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U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE Exhibit C

BELTSVILLE, MD 20705				
		Pumpkin/s	TIVE DESCRIPTION OF VAR Squash/Gourd (<i>Cucurbita p</i>	
NAME OF APPLICANT (S)		TEMPORARY C	R EXPERIMENTAL DESIGNATION	VARIETY NAME
ADDRESS (Street and No.	or RD No., City, State, Zip Code and Co	ountry)		FOR OFFICIAL USE ONLY
				PVPO NUMBER
PLEASE READ ALL	INSTRUCTIONS CAREFUL	LY:		
that describe the cha choose for compariso conducting the trials. localities, in the regio	racteristics of the most simila on should be the most similar The comparison variety shoun on and season of best adaptal	r comparison varion one in terms of ovuld be grown in fie bility. In general, n	ety. Right justify whole numb rerall morphology, backgroun old trials with the application v neasurements of quantitative	pplication variety. On the right, enter the appropriate numbers bers by adding leading zeros if necessary. The variety that you and and maturity. Please follow the guidelines on page 1 for variety for two independent growing cycles, at one or more traits should be taken on at least 24 randomly selected plants or nical content last updated March 2007.)
General Descriptors:				Comparison Variety Name
1 = Acorn 4 = Pumpk 7 = Vegeta 9 = None o (e.g. p) 10 = Gourd	Shape/ Variety Group (Figur 2 = Cocor in 5 = Scalld ble marrow 8 = Zucch if the above, specify shape: rriform, bottle, hourglass, fusild, specify shape: spherical, oblate, egg, pear, specify	zelle 3 = Cro op 6 = Str nini form, etc.)	ookneck aightneck 	01. Fruit Shape/ Variety Group
02. Expect 1 = Culinar	ted primary usage: y 2 = Ornamental	3 = Bo	th	02. Expected primary usage
03. What p 1= Mature 4 = Vegeta			usage (above):	03. Part of plant for #02 above
04. Cotyle	dons measured between fu	II expansion of fi	rst and second true leaves:	: 04. Cotyledons:
	04a. Length to width	n ratio (example: (0.00)	04a. Length to Width ratio
	04b. Apex	1 = Notched	2 = Not notched	04b. Apex
	04c. Veining	1 = Obscure	2 = Obvious	04c. Veining

Comparison Variety

Application Variety

Application	on Variety	Comparison Variety
Main Ste	m:	Main Stem:
	05. Main stem green color, when plants have 20 true leaves on the main stem:	05. Main Stem Color:
	 05a. Main color: 1 = Light (Cocozelle, Black Beauty, Ma'yan, Vegetable Spaghetti) 2 = Dark near base only (Early Prolific Straightneck) 3 = Dark spots at nodes (Sihi Lavan) 4 = Dark for nearly the entire length (Fordhook Zucchini, Jack O'Lantern, Howden) 	05a. Main color
	05b. White marks at nodes: 1 = Absent 2 = Present	05b. White marks at nodes
	05c. Yellow marks (associated with precocious yellow gene complex) at nodes: 1 = Absent 2 = Present	05c. Yellow marks at nodes
	06. Growth habit when plants have 20 true leaves on the main stem:	06. Growth habit
	Bush 1 = True-bush (Fordhook Zucchini, Cocozelle, Ronde de Nice, Benning's Green Tint) 2 = Semi-bush (Taybelle, Table Ace, Jackpot)	
	Vine 3 = Moderate vine (Small Sugar, Spookie, Magic Lantern, Table Queen) 4 = Rampant vine (Howden, Connecticut Field)	
	 07. Tendrils when plants have 20 true leaves on the main stem: 1 = Absent or rudimentary 2 = Present and elongated 	07. Tendrils
	08. Main stem internode dimensions when observed after the 20 th internode has developed:	08. Internode dimensions
	08a. Length 1 = Internode length constant from 5 th to 15 th internode 2 = Internode length increases from 5 th to 15 th internode	08a. Length
	O8b. Width 3 = Internode width constant from 5 th to 15 th internode 4 = Internode width decreases from 5 th to 15 th internode	08b. Width
Petioles:		Petioles:
	09. Petioles derived from main stem when observed after the 20 th node has developed:	09. Petiole measurements:
	09a. Length to medial width ratio of 10 th petiole (example: 0.00)	09a. L:W ratio of 10 th petiole
	09b. Length to medial width ratio of 15 th petiole (example: 0.00)	09b. L:W ratio of 15 th petiole
	 10. Petiole spininess (prickles) when observed after the 20th internode has developed: 0 = Smooth (Spineless Beauty) 2 = Moderately spiny (Cocozelle) 4 = Very spiny (Clarita) 1 = Slightly spiny (Goldy, Fordhook Zucchini) 3 = Noticeably spiny (Early Prolific Straightneck) 5 = Extremely spiny 	10. Petiole spininess
	 11. Petiole angle of 6th through 15th petioles on main stem (between ground and petiole) after the 20th internode has developed, measured when the main stem is at a 90-degree angle with the ground: 1 = Horizontal (Caserta, less than 10 degrees) 2 = Nearly horizontal (Goldy, Fordhook Zucchini, 10 to 30 degrees) 3 = Intermediate (30 to 45 degrees) 4 = Vertical or nearly vertical (45 degrees or greater) 	11. Petiole Angle
Application	on Variety	Comparison Variety

