

A MANUAL FOR FLOWER JUDGING

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and
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STAGING OF CLASSES FOR JUDGING

The objective in staging a class is to set up a class in which there are real and defendable differences between the entries, but differences are not so great that placement of the class is obvious. Staging is essentially the grading process that commercial growers go through when preparing their products for market. A properly staged class should contain identifiable faults positioned so that if the judge sees them and properly weighs them a logical decision can be made which would result in their correct placement. Proper staging is just as valuable as judging practice in helping the judge become familiar with standards of quality for floriculture crops and should be practiced by the judge whenever possible.

A careful examination of the material must be made so that no faults or important points are overlooked when staging. Faults must be properly identified and given proper value or worth. The number of times a fault appears should be considered but resist the temptation to identify a fault and then try to say that it is present in one or more containers, but "worse" on one more than the other. A fault is a fault, and a judge should be able to identify the fault properly and give it a proper relative value.

Another temptation to resist is the mixing of faults of all values both major and minor in all four containers or plants. If a stager does this than the judge must get into a counting game in order to sort the containers. The mixing of values clouds the decision making process and makes it more of a guessing game. When possible, the very best cut flowers or potted plant should be in the number one place, the next best in the second place, and so forth. Excellent stems should not be sprinkled throughout all four cut flower entries. The final sorting by the stager should compare the best of the second place with the worst of the first place and exchange them if appropriate. The same process should be used to up grade the quality of each entry on down to the fourth place.

Potted Plant Classes

Look over the available material, keeping in mind the point values of each of the major positive characteristics on the score card (cultural perfection, floriferousness, size of plant, etc) to select plants in which there are real differences in one or more of these characteristics. At this point, you are beginning to establish a firm basis for staging and judging the class. Select the plant most nearly perfect in at least the major points on the score card, as the first place plant. Concentrate on the positive - but at the same time do not forget the negative. The first place plant should not be demonstrating major faults shown on the "relative value of faults" table.

If all the available plants have a cultural perfection fault (slight marginal burn on a few of the leaves), try to have the least damaged plant in the first place and do not determine the placement solely on this cultural imperfection. Make the major distinctions between placements on the basis of the highest value characteristics from the score card. For example, the first place African Violet is symmetrical while the second place plant is not. If you cannot do that, then you may have to combine merits in two or more of the lower valued qualities to overcome some slight problem in cultural perfection. For example, the first place African violet is more floriferous and has strong, compact petioles compared to the second place plants.

The poorest plant in the class should show some clearly definable deficiency and/or a greater number of the more severe faults from the "relative value of faults" table. The second and third place plants should be intermediate between the other two.

Cut Flower Classes

Setting up a cut flower class requires slightly different thinking than setting up a potted plant class. Uniformity of specimens within the placing entry becomes the most important single characteristic that must be considered. This means uniformity of the entire scored characteristic (condition, form, color, stem and foliage, size, etc).

Study the material carefully to determine the qualities in which there are real differences. If all the flowers are consistently uniform in color, that quality, in actual practice, is more or less ignored in establishing proper placing of the class, and differences will have to be based on other qualities (form, stem and foliage).

The first place vase should score high in several of the major point value qualities. Carnations, for example, usually vary significantly from each other in flower form (roundness symmetry of petal placement) and major defensible differences can be developed on this basis. Select individual flowers uniform in these major qualities, do not have ten good flowers and two "dogs" in each vase. There should not be any poor flowers in the first place vase. If the material available is such that you cannot sort out 6 to 12 really good flowers per vase, then that class should be thrown out.

Summary

Concentrate on the positive. Try to organize the class so that the major differences are between the higher value qualities or combinations of two or more of the lower value qualities whose composite value exceeds the former (a case where color + stem and foliage were clearly superior in a situation where condition might show some slight faults).

Consciously try to exclude faults from the top of the "relative value of faults" table in the top 2 places. If there are stems showing these kinds of problems, they should be placed in the third or fourth place vases.

GIVING REASONS

Giving oral reasons can be a valuable tool in training the judge whether such procedure is part of the contest or not. Systematically administered instructions on note-taking aids the individual in organizing his thoughts for an accurate and substantiated decision.

There are four essential characteristics of a good set of reasons whether written or given orally. These are: accuracy, completeness, clearness, and proper emphasis.

Accuracy is of first importance. This will depend on the accuracy of observations and the discrimination exercised in making comparisons. Notes should be accurately recorded.

Completeness means that no important reasons for the placing are omitted. The most important aid in this will be the knowledge which the student has of the important features of the class being judged and the clearness with which he keeps in mind the important points and the order of their presentation.

Clearness of statement is essential. A means to this end is logical organization, always following an outline and discussing the points in systematic order.

Proper emphasis means that the important differences and the more fundamental points of the individuals of the paired entries being contrasted be given the principal attention. Long discussion of trivial points or slight differences should be avoided.

Presentation of reasons can only be successful if the student (1) keeps systematic notes by following the order of points for the class when writing the notes; (2) notes the important differences between individual flowers or vases, or plants of the class; and (3) delivers the reasons in a manner.

Consideration now will be given to the plan of exercise in which the reasons are written. These reasons necessarily must be brief because of the limitations of time and the space in which to record them. Every statement should be one of comparison. Pure description should not be indulged in because of limited time and also because the inference to be drawn from it is not always clear. Only the important differences or reasons should be mentioned and just the right word or words used to express them. It is necessary that only three paragraphs be written to state the reasons.

The following plan indicates the proper organization for presentation either written or oral:

1. State the placing of the class.
2. Reasons for placing the first over the second.
 - a. State what points placed first over second.
 - b. Give good points of second, or,
 - c. If placing is close give faults of second instead of advantages.
3. Reasons for placing second over third.
 - a. Give admissions in favor of second placing over third, provided the differences are of considerable importance. Do not give too much emphasis to this.
 - b. Give important advantages of second over third. This should constitute the main part of the reasons for this second pair.
4. Reasons for placing third over the fourth.
 - a. Give admissions in favor fourth, if any of importance.
 - b. Tell the important points where the third excels the fourth.
 - c. Point out outstanding faults of fourth place entry.

Example

“My placing of the class of red carnations was A B D C.” “I placed A first because it had better color, stronger stems and better substance than B. B, however, had better form and larger size.”

“In comparison of the second the third place, I grant that D had better color and form, yet I considered B to have larger size, stronger stems, better substance and in more prime condition.”

“In the last pair, I considered D an easy one over C because of better color, size, substance and form. I faulted C because of a split calyx, weak stems and poor substance.”

JUDGING OF FLORICULTURE CROPS

The judging of floriculture crops is horticultural perfection carried to its logical termination. The skilled judge is concerned with sorting floral materials into groups according to previously determined standards. Judging is the evaluation of grading consistency and an assessment of quality. Judges must be familiar with the standards of quality for each floriculture crop. Where quality standards are lacking, the judge's familiarity with the crop and its cultural requirements should be such as to permit this making valid judgments on quality.

In setting up the standards of quality which follow, an attempt has been made to reconcile perfection with commercial acceptability. Accordingly, those faults which reduce commercial desirability whether due to cultural or inherent causes, have been penalized most severely. A table of faults, in which each fault has been assigned a numerical value according to its severity, has been included for each plant material. It should be understood that these placings are on a relative basis only. A score card is included to aid the coach in assessing the various features to be considered in judging any class.

Scale of Points of Cut Flowers (Multiple specimen entry)

Condition	25	(Uniformity 10, freedom of bruises and blemish 5, substance 10)
Form	20	(Uniformity 5, maturity 5, correct shape 5, regular petalage 5)
Stem & Foliage	20	(Uniformity 5, strength and straightness 5, foliage quality 5, size and proportion 5)
Color	20	(Uniformity 5, intensity 5, clarity 5, trueness to variety 5)
Size	15	(Uniformity 5, deduct points in relation to development and condition of oversized or undersize 10)

(Note: Uniformity counts 30 points out of 100)

This scale makes allowance for uniformity of condition, form etc., for the group as a whole when considering each of these qualities of the individual specimens.

Scale of Points for Flowering Pot Plants

Condition	20	(Uniformity 10, freedom from bruise and blemish 5, substance 5)
Form	20	(Uniformity 5, maturity 5, correct shape 5, regular petalage 5)
Floriferous	20	(Uniformity 10, distribution around plant 5, ratio of open flowers to buds 5)
Plant Size	20	(Uniformity 10, deduct points in relation to development and condition of oversized or undersize 10)
Color	10	(Uniformity 5, intensity and clarity 5)
Bloom Size	10	(Uniformity and proportion 5, trueness to variety 5)

(Note: Uniformity counts 50 points out of 100)

This scale makes allowance for uniformity of condition, form etc., for the plant as a whole when considering each of these qualities of the individual stems or flowers.

