



Wyoming 4-H

Produce Judging Handbook Senior



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Revised by: Raina M. Spence, University of Wyoming State Master Gardener Coordinator
Karen L. Panter, University of Wyoming Cooperative Extension Service (UW CES) Horticulture Specialist
Senior Editor: Steven L. Miller, UW CES Office of Communications and Technology
Layout and design: Bernadette van der Vliet, UW CES Office of Communications and Technology

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Horticultural and Consumer Qualities

This publication is a reference for fruit, vegetable, and herb identification and judging and is intended to reduce confusion as contestants, coaches, and judges prepare for this contest. Check with your local University of Wyoming Cooperative Extension Service office to make sure you are using the most recent version of this publication.

The 4-H philosophy for produce judging is that the qualities describing horticultural merit are identical to those traits that make produce ready for purchase and consumption. These qualities include: product uniformity, stage of ripeness, freedom from disease and insect damage, absence of bruises and blemishes, and so forth.

The correct stage of ripeness is determined by examining either the product's skin or leaves. If the product's skin is wrinkled, shriveled, or collapsed in any way, it is probably overripe. Leafy produce should be firm and not wilted. Unripe vegetables and fruits will have uneven color and usually are very hard. Underripe is better than overripe when selecting produce.

Another way to tell if a vegetable or fruit is edible is to look for bruises, growth cracks, or sunscald. Mechanical damage, such as bruises, may need to be cut out. Growth cracks, most often caused by erratic watering practices, may need to be removed. If large portions of a produce item must be removed due to damage, the produce item is low quality.

Sometimes vegetables may be misshapen. This distortion often happens when root vegetables, such as carrots or rad-

ishes, are grown in heavy, compacted soil that has not been amended or properly worked. Odd shapes may occur in vegetables grown above ground or in fruits when they grow next to another plant, a rock, or some other obstacle.

Holes, chewed sections, and discolored areas on vegetables, fruits, and herbs are signs of insect damage. Disease damage results in discolored lesions, off-color and streaked appearances in the flesh, and rotted areas.

Produce Descriptions, Merits, and Faults

Apples (fruit) are round to slightly elongated. Apples commonly come in red, yellow, or green, but many of the newer varieties may be a mixture of these colors. The flesh of the apple should be white or, in some varieties, soft pink.¹

Merits of apples include: crisp flesh that is white and juicy, smooth skin devoid of blemishes, and firm tissue all the way to the core. The apple should have good symmetry.

Faults of apples include: brown or bruised flesh, discolorations of the skin, corky tissue on the skin, soft flesh, and a watery core. Any apparent insect damage is also a fault.

Artichokes (globe) (vegetable) are actually immature flower buds that are edible. Each bud contains many layers of bracts (modified flower petals), of which the



Correct Produce Names

apple	cucumber (slicing or pickling)	mint	rutabaga (table)
artichoke	dill	muskmelon or cantaloupe	shallot
asparagus	edible podded pea	mustard	snap bean (yellow or green)
banana	eggplant	okra	spinach
basil	endive	onion (dry)	strawberry (plural is strawberries)
beet (table)	garlic	orange	summer squash
broccoli	ginger root	parsley	sweet corn
Brussels sprout (plural is Brussels sprouts)	grape	parsnip	sweet potato (plural is sweet potatoes)
cabbage	grapefruit	pea (green, in pod)	thyme
carrot	green onion	pepper	tomato (plural is tomatoes)
cauliflower	head lettuce	pineapple	turnip
celeriac	jicama	potato (plural is potatoes)	watermelon
celery	kale	radish (plural is radishes)	winter radish or daikon (plural is winter radishes)
chard (also called Swiss chard)	kiwi	raspberry (plural is raspberries)	winter squash
Chinese cabbage	kohlrabi	rhubarb	
chive (plural is chives)	leaf lettuce	rosemary	
collard	leek		
	lemon		

lower bases of the bracts are edible. The heart of the artichoke, on which the bracts are attached, may also be eaten. ¹

Merits of the artichoke include: leaves that are thick and firm, stem free of holes and blemishes, and all of the leaves should be tightly closed, perhaps even squeaking when handled.

Faults of the artichoke include: leaves that are soft and browning, stems with holes, which may be evidence of insect damage within the head, and leaves that are loose or open.

Asparagus (vegetable) has young, immature stem tips, and scales on the tips are tight. Asparagus may be dark green or white, or it may be green toward the tip and white toward the base.

Merits of asparagus include: uniform stalk length and size (at least ½ inch in diameter), juiciness, bright color, and tightly closed scales at tips.

Faults of asparagus include: loose scales, or undersized, spindly, wilted, or oversized stalks.

Bananas (fruit) are a curved, long fruit. The skin is yellow, and the flesh is white and creamy. Bunches usually grow in 6 to 25 individual bananas. ¹

Merits of bananas include: bright yellow skin, absence of bruising on the flesh, and lack of skin browning near the stem. The flesh should be soft and creamy but not overripe.