Application Variety	Comparison Variety
Laminae:	Laminae:
12. Lobing of 10 th and 15 th laminae on main stem (Figure 2): 0 = Not lobed 1 = Shallowly lobed 2 = Medium lobed 3 = Deeply lobed 4 = Very deeply lobed	12. Lobing
13. Dimensions of leaf laminae after the 20 th internode has developed (length measured from the point of petiole attachment to the apex of the lamina; maximal width measured at 90-degree angle to the length of the lamina):	13. Leaf laminae dimensions:
13a. Length to maximal width ratio of 10 th true leaf (example: 0.00)	13a. L:W ratio of 10 th true leaf
13b. Length to maximal width ratio of 15 th true leaf (example: 0.00)	13b. L:W ratio of 15 th true leaf
 14. Silver blotching or mottling (genetic, not leaf-silvering disorder) of adaxial surface of laminae after the 20th internode has developed: 1 = Silver blotching completely absent over time (Costata Romanesca, Early Prolific Straightneck) 2 = Silver blotching present early in development, then disappearing 3 = Silver blotching over a small amount of the surface 4 = Silver blotching over a moderate amount of the surface 5 = Silver blotching over much of the surface (Caserta) 	14. Silver blotching
Flowers:	Flowers:
 15. Number of flowers per node: 1 = Averaging clearly less than one 2 = One (almost always) (Fordhook Zucchini, Cocozelle) 3 = Often more than one 4 = Consistently more than one (Yellow Summer Crookneck) 	15. Number of flowers per node
16. Staminate flower on day of anthesis on main stem between nodes 11 and 20 (Figure 3):	16. Staminate flower measurements:
mm 16a. Length from base of calyx to tip of corolla	mm 16a. Length of petal
mm 16b. Exterior width at top of calyx cup	mm 16b. Width of petal
mm 16c. Pedicel length	mm 16c. Pedicel length
mm 16d. Length of anther column	mm 16d. Length of anther column
17. Dominant color of corolla of staminate flower, on day of anthesis: 1 = Orange-yellow 2 = Light yellow 3 = Nearly white	17. Dominant staminate flower color
18. Ring at base of interior of staminate corolla: 1 = Absent 2 = Yellow 3 = Green and yellow 4 = Light green 5 = Dark green	18. Ring at base of staminate corolla
19. Ring at base of interior of pistillate corolla: 1 = Absent 2 = Yellow 3 = Green and yellow 4 = Light green 5 = Dark green	19. Ring at base of pistillate corolla
20. Pistillate flower on day of anthesis:	20. Pistillate flower measurements:
mm 20a. Length from base of calyx to tip of corolla	mm 20a. Length of petal
mm 20b. Pedicel length	mm 20b. Pedicel length
21. Ovary color on day prior to anthesis: 1 = Green (Black Beauty, Fordhook Zucchini, Cocozelle, Clarita) 2 = Green turning yellow (Yellow Summer Crookneck) 3 = Yellow (Goldy, Gold Rush, Multipik) 4 = Bicolor green and yellow (Zephyr, Flying Saucer)	21. Ovary color
Application Variety	Comparison Variety