Scale of Points for Foliage Plants

Foliage	35	(Uniform progression of leaf sizes 10, leaf shapes 10 strong growth 10, symmetrical placement of leaves 5)
Color	25	(Bright vivid green or uniform variegation in variegated forms 10, color typical of type 10, overall attractive appearance 5)
Plant Form of size & Size	25	(Full compact, bushy growth with short internodes 10, uniformity development of multiple plants in a container 10, symmetry 5)
	15	(Size in proper proportion to container 15)

(Note: Uniformity counts 20 points out of 100)

This scale makes allowance for uniformity of condition, form etc., for the plant as a whole when considering each of these qualities of the individual specimens.

SPECIAL NOTE ON INSECT PESTS AND DISEASES

The presence of or damage from insect pests and diseases constitutes a serious fault when judging any crop. The presence of one or even a few insects should not be justification for placing the entry automatically in last place. Live insects move about and may not be apparent to all judges. Insect injury is permanent injury and should be strongly faulted. Either presence of or damage from disease organisms should be strongly faulted.

SPECIAL NOTE ON PLANT MATERIAL NOT DESCRIBED IN THE MANUAL

The Manual for Flower Judging was never intended to be an encyclopedia of judging considerations for the dynamic collection of plant material used in modern Floriculture. Rather, the authors intended to provide specific criteria for only the major floricultural crops. Coaches should be able to use the basic information contained in the manual and determine how the judging criteria should be developed for new crops. For example, liatris and orchids are spike flowers similar to snapdragons and would be judged using the snapdragon judging criteria. When in doubt refer to the "Judging of Floricultural Crops" for guidance.

FOLIAGE PLANTS

I. Definitions of Terms

- A. Foliage Plant - Any plant produced for the beauty of its foliage and shape.
- B. Size - Size is only a relative matter since some specimens growing in their native habitat may reach 100 feet in height (*Ficus elastica*) Plants grown for table display should be in proportion to their intended use. Plants grown as large specimens for floor display may be considerably larger.

II. Judging Considerations

- A. Cultural Perfection - The physical appearance of the plant should clearly indicate the skill of the grower. There should be a proper balance between the size of the plant and container. A plant which is either too small or too large for its container is not a good commercial specimen. The plant which is too small for its container should be more severely faulted than the plant which is too large. Foliage plants may have flowers at the time of judging, but this is ordinarily and a minor fault. In most species, the flowers produced are small, inconspicuous, and obscured by the foliage. In a few cases, (ea. coleus or Swedish ivy) the presence of large conspicuous inflorescence would actually be considered a fault, since these flowers are ordinarily pinched off when they first appear to cause the plant to remain in lush vegetative growth.

B. Plant Form

1. Upright Types - The shape of the plant will vary according to variety or type but, in general, it should be compact, symmetrical, and well-furnished with foliage from the top of the pot to its full height. The plant should appear full from all sides. This may not be feasible for some types such as split-leaves (*Monstera deliciosa*) and others trained on poles of fern or bark. The stem or stems should be sufficient size and strength to properly support the plant from ground level to top. Special support such as bamboo, osmunda fern pole, sphagnum, etc., may be placed with the plant if it is of the type which can use and is enhanced by such support.

Height of plants in pots with multiple stems such as Dracaenas, may be intentionally stair-stepped. Others may be grown with a multi-stemmed, but full appearance and all plants should be approximately the same height. In all cases, multi-stemmed pots should have uniform stage of development and size.

2. Trailing Types - Certain foliage plants such as ivy (*Hedera helix*) and certain philodendrons (*Philodendron oxycardium*) have a trailing habit of growth. Therefore, they need a slight variation in judging characteristics as compared to the upright types. The physical appearance of the hanging container should clearly indicate the skill of the grower to give a proper balance between the scale (size) of the container and the growing plants. The shape of the growing plant should conform interestingly with the shape and contour of the container. The overall effect should be symmetrical in shape in keeping with the natural form of the species or variety without any gaps within the foliage cover. The trailing plants should uniformly fall over the edge of the container and cascade to the proper (scale) length.

- C. Foliage - Since the leaves, in general, are the most effective part of the plant, they must be given considerable attention and weight. The foliage should be clean, have good color and sheen, giving no evidence of nutritional deficiencies, spray, or water residues and insect, disease, or mechanical injury. The size and number of leaves should be commensurate with the variety or kind of plant and in any event should be sufficient to fully clothe the plant without leaving any gaps in the foliage cover. The foliage should give the appearance of continued and vigorous growth. Foliage polishes may be used to clean and brighten the leaves.

III. Merits

1. Correct form for variety of plant.
2. Symmetry of form.
3. Proper proportion of plant to pot.
4. Strong and proportionate stem or stems.
5. Proper cascading or trailing of foliage.
6. Abundant glossy, green foliage.
7. Bright, clear, and vivid colored foliage.
8. Foliage free of insects and/or disease damage.
9. Abundant, vigorous foliage free from residues and mechanical damage.
10. Support pole of good character and scale.

IV. Faults

1. Poor form for the variety of plant.
2. Lack of symmetry.
3. Plant too large or too small for pot.
4. Weak stem or stems.
5. Sparse foliage.
6. Foliage dull.
7. Blemished foliage.
8. Water spots, spray residues, disease or insect damage present.
9. Improper support.
10. Excessive flowers present.
11. Improper development of multiple stem plants
 - a. uneven development in height of table
 - b. improper variation in height
 - c. lack of proper tiering of floor specimen

COLOR POTTED PLANTS

A color pot is any flowering plant grown to maturity in a 4, 5, or 6 inch pot. The pot should contain one or more well branched plants with the pot size determining the finished plant size. Ranunculus, Impatiens, Begonias, Petunia, Marigold, and Ageratum are common plants used for color pots.

Perennial plants such as day lilies or bleeding hearts can also be judged, but plant considerations may differ. Perennial plants may be grown in nursery containers, they may not be continuously in flower, and they may be more irregular in growth habit. Consequently, judging considerations may differ from those used in this chapter to describe annual plants.

I. Judging Considerations

- A. Plant - A flowering plant properly proportioned to its pot will be roughly twice the size of the pot and should look stable. The plant should be symmetrical and well branched; the flowers and expanding buds should roughly equal the leaf area. No obvious breaks or spaces should occur between flowers and foliage. The flowers should be held on strong stems.

The high quality plant will be well clothed with foliage to the rim of the pot and the foliage will be a clear, healthy color. Flowers and leaves should be uniform in color, size, shape and distribution according to variety.

Floriferousness and cultural perfection should carry 70 percent of the weight when judging color pots. The remaining 30 percent includes plant and flower size and foliage quality. Plants should be groomed to eliminate dead leaves and flowers, broken stems and soil debris. Pinching to repair damage or induce branching should not be obvious.

- B. Flowers - Flowers should make an abundant, showy display since quantity and quality of the flowers is more important than foliage characteristics. The more flowers, the better, provided they are well distributed, uncrowded, and in good condition. Flower color should be clean, intense and typical for variety. Flowers should be free of blemishes from handling, cultural stress, insects or disease.
- C. Foliage - Foliage should be abundant, dark green and free from spray residue and insect and disease injury. Mechanical injury would be a minor fault, but chlorosis, marginal necrosis, and leaf loss from cultural stress would be a serious fault.

II. Merits

1. Plant symmetrical and well placed in pot.
2. Plant properly proportioned to pot.
3. Foliage to rim of pot
4. Abundant flowers in prime condition.
5. Foliage dark green and free from injury.
6. Flowers well distributed and uniform in color, size, and shape.
7. Flowers borne above foliage on strong stems.
8. Clear, intense flower color typical of variety.

III. Faults

1. Lack of symmetry.
2. Plant too large or small for pot.
3. Foliage chlorotic, injured by disease, insects, cultural stress, or handling.
4. Flowers faded, blemished, or in otherwise poor condition.
5. Sparse flowering.
6. Flowering down in foliage.
7. Weak stems.
8. Sparse foliage.

IV. Relative Value of Faults

- | | |
|----|---|
| 10 | Injury from insects, pests, or disease |
| 9 | Poor symmetry
Malformation due to improper growth regulator use |
| 8 | Poor proportion of plant to pot
Poor shape or form for variety of plant
Leggy |
| 7 | Sparse flowering
Lack bud potential |
| 6 | Flowers in poor condition - over mature, faded, diseased
Foliage chlorotic or necrotic |
| 5 | Flowers lack uniformity in color, size, shape, or distribution |
| 4 | Weak stems
Centering of plant in pot |
| 3 | Mechanical injury to foliage
Immaturity of flowers |
| 2 | Spray residue on foliage |

HANGING FLOWER CONTAINERS AND/OR BASKETS

I. Definition of Terms

A. Hanging Flower Container - A container of suitable material (ceramic, plastic, metal, paper maché, wire, etc.) so formed and constructed that it can be suspended from above by supporting strands of nylon, rope, wire, leather, chains, etc., and made to accommodate living plants.