Faults of bananas include: brown skin, bruised flesh, and squishy stem end.

Basil (herb) is a fragrant herb used as a seasoning in a variety of foods. Basil is sold dry or fresh.

Merits of fresh basil include: green bunches that are fresh and not wilted. Basil should be free of insect damage or yellowing and should have a strong, pleasing aroma.

Faults of basil include: yellow leaves, wilting, signs of insect damage, and blackening of the stems.

Beets (vegetable) have round or cylindrical roots. Beets may be red, yellow, or, rarely, white.

Merits of beets include: uniform size, color, and shape. Baby beets should be 1½ inches and table beets should be 1½ to 3½ inches in diameter. The crown should have very little browning and no cracks.

Faults of beets include: damaged, cracked, pithy, or wilted tissues.

Broccoli (vegetable) has immature green flower heads and is harvested before buds open.

Merits of broccoli include: fresh green color with florets close together. Broccoli should be tender, crisp, and free from worms. Stems should be less than 6 inches long.

Faults of broccoli include: heads that are soft or wilted or are showing yellow flowers.

Brussels sprouts (vegetable) are firm, green, round buds measuring about 1 inch across. Brussels sprouts look like small cabbage heads.

Merits of Brussels sprouts include: fresh, solid, and tightly closed buds with good green color.

Faults of Brussels sprouts include: small or loosely closed buds, yellowish color, or wilted buds.

Cabbage (vegetable) is a compact ball of thickened leaves. The heads can be green, red, smooth, or crinkled. Cabbage is solid and heavy with outer leaves intact. The head may be rounded, flattened, conical, or egg-shaped. The midribs may be white.

Merits of cabbage include: solid, firm heads that measure about 6 to 9 inches in diameter. Heads should be tender, crisp, and heavy for their size. Worm damage or rot should never be present. Knowing the cabbage variety is important as varieties differ in size and shape.

Faults of cabbage include: prominent midribs on leaves, incorrect size, light weight, loosely formed, wilted, or uneven color.

Carrots (vegetable) have yellow or orange roots. They are cylindrical, tapered, or round, without side roots.

Merits of carrots include: uniform type (diameter depends on variety), smooth surface, and pale to deep orange color (depending on variety). When carrots are cut, they should have a small core without rings. Carrots should be tender and sweet.

Faults of carrots include: off-color, wilted, rough, or cracked roots. Worm damage, crooked or branched roots, or green crowns also are considered faults.

Cauliflower (vegetable) consists of a firm, heavy, white head of immature flowers. Some types may be purple or green.

Merits of cauliflower include: solid heads with good color and smooth, fine-grained texture. Cauliflower should be crisp with outer leaves trimmed about 1 inch above the head's center.

Faults of cauliflower include: wilted heads having yellowish color or rough, grainy texture.

Celeriac (vegetable) is a rough-surfaced, round root measuring about 2 to 6 inches in diameter. The root has crisp, white flesh. Celeriac smells like celery.

Merits of celeriac include: uniform color and solid roots.

Faults of celeriac include: incorrect size, wilted root, or damage from worms or insects.



Celery (vegetable) is the whole, above-ground portion of the plant. Leaf blades are trimmed off. Stalks may be green, white, or yellowish. Celery is a cylindrical cluster of leaf petioles attached to a very short stem.

Merits of celery include: thick, firm, and crisp petioles that are uniform and long. Color should be uniform.

Faults of celery include: stalks that are stale or wilted. Rust on the stalks is a fault. Stalks that are uneven in color, spindly, or unevenly arranged in the bunch also should be faulted.

Chard (vegetable) consists of large, thick, crumpled leaves. Chard can include single leaves or the entire plant with the roots removed. Stems are short. Petioles and midribs may be white, red, orange, or yellow.

Merits of chard include: firm, tender, crisp leaves free from insect or disease damage.

Faults of chard include: small or wilted leaves, roots that are still present, or uneven color.

Chinese cabbage (vegetable) has a compact, elongated head with thin, many-veined leaves. Chinese cabbage color can be light green to white. One type, bok choy, has dark green leaves and white petioles. Bok choy does not form a solid head.

Merits of Chinese cabbage include: solid, firm heads with tender, crisp leaves and uniform color.

Faults of Chinese cabbage include: very prominent midribs, incorrect sized heads, wilted leaves, or uneven color.

Chives (herb) are small, onion-like plants. Chives grow in clusters and are dark green. The leaves are hollow and thin.

Merits of chives include: fresh leaves that are evenly green and have no sign of blemish or drying.

Faults of chives include: wilted leaves, dried leaves, signs of insect damage, or unevenly colored leaves.

Collards (vegetable) consist of rosettes of tender, dark green leaves, which may be attached or detached from the main stem. The roots are removed.