immature Fruit: 22. Immature fruit size (3-5 days past anthesis) (Figure 4): ———————————————————————————————————	Applicati	on Variety	Comparison Variety
	Immature Fruit:		Immature Fruit:
22b. Length (through the axis) to maximal width ratio (example: 0.00) 23. Immature fruit color (3-5 days past anthesis): 23a. Main color: 1 = Intense green (Fordhook Zucchini, Black Beauty, Jack O'Lantem, Sentator, Spirotess Deauty, Raven) Sentator, Spirotess Deauty, Raven) Sentator, Spirotess Deauty, Raven) 3 = Intense spirotess Deauty, Raven) 3 = Intense blockor (Coloty, Gold Rush, Golden Rod) 4 = Light yallow (Early Prolific Straightneck, Yellow Summer Crookneck, Muhipk, Diots, Gentry) 5 = Intense blockor (Surfourst, Nova) 7 = Striped group (Coocalle, Coastal Romanesca, Caserta) 8 = Striped blockor, or quadricolor (Zephyr, Flying Saucer) 2 = Shartware fruit flecks 1 = Stroad Intense of Milator, Steven, Magic Lantern) 2 = Netward (Fordhook Zurcchin), Mano Varice difficulty 2 = Netward (Fordhook Zurcchin), Hano Varice difficulty 1 = Senati (Neural Milator, Steven, Magic Lantern) 2 = Netward (Fordhook Zurcchin), Hano Varice difficulty, Howden, Ronde de Nico, 3 = Large (Ordiano of Faerax, Striato Pugliess, Coastata Romanesca, Grey Zucchini OP, Colitari, Spineless Seaury, Howden, Ronde de Nico, 2 = Simmature fruit varifag; 1 = Abearat (Coacaelle, Fordhook Zurcchin, Ronde de Nico, Centry) 2 = Present (Caser) Frodifico Xurcchin, Ronde de Nico, Centry) 2 = Present (Caser) Frodifico Xurcchin, Ronde de Nico, Centry) 2 = Present (Caser) Frodifico Xurcchin, Ronde de Nico, Centry) 3 = Sight, more prominent near peduncie (Fordhook Zurcchin) 3 = Sight, more prominent near peduncie (Fordhook Zurcchin) 5 = Moderate (Sweet Dumpling) 5 salloping roundly bode between vascular tracts) 6 = Prominent, at equational region (Benning's Green Tint) 7 = Not so prominent, at equational region (Earlor) 1 = Not so prominent, at equational region (Earlor) 1 = Prominent, at equational region (Selen) 1 = Not so prominent, at equational region (Selen) 1 = Not so prominent, at equational region (Selen) 1 = Not so prominent, at equational region (Selen) 1 = Not so prominent, at equational region (Selen) 1 = Not so prominent, at equational re		22. Immature fruit size (3–5 days past anthesis) (Figure 4):	22. Immature fruit size
23. Immature fruit color (3-5 days past anthesis): 23. Main color: 1 = Immense green (Fordhook Zucchini, Black Beauty, Jack O'Lantern, Sonator, Spinneless Beauty, Rawen) 2 = Light green (Afrika, Clarita, Samal Bugat, Ronde de Nice) 3 = Interse yellow (Soldy, Gold Rush, Solden Rod) 4 = Light yellow (Endry, Potellis Straightneck, Yellow Summer Crookneck, 5 = Immere biolar (Sumburst, Nova) 6 = Light biolor 7 = Striped green (Cocarelle, Costata Romanesca, Caserta) 8 = Striped yellow (Cody, Gold Rush, Solden Rod) 9 = Striped biocitor, or quadricoler (Zephyr, Flying Saucer) 9 = Striped biocitor, or quadricoler (Zephyr, Flying Saucer) 9 = Striped biocitor, or quadricoler (Zephyr, Flying Saucer) 9 = Striped biocitor, or quadricoler (Zephyr, Flying Saucer) 9 = Striped biocitor, or quadricoler (Zephyr, Flying Saucer) 9 = Striped biocitor, or quadricoler (Zephyr, Flying Saucer) 9 = Striped biocitor, or quadricoler (Zephyr, Flying Saucer) 9 = Striped biocitor, or quadricoler (Zephyr, Flying Saucer) 9 = Striped biocitor, or quadricoler (Zephyr, Flying Saucer) 9 = Striped biocitor, or quadricoler (Zephyr, Flying Saucer) 1 = Brand Americoler, or quadricoler (Zephyr, Flying Saucer) 1 = Striped striped (Potention Saucer) 2 = Narowa and rocordigues (Potention Saucer) 2 = Narowa (Cocacelle, Fordhook Zucchini, Ronde de Nice) 2 = Narowa (Cocacelle, Fordhook Zucchini, Ronde de Nice) 2 = Pramarur (Early Prolitic Striightnack, Yellow Summer Crookneck, Entry Summer Crookneck) Mature Fruit: 2		22a. Length (through the axis) to medial width ratio (example: 0.00)	22a. L:W ratio (to medial width)
23a. Main color 1 = Interiors green (Frodhook Zucchini; Black Beauty, Jack O'Lantern, 2 = Light green (Alias Clatta, Smell Supar, Ronde de Nice) 3 = Interior (Edita) Clatta, Smell Supar, Ronde de Nice) 3 = Interior (Edita) Clatta, Smell Supar, Ronde de Nice) 4 = Light yellow (Edity, Gold Rush, Golden Rod) 4 = Light yellow (Edity, Gold Rush, Golden Rod) 7 = Shipped green (Cooccalle, Costata Romanesca, Caserta) 8 = Siripad yellow 9 = Stirped policy (Cooccalle, Costata Romanesca, Caserta) 8 = Siripad yellow 9 = Stirped blooter, or quadricolor (Zeptyr, Phying Saucer) 22 = Natrow and not contiguous (Caserta, Verre of Italie) 24. Immature fruit fecks: 1 = Small (Nero d Milano, Raven, Majot Lantern) 2 = Natrow and not contiguous (Caserta, Verre of Italie) 24. Immature fruit fecks: 1 = Small (Nero d Milano, Raven, Majot Lantern) 2 = Natrow (Cooccalle, Costata Romanesca, Grey Zucchini (Pc, Corta, Spineless Beauty, Howden, Ronde de Nice) 3 - Stept (Cooccalle, Frodhook Zucchini, Ronde de Nice) 25. Immature fruit warting 1 = Absent (Cooccalle, Frodhook Zucchini, Ronde de Nice, Gentry) 2 = Rose (Cooccalle, Frodhook Zucchini, Ronde de Nice, Gentry) 2 = Rose (Cooccalle, Frodhook Zucchini, Ronde de Nice, Gentry) 2 = Stept, more promisent near peduncia (Frodhook Zucchini) 3 - Promisent and along entrie length (Costata Romanesca) 4 - Promisent and along entrie length (Costata Romanesca) 5 - Moderate (Sweet Dumpling) 5 - Moderate (Sweet Dumpling) 8 - Not so promisent, at equational reach) 9 - Not so promisent at explain (Simpy Delign) 9 - Not so promisent at explain (Simpy Delign) 1 - Not so promisent at explain reach) 1 - Promisent and ground produced between vascular tracts) 1 - Promisent and ground produced between vascular tracts and stability (progressed along the vascular tracts and stability (progressed along the vascular tracts and stability (progressed along the vascular tracts and mild produced progressions along vascular tracts and mild produced progressions along vascular tracts and mild produced progressions along v		22b. Length (through the axis) to maximal width ratio (example: 0.00)	22b. L:W ratio (to maximal width)