II. Judging Considerations

- A. Plant Form - It is possible to have various plant forms from upright to spreading and trailing. The usual form is to use those species or varieties of plants with a trailing habit by itself or in conjunction with other kinds of plants or forms. The plants may be of those kinds which produce flowers and foliage or those admired for their foliage alone.
- B. Cultural Perfection - The physical appearance of the hanging container should clearly indicate the skill of the grower to give a proper balance between the scale (size) of the container and the growing plants. The shape of the growing plant or plants should conform interestingly with the shape and contour of the container. The overall effect should be symmetrical in shape in keeping with the natural form of the species or variety without any gaps within the foliage or flower cover. The trailing plants should uniformly fall over the edge of the container and cascade to the proper (scale) length.
- C. Foliage - If the plant or plants are only produced for their foliage effects, the perfection of growth is of greatest importance. The foliage should be clean, have good color and sheen (if smooth leaved), giving no evidence of nutritional deficiencies, spray or water residues, and insect, disease, or mechanical injury. The foliage should give the appearance of continued and vigorous growth. The size and number of leaves should be commensurate with the variety and kind of plant. Stems correctly supportive of the leaves and vigorous appearing.
- D. Flowers - If the plants are grown for their foliage and flowers, then a proper amount of weight and consideration must be given to the proportionate value of both. This could be a 50/50 or 66/33 or 75/25 split, depending upon the type and importance of the foliage. The flowers should be abundantly and clearly displayed uniformly over the entire plant. The flowers should be partially in full bloom with reasonable promise of future display from well-formed and visible buds. The flowers should be in prime condition showing no age, blemishes, or mechanical injury and be of proper size and color for the species or variety.

III. Merits

1. Correct form for species or variety of plant
2. Symmetry of form
3. Proper proportion of plant to container
4. Strong and Proportionate stems
5. Proper trailing or cascading of foliage and/or flowers
6. Dense and even distribution of foliage and/or flowers
7. Foliage turgid and proper color for that cultivar and free from insect or disease damage.

8. No water or spray residue on foliage
9. Flowering plants should have flowers one-third to one-half open, but not overmature, and one-half to two-thirds in properly advanced bud stage.
10. Proper relationship of aesthetic appeal of container and plant material

IV. Faults

1. Not representative form for species or variety of plant
2. Poorly shaped or off-form plant for container
3. Too large or too small for container
4. Weak and/or flaccid stems and foliage
5. Irregular distribution of flowers and/or foliage
6. Foliage dull, marginal burning, or chlorotic in appearance
7. Presence of water spots, spray residue, or damage from insects or disease
8. Flowers overmature or insufficiently developed with poor potential
9. Poor aesthetic relationship of container and plant materials.
10. Mechanical damage to foliage and/or flowers

V. Relative Value of Faults

- | | |
|----|---|
| 10 | Injury from insect pests or disease
Lack of symmetry |
| 9 | Sparse or off color foliage
Poor plant form
Overmaturity
Plant too small for container |
| 8 | Plant too large for container
Weak Stems
Irregular distribution of flowers and/or foliage |
| 7 | Flowers and flower potential or underdeveloped
Poor flower condition |
| 6 | Soiled or dirty foliage |
| 4 | Mechanical injury to foliage |
| 2 | Lack of aesthetic relationship between container and plant materials |

CHRYSANTHEMUM PLANTS

Dendranthema × grandiflorum

I. Definitions of Terms

- A. Plants - As used in commercial practice, a plant shall consist of one to eight individual plants grown in a single container to produce the effect of one plant. For contest purposes, each pot must contain the same number of plants.
- B. Crown Bud. A crown bud forms early, usually fails to develop, and is surrounded by vegetative shoots. Morphologically, it is no different than a terminal bud except that development is arrested by either long days or high temperatures.
- C. Terminal Bud. This type of bud forms under short day conditions and is surrounded by other flower buds. It develops normally into a mature flower usually near the same level as surrounding flowers.
- D. Spray types.
 Terminal Spray - The terminal bud is surrounded by flower buds. Peduncles are not branched.
 Crown Spray - The terminal bud is surrounded by vegetative shoots. Peduncles are branched. The spray type may be poor or good. If the terminal flower is noticeably below the level of the other flowers, it is considered poor.
 Clubby Spray - The lateral flowering branches are shortened forming a tight, elongated spray.
- E. Flower Type. Inflorescence may be pompon, anemone, single or decorative.

II. Judging Considerations

- A. Cultural Perfection - A term relating to the physical appearance of the plant as witness to the skill of the grower, In general, the points a judge should look for are the following:

There should be good balance between the size of the plant and pot. The pot should be full enough to prevent the appearance of legginess. The shape of the plant will vary according to variety and the number of individual plants composing the specimen. The plant should be symmetrical, compact, well furnished with foliage to the base, and have slightly rounded head, permitting maximum distribution of the flowers. The plant should give a good appearance from all sides. It should form a regular circle as seen from above.

The foliage should have good color, giving no evidence of nutritional deficiencies, disease, and/or insect damage, spray residues and mechanical injury. In addition, aged foliage at the base of the stem should be at the minimum, and dead or malformed leaves should be removed.

The stems should be of uniform length and well spaced, contributing to the shape of the plant and the floral display. They should be strong enough to support the flower or floral spray, Willowy or weak stems which require staking are either varietal faults or indicate poor cultural methods.

The flowers should be uniform in development. The desired stage of development is that approaching full maturity without showing an open center. Hard, green centers, mechanical damage due to poor handling, careless or poorly timed disbudding are faults, as are evidence of spray residues or injury by insects or disease. There should be no evidence of recent or incomplete disbudding.

- B. Floriferousness - Refer not only to the number of flowers in good condition at the time of judging, displayed by the specimen, but also to the effect of the flowers. A smaller number of flowers so spaced as to permit their maximum development without crowding is more desirable than a large number of flowers crowded into a tight, confused floral display.
- C. Size of Plant - The size of the plant should be in proportion to the size of the pot in which exhibited, but not so large as to be top heavy.
- D. Size of Flowers - The Judge should consider the size of the individual flowers and their uniformity. The individual flowers should be as large as varietal characteristics will permit without being coarse.
- E. Flower Color - The color should be fresh, bright and true to the variety without evidence of fading or browning of the petal edges.

III. Merits

- 1. Compact, symmetrical plants, 15 to 18 inches from the bottom of the pot.
- 2. Foliage dark green and turgid.
- 3. Floral display slightly rounded.
- 4. Individual flowers uniform in development, well spaced, not crowded, well-colored.
- 5. Stems strong enough to hold flowers.

IV. Faults

- 1. Poor floral display:
 - a. Too crowded
 - b. Too loose
 - c. Irregular level of flowers
 - d. Voids resulting in lack of symmetry
- 2. Faded flowers.
- 3. Poor development of centers or lopsidedness of individual flowers or sprays.
- 4. Damage to flowers, stems, and foliage by disease or insects.
- 5. Mechanical injury to flowers, stems, and foliage.
- 6. Weak or willowy stems.
- 7. Legginess of plant.
- 8. Careless or poorly-timed disbudding.
- 9. Lack of uniform development of stem and flower.
- 10. Failure to disbud.

GLOXINIA PLANTS

Sinningia speciosa cultivars

I. Judging Considerations

- A. Plant. A well-grown gloxinia plant consists of regular whorls of leaves radiating from a common stem. When seen from above, the plant should be symmetrical with leaves regularly spaced. When seen from the side, the leaves should appear as a flattened dome, with the lower leaves extending beyond and arching slightly downward over the edge of the pot. Single-crowned plants are preferred to multiple-crowned plants because they produce this effect. One-sided form or upright leaves may be the results of crowding on the greenhouse bench.

The plant should be properly proportioned to its container, usually an "azalea" pot. Under optimum conditions, gloxinias may reach 20 inches or more in diameter, but from a commercial standpoint such sizes are ungainly and a diameter of 10 to 12 inches is more suitable. Plants of larger size in a class maybe given extra credit if they are of good form and in proportion to their containers.

The flowers and flower buds are displayed on upright peduncles that extend in a regular pattern well above the leaves.

- B. Flowers. Flowers and flower buds should be in reasonable abundance and loosely clustered about the center of the plant. A well-grown plant may carry 15 to 35 flowers, but for optimal effect at judging about one-fourth of the flower should be fully open and the remaining buds in various stages of development and coloring. Flower color should be bright, clear, and intense and the flowers should be free of injury or dried edges.

