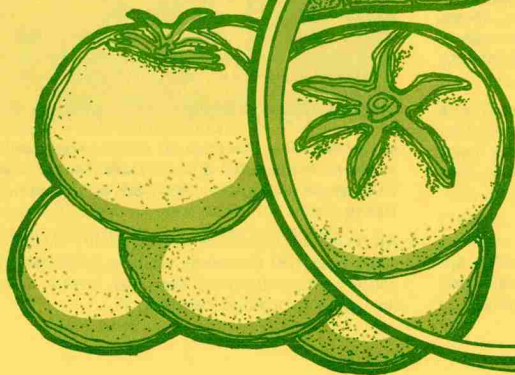
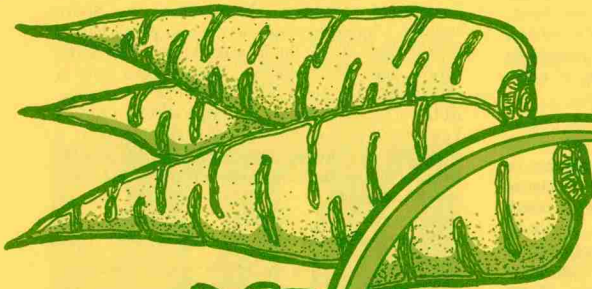
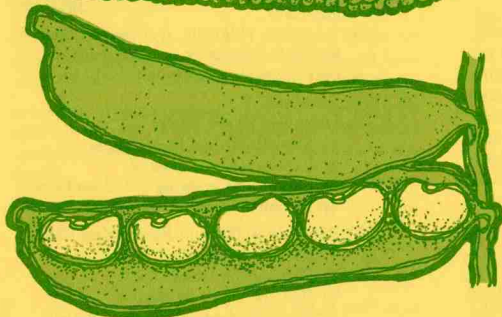
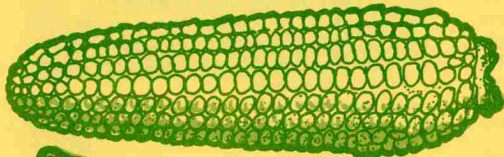


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4-H Judging Horti- cultural Crops

FOR THE BEGINNER

Judging Horticultural Crops (For the Beginner)

Introduction

Judging quality of the things you buy and use is a lifelong task. You learned early in life the best quality candy bar was the one that tasted better than all the others. If you had a choice and the quantity were the same, you would generally buy the best quality. As you grew older, you began to apply this same principle to other things such as bicycles, baseball gloves, shoes, and blue jeans. What you are really doing when judging is deciding which of the items offers the greatest value based upon quality.

Judging horticultural crops is no different. If you are judging flowers, ornamentals or indoor plants, you are, in reality, deciding which item has the greatest value. If fruits and vegetables are being judged, the major decision is made on which, pound for pound, is of greater value. To put it another way, if all were the same price per pound, which would you buy first, which would you buy second, third, fourth? In making that decision you automatically place the items from first to last.

Pointers on Judging Horticultural Crops

Generally, entries within a class will usually stand out either as good or unworthy. Learn to spot these extremes and immediately place the most unworthy entry last. Next, try to determine the best entry. After you have determined the best and the worst, spend most of your time placing the middle entries; they will usually be close. Entries must conform to show rules with respect to number, size, or other directions given for that particular show.

Flowers

When judging flowers, examine the top placings in detail for minor blemishes, irregularities, evidence of missing petals or other mechanical injury, insect damage, spray residue, fullness and depth of flowers, symmetry, color, shape, and arrangement of petals. The pose or position of the flower (with some exceptions) should be "looking at you." Stems and foliage should be healthy and strong enough to support the flower. Color of leaves should indicate good culture and normal light exposure.

Size of bloom is not as important in judging flowers as overall perfection, clear colors, and true-to-variety flower shape. A good rule of thumb is that a flower should be beautiful and anything that detracts from its beauty penalizes it.