1 = Intense green (Forthook Zucchini, Black Beauty, Jack O'Lantem, Sanator, Sprinelass Beauty, Raven) 2 = Light green (Arlika, Clarita, Small Sugar, Ronde de Nice) 3 = Intense yellow (Colley, Gold Bush, Golden Rod) 4 = Light yellow (Calvit, Gold Bush, Golden Rod) 5 = Intense biction (Surburst, Nova) 6 = Light bicclor 7 = Striped green (Cocczelle, Costata Romanesca, Caserta) 8 = Striped bicclor, or quadricolor (Zerphyr, Flying Saucer) 9 = Striped bicclor, or quadricolor (Zerphyr, Flying Saucer) 2 = Narrow and not contiguous (Coccelle, Costata Romanesca) 2 = Narrow and not contiguous (Coccelle, Costata Romanesca) 2 = Narrow and not contiguous (Caserta, Verte d'Italie) 24. Immature fruit Rocks 1 = Small (Neco di Milano, Roven, Magic Lantem) 3 = Large (Ordiano di Faenza, Striato Pugliese, Costata Romanesca, Grey Zucchini OP, Clarita, Spineless Beauty, Howden, Ronde de Nico) 25. Immature fruit warting: 1 = Absent (Cocczelle, Fortinock Zucchini, Ronde de Nico, Gentry) 2 = Prasent Early Prolific Straightneck, Yellow Summer Crockneck, Early Summer Crockneck) Mature Fruit: 26. Mature fruit surface topography (fill in the blank with the most appropriate chololy (Figure 5); Ribbing present (seville prolific Straightneck, Nellow Summer Crockneck, Early Summer Crockneck) 3 = Silght, more prominent and poling entire length (Costata Romanesca) 2 = Silght, more prominent and genomic (Forthook Zucchini) 3 = Silght, near peduncler (Gropkook Zucchini) 5 = Moderate (Sove Churpling) Calloging (roundly lobed between vascular tracts) 1 = Prominent, at equatorial region (Scallopin) 5 = Moderate (Sove Churpling) 1 = Prominent, at equatorial region (Scallopin) 1 = Prominent, at equatorial region (Scallop		23. Immature fruit color (3–5 days past anthesis):	23. Immature fruit color
1 = Broad and contiguous (Cocozelle, Costata Romanesca) 2 = Narrow and not contiguous (Caserta, Verte d'Italie) 24. Immature fruit flecks: 1 = Small (Naro di Milano, Raven, Magic Lantern) 2 = Medium (Fordnook Zucchini, Nano Verde di Milano) 3 = Large (Ortolano di Faenza, Striato Pugliese, Costata Romanesca, Grey Zucchin Of Clarita, Spineless Beauty, Howden, Ronde de Nice) 25. Immature fruit warting: 1 = Absent (Cocozelle, Fordnook Zucchini, Ronde de Nice, Gentry) 2 = Present (Early Prolinic Straightmeck, Yellow Summer Crockneck, Early Summer Crockneck) Mature Fruit: 26. Mature fruit surface topography (fill in the blank with the most appropriate choice) (Figure 5): Ribbing present (swelling above vascular tracts): 1 = Prominent and along entire length (Costata Romanesca) 2 = Slight, more prominent near pedurole (Fordnook Zucchini) 3 = Slight, more prominent near pedurole (Fordnook Zucchini) 5 = Moderate (Sweet Dumpling) Scalloping (roundly lobed between vascular tracts): 6 = Prominent, at equatorial region (Scallopini) 8 = Prominent, at equatorial region (Scallopini) 9 = Not so prominent, at equatorial region (Scallopini) 11 = Not so prominent, at equatorial region (Scallopini) 12 = Prominent, at stylar region (Sumburst) 11 = Not so prominent (Taylock-Be-Little) 13 = Not so prominent (Groving Very narrow, shallow depressed along the vascular tracts and shallowly depressed along the vascular tracts, along nearly the entire length of the mild of the control of the c		 1 = Intense green (Fordhook Zucchini, Black Beauty, Jack O'Lantern, Senator, Spineless Beauty, Raven) 2 = Light green (Arlika, Clarita, Small Sugar, Ronde de Nice) 3 = Intense yellow (Goldy, Gold Rush, Golden Rod) 4 = Light yellow (Early Prolific Straightneck, Yellow Summer Crookneck, Multipik, Dixie, Gentry) 5 = Intense bicolor (Sunburst, Nova) 6 = Light bicolor 7 = Striped green (Cocozelle, Costata Romanesca, Caserta) 8 = Striped yellow 9 = Striped bicolor, or quadricolor (Zephyr, Flying Saucer) 	
1 = Small (Nero di Milano, Raven, Magic Lantern) 2 = Medium (Forthook Zucchini, Nano Verde di Milano) 3 = Large (Ortolano di Faenza, Striato Pugliese, Costata Romanesca, Grey Zucchini OP, Clarita, Spineless Beauty, Howden, Ronde de Nice) 25. Immature fruit warting: 1 = Absent (Cocozelle, Fordhook Zucchini, Ronde de Nice, Gentry) 2 = Present (Early Profitic Straightneck, Yellow Summer Crookneck, Early Summer Crookneck) Mature Fruit: 26. Mature fruit surface topography (fill in the blank with the most appropriate choice) (Figure 5): Ribbing present (Sewleling above vascular tracts): 1 = Prominent and along entire length (Costata Romanesca) 2 = Slight, near pedunole (Grey Zucchini OP, Small Green Algerian) Furrowing (angularly depressed above vascular tracts) 4 = Prominent, along nearly entire length (Taybelle, Mammoth Table Queen) 5 = Moderate (Sweet Dumpling) Scalloping (roundly lobed between vascular tracts): 6 = Prominent, at equatorial region (Sealopini) 8 = Prominent, at equatorial region (Sealopini) 9 = Not so prominent, at squatorial region (Scallopini) 1 = Not so prominent, at stylar region Lobing (broadly and roundly protruding between the vascular tracts and shallowly depressed along the vascular tracts, along nearly the entire length of the fruit) 12 = Prominent (Jack-Be-Little) 13 = Not so prominent Grooving (very narrow, shallow depressions along vascular tracts and midway in-between) 14 = Distinct (Howden) 15 = Not so distinct (Winter Luxury) Wrinkling (irregular surface) 16 = Distinct 17 = Indistinct 17 = Indistinct 18 = Completely smooth		1 = Broad and contiguous (Cocozelle, Costata Romanesca)	23b. Description of darker stripes