The peduncle must be strong enough to support the tubular flowers clearly above the leaves and in a horizontal to slightly upright position for best showing.

- C. Foliage. The foliage of gloxinia is usually large and ungainly, and a true indication of cultural perfection is the lack of "stretch" in the leaf petioles. Mechanical injury to the leaves is a minor fault because of their large size and tendency toward brittleness.

The hairy leaves should have a lush, deep dark green, velvety appearance. Dried leaf edges and yellowish or light-colored leaves indicate improper moisture or fertility levels. The presence of spray or water residue on the foliage is a fault. Streaks or spots on leaves suggest that leaves have been subject to cold water. These leaf blemishes signal improper culture and should be faulted accordingly.

II. Merits

1. Proper proportion of plant to pot.
2. Symmetrical plant form.
3. Flowers and flower buds uniformly distributed in a loose cluster in the center of the plant.
4. About one-fourth of flowers open with buds at all stages of development.
5. Flowers carried on strong upright stems well above foliage.
6. Fresh, clear, bright flower color with no injury or drying of petal edges.
7. Large, abundant, lush green leaves regularly distributed on plant.
8. Foliage free of blemishes and disease and insect injury.

III. Faults

1. Plant too large or small for container.
2. Plant form one-sided or otherwise poorly shaped.
3. Flowers in poor condition - irregular, injured, faded, spotted.
4. Too few or too many flowers open.
5. Flowers on weak or short stems that fail to adequately clear leaves.
6. Chlorotic, small, or "stretched" leaves present.
7. Foliage blemished by spray, disease, insects, or mechanical injury.
8. Large gaps in foliage or missing foliage.
9. Multiple-crown plant in single-crown class.

IV. Relative Value of Faults

- | | |
|----|---|
| 10 | Injury from insects, pests, or disease
Asymmetrical plant - too large or too small for pot
Multiple-crown plant in single-crown class |
| 9 | "Stretched" leaf petioles
Gaps in foliage |
| 8 | Sparse and off-colored foliage
Too few flowers and buds
Flowers poorly distributed around plant
Overmature plant |
| 7 | Immature plant
Poor flower condition |
| 6 | Small Flowers
Flowers failing to clear foliage |
| 5 | Flower stems weak |
| 4 | Water spotting on leaves
Spray or water residue |
| 3 | Mechanical injury to leaves |

CINERARIA PLANTS

Pericallis × hybrida

I. Judging Considerations

A. Plant. Cinerarias are grown one plant, properly centered, per 5.- or 6-inch azalea pot. Dwarf and standard size varieties are available; each type should be grown in a pot that is in proportion to the size of the plant. The plant should be symmetrical, vigorous, and well-clothed with evenly spaced leaves on short petioles. The overall shape of the plant with flowers is hemispherical. The flowers are daisy-like, displayed in a large dome-shaped cluster above the foliage. No break between flowers and leaves should be apparent.

B. Flowers. Cinerarias are seed grown so flower color and size will vary from plant to plant. In all cases, the best flower color is bright and clear with no streaking, blotching, running, or fading. It is best to have a class of one flower type and color so that the judges do not make a choice on color preference.

Cinerarias flower like other composites. The center part of the flower spray opens before the outside flowers. Since cinerarias are rarely disbudded, there will be flowers in all stages of development. A vigorous flower spray may almost cover the foliage with blooms. The entire inflorescence should be loosely compact, having no gaping holes and no overlapping flowers. Loose "airy" plants with weak flower stems are not as desirable as compact plants.

The inflorescence should not be interrupted with foliage. Flowers should be in prime condition, showing no sign of age, blemishes, or mechanical injury. Aging flowers will have faded ray florets, and disk florets shedding bright yellow pollen that becomes dry and off colored with age.

Top quality plants are sold as follows: 1/3 to 1/2 open to retail florists, and 1/2 to 2/3 open for mass market sales. Since the cineraria are an annual to be discarded after bloom, overripe plants should be seriously faulted for lacking potential.

C. Foliage. The foliage of cineraria should be large and dark green. The largest leaves should be at the base of the plant, with smaller leaves subtending the flowers. Large and small leaves should be evenly spaced around the plant for best effect. Dried leaf edges and light-colored foliage indicate improper moisture or fertility levels, or may be chemical damage. These blemishes, along with insect or disease damage, reflect poor culture and should be faulted according to their severity. Mechanical damage such as tearing, creasing, and bruising do not suggest long-term cultural problems and should not be heavily faulted.

II. Merits

1. Proper proportion of plant to pot (see *Calceolaria*).
2. Proper balance of flowers to foliage.
3. Symmetrical with even distribution of foliage and flowers.
4. Open flowers throughout the inflorescence; spray 1/3 to 2/3 open.
5. Flowers supported upright by strong peduncles.
6. Flower color uniform throughout the inflorescence.
7. Dark green foliage regularly distributed throughout the plant.
8. Foliage and flowers are blemish and injury free.

III. Faults

1. Plant too large for container.
2. Plant irregularly shaped or one-sided.
3. Too few flowers for amount of foliage.
4. Flowers overripe: fading, wilting, shedding pollen, falling off
5. Stretched, drooping foliage.
5. Spray, disease, insect, or mechanical injury to flowers or foliage.
6. Uneven distribution of flowers

IV. Relative Value of Faults

- 10 Injury from insects, pests, or disease
Lack of symmetry
- 9 Poorly proportioned plant
Open inflorescence
Flowers on weak peduncles
- 8 Gaps in floral display
Poor flower condition
Gaps in foliage effect
Too few flowers open
- 7 Stretched leaf petioles
Drooping foliage
Uneven distribution of flowers
- 6 Dried leaf margins
Chlorotic foliage
Immaturity
- 4 Mechanical injury to foliage
Spray or water residue on foliage

AFRICAN VIOLET PLANTS
Saintpaulia ionantha cultivars

I. Definition of Terms

Crown. A short stem, terminating in a whorl of leaves.

II. Judging Considerations

A. Plant. Two types of plants are found in the trade: the single-crown plant and the multiple crown plant. The African violet fancier prefers the single-crown plant because it will display better symmetry and perfection of leaf form and pattern. Florists may prefer a multiple-crown plant because it takes less effort to produce a large flowering plant.

1. The Single-Crown Plant: A well-grown single crown plant consists of concentric circles of leaves radiating from a common stem, the crown. When seen from above, the plant should be symmetrical with the leaf pattern circular. There should be no large gaps. Large gaps suggest immaturity, poor grooming, or inadequate growing space.

When seen from the side, the plant is dome shaped with each circle of leaves overlapping slightly the leaves below. The lowest or outermost leaves extend beyond the rim of the pot and arch downward slightly. The hemispherical form of the plant is determined somewhat by variety and plant health.

The presence of lateral shoots, with or without an accompanying whorl of foliage, interrupts the symmetrical foliage pattern of the single-crown plant and should be severely faulted.

2. The Multiple-Crown Plant: In general, the same considerations which apply to single-crown plants will apply to multiple-crown plants. The presence of lateral stems will modify the form of the plant. Leaves will tend to be upright, perhaps even crowded, and they will not radiate from the center of the plant in a regular pattern of concentric circles.

Even with multiple-crown plants, however, excessive crown development resulting in crowded leaf formation and hidden flowers is a prime fault. The plant should be of maximum size for the pot in which it is grown.

B. Flowers. There should be an abundance of flowers in prime condition borne on strong stems that are long enough to hold them above the foliage. For best flowering effect, the flowers should be concentrated around the center of the plant. Floriferousness is an indicator of grower ability and should be given more weight in judging than the size and color of blooms which, to a great extent, are varietal in nature. A mature show plant may carry 20 to 30 blossoms. At least one-third of the flowers should be open and evenly distributed over the plant. Flowers and foliage are properly balanced when neither visually outweighs the other.

Sparse blooms or flowers of poor quality may result from insufficient light, excessive nitrogen, or insects. The flowers should be free of mechanical injury, uniform in color and size, free from blotching, and fresh. Old flower stems should be removed cleanly.

- C. Foliage. Though foliage color, shape, and size may vary with variety, the foliage should be sturdy, vigorous, and clean with a natural sheen. The foliage will be free of disease or insect injury, spray residues, water spotting, mechanical injury, and nutritional deficiencies. Leaf petioles should be strong enough to support the leaves, and not excessively elongated or “stretched.”

III. Merits

1. Symmetrical foliage development; concentric circles, no voids, uniform.
2. Lush foliage characteristic to variety.
3. Foliage and flowers free from blemishes.
4. Flowers held upright above foliage and in center of plant.
5. Clean, bright, uniform flower color.
6. Abundance of blossoms in good condition.
7. Strong leaf petioles not excessively stretched.

