

HORTICULTURE (Invitational)

Note: The state contest is an invitational, which means no elimination contests are required for participation. However, for the educational value of this program, we strongly recommend County and area contests.

I. Purpose

- A. The production, marketing and buying of flower, fruit, vegetable and ornamental crops require a detailed knowledge of many subject matter disciplines.
- B. The judging, information and identification contest is in effect a training program concerned with:
 - 1. Teaching individuals to recognize and identify some of our most important horticultural crops.
 - 2. To learn quality characteristics.
 - 3. To be able to answer questions or solve problems on horticultural subjects.

II. Suggestions for a Local Contest and Area Contest

- A. Assign contestant a number to be used throughout the contest.
- B. Junior Division
 - 1. County, area and state contests.
 - 2. Contestants would compete as a 4-H or FFA team.
 - 3. Team will be composed of three or four members.
 - 4. County and area levels would include photos only. State level will be live specimens.
 - 5. Should include quiz of 40 questions (objective or true/false).
 - 6. Scoring
 - a. 120 points for identification
 - b. 80 points for quiz
 - c. 200 total points
 - 7. References
 - a. 4-H manuals
 - b. Flower and garden publications
 - 8. Suggestion: Give the quiz first. (Allow 30 minutes.) Lay out identification specimens on tables.
 - 9. Juniors identify 60 specimens from the study list of 80.

Clover and Junior Study List

| <u>Vegetables</u> | <u>Fruits and Nuts</u> | <u>Flowers</u> | <u>Ornamentals</u> |
|-------------------|------------------------|----------------|--------------------|
| Asparagus | Apple | African Violet | Arborvitae |
| Bean | Apricot | Begonia | Birch |
| Beet | Avocado | Cactus | English Ivy |
| Cabbage | Banana | Chrysanthemum | Euonymus |
| Carrot | Blackberry | Cockscomb | Flowering Dogwood |
| Cauliflower | Blueberry | Coleus | Forsythia |
| Celery | Cherry | Daffodil | Holly |
| Corn | English Walnut | Daylily | Honey Locust |
| Cucumber | Grape | Easter Lily | Juniper |
| Lettuce | Grapefruit | Geranium | Lilac |
| Muskmelon | Lemon | Gladiolus | Maple |
| Onion | Orange | Marigold | Oak |
| Peas | Peach | Pansy | Periwinkle |
| Pepper | Peanut | Peony | Pine |
| Potato | Pear | Petunia | Redbud |
| Radish | Pecan | Philodendron | Spruce |
| Spinach | Persimmon | Poinsettia | Sweetgum |
| Squash | Plum | Snapdragon | Tulip Tree |
| Tomato | Raspberry | Tulip | Willow |
| Watermelon | Strawberry | Zinnia | Yew |

C. Senior Division (County, area and state contests)

1. Contestants compete as 4-H or FFA teams.
2. Teams will consist of three or four members.
3. Rules and Regulations (rules listed in the general section will prevail unless listed below).
 - a. The contest has two divisions:
 1. 4-H: This division is for official 4-H club teams, which may consist of three or four members. The three high individual scores are the team score.
 2. FFA: This division is for official FFA teams, which may consist of three or four members. The high three individual scores are the team score.
 - b. Ties for team and individual awards will be broken by one of the following methods in order.
 - 1a. The team having the highest score in the identification section will receive the higher placing. Scores of alternate members of the three-member teams will not be considered.
 - 1b. The individual having the highest score in the identification section will receive the high placing.
 - 2a. If teams tie in total scores and also in scores in the identification section, the tie will be broken by an additional short quiz and/or specimens.
 - 2b. If individuals tie in total scores and also in scores in the identification, the tie will be broken by an additional short quiz and/or specimens.
 - c. Members of Senior Division teams must be eligible for the national contest.