Ornamentals

Most general comments about judging flowers apply to ornamentals. Symmetry, general health and abundance of basal stems are desirable traits for or-

namentials.

Some factors that downgrade ornamentals are:

1. Lack of health and vigor or excessive succulence.
2. Canes or trunk(s) and branches:
 - a) Weak or poorly formed.
 - b) Excessive scarring, scars not healing properly or poor pruning cuts.
 - c) Poor graft unions.
 - d) Branches poorly distributed.
 - e) Dead branches, cavities or "holes."
 - f) Cold damage.
3. Foliage:
 - a) Leaves of improper size, shape, texture, and color.
 - b) Excessive chlorosis (yellowing) due to fertilizer deficiency or other causes.
 - c) Pest or mechanical injury.
4. Root System:
 - a) Container grown stock:
 - 1) Not established in container.
 - 2) Excessively root bound.
 - 3) Large roots growing out of container.
 - 4) Noxious weeds in container.
 - b) Balled and Burlapstock (B&B):
 - 1) Loosely established in ball.
 - 2) Ball soft or loosely tied.
 - 3) Ball too small or shallow.
 - 4) Noxious weeds growing from ball.

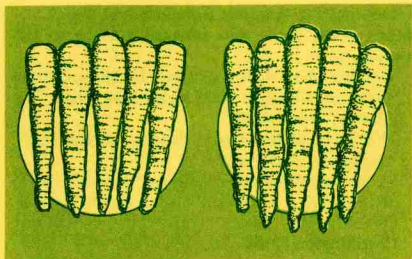
For broad spreading shrubs (such as Shore Juniper—*Juniperus conferta*) the best plants have a spread three times the average height. Spreading shrubs such as *Juniperus chinensis* need have a spread only 1½ times the height to be top quality. At the other extreme, the columnar shrubs (Chinese Yew—*Podocarpus macrophylla*) should have a spread of one-third average height to be top quality. Less spread as compared to height places the plant in a lower grade.

Fruits and Vegetables

Standards for judging fruits and vegetables, generally, are not as well established as for flowers and ornamentals. Common sense factors usually serve as a guide unless specific sizes, color or variety are demanded.

When judging fruits or vegetables, remember, they are grown to be eaten and should be shown in prime eating condition. For example, okra and cucumbers would be downgraded if overmature. On the other hand, green apples would not place as high as firm ripe apples.

All fruits and vegetables of good quality should be clean, free from blemishes, uniform in size, shape, and color, true-to-variety, free from insects, insect damage, rots or other diseases.



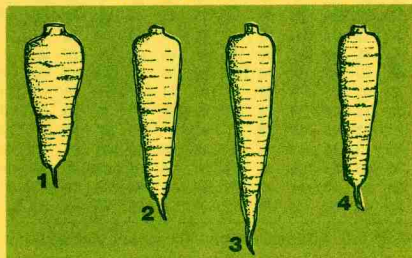
The carrot exhibit on the left is more uniform in size, shape, length and taper than the exhibit on the right.

Apples, peaches, oranges, etc. should be displayed with five fruits per plate. Smaller fruits should have more (12-24) while larger fruits less (1-5) per plate.

Examples of some common fruits and vegetables with a description of their display follow (number of items may vary, depending upon the rules of the show):

GREEN SNAP BEANS: Twelve pods, varieties not mixed. All pods uniform maturity, size, color and relatively straight; not over-mature; small portion of stem attached. No insect or mechanical injury.

CARROTS: Five roots with tops neatly removed. Uniform in size, shape, color, with greatest diameter $\frac{3}{4}$ " to $1\frac{1}{2}$ " depending on variety. Taper uniform, free from secondary roots. Not wilted.



All varieties differ in certain characteristics. Note these different varieties of carrots: (1) Chantenay, (2) Danvers, (3) Imperator, and (4) Nantes. The best placings are of the same variety and are uniform in size, shape and color.