IV. Faults

1. Lack of symmetry.
2. Presence of lateral stems (single-crown plants).
3. Overcrowding or promiscuous leaf arrangement (multiple-crown plants).
4. Flowers hidden by foliage.
5. Weak flower stem.
6. Sparse flowering.
7. Blemished flowers or foliage.
8. Weak, off-color foliage.
9. Poor grooming-broken petioles and flower stalks.
10. Plant too large or small for pot.

V. Relative Value of Faults

- | | |
|----|---|
| 10 | Injury from insects or disease
Lack of symmetry
Presence of lateral crowns in single-crown class. |
| 9 | Blemished, off-color foliage. |
| 8 | Poor proportion of plant to pot
Excessive crown development in multiple-crown classes |
| 7 | Flowers in poor condition. |
| 6 | Flowering down in foliage
Flowers poorly centered around plant
Mechanical damage to foliage |
| 5 | Weak, elongated leaf petioles. |
| 4 | Petiole or flower stalk stubs. |
| 3 | Weak flower stems
Sparse flowering
Mechanical damage or residue on flowers. |

AZALEA PLANTS

Rhododendron hybrids

In the past, azaleas commonly were grown with one plant in a pot and were pinched several times. Plant shapes were more easily defined with this growing method and cultivar distinctions were clear. Many potted florist azaleas being grown today are with multiple plants clumped together in a pot. This growing style definitely influences shape, but strict adherence to a perfectly symmetrical plant will likely never be possible. Naturally irregular growth of azaleas compounded by the presence of many plants in a pot will promote irregular shapes.

I. Judging Considerations

- A. Plant - There may be one or more plants in a pot, but number must be consistent within a class. The plant(s) should be symmetrical in shape and vigorous in growth. The plant(s) should be shaped and sturdy enough so as to display the flowers to the best advantage. The most popular form is dome-shaped. Evenness of stem length is desirable. When viewed from above, the form should be all-round. The plant should be in proper proportion to its container.
- B. Flowers - Flowers and flower bud potential should be equal to the leaf area. Vegetative growth around the flower buds is undesirable. Flowers and buds should be distributed uniformly over the plant with one-third to one-half of the flowers open, the rest in bud. The flowers should be in prime condition, showing no signs of age or mechanical injury.
- C. Foliage - The foliage should be sufficient to clothe the framework of branches, dark green, lustrous, and free from blemishes, spray residues, and insect or disease pests. There should be no evidence of nutrient deficiencies.

II. Merits

- 1. Flower and flower bud potential equal to leaf area.
- 2. Proper proportion of plant to pot.
- 3. Symmetrically balanced plant form.
- 4. No vegetative growth around buds.
- 5. Uniform distribution of flowers and buds over plant.
- 6. Floral effect well displayed.
- 7. Dark green foliage.
- 8. Abundant foliage.
- 9. Strong stems.

III. Faults

- 1. Uneven development of plants in one container
- 2. Sparse flower and flower bud development.
- 3. Poor flower condition.
- 4. Sparse leaf cover.
- 5. Irregular flower distribution.
- 6. Poor shape.
- 7. Vegetative growth around flower buds.
- 8. Over one-half of flower buds open.
- 9. Weak stems, poor support for flowers.

IV. Relative Value of Faults

- 10 Injury from insect pests or disease
- 9 Poor plant shape
Uneven development of plant(s) in container
- 8 Poor proportion of plant to pot
Sparse flowers and flower buds
Flowers irregularly dispersed over plant
- 7 Pale, yellowish foliage
Weak stems
- 6 Vegetative growth around flower buds
More than one-half of flowers open
- 5 Poor flower condition
- 4 Poor position of plant in relation to pot
Sparse leaf coverage
Less than one-third of the flowers open
- 3 Spray or water residue
Mechanical injury to foliage

EASTER LILY PLANTS

Lilium longiflorum

Hybrid lilies such as Asiatics or Orientals can be judged using the information in this chapter, but hybrid lilies generally are grown with more than one bulb in a pot. These plants should develop and flower uniformly nonetheless. Use the judging criteria found in the bulbous plant chapter as a guide.

I. Judging Consideration

- A. Plant - The typical Easter lily is one of the cultivars of *Lilium longiflorum* usually 'Ace', 'Nellie White', 'Harbour' or 'Chetco'. The preferred plant is from a single-nosed bulb (producing one growing flowering stalk) which is usually planted in a 5- or 6-inch standard pot. The plant should be symmetrical, vigorous, attaining a preferred height of 12 to 18 inches above the pot rim and centered in the pot.
- B. Flowers - The number of flowers and buds present is an important consideration of plant value in Easter lilies. An acceptable Easter lily plant should have from four to eight flowers and buds. At the time of judging, 1/3 to 1/2 of the flower potential should be in full bloom. The flowers should be in prime condition without blemishes or showing any sign of age, and they should be of sufficient size and proper form for that cultivar. In order to prevent smearing of the trumpet, the anthers should have been removed as soon as the bud opened. The flowers and flower buds should be uniformly placed at the top of the stem to form a regular pattern in all directions of the compass.
- C. Foliage - The stem lily should be heavily clothed from the top of the stem to the top of the pot with large, glossy, deep green foliage and free from blemish and spray residue. Lack of foliage at the pot indicates improper forcing temperatures, nutrition, and general culture. Presence of tip burn indicates improper nutrition and water relations. Excessively curled leaves are a result of improper use of DIF and should be faulted.

II. Merits

- 1. Single-nosed bulb, one stem per pot.
- 2. Four to eight or more flower buds and flowers per plant.
- 3. Height of plant in scale with pot, usually a height of 12 to 18 inches above the pot.
- 4. Flowers and buds distributed in an equal radial pattern at the top of flower stem.
- 5. Flowers well-formed and of sufficient size.
- 6. Dark, glossy green foliage.
- 7. Blemish-free foliage.
- 8. One-third to one-half of the flowers in full bloom.
- 9. Upright, sturdy stem centered in the pot.

III. Faults

1. More than one growing stem per pot.
2. Height of plant too tall or extremely short.
3. Less than four flowers and buds per pot.
4. Flowers and buds improperly formed or injured.
5. Flowers in poor condition.
6. Flowers and buds asymmetrically arranged on stem.
7. Sparse, light green foliage.
8. Foliage missing or yellowed near rim of pot.
9. Tip burn or leaf scorch on foliage.
10. Crooked stem.
11. Excessively curled leaf tips.
12. Pollen smeared on flower petals.
13. Old flowers removed.

IV. Relative Value of Faults

- | | |
|----|---|
| 10 | Injury from insect pests or disease |
| 9 | Poorly proportioned plant |
| 8 | Flowers overmature |
| 7 | Low flower and bud count
Poor flower distribution (not symmetrical)
Torn, blasted, or misshapen flower or bud |
| 6 | Sparse foliage
Pale foliage
Tip burn on foliage
Excessive curling of leaf tips. |
| 5 | Too few flowers open
Old flowers removed
Weak stem
Lack of foliage at rim of pot |
| 4 | Crooked or leaning stem
Plant not centered in pot |
| 3 | Pollen smeared flower
More than one flower stem or bulb per pot |

HYDRANGEA PLANTS

Hydrangea macrophylla

I. Judging Considerations

- A. Plant - The plant consists of one stem branching just above soil level, forming a round or rounded triangular plant when viewed from above. Blind shoots and short scrubby growth at base of plant is a serious fault.
- B. Flowers - The floral display should consist of a panicle of florets terminating each primary stem of the plant. The florets within each panicle should be uniform in size and stage of openness. Prime condition requires 90 percent of the florets to be open. There should be uniformity among the individual trusses of bloom. The color should be pure and of intensity and brilliance typical of the variety. Muddiness, greenish coloration, faded coloring are to be discriminated against. The stems should be strong enough to support the flowers without staking or tying. Of equal seriousness is the presence of a cleft which divides the panicle into two or more parts.
- C. Foliage - The foliage should be large, ample in quantity, dark green, and free from nutrient deficiency, insect or disease injury, and spray residue. Dead foliage should be removed. The use of foliar waxes is to be faulted. Evidence of a check in growth is a serious fault.

II. Merits

- 1. A well-shaped plant, as nearly round as possible.
- 2. A minimum of three panicles of flowers on plant(s) in 5-inch or larger pots.
- 3. Uniform stage of opening in each panicle and between panicles.
- 4. At least half of the florets open in each panicle.
- 5. Strong, well-branched stems arising just above soil line.
- 6. Large, dark green foliage.
- 7. Flower color of full intensity for the variety.
- 8. Overall height of the plant about 15 to 20 inches.