- d. The state contest will be set up by the Purdue Horticulture Department or a committee appointed by the State IJHA committee and coordinated by the State 4-H Office.
 - e. Each contestant will get an entry number by which they will be designated throughout the contest.
 - f. If there are any special cases that these rules do not cover, they will be acted upon by the general committee in charge of the contest.
4. Seniors identify 100 specimens from the study list of 180.
5. Scoring:
- a. Judge eight classes of four plates each of two vegetables, two fruits, two flowers and two ornamentals. The classes are judged on the basis of quality and condition.
 - b. Points:
 - 1. Judging--total 80 points. (400 points if computer calculation used)
 - 2. Identification--total 200 points. (1000 points if computer used)
 - a. Identify 100 specimens from the study list of 180.
 - b. Pictures or live specimens in county and area levels. Live specimens at state level.
 - 3. Quiz--total 160 points (800 points if computer used)
 - a. Objective type questions dealing with horticultural topics are selected from the reference list in section 8.
 - 4. Total Points--440 (2,200 if computer used)
6. Recognition and Awards (State Contest)
- a. The top overall winning 4-H team and FFA team will receive partial payment of trip expenses (provided by the Indiana State Fair Board) to attend the NJHA National Convention and Judging Contest.
 - 1. Appropriate recognition will be awarded by the Indiana Vegetable Growers Association as follows: (See Section Q--Awards--under Contest Rules and Criteria of this publication for the details.)
 - b. Coaches of state winning teams in 4-H and FFA should contact William Wilder, Columbia City High School, phone: (219) 244-6136, Ext. 205, for references for the quiz given at the national level.
8. Suggested References
- a. Purdue Consumer Horticulture's Plant Identification for 4-H/FFA Horticulture Contests (web only): <http://www.hort.purdue.edu/ext/senior/senior.htm>

Horticulture Judging reference list (updated 02/02)

Note: Almost all of these publications are available online at Purdue's Consumer Horticulture page, along with many others that you and your students may find helpful. <http://www.hort.purdue.edu/ext/conhort.html>
 For others please consult Purdue Extension publications website: <http://www.agriculture.purdue.edu/agcomm/campus/other/mdc/catalog.html> or your County Extension office.

Topics covered in quizzes:

| | |
|---|---|
| Home Gardener's Guide | HO-32-W (reviewed 4/01) |
| Starting Seed Indoors | HO-14-W (reviewed 4/01) |
| New Plants From Cuttings | HO-37 (rerun 6/99) |
| Growing Perennial Flowers | HO-61 (rerun 7/99) |
| Growing Annual Flowers | HO-99 (rerun 6/99) |
| African Violet Care | HO-10-W (revised 3/01) |
| Terrariums | HO-13-W (reviewed 4/01) |
| Indoor Plant Care | HO-39-W (reviewed 5/01) |
| Fruits and Nuts for Edible Landscaping | HO-190-W (revised 5/01) |
| Pollination of Fruits and Nuts | HO-174 (rev 01/82) |
| Lawn Fertilization for Established Turf | AY-4 (rerun 1/93) |
| Residential landscape Design Series | HO-204, 205, 206 (out of print – expected to be re-run) |
| Floral Design | NCR-139 (out of print) |

(See <http://flowers.hort.purdue.edu/web/consumer.htm> for flower arranging publications)

***New to the list, will be included in Quiz questions:**

| | |
|--|-------------------------|
| New Plants From Layering | HO-1-W (reviewed 3/01) |
| Growing Herbs | HO-28-W (revised 1/02) |
| Flowering Bulbs | HO-86-W (revised 6/01) |
| Add Hours to Your Flowers | HO-158-W (revised 5/01) |
| A Guide to Flowering & Why Plants Fail to Bloom | HO-173 (revised 7/99) |
| Weed Control for the Garden & Landscape | HO-217 (revised 7/94) |

Out of print, will no longer be included in quiz questions:

| | |
|-------------------|--------|
| Corsages | HO-84 |
| Apple Cultivars | HO-165 |
| Dwarf Apple Trees | HO-107 |

SENIOR STUDY LIST

FLOWERS & INDOOR PLANTS

African Violet
 Ageratum

 Amaryllis
 Bachelor Button
 Begonia
 Boston Fern
 Cactus
 Anna
 Chrysanthemum
 Cockscomb
 Coleus
 Columbine
 Cosmos
 Crocus
 Cyclamen
 Daffodil
 Dahlia
 Dally
 Dracena
 Dumbcane (Dieffenbachia)
 Lily (Easter, Asiatic Driantal)
 Geranium
 Gladiolus
 Gloxinia
 Hosta
 Hyacinth
 Impatiens
 Iris
 Jade Plant (Crassula)
 Marigold
 Nasturtium
 Orchid
 Pansy

 Peony
 Peperomia
 Petunia
 Philodendron
 Poinsettia
 Portulaca
 Rose
 Rubber Plant (Ficus)
 Salvia
 Schefflera
 Snakeplant (Sansevieria)
 Snapdragon
 Sweet Alyssum
 Tulip
 Zinnia