1 = Absent (Cocazelle, Fordhook Zucchini, Ronde de Nice, Gentry) 2 = Present (Early Profific Straightneck, Yellow Summer Crookneck, Early Summer Crookneck) Mature Fruit: 26. Mature fruit surface topography (fill in the blank with the most appropriate choice) (Figure 5): Ribbing present (swelling above vascular tracts): 1 = Prominent and along entire length (Costata Romanesca) 2 = Slight, more prominent near peduncle (Fordhook Zucchini) 3 = Slight, more prominent near peduncle (Fordhook Zucchini) Furrowing (angularly depressed above vascular tracts) and/or ridging (angularly raised between vascular tracts) between vascular tracts) 4 = Prominent, along nearly entire length (Taybelle, Mammoth Table Queen) 5 = Moderate (Sweet Dumpling) Scalloping (roundly lobed between vascular tracts): 6 = Prominent, at equatorial region (Bennings Green Tint) 7 = Not so prominent, at equatorial region (Sunny Delight) 9 = Not so prominent, at equatorial region (Sunny Delight) 11 = Not so prominent, at stylar region (Sunny Delight) 12 = Prominent, at stylar region (Sunny Delight) 13 = Not so prominent, at stylar region (Sunny Delight) 13 = Not so prominent, at stylar region (Sunny Delight) 13 = Not so prominent, at stylar region (Sunny Delight) 13 = Not so prominent, at stylar region (Sunny Delight) 13 = Not so prominent, at stylar region (Sunny Delight) 13 = Not so prominent, at stylar region (Sunny Delight) 15 = Not so prominent, at stylar region (Sunny Delight) 16 = Prominent (Jack-Be-Little) 17 = Indistinct (Vinter Luxury) 18 = Completely smooth		 1 = Small (Nero di Milano, Raven, Magic Lantern) 2 = Medium (Fordhook Zucchini, Nano Verde di Milano) 3 = Large (Ortolano di Faenza, Striato Pugliese, Costata Romanesca, 	24. Immature fruit flecks
26. Mature fruit surface topography (fill in the blank with the most appropriate choice) (Figure 5): Ribbing present (swelling above vascular tracts): 1 = Prominent and along entire length (Costata Romanesca) 2 = Slight, more prominent near peduncle (Fordhook Zucchini) 3 = Slight, near peduncle (Grey Zucchini OP, Small Green Algerian) Furrowing (angularly depressed above vascular tracts) and/or ridging (angularly raised between vascular tracts) and/or ridging (angularly raised between vascular tracts) and/or ridging (angularly raised between vascular tracts): 6 = Prominent, along nearly entire length (Taybelle, Mammoth Table Queen) 5 = Moderate (Sweet Dumpling) Scalloping (roundly lobed between vascular tracts): 6 = Prominent, at equatorial region (Benning's Green Tint) 7 = Not so prominent, at equatorial region (Scallopini) 8 = Prominent, at peduncular region (Scallopini) 10 = Prominent, at stylar region (Sunburst) 11 = Not so prominent, at stylar region Lobing (broadly and roundly protruding between the vascular tracts and shallowly depressed along the vascular tracts, along nearly the entire length of the fruit) 12 = Prominent (Jack-Be-Little) 13 = Not so prominent Grooving (very narrow, shallow depressions along vascular tracts and midway in-between) 14 = Distinct (Howden) 15 = Not so distinct (Winter Luxury) Wirnkling (irregular surface) 16 = Distinct 17 = Indistinct 18 = Completely smooth		1 = Absent (Cocozelle, Fordhook Zucchini, Ronde de Nice, Gentry) 2 = Present (Early Prolific Straightneck, Yellow Summer Crookneck,	25. Immature fruit warting
most appropriate choice) (Figure 5): Ribbing present (swelling above vascular tracts): 1 = Prominent and along entire length (Costata Romanesca) 2 = Slight, more prominent near peduncle (Fordhook Zucchini) 3 = Slight, near peduncle (Grey Zucchini OP, Small Green Algerian) Furrowing (angularly depressed above vascular tracts) and/or ridging (angularly raised between vascular tracts) 4 = Prominent, along nearly entire length (Taybelle, Mammoth Table Queen) 5 = Moderate (Sweet Dumpling) Scalloping (roundly lobed between vascular tracts): 6 = Prominent, at equatorial region (Benning's Green Tint) 7 = Not so prominent, at equatorial region (Scallopini) 8 = Prominent, at peduncular region (Sunly Delight) 9 = Not so prominent, at peduncular region 10 = Prominent, at stylar region (Sunburst) 11 = Not so prominent, at sylar region Lobing (broadly and roundly protruding between the vascular tracts and shallowly depressed along the vascular tracts, along nearly the entire length of the fruit) 12 = Prominent (Jack-Be-Little) 13 = Not so prominent Grooving (very narrow, shallow depressions along vascular tracts and midway in-between) 14 = Distinct (Minter Luxury) Wrinkling (irregular surface) 16 = Distinct 17 = Indistinct 18 = Completely smooth	Mature I	Fruit:	Mature Fruit:
Application Variety Comparison Variety		most appropriate choice) (Figure 5): Ribbing present (swelling above vascular tracts): 1 = Prominent and along entire length (Costata Romanesca) 2 = Slight, more prominent near peduncle (Fordhook Zucchini) 3 = Slight, near peduncle (Grey Zucchini OP, Small Green Algerian) Furrowing (angularly depressed above vascular tracts) and/or ridging (angularly raised between vascular tracts) 4 = Prominent, along nearly entire length (Taybelle, Mammoth Table Queen) 5 = Moderate (Sweet Dumpling) Scalloping (roundly lobed between vascular tracts): 6 = Prominent, at equatorial region (Benning's Green Tint) 7 = Not so prominent, at equatorial region (Scallopini) 8 = Prominent, at peduncular region (Sunny Delight) 9 = Not so prominent, at stylar region (Sunburst) 11 = Not so prominent, at stylar region Lobing (broadly and roundly protruding between the vascular tracts and shallowly depressed along the vascular tracts, along nearly the entire length of the fruit) 12 = Prominent (Jack-Be-Little) 13 = Not so prominent Grooving (very narrow, shallow depressions along vascular tracts and midway in-between) 14 = Distinct (Howden) 15 = Not so distinct (Winter Luxury) Wrinkling (irregular surface) 16 = Distinct 17 = Indistinct	26. Mature fruit topography
	Annlinati	on Variety	Comparison Variety