III. Faults

- 1. Lack of uniformity in floret size or maturity.
- 2. Lack of maturity between panicles
- 3. A top heavy plant with weak stems.
- 4. Lack of uniformity in height of panicles in the pot.
- 5. Spray residue and dead foliage
- 6. Evidence of nutrient deficiency.
- 7. Blind shoots.
- 8. Leaves in the floral panicle.
- 9. Split or cleft in the floral panicle.

IV. Relative Value of Faults

- 10 Injury from insect pests or disease
 - Multiple plants in container
 - Grotesque or misshapen form of plant
 - Maturity of bloom (over or under mature)
- 9 Panicles poorly distributed around plant
 - Non-uniformity in size or maturity of panicles
 - Non-uniformity in stem length
 - Blind shoots
 - Cleft or leaves in panicle
- 8 Improper height
 - Wilted plant
 - Stretched internodes
- 7 Bare stems
 - Chlorotic foliage
 - Small foliage
- 6 Off color panicles (neither blue or pink)
 - Non-uniformity in size and maturity of individual florets
 - Weak stems
 - Too few panicles
- 5 Off color florets within panicle
 - Dead shoot stubs
 - Spray or water residue
 - Damaged or wilted individual florets
- 4 Plant not centered in pot
- 3 Mechanical injury to foliage
 - Presence of dead foliage

CARNATION FLOWERS—STANDARD TYPE

Dianthus caryophyllus

I. Definition of Terms

- A. Split Calyx - Splitting at junction of calyx lobes due to excess number of petals or other flower parts. The degree of splitting varies from a slight, short separation to a long separation to the base of the calyx with petals extending.
- B. Sleepy Flowers - A condition resulting from physiological and environmental factors such as high temperature, overmaturity, ethylene gas, etc. The tips of the flower petals curl toward the center and the whole flower appears cup-shaped or partially closed. Petals lack turgidity.
- C. Disbud - Buds and shoots borne in the axils of the leaves are removed before they become too large. Proper disbudding includes the removal of the peduncles of these buds also. Leaves should not be torn or removed in the process of disbudding.

II. Judging Considerations

- A. Flower Placement - The flower should be borne so that the plane of the outer petals is at right angles to the stem.
- B. Flower Form - The flower should be hemispherical shaped with petals well-placed to form a full, rounded center. Preferably the outer petals should be at right angles to the median line of the calyx, forming a relatively flat base on the flower. In some varieties, the outer petals are characteristically lower than a right angle and should not be faulted. Optimum stage of openness is that in which the flower is approaching maturity with some of the center florets not fully developed.
- C. Flower Petal Arrangement - The petals should regularly overlap each other and be of similar size in each ring or row. A flower composed of concentric rings or rows as in the garden forms of *Dianthus* are not desirable. The size and texture of petals varies with variety; however, in a flower of any one variety, the petal size and shape should be uniform. No large, irregular voids should be present in the face of the flower.
- D. Flower Calyx - The calyx should be strong, not split, and of sufficient size to contain all lower petals. The sides of the calyx are ideally nearly parallel or slightly funnel shaped. The bracts at the base should closely adhere to the calyx.
Three degrees of splitting are recognized:
 - 1. Slight splitting of the calyx to less than one-half its length, with no resultant flower deformation, will be considered a slight fault;
 - 2. Splitting of the calyx down to the base, without flower deformation, will be considered a medium fault;
 - 3. Splitting of the calyx to any extent with the protrusion of petals, and a resultant deformation of flower shape, will be considered a serious fault. Stapled splits or banded calyces are serious faults.
- E. Size - Flowers should be of a size appropriate to their cultivar.
- F. Stem - The stem should be of sufficient strength to support the flower in an upright position without excessive bending. Stems should be straight. Side shoots should neither be present nor should there be evidence of recent or incomplete disbudding.
- G. Color - The color of the flower should be at the optimum stage of clarity and brilliance for the variety. Color should be even throughout the flower, unless the flower is naturally variegated.

- H. Fragrance - Since few carnation cultivars are fragrant, this criterion should not be considered in judging.

III. Merits

1. Hemispherical flower with a relatively flat base.
2. Plane of flower at right angles to stem.
3. Petals of uniform size and regularly overlapped in even rings or rows.
4. Petals firm and of good substance.
5. Well-formed, strong calyx - not split.
6. Stem strong, straight, with no side shoots or disbuds.
7. Leaves of good color and turgidity.

IV. Faults

1. Sleepiness or other signs of maturity or post optimum maturity such as dark coloration of petal tips, flaccid petals, dull faded colors.
2. Split calyx (see II-D, Flower Calyx):
 - Type 1- slight -less than one-half length of calyx.
 - Type 2 -medium - no petals extending.
 - Type 3 - serious -petals extending.
3. Weak stems.
4. Irregularity of petal size and arrangement, resulting in voids on flower faces.
5. Insects, disease, or mechanical injury on foliage, flowers or stems.
6. Color not optimum for variety.
7. Flower not open to optimum stage.

V. Relative Value of Faults

- | | |
|----|-------------------------------------|
| 10 | Injury from insect pests or disease |
| 9 | Sleepiness |
| | Over-ripe, poor condition, damage |
| | Split calyx - type 3 - poor form |
| 8 | Voids in flower face - poor form |
| 7 | Small flowers |
| | Poor color for variety |
| | Cut too tight |
| 6 | Split calyx - type 2 |
| | Flower not at right angle to stem |
| | Weak stems |
| 5 | Spray or water residue |
| | Recent or faulty disbudding |
| | Short or broken stem |
| 4 | Crooked stem |
| 3 | Flat flower top |
| | Injured foliage |
| 1 | Outside petals not in flat plane |
| | Split calyx - type 1 |

CARNATION FLOWERS—SPRAY TYPE

Spray or miniature carnations are carnations produced in a spray. A spray is a cluster of blooms produced by lateral growth, the terminal flower disbudded or intact. The stem shall have at least 24 inches overall in length. The size of the individual flowers shall not exceed 2.5 inches in diameter.

I. Definitions of Terms

- A. Flower Placement - The flower should be borne so that the plane of the outer petals is at right angles to the stem.
- B. Flower Form - The flower should be hemispherical shaped with petals well-placed to form a full, rounded center. Preferably the outer petals should be at right angles to the median line of the calyx, forming a relatively flat base on the flower. In some varieties, the outer petals are characteristically lower than a right angle and should not be faulted. Optimum stage of openness is that in which the flower is approaching maturity with some of the center florets not fully developed.
- C. Disbudding - In this class, disbudding is for a different purpose. The terminal flower bud is removed to create a loose spray of flowers. The bud should be removed at a relatively early stage to make a clean break and to encourage strong stem elongation of the auxiliary flower buds. No calyx should remain on the disbudded tip.

II. Judging Considerations

- A. Flower Placement - Four to six flowers and flower buds should be uniformly distributed along the main stem to produce a strong but loose spray. At least two of the top flowers should be fully open with the remaining buds showing varying degrees of color.
- B. Form - The entire spray is considered, including size, shape and placement of flowers.
- C. Flower Petal Arrangement - The petals should regularly overlap each other and be of similar size in each ring or row. A flower composed of concentric rings or rows as in the garden forms of *Dianthus* are not desirable. The size and texture of petals varies with variety; however, in a flower of any one variety, the petal size and shape should be uniform. No large, irregular voids should be present in the face of the flower.
- D. Flower Calyx - The calyx should be strong, not split, and of sufficient size to contain all lower petals. The sides of the calyx are ideally nearly parallel or slightly funnel shaped. The bracts at the base should closely adhere to the calyx.
Three degrees of splitting are recognized:
 - 1. Slight splitting of the calyx to less than one-half its length, with no resultant flower deformation, will be considered a slight fault;
 - 2. Splitting of the calyx down to the base, without flower deformation, will be considered a medium fault;
 - 3. Splitting of the calyx to any extent with the protrusion of petals, and a resultant deformation of flower shape, will be considered a serious fault. Staped splits or banded calyces are serious faults.
- E. Size - Flowers should be at size appropriate to their cultivar.
- F. Stem - The stem should be of sufficient strength to support the flower in an upright position without excessive bending. Stems should be straight.

- G. Color - The color of the flower should be at the optimum stage of clarity and brilliance for the variety. Color should be even throughout the flower, unless the flower is naturally variegated.
- H. Fragrance - Due to the fact that very few carnation cultivars are fragrant, this criterion should not be considered in judging.

III. Merits

- 1. Hemispherical flower with a relatively flat base.
- 2. Plane of flower at right angles to stem.
- 3. Petals of uniform size and regularly overlapped in even rings or rows.
- 4. Petals firm and of good substance.
- 5. Well-formed, strong calyx - not split.
- 6. Stem strong and straight.
- 7. Leaves of good color and turgidity.