Merits of collards include: firm, crisp leaves with uniform color and size.

Faults of collards include: wilted, dirty, or damaged leaves.

Cucumber (fruit) is an immature, firm, heavy, green fruit. Pickling cucumbers are 1¾ to 5 inches long, and they are blocky. Slicing cucumbers are 6 to 9 inches long. European slicing cucumbers can be up to 16 inches long. Lemon cucumbers are egg-shaped and 4 to 6 inches long. Lemon cucumbers have light yellow skin. Some might assume cucumbers and several other fruits mentioned in this guide, including edible podded peas, eggplant, okra, peppers, snap beans, squash, and tomatoes, are vegetables. They are fruits because the botanic and horticultural definition of "fruit" is a mature ovary, which may or may not contain seeds (some fruits are seedless).

Merits of cucumbers include: uniform size, crisp and straight fruits, dark green color, uniform maturity, and evenly spaced spines (if present).

Faults of cucumbers include: non-standard size or color, or wilted, over mature fruits.

Dill (herb) has green, fragrant flower heads with stems and green leaves. Seeds are brown and immature and should not be shedding.

Merits of dill include: freshness, uniform and balanced bunches, and clean leaves and stems.

Faults of dill include: dirty foliage or flower heads, disease or insect damage, discoloration, or wilted foliage.

Edible podded peas (fruit) are tender, flat pods. The seeds inside should be starting to enlarge. Some varieties have rounder, crisp pods with nearly full-grown seeds. Both ends of the pods are intact.

Merits of edible podded peas include: uniform color and size, both ends intact, and fresh, crisp pods.

Faults of edible podded peas include: wilted or over mature pods, pale color, or insect or disease damage.

Eggplant (fruit) is a black, purple, or white, round to egg-shaped fruit. An eggplant may be as long as 14 inches.

Merits of eggplant include: well-shaped, firm, mature fruit. Other merits are a connected stem and a shiny surface.

Faults of eggplant include: wilted or misshapen fruit, uneven color, or over maturity.

Endive (vegetable) is a green, leafy rosette plant. The roots are removed, and the center leaves are creamy-white.

Merits of endive include: fresh, uniform, and clean leaves and stems.

Faults of endive include: dirty, diseased, discolored, or wilted leaves or stems.

Garlic (herb) is a bulb 1½ to 3 inches in diameter. Garlic may be white to pink, and it has papery, dry skin.

Merits of garlic include: individual cloves that are uniform in size and shape. Clear skin also is a merit.

Faults of garlic include: soft or damaged bulbs.

Ginger root (vegetable) is actually an edible rhizome. The interior is golden white.

Merits of ginger root: few knots or branches, light brown skin that is smooth, and lack of blemishes or bruises.

Faults of ginger root: withered knobs, many knots and branches, and blemishes or bruised skin.

Grapes (fruit) are round fruits that grow in clusters on vines. The skin of the fruit may be green, red, purple, or yellow when ripe. The skin is usually thin and the flesh juicy. Seeds may or may not be present, depending on the variety. ¹

Merits of grapes include: plump fruits, stems securely attached, rich coloring, and absence of shriveling or skin blemishes.

Faults of grapes include: blackening of skin near stem, soft or shriveled fruits, and mold present on fruits.



Grapefruits (fruit) are large, round fruits with a thick rind. The rind is yellow but may be slightly red or pink. The flesh of the fruit is pinkish-red or yellow and is slightly bitter in taste. ¹

Merits of the grapefruit include: smooth and shiny skin, firm fruit, and absence of mold or bruising.

Faults of the grapefruit include: dull or wrinkled skin, soft fruit, and the presence of mold or bruising.

Green onions (vegetable) are immature onion plants. Green onions have thick, straight stems with roots trimmed short.

Merits of green onions include: no large bulge at the base, clear white base color, and dark green tops. Green onions should be fresh and clean.

Faults of green onions include: wilted or damaged tissues, or soft tops. Another fault is when the base bulges more like an onion.

Head lettuce (vegetable) is a solid, round head of green leaves. The midribs and center leaves are nearly white.

Merits of head lettuce include: a firm, crisp, clean, solid head heavy for its size.

Faults of head lettuce include: wilted, dirty, loose, or damaged leaves.

Jicama (fruit) is a large tuberous root from a legume plant.

Merits of jicama include: tubers free of bruises or cracks and tissue that appears fresh and firm.

Faults of jicama include: cracks, bruises, and soft tubers.

Kale (vegetable) has grayish or blue-green curly leaves. Kale looks like a non-heading cabbage.

Merits of kale include: firm leaves uniform in color.

Faults of kale include: wilted, dirty, or damaged leaves or uneven color.

Kiwi (fruit) is an egg-shaped fruit with bright green flesh and brown skin covered with brown fuzz. A ring of small black seeds is embedded in the flesh. The seeds are edible.