Applicati	on Variety	Comparison Variety
Mature	Fruit (continued):	Mature Fruit (continued):
	27. Mature fruit dimensions (at least 40 days past anthesis) (Figure 4):	27. Mature fruit dimensions:
	27a. Length (through the axis) to medial width ratio (Example: 0.00)	27a L:W ratio (to medial width)
	27b. Length (through the axis) to maximal width ratio (Example: 0.00)	27b. L:W ratio (to maximal width)
	 28. Mature fruit warting: 1 = Absent (Cocozelle, Fordhook Zucchini, Ronde de Nice) 2 = Sparse, small (Gentry) 3 = Sparse, large (White Bush Scallop) 	28. Mature fruit warting
	2 = Sparse, small (Gentry) 3 = Sparse, large (White Bush Scallop) 4 = Many, small 5 = Many, large (Orange Warted, Yellow Summer Crookneck)	
	 29. Mature fruit rind: 1 = Lignified (when cutting mature fruit, little cracks form) 2 = Not lignified (when cutting mature fruit, they slice smoothly and easily) 	29. Mature fruit rind lignified
	30. Mature fruit stylar scar: 1 = Protruding 2 = Flat 3 = Depressed	30. Mature fruit stylar scar
	31. Mature fruit stylar end: 1 = Depressed (Howden)	31. Mature fruit stylar end
	32. Mature fruit peduncle end: 1 = Depressed 2 = Nearly flat 3 = Convex	32. Mature fruit peduncle end
	33. Mature fruit peduncle (Figure 6):	33. Mature fruit peduncle dimensions:
	33a. Length (through the axis) to medial width ratio (Example: 0.00)	33a. L:W ratio (to medial width)
	33b. Length (through the axis) to maximal width (near fruit attachment) ratio (Example: 0.00)	33b. L:W ratio (to maximal width)
	34. Mature fruit surface: 1 = Netted (Winter Luxury)	34. Mature fruit surface
	35. Mature fruit exterior color: 35a. Main color: 1 = Light green 2 = Dark green (Table Queen) 3 = Black green (Fordhook Zucchini, Taybelle) 4 = Grey green 5 = Grey 6 = Light orange 7 = Pale orange 8 = Medium orange (Winter Luxury, Grey Zucchini OP) 9 = Intense orange (Jack O'Lantern, Howden) 10 = Yellow orange 11 = Light yellow orange 12 = Light yellow (Vegetable Spaghetti)	35a Main fruit exterior color
	13 = Intense yellow (Early Prolific Straightneck)14 = Nearly white (White Bush Scallop)	, 35b. Striped pattern
	Complex colors (give combination of choice above with color covering most of the fruit surface first)	, 35c. Bicolor pattern
	, 35b. Striped (Cocozelle 1, 8; Delicata 11, 2)	,, 35d. Quadricolor pattern
	, 35c. Bicolor (Sunburst 10, 1)	36. Mature fruit flesh color
	,, 35d. Quadricolor (Carnival 2, 4, 6, 11)	
	36. Mature fruit mesocarp (flesh) color: 1 = Intense Orange (Winter Luxury) 2 = Light Orange (Connecticut Field, Fordhook Zucchini) 3 = Intense Yellow (Mongogo) 4 = Light Yellow (Early Prolific Straightneck) 5 = White (White Bush Scallop) 6 = White tinged green	37. Mature fruit placenta color
1 = Orar		
Applica	tion Variety	Comparison Variety