IV. Faults.

- 1. Sleepiness or other signs of maturity or post optimum maturity such as dark coloration of petal tips, flaccid petals, dull faded colors.
- 2. Split calyx (see II-D, Flower Calyx):
 - Type 1 - slight - less than one-half length of calyx.
 - Type 2 - medium - no petals extending.
 - Type 3 - serious - petals extending.
- 3. Poor spray formation.
- 4. Weak stems.
- 5. Irregularity of petal size and arrangement, resulting in voids on flower faces.
- 6. Insects, disease, or mechanical injury on foliage, flowers or stems.
- 7. Color not optimum for variety.
- 8. Flower not open to optimum stage.

CHRYSANTHEMUM FLOWERS—STANDARD TYPE

Dendranthema × grandiflorum

(Japanese, Hairy, Anemone, and other unusual forms are not considered.)

I. Definition of Terms

- A. Standard - Cultivars recommended to be grown with one flower per stem.
- B. Terminal Bud - A flower bud surrounded by other flower buds.
- C. Crown Bud - A flower bud surrounded by vegetative buds.
- D. Promiscuous ray arrangement - Ray florets are irregularly oriented or massed together in a disordered fashion. Ray florets may simply be out of place which destroys the geometric form of the composite flower.

II. Judging Considerations

- A. Flower Size - The size of a variety will vary with the number of flowers permitted to mature on the plant. The largest size consistent with good quality is desired.
- B. Flower Form - Standard Chrysanthemums should be fully double, globular, with the ray petals regularly distributed to produce a firm, closely overlapping surface, i.e., no promiscuous rays. Flowering on a crown bud or a terminal bud may account for considerable variation in flower type within a given cultivar. The crown is preferable for some, while the terminal produces the better flowers for others.
- C. Flower Maturity - The flower should approach maturity with some center florets not fully developed. Blooms mature enough to show fully developed ray flowers in the center or immature to the point of greenness are equally faulted.
- D. Flower Color - The color should be clear, bright, intense, and typical of the cultivar. Off-colored ray florets, streaked, and/or faded florets are faults.
- E. Stem - The horizontal axis of the flower head should be perpendicular to the vertical axis of the stem. The stem should be in proportion to the flower it bears and long, strong, and straight. Disbudding should have been done early enough that the wounds have healed and clean enough so as to leave no stubs.
- F. Foliage - The foliage should be typical of the cultivar, dark green, free from mechanical, insect or disease, free from water or spray residue, and show no evidence of nutritional disorders.

III. Merits

- 1. Large size, consistent with quality.
- 2. Double, globular flowers.
- 3. Flower head placed squarely on top of the stem.
- 4. Flower approaching full maturity with nearly developed center.
- 5. Stem long, strong, and straight.
- 6. Neat, early disbudding.
- 7. No side shoots.
- 8. Clean, intense color.
- 9. Dark green, healthy foliage.

IV. Faults

1. Flowers either overmature or immature.
2. Color faded, dull, or off-color due to age.
3. Flower form lopsided, open-centered, or has promiscuous ray arrangement.
4. Stem too weak or too heavy.
5. Presence of side shoots.
6. Recent of faulty disbudding as indicated by stubs showing.
7. Foliage too small or lacking vigor.
8. Foliage too small or lacking vigor.
9. Wilting of flower, foliage, or stem.
10. Evidence of nutritional deficiencies.
11. Mechanical injury to flower-and leaves.
12. Falling ray florets.
13. Missing foliage.

V. Relative Value of Faults

- | | |
|----|---|
| 10 | Injury from insect pests or disease |
| 9 | Over mature or immature flower
Poor flower condition
Falling ray florets |
| 8 | Promiscuous ray arrangement
Poor flower form |
| 7 | Presence of side shoots
Poor flower placement on the stem
Small flower size
Foliage too small or lacking vigor |
| 6 | Chlorotic foliage
Off colored flowers
Missing or wilting foliage
Weak or thin stem |
| 4 | Recent or faulty disbudding
Spray or water residue on foliage
Crooked stem
Blemishes on flowers |
| 3 | Mechanical injury to foliage |
| 1 | Off colored florets |

CHRYSANTHEMUM FLOWERS—SPRAY TYPE

Dendranthema × grandiflorum

I. Definition of Terms

- A. Crown Bud - A crown bud forms early, usually fails to develop, and is surrounded by vegetative shoots. Morphologically it is no different than a terminal bud except that development is arrested by an environmental factor such as long days or high temperatures.
- B. Terminal Bud - This type forms under short day conditions and is surrounded by other flower buds. It develops normally into a mature flower usually near the same level as surrounding flowers.
- C. Spray Types
 - Terminal Spray - The terminal bud is surrounded by flower buds. Peduncles are not branched.
 - Crown Spray - The terminal bud is surrounded by vegetative shoots. Peduncles are branched.
 - The spray type may be poor or good. If the terminal flower is noticeably below the level of the other flowers, it is considered poor.
 - Clubby Spray - The lateral flowering branches are short; forming a tight, elongated, poor spray.
- D. Flower Type - Spray type Chrysanthemums may have inflorescence of several types, such as: pompon, anemone, single, or decorative.

II. Judging Considerations

- A. Spray Formation - The arrangement of flowers in the spray will vary with variety from poor to good. Undesirable spray types are poor crown, clubby, or loose. A terminal or acceptable crown spray is desirable. The flowers should be borne in a flat or slightly convex plane so that all flowers are visible to fullest advantage. The center flowers of the spray should be the most open with the others progressively smaller and less mature from the center of the spray outward. The center bud may or may not be present; if absent, it should have been removed early enough so that the stub is inconspicuous; no penalty should be assessed against center bud removal if done properly. Flowers or buds which do not contribute to the spray should not be present along the stem for any distance below the spray. If these laterals have been removed, this should have been done at an early date. Broken peduncles should not be present.
- B. Inflorescence Form
 - 1. Pompon - This inflorescence should be hemispherical in shape with the ray florets evenly spaced and arranged. The center of the inflorescence should be mounded, not flat. Few, if any, disk florets should show at full maturity. The inflorescence should be circular from a top view.
 - 2. Anemone - The one to five rows of outer ray florets should be arranged in a flat plane and overlapping at regular intervals. The tubular disk florets should be tightly arranged to form a prominent cushion in the center and are usually a different color from the rays. The inflorescence should be circular from a top view.

3. Single - The one to five rows of ray florets should be in a flat plane, evenly arranged, and overlapping at regular intervals. The simple disk florets should be conspicuous and arranged in a tight, flat cluster in the center. The inflorescence should be circular as viewed from the top.
 4. Decorative - The outer ray floret should be evenly arranged in a flat plane and overlapping at regular intervals. The center ray florets gradually become shorter than those in the outer rows as they approach the center of the inflorescence. Few, if any, disk florets should show at full maturity. The inflorescence should be circular as viewed from the top.
- C. Foliage - The leaves should be turgid, dark green, and of good substance. There should be no evidence of insect, disease, mechanical damage, nutritional deficiency, or improper water relations during growth. The presence of spray or water residue is considered to be a fault.
- D. Stem - The stem should be straight, and of sufficient strength to hold the flower spray upright. There should be no evidence of insect, disease, or mechanical damage.
- E. Flower Color - Flower color should be typical of the cultivar with no evidence of fading. The presence of pollen is an indication of overmaturity.

III. Merits

1. Good spray formation.
2. Well-shaped and good-colored inflorescence.
3. Flowers opening progressively from center of spray outward.
4. Foliage dark green and turgid.
5. Strong, straight stem.

IV. Faults

1. Poor spray formation.
 - a. Clabby.
 - b. Too loose.
 - c. Irregular.
 - d. Crown spray.
 - e. Many flowers not in main spray.
2. Faded flowers.
3. Damage on flowers, foliage, or stems.
4. Light green foliage.
5. Weak or crooked stem.
6. Broken peduncles.
7. Flowers in poor condition, too open.
8. Flowers too tight.