Merits of kiwi include: plump, fragrant fruit with skin free of spots or blemishes.

Faults of kiwi include: wrinkled, soft, or very small fruits, and blemishes or soft spots on the fruit.

Kohlrabi (vegetable) has an enlarged stem measuring about 2 to 3 inches in diameter. Leaf scars and petioles of kohlrabi are in a spiral pattern. Kohlrabi may be round or shaped like a toy top.

Merits of kohlrabi include: uniform size, tender stem, and even color.

Faults of kohlrabi include: an oversized (larger than 3 inches), wilted, damaged, or soft stem.

Leaf lettuce (vegetable) consists of a rosette of tender, green leaves attached to a stem. The roots are removed.

Merits of leaf lettuce include: firm, crisp leaves attached to the stem and having uniform color and size.

Faults of leaf lettuce include: wilted, dirty, or damaged leaves.

Leeks (vegetable) look like large, green onions with thick, straight, 1- to 2-inch thick stems. Leeks have flattened, green leaves.

Merits of leeks include: uniform size, shape, and color with dark green tops and clear white bulbs.

Faults of leeks include: uneven color, faded or pale tops, or a wilted or damaged product.

Lemons (fruit) are a bright yellow, oblong shaped fruit. The skin is smooth, and the fruit may have a slight protrusion at the stem end. The inner flesh is light in color with a fragrant smell and acidic taste. ¹

Merits of the lemon include: skin that is vibrant colored and smooth. The skin should lack blemishes. The flesh should be juicy and fragrant.

Faults of the lemon include: pulpy or dry flesh. Avoid skin that is bruised or blemished.

Mint (herb) is a perennial herb known for its distinctive minty smell.

Merits of mint include: green bunches that are fresh and not wilted. Mint should be free of insect damage or yellowing and should have a strong, pleasing aroma.

Faults of mint include: yellow leaves, wilting, signs of insect damage, and blackening of the stems.

Muskmelons or cantaloupes (fruit) are netted or ribbed, round to oval fruits. The fruits have cream-colored netting on rinds and greenish to yellow skins.

Merits of muskmelons include: clean, firm fruits free of soft spots, scratches, or decay. Netting should be deeply ridged over melons. Color should be even.

Faults of muskmelons include: over or under ripeness, poor color, blemishes, or coarse netting.

Mustard (vegetable) consists of green leaves that are used fresh or cooked.

Merits of mustard include: fresh, uniform, and clean leaves and stems.

Faults of mustard include: dirty, diseased, discolored, or wilted leaves or stems.

Okra (fruit) has pointed, velvety pods. The pods may be green, yellow, or somewhat red. The pods should be partially mature.

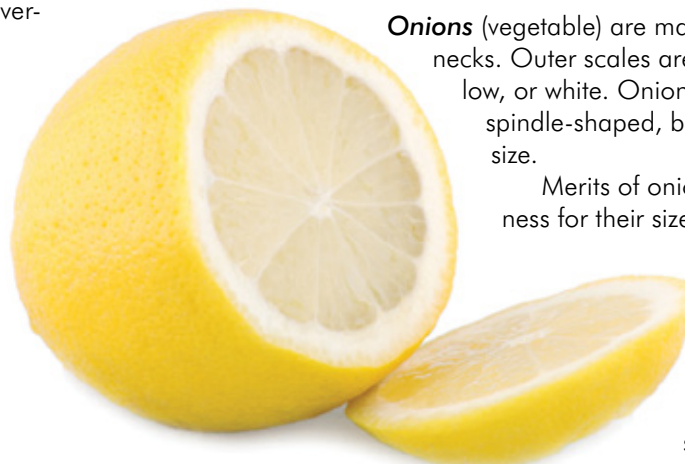
Merits of okra include: uniform pod size, shape, and color. Pods should be clean, fresh, and crisp.

Faults of okra include: uneven color, damaged, overly mature, or wilted pods.

Onions (vegetable) are mature bulbs with dry roots and dry necks. Outer scales are dry and can be red, brown, yellow, or white. Onions may be flattened, round, or spindle-shaped, but they should be heavy for their size.

Merits of onions include: even color and heaviness for their size. Onions also should have clear skin, thin necks, good color, and good shape, and they should be uniform in size.

Faults of onions include: any damage, too many layers of outer skin removed, or thick, soft necks.



Oranges (fruit) are a round fruit that bears similarity to grapefruit but are smaller. The rind tends to be somewhat rough and is orange to yellow-orange in color. The flesh is yellow-orange and sweet to the taste. ¹

Merits of the orange include: smooth and shiny skin, firm fruit, and absence of mold or bruising.

Faults of the orange include: dull or wrinkled skin, soft fruit, and the presence of mold or bruising.

Parsley (herb) has curled or smooth green leaves with no flowers or seed heads.

