                    |                                  |                          |
|------------------------------------|----------------------------------|--------------------------|
| 1. Aphids*                         | scale                            | 14. Spiders*             |
| 2. Bagworms*                       | 8. Eastern tent<br>caterpillars* | 15. Spindle/nipple galls |
| 3. Boxelder bug*                   | 9. Euonymus scale                | 16. Wasps                |
| 4. Brown marmorated<br>stink bugs* | 10. Fall webworms                | 17. Ladybugs*            |
| 5. Cicada killers                  | 11. Japanese beetles*            | 18. Ants                 |
| 6. Cicadas*                        | 12. Lace bugs                    | 19. Slugs                |
| 7. Cottony camellia                | 13. Spider mites                 | 20. Tomato Hornworm*     |

### Category 5 - Equipment and supplies

- |  |  |
|--|--|
| 1. Containers (must be able to describe<br>type and size such a 1 gallon pot, 6-inch<br>pot, etc.)                   | 10. Loppers*   |
| 2. Dibble or dibber*   | 11. Peat Moss  |
| 3. Fertilizer (must be able to read analysis<br>of the fertilizer and any special qualities<br>such as slow release) | 12. Potting mix*   |
| 4. Fertilizer spreader   | 13. Pruning saw  |
| 5. Hand fork   | 14. Rakes (garden type, leaf type)*  |
| 6. Hand pruners*   | 15. Soil sampling probe*   |
| 7. Hand weeder   | 16. Sprayer  |
| 8. Hoe (weeding and furrowing)*  | 17. Sprinklers (describe the type)   |
| 9. Hoses and hose connections*   | 18. Trowel*  |
|  | 19. Vermiculite  |
|  | 20. Watering wand and water breaker,<br>watering can and rose (spout) types* |