SNAPDRAGON AND STOCK FLOWERS

Antirrhinum majus and *Matthiola incana*, respectively

I. Judging Considerations

- A. Flower Spike - The petals should be firm and free from crepeiness which is a sign of old age and mechanical injury. The florets at the base of the spike should be further advanced with development decreasing toward the tip of the spike. There should be a good balance between buds and open florets. A spike showing two-thirds of the flower head open and one-third buds in various stages of development produces a well-proportioned spike. In stocks, a good spike will frequently exhibit three-fourths of the head open, the rest in bud. Seed pods or old flowers should be neither present nor be removed from the spike.
- B. Floret Spacing - The florets should be spaced so as to give the effect of compactness without crowding. They should be arranged around the spike in an ascending spiral from the base to the tip of the inflorescence. There should be no voids or skips due to "lankiness" in the flower head.
- C. Flower Color - The florets should have the color typical of the variety. The color should be clear and fresh, free from fading or blemish. There should be uniformity of color for all florets in the spike as well as all spikes within the entry.
- D. Foliage - The leaves should be firm, dark green, and not extend above the basal floret. There should be no evidence of injury from spray materials, nutrient problems, or from diseases, mites, or insects.
- E. Stem - The stem should be straight and strong. Curvatures of the tip of the flower head, as is the presence of side branches or secondary flowering within the spike, are all serious faults. Laterals below the basal floret should have been removed when young, but should not detract from floral effect of the spike. Removal of tips or their absence, resulting in a "clubby," unbalanced inflorescence is a major fault. The stem should be of sufficient length to be in proportion to inflorescence.

II. Merits

1. Florets in good condition.
2. Florets open progressively from fully open florets at the base to tight buds at the top of the spike.
3. Florets facing to produce a symmetrical, compact spike.
4. Florets evenly spaced in spike.
5. Strong, straight stem and flower spike.

III. Faults

1. Broken tips of spikes.
2. Poor flower condition.
3. Presence of lateral shoots below inflorescence.
4. Poor facing of florets in spike.
5. Irregular spacing between florets.
6. Lateral shoots in flower spike.
7. Secondary flowering within spike.
8. Crooked or weak stems.
9. Missing florets in spike.
10. Short, "clubby" spike.
11. Crowded florets producing misshapen spike of bloom.

IV. Relative Value of Faults

- | | |
|----|--|
| 10 | Injury from insects or diseases
Stem tip broken out or missing |
| 9 | Poor flower condition
Seed pods or old flowers present |
| 8 | Asymmetrical facing of florets |
| 7 | Irregular spacing of florets
Presence of side branches or secondary flowers in spike
Weak stem |
| 6 | Florets missing
Cut too tight
Immaturity
Poor stage or progression of opening |
| 5 | Foliage extending above basal floret |
| 4 | Presence of laterals below the inflorescence
Crooked stem |
| 3 | Stem tip bent |
| 2 | Mechanical injury to foliage |

GLADIOLUS FLOWERS

Gladiolus species and cultivars

I. Judging Considerations

- A. Florets - The petals should be turgid, not showing signs of age or damage. The basal florets should be at optimum opening, decreasing in degree of openness to a colored bud located approximately one-third the distance from the top of the flower spike. There should be no streaking of petals due to thrips damage, or damaged bracts (sheath) around the buds.
- B. Floret Spacing - The florets should be evenly spaced in the spike without any apparent spaces between florets.
- C. Floret Facing - All florets should face in approximately the same direction.
- D. Foliage - The leaves should be turgid, dark green, and not extend above the basal floret. There should be no evidence of insect, disease, or mechanical damage. There should be no tip burn or any evidence of thrips injury.
- E. Stem - The stem should be straight and strong and the tip of the flower spike should not be bent or broken. There should be no side shoots present.
- F. Flower Color - The color of the florets should be typical of the variety and similar to all florets on the spike.
- G. Flower Spike - The flower spike should not be less than 1/3 of the total length of the stem.

II. Merits

- 1. Two-thirds of the florets open and in good condition.
- 2. Florets open progressively from full open florets at base to buds at top of spike.
- 3. All florets face the same direction.
- 4. Strong, straight stem.
- 5. Leaves dark green with no damage.
- 6. Florets evenly spaced on spike.

III. Faults

- 1. Florets show signs of age - discolored, flaccid.
- 2. Florets too tight.
- 3. Stem bent at tip.
- 4. Florets face different directions.
- 5. Florets unevenly spaced.
- 6. Florets not progressively smaller from base to top of flower spike.
- 7. Presence of thrips injury on florets or foliage.
- 8. Presence of leaf tip burn.
- 9. Foliage extending above basal florets.

IV. Relative Value of Faults

- 10 Injury from insect pests or disease
- 9 Poor condition or overmaturity
Stem tip broken
- 8 Poor facing
- 7 Flower spike less than one-third total stem length
Poor spacing
Poor stage or progression of opening
Missing florets
- 6 Off color florets
Crooked stem
- 5 Mechanical damage to flowers
Cut too tight
- 4 Foliage extending above basal florets
- 3 Stem tip bent
Presence of side shoots
- 2 Mechanical injury to foliage
- 1 Leaf tip damage

ROSE FLOWERS

Rosa species, Hybrid Tea and Floribunda Types

I. Definition of Terms

- A. "Peeling" - The removal of one or more outer petals which are overmature, "off" color, damaged, or dirty to reveal the inner petals which are less mature, of true color, undamaged, or clean.
- B. Bullhead - A malformed bud which either is unable to open or up on opening becomes a malformed flower. The outer, and sometimes the inner petals, are shortened, stiff, fail to reflex, and crinkled. The bud is often flat rather than pointed.
- C. "Peanut" Flower - A flower of near normal form but which is distinctly smaller and with many fewer petals than normal for the cultivar.
- D. Bent or Weak Neck - The collapse of the stem directly below the flower. The flower droops and wilts rapidly because of its inability to take up adequate water.

II. Judging Considerations

- A. Flower Placement - The flower should be borne so that the longitudinal axis of the flower coincides with the vertical axis of the stem.
- B. Flower Maturity - Commercial roses are acceptable at two stages of development. Before judging starts, the judges should be informed of the desired stage.
 - 1. Wholesale or Fairly Tight Stage. This stage may be described as one in which one to several outer petals are no more than slightly separated from the remainder of the bud, which remains tight. This stage is the minimum development of the flower which permits it to develop and open naturally. The degree of openness desirable at this stage varies with the cultivar, but basically depends on the number of petals characteristic of a normal flower of that cultivar. Those which normally have many petals should be looser than those which normally have fewer petals.
 - 2. Retail or "Bud" Stage - In this stage, the flowers are further developed than in the wholesale stage but, in no case are they more than one-fourth to one-third open. Again, the normal number of petals per cultivar determines the acceptable degree of openness. The "peeling" of a number of outer petals from flowers to make them appear to conform to either the wholesale or retail stage is a major fault. The "peeling" of less than two outer petals which are bruised, off color, dirty, or otherwise damaged from a fresh flower is considered only a minor fault.
 - 3. Amateur Stage - A third stage of development, usually at least one-half open, is used in showing and judging flowers according to the American Rose Society standards. This stage is not used in judging commercial roses.
- C. Flower - Condition - The petals should be fresh, firm, turgid, and free from mechanical damage, blemishes, dirt, spray, or water residue, disease, and injury from diseases and insects.

- D. Flower Form and Size - Flowers should be of the form and petalage generally accepted as typical for the cultivar. They should not be "bullheaded" or otherwise misshapen, but have the petals arranged in a tight spiral manner. They should be of typical size for the cultivar and not be of small "peanut" size.
- E. Flower Color - The color should be fresh, intense, and clear. Bi-color and multicolor cultivars should have distinct color markings. There should be freedom from bluing and purpling in red and pink cultivars, greenish tones in yellow cultivars, and any tones giving a soiled or dirty effect in white or light colored cultivars. The greenish or off-color blotching on the outer petal or petals of some cultivars is inherent and, while undesirable, should not be considered more than a minor fault.
- F. Stem - The stem should be long and thick and in reasonable proportion to the flower size, strong enough to hold the flower in an erect position, and straight. Thin, weak stems are a more serious fault than slightly crooked ones. The presence of side shoots or buds is a fault, as is the indication of late or careless disbudding. A bent or weak neck is a serious fault.
- G. Foliage - The foliage should be fresh, firm, turgid, typical in size and color for the cultivar, and free from spray or water residue, disease, insect and disease injury, evidence of nutritional deficiencies or excesses, and chlorosis. Few roses passing through commercial markets have foliage entirely free from mechanical and thorn damage. Such damaged foliage, unless severe, constitutes only a minor fault.

III. Merits

- 1. Fresh flowers of normal size and in prime condition.
- 2. Proper stage of opening.
- 3. Color fresh, intense, clear, and typical for cultivar.
- 4. Form typical for cultivar.
- 5. Flower properly placed on stem.
- 6. Stems long, stiff, and straight.
- 7. Foliage turgid and of normal color for cultivar.

IV. Faults

- 1. Bent or weak necks with wilted flowers.
- 2. Overmature, "peeled" flowers.
- 3. Bullhead or otherwise misshapen flowers.
- 4. Color faded or off color for cultivar.
- 5. Inner petals bruised, blemished, or otherwise damaged.
- 6. Thin, weak, or crooked stems.
- 7. Late or careless disbudding.