Merits of parsley include: fresh, deep green color and crisp, clean leaves.

Faults of parsley include: wilted or yellowish foliage, or foliage damaged by insects.

Parsnip (vegetable) is a long, tapered, creamy-white root.

Merits of parsnips include: uniformity in size and true-ness to type. Parsnips should be free of side roots. They also should be firm, solid, and exhibit good color.

Faults of parsnips include: cracked or branched roots, rubbery flesh, or uneven color. Warty or over or undersized roots also should be faulted.

Peas (vegetable) are full-size, tender, green seeds in fresh, green pods.

Merits of peas include: freshness, bright green color, and uniform length and size.

Faults of peas include: large, empty, or partially filled pods. Discolored, damaged, or over mature peas also should be faulted.

Peppers (fruit) are green, red, or yellow fruits. They have three or four lengthwise lobes, and their shapes may be round or long and tapered. Peppers have deep color. Peppers are firm and heavy with thick walls.

Merits of peppers include: uniform size, color, and variety. Peppers should be crisp, heavy, smooth, and free of blemishes. Stems should be attached but cut cleanly. Peppers should have the same number of lobes or sections.

Faults of peppers include: dull or rough texture and fruits that are off-color or light weight. Other faults include: soft spots or damage from sunscald, disease, or insects.

Pineapples (fruit) are oval or cylindrical and are topped by a crown of coarse leaves. The pineapple is a multiple fruit, or one that is made up of numerous flowers fused together. The skin of the pineapple has many scales and is yellow when ripe. The inner flesh is juicy, sweet, and yellow in color. There are no seeds inside the fruit, but the core of the pineapple is fibrous and white.¹

Merits of pineapples include: green and healthy top, firm fruit, and a bright yellow color.

Faults of pineapples include: brown leaves, soft fruit, bruises, mold, and sour smell.

Potatoes (vegetable) are swollen underground stems with buds (eyes). Potato skins can be smooth or russet (rough). Color

and shape may differ among varieties. Potatoes should be heavy for their size and should show no green spots.

Merits of potatoes include: medium size tubers (best show size 8 to 10 ounces) that are firm and plump. Skins should be smooth or russet, depending on the variety, and free of scab, mosaic, or other damage.

Faults of potatoes include: immaturity, rubbed off or thin skin, or odd shapes. Bruised or diseased potatoes also should be faulted.

Radishes (vegetable) are crisp, swollen roots measuring up to 1¼ inches in diameter. Radishes may be round or long, and their skin may be red, white, or purple. They are white inside.

Merits of radishes include: firm, crisp roots with bright color. Radishes should show good shape for their variety, and skins should be smooth and clean.

Faults of radishes include: poor shapes or colors, rough textures, or wilting. Radishes that are over mature, woody, or pithy should be faulted.

Raspberries (fruit) are aggregate fruits (one flower with multiple sections). When picked, their central core remains on the plant; therefore, the fruit is hollow when picked. Raspberries may be red, black, purple, or golden in color when ripe. ¹

Merits of the raspberry include: fruit is juicy and fragrant and has a rich color; the fruitlets are firmly held together; the fruitlets are not over or underripe, and they have unblemished skin.

Faults of the raspberry include: fruitlets that are soft and falling apart, leakage from fruitlets, and bruising or mold on the skin.

Rhubarb (vegetable) is a leafstalk with a small portion of the leaf blade included. The skin and inside of the stalk either may be red or green. Rhubarb is a vegetable because the edible leafstalk is not the seed-bearing portion of the plant.

Merits of rhubarb include: clean stalks and foliage, uniform color, and uniform stalk sizes.



Faults of rhubarb include: absent, wilted, or dirty leaf blades or damaged stalks.

Rosemary (herb) is an aromatic herb with slender, pointed leaves.

Merits of rosemary include: leaves that are green and pliable.

Faults of rosemary include: leaves that are brittle and dry.

Rutabagas (vegetable) are large, round, or slightly elongated roots. Rutabagas may include several smaller roots at the base. Their skin will be white to yellow, and the top may be purplish.

Merits of rutabagas include: uniform size and trueness to type. Rutabagas should be free of side roots, be firm and solid, and exhibit clear color.

Faults of rutabagas include: roots that are cracked or branched, rubbery flesh, or uneven color. Warty, under or oversized rutabagas also should be faulted.

Shallots (vegetable) are round or oblong bulbs. Shallots have dry yellow or red skin and measure about 1 inch in diameter. They may be up to 2½ inches long.

Merits of shallots include: bulbs that are crisp and have uniform color. Shallots should be relatively heavy, have clear skin, and be uniform in size and shape.

Faults of shallots include: thick, soft necks. Damaged or over or under mature bulbs also should be faulted.

Snap beans (fruit) are crisp pods containing nearly full-size seeds. The pods may be green, yellow, purple, or green with purple spots.