FRUITS & NUTS

Almond
 Apple

 Apricot
 Avocado
 Banana
 Blackberry
 Black Walnut
 Blueberry
 Brazil Nut
 Butternut
 Cashew
 Cherry
 Chestnut
 Coconut
 Cranberry
 Currant
 Date
 Elderberry
 Fig
 Filbert
 Gooseberry
 Grape
 Grapefruit
 Hickory Nut
 Kumquat
 Lemon
 Lime
 Macadamia Nut
 Mango
 Mulberry
 Nectarine
 Orange
 Papaya

 Peach
 Peanut
 Pear
 Pecan
 Persimmon
 Pineapple
 Plum
 Pomegranate
 Raspberry
 Strawberry
 Tangerine
 Walnut (English)

ORNAMENTALS

Arborvitae
 American Planetree
 (Sycamore)
 Ash
 Azalea or Rhododendron
 Barberry
 Basswood
 Beech
 Bermuda Grass
 Birch
 Bluegrass
 Boxwood
 Camellia
 Cotoneaster
 Elm
 English Ivy
 Euonymus
 Fescue (tall or fine leafed)
 Fir
 Flowering Dogwood
 Forsythia
 Ginkgo
 Hawthorn
 Hemlock
 Holly
 Honey Locust
 Hydrangea
 Juniper
 Lilac
 Magnolia
 Mahonia
 Maple
 Oak
 Pachysandra (Japanese
 Spurge)
 Periwinkle (Vinca Minor)
 Pine
 Pittosporum
 Privet
 Redbud
 Spirea
 Spruce
 Sweetgum
 Tulip Tree (Tulip Poplar)
 Viburnum
 Willow
 Yew
 Zoysia Grass

VEGETABLES

Artichoke
 Asparagus

 Basil
 Bean
 Beet
 Broccoli
 Brussels Sprouts
 Cabbage
 Carrot
 Cauliflower
 Celery
 Chinese Cabbage
 Chives
 Collards
 Corn
 Cucumber
 Dill
 Eggplant
 Endive (all types)
 Garlic
 Kale
 Kohlrabi
 Leek
 Lettuce
 Muskmelon (Cantaloupe)
 Mustard
 Okra
 Onion
 Parsley
 Parsnip
 Peas
 Pepper
 Potato

 Pumpkin
 Radish
 Rhubarb
 Rutabaga
 Sage
 Spinach
 Squash
 Sweet Potato
 Swiss Chard
 Tomato
 Turnip
 Watermelon

To eliminate any possible confusion, the botanical name of each ornamental is provided.

| | |
|-------------------------------|------------------------------|
| Arborvitae | Thuja sp. or Platycladus sp. |
| Planetree (Sycamore) | Platanus sp. |
| Ash | Fraxinus sp. |
| Azalea or Rhododendron | Rhododendron sp. |
| Barberry | Berberis sp. |
| Basswood (Linden) | Tilia sp. |
| Beech | Fagus sp. |
| Bermuda Grass | Cynodon dactylon |
| Birch | Betula sp. |
| Bluegrass | Poa pratensis |
| Boston Ivy | Parthenocissus tricuspidata |
| Boxwood | Buxus sp. |
| Camellia | Camellia sp. |
| Cotoneaster | Cotoneaster sp. |
| Elm | Ulmus sp. |
| English Ivy | Hedera helix |
| Euonymus | Eyonymus sp. |
| Fescu (tall or fine leafed) | Festuca sp. |
| Fir | Abies sp. |
| Flowering Dogwood | Cornus florida |
| Forsythia | Forsythia intermedia |
| Ginkgo | Ginkgo biloba |
| Hawthorn | Crataegus sp. |
| Hemlock | Tsuga canadensis |
| Holly | Ilex sp. |
| Honey Locust | Gleditsia triacanthos |
| Hydrangea | Hydrangea sp. |
| Juniper | Juniperrus sp. |
| Lilac | Syringa sp. |
| Magnolia | Magnolia sp. |
| Mahonia | Mahonia sp. |
| Maple | Acer sp. |
| Oak | Quercus sp. |
| Pachysandra (Japanese Spurge) | Pachysandra terminalis |
| Periwinkle | Vinca minor |
| Pine | Pinus sp. |
| Pittosporum | Pittosporum tobira |
| Privet | Ligustrum sp. |
| Redbud | Cercis canadensis |
| Spiraea | Spiraea sp. |
| Spruce | Picea sp. |
| Sweetgum | Liquidambar styraciflua |
| Tulip Tree (Tulip Poplar) | Liriodendron tulipifera |
| Viburnum | Viburnum sp. |
| Willow | Saliz sp. |
| Yew | Taxus sp. |
| Zoysia Grass | Zoysia japonica |

Note: sp. indicates that any horticultural species within the genus may be used on the identification or judging portion of the horticulture contest.