Applica	tion Variety	Comparison Variety
Seed:		Seed:
	38. Seed cavity:	38. Seed cavity measurements:
	38a. Length (through the axis) to medial width ratio (Example: 0.00)	38a. L:W ratio (to medial width)
	38b. Length (through the axis) to maximal width ratio (Example: 0.00)	38b. L:W ratio (to maximal width)
	 39. Seed hull (from mature fruit harvested on candidate variety): 1 = Absent 2 = Present but rudimentary 3 = Present with normal appearance 	39. Seed hull
	40. Seed dimensions (average for 12 mature seeds from open-pollinated fruit harvested on candidate variety):	40. Seed measurements
	40a. Length to width ratio (Example: 0.00)	40a. L:W ratio
	40b. Length to thickness ratio (Example: 0.00)	40b. L:Thickness ratio
	40c. Width to thickness ratio (Example: 0.00)	40c. W:Thickness ratio
	41. Resistance to biotic or abiotic stresses: 1 = None 2 = Yes, as qualified In Exhibit B or D (specify disease resistance/tolerance):	41. Resistance to biotic or abiotic stresses
	42. Unique features that are not listed in the current 'Exhibit C' and/or are strongly environmentally dependent or occur sporadically (i.e.: peduncle characteristics, immature or mature fruit length or contents, width, or weight, stylar scar size, pollen color, seed-coat characteristics, branching, etc.): 1 = None 2 = Yes, as described herein:	42. Unique features not listed elsewhere in the application