Merits of snap beans include: freshness, uniform color and length, and long, slender shapes. The pods should be brittle and fleshy, well-filled, and free from defects. Both ends of the pods should be intact, and pods may be straight or curled, depending on the variety.

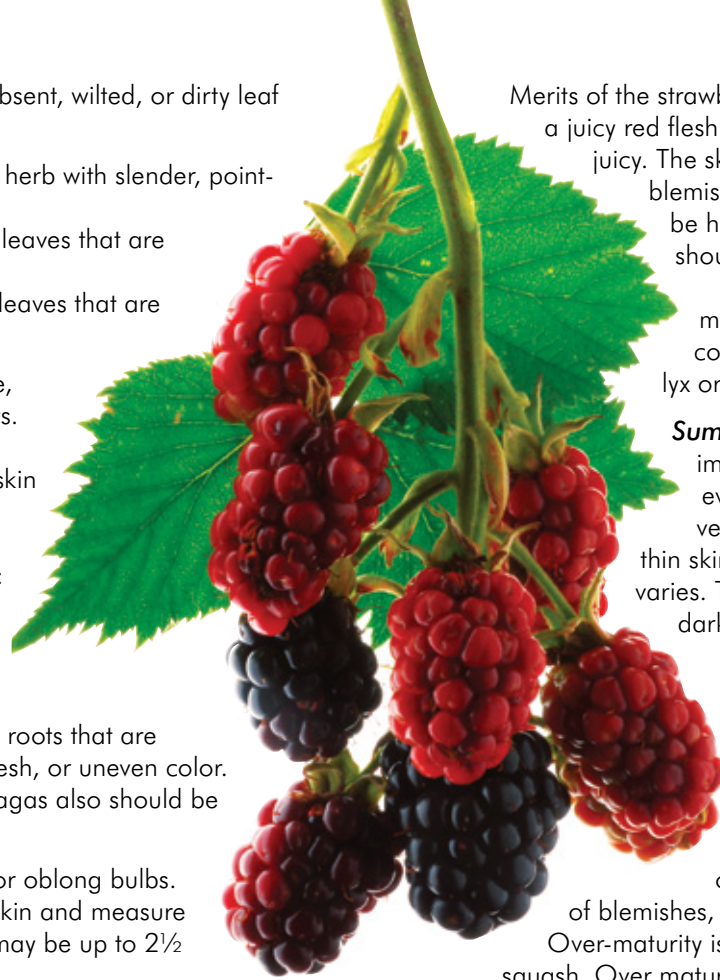
Faults of snap beans include: pods that are tough, wilted, stringy, pale or discolored, rusty, unevenly filled, or over mature.

Spinach (vegetable) consists of thick, dark green leaves that may be smooth or crumpled. Spinach is often harvested as a whole plant.

Merits of spinach include: clean and crisp foliage with fresh, green color.

Faults of spinach include: wilted foliage, dark or poor foliage color, or a gritty texture. Evidence of bolting is also a fault. Bolting is when the plant becomes reproductive and sends up a flower stalk.

Strawberries (fruit) are cone-shaped, red fruits having a skin scattered with small, hard seeds. Strawberry inner flesh is rich red and juicy. The green calyx (the outer covering of the flower bud) may be attached at the stem end. The strawberry is an aggregate fruit. ¹



Merits of the strawberry include: rich red skin with a juicy red flesh. The core should be fleshy and juicy. The skin should be free of bruises and blemishes. If present, the calyx should be healthy and green. No visible dirt should be present on the fruits.

Faults of the strawberry include: mold present on the skin, pulpy core, bruised flesh, and a brown calyx or soft tissue near the calyx.

Summer squash (fruit) is a tender, immature fruit. Squash is crisp and even in color, and the seeds are very immature. Summer squash has thin skin. The shape of summer squash varies. The color can be yellow or light to dark green, or squash can be striped.

Merits of summer squash include: an attached stem, heavy weight for size, clear and even color, maturity, and freedom from blemishes.

Faults of summer squash include: stems that are absent or soft, light weight, presence of blemishes, or fruits not uniform to type.

Over-maturity is a very common fault of summer squash. Over mature squash are often squishy and show bruising.

Sweet corn (vegetable) has well-filled kernels on ears covered with fresh, green husks. Sweet corn kernels should be in the milky stage. In this stage, kernel juices are milky white when kernels are squeezed.

Merits of sweet corn include: uniform in length, size, and color ears, according to variety. Kernels should be full and in the milky stage.

Faults of sweet corn include: immature, unfilled, over-ripe, or hard kernels. Sweet corn with uneven rows of kernels or rows not filled to the tips of the ears should be faulted. Also, damage from worms, insects, or disease is a fault.

Sweet potatoes (vegetable) are round, spindle-shaped, or cylindrical roots. Sweet potatoes may have red, orange, or yellow skin, and skin can be smooth or russet.