CUCUMBERS: Slicing type, three per plate; pickling type, 12 per plate; Gherkins, 6-12 per plate. Slicing 6-9" long, not

over $2\frac{1}{2}$ " in diameter; pickling under 5" long, but length not to exceed twice the diameter. Sizes uniform not crooked or irregular, ends blunt, portion of stem remaining. Free from insect, disease, or mechanical injury.

IRISH POTATOES: Five per plate, usually only mature potatoes are shown. Smooth, free from knobby irregularities, eyes shallow, clean; no greening of the skin, uniform and of same variety. Crisp, no evidence of disease, insect or other damage. Size average for variety.

TOMATOES: Larger varieties, five per plate; salad or cherry type, 12 per plate. Shape typical for the variety. Larger varieties at least $2\frac{1}{2}$ " diameter. Uniform color, shape, size, fully ripe but firm, free from all types of blemishes, puffiness and cracking, with or without calyx (stem) attached.

APPLES: Usually five per plate. Diameter from $2\frac{3}{4}$ to $3\frac{3}{8}$ " depending on variety. Uniform size, color, and shape. Smooth finish, free from blemishes (insect, disease, or mechanical injury); true-to-variety, stems attached, optimum maturity.

PEACHES: Usually five per plate. Diameter from $2\frac{1}{2}$ to $3\frac{1}{2}$ " depending on variety, usually stems not attached. Other factors same as for apples.

PEARS: Except for size, generally same as for apples.

The examples above are illustrations that are typical of fruits and vegetables for judging. Generally, uniformity of size, shape, and color, trueness to variety and freedom from all types of injury are the major factors to consider when judging these crops.

Definitions of Words Frequently Used In Judging Horticultural Crops

According to Variety (true-to-variety): Has the characteristics generally associated with the variety. (Example: Red Delicious apples should be at least 50% red, elongated in shape with five distinct lobes on calyx end.)

Blemish: Bruise, russetting, any injury or malformation that detracts from the appearance of the exhibit.

Blotch: Usually a disease characterized by dark spots or irregular markings on leaves or fruit.

Class: A group of exhibits conforming to the same specifications in a show.

Color: The hue, clarity, intensity of coloring, in relation to the usual for the variety.

Condition: The physical state of the flower, fruit,

vegetable or plant at the time of judging.

Cultural Perfection: The development of horticultural material to the peak of its potential.

Disqualify: To remove an exhibit from competition because of some major defect.

Foliage: The leaves of a plant.

Fruit: Botanically, any seed-bearing part of a plant.

Horticulture: The art and science of growing fruits, vegetables, flowers and ornamental plants.

Shape: The overall conformation (make-up) and proportions based primarily on trueness to variety.

Size: The dimensions of a plant, flower, fruit, or vegetable in relation to the normal for the variety.

Specimen: A single fruit, vegetable, plant or bloom.

Variety: Named variations in plant species. In plant classification, variety stands at the fourth level: Family (Rosaceae), Genus (Rosa), Species (Hybrid Tea), Variety (Peace). (Variety may be referred to as cultivar.)

Vegetable: Herbaceous plant or parts grown for food. May include some that are botanically classed as fruit, such as tomato.

References for Judging Horticultural Crops (Much of the above was adapted from these references.)

1. Judging Handbook. Published by Mens Garden Clubs of America, 5560 Merle Hay Road, Des Moines, Iowa 50323.
(Very complete; covers flowers, ornamentals, vegetables, and fruits.)
2. A Manual for Flower Judging. Published by Pi Alpha Xi, Horticulture Department, Washington State University, Pullman, Washington 99163.
(The standard reference for college judging teams; covers cut flowers and potted flowers.)
3. Grades and Standards for Nursery Plants. Published by Florida Department of Agriculture and Consumer Services, P. O. Box 1269, Gainesville, Florida 32602.
(Very complete for ornamental plants; pictures showing grades and standards of over 100 ornamental and foliage plants.)