43. On additional pages, attach photographs of mature fruits of both the application variety and the comparison variety, showing external and internal coloring, with a ruler in the photograph to indicate scale.

Additional photographs of the plant, flowers, immature fruits, or other plant parts could also be helpful in providing a full description of the variety to readers. Please provide such photographs if you believe they would be helpful.

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Figure 1. Fruit shapes

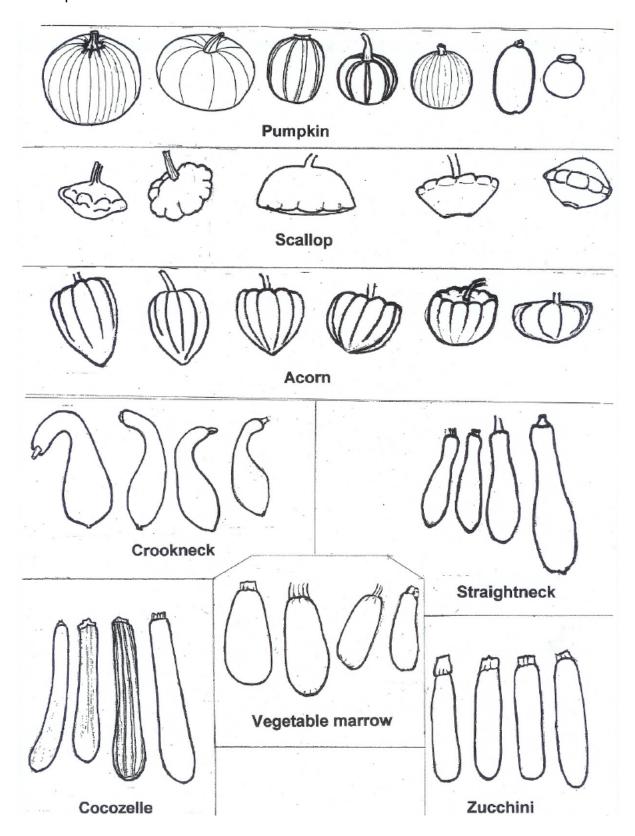


Figure 2. Leaf lobing

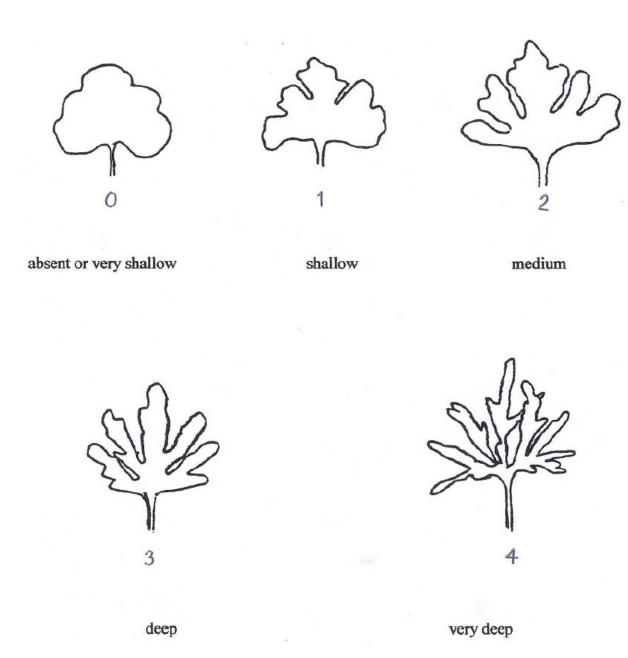


Figure 3. Flower measurements

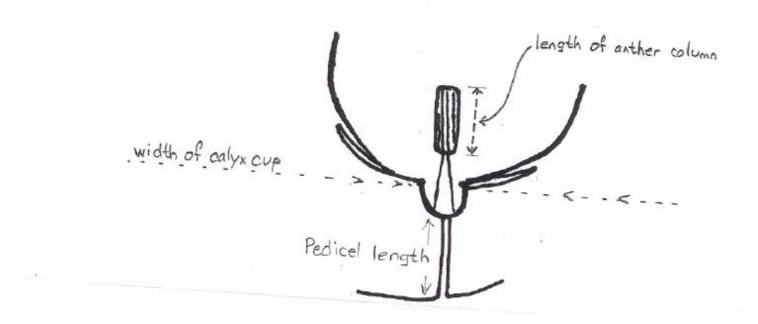


Figure 4. Fruit measurements

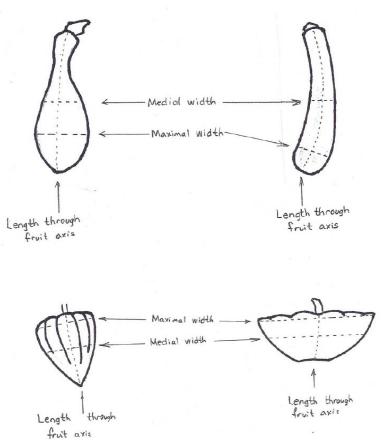


Figure 5. Fruit cross-sections

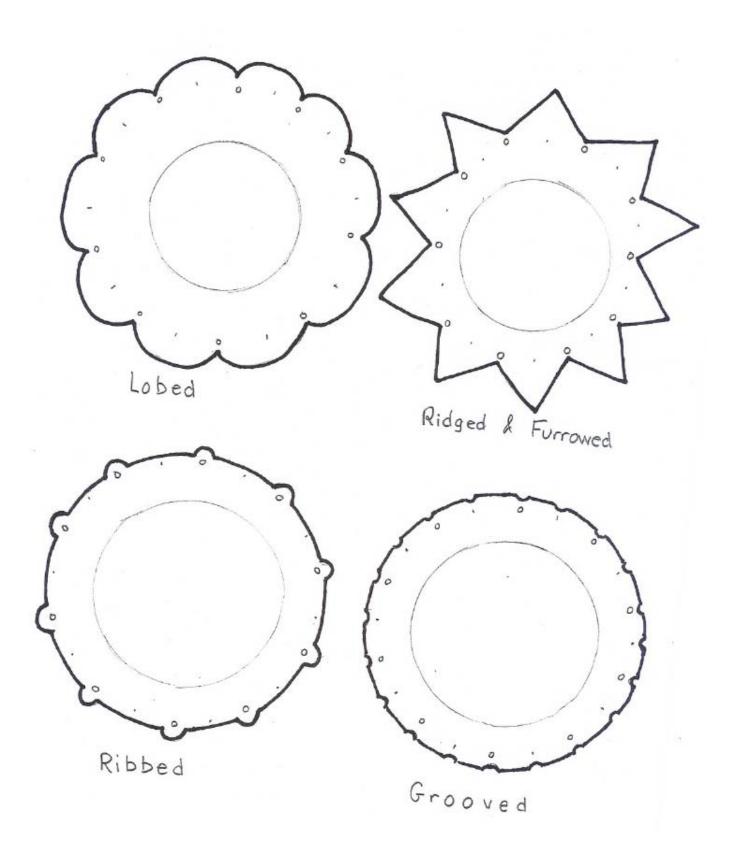
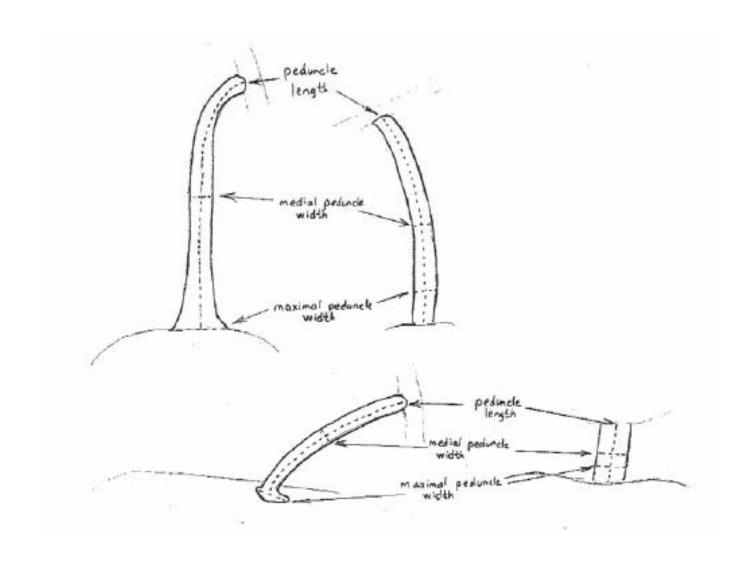


Figure 6. Peduncle measurements



INSTRUCTIONS FOR OBJECTIVE DESCRIPTION OF VARIETY Pumpkin, Squash, Gourd (*Cucurbita pepo* L.)

1. Subject & Purpose of these Guidelines

These Guidelines for testing apply to all varieties of pumpkins, squash, and gourds for those belonging to the species *Cucurbita pepo* L. Their purpose is to tabulate many characteristics in order to establish the distinguishing phenotypic features of various cultivars of this species.

2. Material Required

- a. The applicant, upon receiving a PVP application number and seed-depository letter from the PVP Examiner, will deposit 3000 (three thousand) seeds at the institution indicated on the depository form.
- b. The seed sample should meet normal commercial requirements for germination, which should be stated by the applicant.
- c. The sample must not have undergone any treatment unless the competent authorities allow or request such treatment. If the seed sample has been treated, full details of the treatment must be given.

3. Conduct of Testing

- a. The minimum duration of the test of the variety shall be two independent growing cycles and the test may be done at one or more localities.
- b. The test should be conducted under conditions ensuring satisfactory growth of the plants and normal expression of the characteristics of the variety under examination.
- c. The size of the plots must be large enough to allow the plants to realize their potential. The plots also must be large enough to allow removal of plants or parts of plants for measurement or counting, if necessary, without jeopardizing later observations, such as those to be made at the end of the growing cycle. Each characteristic for testing should be based on a total of at least 24 plants (12 per growing cycle). Separate plots for observations and for measurements can be used but only if they have been subjected to similar growing and environmental conditions.
- d. Testing for special purposes (disease resistance, vitamin content, etc.) may be established.

4. Methods and Observations

- a. All observations determined by measurement or counting should be made on at least 12 plants or parts taken from each of 12 plants.
- b. For the assessment of uniformity, a population standard of 3% should be applied. Where the test is conducted on 24 plants, the maximum number of off-types allowed would be 2.

5. Grouping of Varieties

The applicant should correctly classify the variety to species together with citation of the botanical authority (for example: *Cucurbita pepo* L.). The applicant should suggest, upon submitting the variety for testing, the market type to which the variety belongs and suggest control varieties of the same species and type.