Merits of sweet potatoes include: uniform shape, size, and color. Sweet potatoes should be free from blemishes and should be fresh.

Faults of sweet potatoes include: roots that are branched or cracked, uneven in color, or blemished.

Thyme (herb) is a perennial herb. Thyme has a strong lemony flavor.

Merits of fresh thyme include: green bunches that are fresh and not wilted. Thyme should be free of insect damage or yellowing and should have a strong, pleasing aroma.

Faults of thyme include: yellow leaves, wilting, signs of insect damage, and blacking of the stems.

Tomatoes (fruit) can be red, orange, or yellow. Tomatoes can range from ½ inch to 6 inches in diameter and weigh

up to 1 pound. They are firm and heavy but not soft or over-ripe. Cherry tomatoes are smaller in diameter than standard tomatoes.

Merits of tomatoes include: medium size according to variety. Tomatoes should be firm and should show clear color typical of variety. They should be clean with no cracks. Stems should be closely trimmed, or all stems should be removed. Tomatoes should show only a small blossom scar.

Faults of tomatoes include: coarse skins or over or under ripeness. Bruised, soft, cracked, or lobed tomatoes should be faulted.

Turnips (vegetable) are round roots that may either be pure white or have a purple top. Turnips have thin, tender skin.

Merits of turnips include: uniformity in size, trueness to type, and freedom from side roots. Turnips should be firm and solid with clear, clean color.

Faults of turnips include: roots that are cracked or branched, rubbery flesh, or uneven color. Warty or under or oversized turnips for the type should be faulted.

Watermelons (fruits) are round or oblong fruits with gray-green, green, striped, or yellow skin. Watermelon flesh may be red, pink, or yellow and size varies.

Merits of watermelons include: good weight and medium to large size (10 to 20 pounds). Watermelons should exhibit bright color with even striping over the whole melon. Watermelon shapes should be even and without bulges, furrows, or dimples. If there is a yellow spot (rather than white) where the melon rested on the ground, it is ripe.

Faults of watermelons include: light weight, uneven shape or color, or presence of blemishes. A white, rather than yellow, ground spot also should be faulted.

Winter radishes (vegetable) are large, round, or elongated roots. Their skins may be black, white, or pink. Their flesh should be firm, crisp, and white.

Merits of winter radishes include: firm, crisp, and bright colored roots. Winter radishes should show good, uniform shapes for the variety and should have smooth, clean skin.



Faults of winter radishes include: poor shape or color, rough texture, wilting, or over mature roots.

Winter squash (fruit) is a mature, hard-shelled fruit. Winter squash shapes and sizes vary. Winter squash should be heavy for its size.

Merits of winter squash include: an attached stem and heavy weight. Winter squash should show clear, even color, be mature, and be free from insect, disease, or mechanical injury damage.

Faults of winter squash include: lack of or a soft stem, uneven color, immaturity, or light weight. Winter squash also should be faulted if the fruit is blemished or not true to type.

Suggested Judging Points Scale (Use as a Guide)

Color	20 points
Condition	20 points
Form	20 points
Size	20 points
Uniformity	20 points

Suggestions for assigning points in each of the above categories follow:

Color

If the produce's color is clear, bright, and typical of the type: 11 to 20 points

If the color is faded or not uniform: 10 points or less

Condition

If the produce's condition is fresh, unblemished, and mature for the type: 11 to 20 points

If the produce is bruised, injured, or scarred by insect or disease damage: 10 points or less

Form

If the produce is formed symmetrically and is typical of the type: 11 to 20 points. Produce may vary in shape, but they will almost always be bilaterally symmetrical. If the produce's form is misshapen, over or under mature, or distorted by insect, disease, or mechanical damage: 10 points or less

Size

If the produce's size is typical for ideal edibility and consumer use: 11 to 20 points