**Chart For Computing Scores On Classes Judged
Grade for Placings**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	
(1) ABCD	100	87	88	75	76	63	75	62	70	56	57	44	57	43	45	31	38	25	38	25	26	12	13	0	
(2) ABCD	87	100	76	63	88	75	62	75	57	44	70	56	38	25	26	12	13	0	57	43	25	45	31	38	25
(3) ACBD	88	75	100	87	63	76	57	43	45	31	38	25	75	62	70	56	57	44	25	38	13	0	26	12	
(4) ACDB	76	63	87	100	75	88	38	25	26	12	13	0	62	75	57	44	70	56	43	57	38	25	45	31	
(5) ADBC	75	88	63	76	100	87	43	57	38	25	45	31	25	38	13	0	26	12	75	62	70	56	57	44	
(6) ADCB	63	76	75	88	87	100	25	38	13	0	26	12	43	57	38	25	45	31	62	75	57	44	70	56	
(7) BACD	75	62	70	56	57	44	100	87	88	75	76	63	45	31	57	43	25	38	26	12	38	25	0	13	
(8) BADC	62	75	57	44	70	56	87	100	76	63	88	75	26	12	38	25	0	13	45	31	57	43	25	38	
(9) BCAD	57	43	45	31	38	25	88	75	100	87	63	76	70	56	75	62	44	57	13	0	25	38	12	26	
(10) BCDA	38	25	26	12	13	0	76	63	87	100	75	88	57	44	62	75	56	70	38	25	43	57	31	45	
(11) BDAC	43	57	38	25	45	31	75	88	63	76	100	87	13	0	25	38	12	26	70	56	75	62	44	57	
(12) BDCA	25	38	13	0	26	12	63	76	75	88	87	100	38	25	43	57	31	45	57	44	62	75	56	70	
(13) CABD	70	56	75	62	44	57	45	31	57	43	25	38	100	87	88	75	76	63	12	26	0	13	38	25	
(14) CADB	57	44	62	75	56	70	26	12	38	25	0	13	87	100	76	63	88	75	31	45	25	38	57	43	
(15) CBAD	45	31	57	43	25	38	70	56	75	62	44	57	88	75	100	87	63	76	0	13	12	26	25	38	
(16) CBDA	26	12	38	25	0	13	57	44	62	75	56	70	76	63	87	100	75	88	25	38	31	45	43	57	
(17) CDAB	38	25	43	57	31	45	13	0	25	38	12	26	75	88	63	76	100	87	56	70	44	57	75	62	
(18) CDBA	13	0	25	38	12	26	38	25	43	57	31	45	63	76	75	88	87	100	44	57	56	70	62	75	
(19) DABC	56	70	44	57	75	62	31	45	25	38	57	43	12	26	0	13	38	25	100	87	88	75	76	63	
(20) DACB	44	57	56	70	62	75	12	26	0	13	38	25	31	45	25	38	57	43	87	100	76	63	88	75	
(21) DBAC	31	45	25	38	57	43	56	70	44	57	75	62	0	13	12	26	25	38	88	75	100	87	63	76	
(22) DBCA	12	26	0	13	38	25	44	57	56	70	62	75	25	38	31	45	43	57	76	63	87	100	75	88	
(23) DCAB	25	38	31	45	43	57	0	13	12	26	25	38	56	70	44	57	75	62	75	88	63	76	100	87	
(24) DCBA	0	13	12	26	25	38	25	38	31	45	43	57	44	57	56	70	62	75	63	76	75	88	87	100	

To determine score, locate correct placing that corresponds to 100. All possible combinations of placing are in that column. Simply move up (or down) the column to the placing indicated by the contestant. His score will correspond to his placing. Example: If ACDB is the correct placing, go to column 4 where ACDB corresponds to 100. If the contestant has placed the class BACD, locate BACD in the placing column, go across to column 4 and you will find his placing score 56 points. If the class ACDB has been placed ABCD, then the score is 75 points, etc. . . .

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