If the produce is too small or overly large: 10 points or less

Uniformity

If the produce has uniform size, form, color, and condition: 11 to 20 points

If size, form, color, or condition is not optimal: 10 points or less

Vegetable, Fruit, and Herb Terms

Aggregate fruit	One flower with multiple sections.
Bulb	Fleshy, underground leaves on a shortened stem. Compressed leaf tissue.
Butt	The bottom end of a fruit or vegetable.
Cob	The portion of an ear of corn to which kernels are attached.
Core	The central part of a fleshy fruit.
Ear	The fruiting spike of a cereal such as corn or wheat.
End	The tip of a branch, stem, fruit, or vegetable.
Flesh	The succulent, thick, or juicy portion of a fruit or vegetable.
Fruit	The ripened ovary; may or may not contain seeds.
Head	A dense formation of leaves or flowers.
Herb	A plant consisting only of primary tissues. Lacks wood.
Husk	The outer covering of certain fruits or seeds, such as corn.
Kernel	The seed of a grass such as corn. Notes: The kernels that are eaten are the seeds, not the fruits, which are ripened ovaries. Corn is in the grass family (Poaceae).
Leaf	The plant part that photosynthesizes and transpires.
Lobe	Any division or segment of a plant organ.
Midrib	The main or central vein of a leaf.
Neck	Any constricted, slender area.
Outer shell	A hard or tough covering.
Pod	Any dry fruit.
Rib	An elongated ridge, as on a leaf.
Rind	A hard or tough outer layer.
Root	The plant part below ground responsible for anchoring and water and nutrient uptake.
Russet	Rough.
Seed	The product of sexual reproduction in plants.
Shank	The connecting part of a plant between functional parts.
Skin	The outer or surface layer.
Spear	A young shoot.
Stalk	The main supporting structure, stem.
Stem	The vertical axis of a plant.
Taproot	A stout, tapering, primary root such as a carrot or radish.
Tip	The end of a branch, leaf, or fruit.
Tuber	A thickened, compressed, fleshy, stem, usually underground.
Vegetable	Any other edible portion of a plant besides a fruit.

Descriptive Words: Merits

Fresh	Smooth
Tender	Clean
Succulent	Straight
Crisp	Firm
High quality	Compact
Tapering	Ripe
Maturity	Mature
Solid	Heavy
Edible	Table use
Words concerning uniformity:	Uniform size
	Uniform shape
	Uniform color
Words concerning trueness to variety:	Same type
	Same variety
	Typical shape
	Typical color

Descriptive Words: Faults

Blemish	Cracks
Bruise	Decay
Weather damage	Blossom scars
Insect damage	Soft
Mechanical damage	Sunburn
Diseased	Rust
Deteriorated	Waste
Woody	Fibrous
Tough	Stringy
Pithy	Puffy
Withered	Shriveled
Wilted	Over mature
Overripe	Discolored
Yellowing	Immature
Dull color	

Points to Remember:

- Make comparisons
- Grant merits, and criticize faults
- Use different terms
- Be sure you know what you are talking about
- Judge as if the produce would be eaten immediately
- Learn and enjoy!

Sample Reasons

- “I placed corn tray 1 over tray 4 because the latter tray offers the consumer the highest amount of quality product. It has fuller, plumper kernels with more evenly spaced rows. The corn ears in tray 4 showed insect damage and lacked overall consistency of color and size of kernels. Therefore, I placed corn tray 1 over tray 4.”
- “I placed tray 2 of beans over tray 4 because of the rusty and shriveled appearance of the beans in tray 4. Although I grant that tray 4 was more uniform in size, shape, and maturity, the presence of the rust and shriveling reduced tray 4’s use by the consumer. Tray 2 has the merits of bright color, a more edible product, and a crisp appearance; therefore, I placed tray 2 over tray 4.”

- “I placed corn tray 1 over tray 4 because of the numerous faults in tray 4. The corn ears in tray 4 were not fully developed and had many empty spaces. The earworm insect damage evident on ears in tray 4 also decreased its appeal to the consumer. Although the ears are not as large as those on tray 4, tray 1 showed more consistent color, filling of kernels, and freedom from insect damage. Therefore, I placed corn tray 1 over tray 4.”

Sample Class Placement

- “I place this class of leaf lettuce 1, 2, 3, 4. I placed tray 1 over tray 2 because of the crisp, green leaves on the rosettes and the uniformity of the rosettes on the tray. I placed tray 2 over tray 3 because tray 3 shows damage on the leaves from either weather or harvesting. Leaf lettuce on tray 2 is less uniform than that on tray 1 but does not show the damaged foliage like that on tray 3. I placed tray 3 over tray 4 because, even though there is damage to the leaves on tray 3, there is no wilting and the foliage is clean. I placed tray 4 last because the rosettes are wilted and are not of uniform size, and the foliage is dirty; therefore, I place this class of leaf lettuce 1, 2, 3, 4.”
- “I place this class of strawberries 4, 3, 2, 1. I placed tray 4 over 3 because of the bright colored fruits, juicy ripe flesh, and healthy green calyx tissue on the strawberries on tray 4. I placed tray 3 over tray 2 because tray 2 shows bruising of the fruit and brown calyx tissues. While tray 3 has some blemishes on the fruit, no bruising is evident, and the calyx tissues are green. I placed

tray 2 over tray 1 because tray 1 has white mold growing on the fruit, and the flesh is extremely soft. Therefore, I place this class 4, 3, 2, 1.”

References

¹ Many of the fruit descriptions were adopted from the University of Florida. Many topics relating to gardening and plant sciences are at <http://florida4h.org/projects/plants/index.shtml>.

A manual on vegetable identification and judging is at <http://florida4h.org/projects/plants/HortIDJudging/4HPSJ24.pdf>.

A manual on fruits is at <http://florida4h.org/projects/plants/HortIDJudging/4HPSJ22.pdf>.

