Carol Deppe/Fertile Valley Seeds 2019 SEED CATALOG <u>http://www.caroldeppe.com/;</u> 7263 NW Valley View Dr., Corvallis OR 97330

To be on the mailing list for my e-mail seed catalog announcements and news, e-mail your request to <u>caroldeppe@gmail.com</u> (I will not share your email address with anyone.)

LOCAL VOLUNTEERS NEEDED to help with seed crop planting, harvesting, processing, and seed packing. It's as your schedule permits. Also LOCAL FARMS needed for help with certain breeding projects. Email me at <u>caroldeppe@gmail.com</u>.

I AM SOLICITING PATRONS to help support my plant breeding work. Please see section on page 28.

All the varieties in this catalog are bred or chosen primarily for superb flavor and for high vigor, high yield, and resilience when grown in organic systems. All varieties are open-pollinated and non-GMO. The majority of the varieties listed are open source OSSI-Pledged varieties (44). This is one of the most extensive listings of OSSI-Pledged varieties. The rest of the varieties are public domain varieties. All varieties bred by other freelance plant breeders are sourced directly from the breeder wherever possible. Breeder-grown seed is often a bit more expensive. I am proud to carry breeder-grown seed to get the best possible version of the breeder's vision as well as to support his or her breeding work. Where no breeder-grown seed is available, FVS usually pays a voluntary benefit sharing to the plant breeder to help support the breeding work. All seeds are packed for 2019 and exceed expected germination standards unless stated otherwise. Any liability is limited to the cost of the seeds.

HOW TO ORDER, ORDERING DEADLINE, & PAYMENT: Browse the catalog on my website (http://www.caroldeppe.com/) or on this pdf (downloadable from my website). Download and print out the order form, fill it out, and send it (by ordinary mail) with your payment to Carol Deppe, Fertile Valley Seeds, 7263 NW Valley View Dr., Corvallis, Oregon 97330. The ordering form is the last few pages of this pdf; it can also be downloaded as a separate pdf.) The order deadline for the 2019 season is April 30, 2019. I am still doing germination tests and packing seeds in January; I start shipping in February. Fertile Valley Seeds is a seasonal seed company. After April 31 I return to gardening, plant breeding, and writing. (So please don't expect to order seeds or get questions answered at the seed company email address (or my home address) year round.) There is no print catalog, telephone ordering, or email ordering. Acceptable payment includes personal checks, money orders, and any piece of paper that my bank will accept as a deposit. Please do not send forms of payment that require me to make a special trip to some special place in order to cash them. Please do not use certified or registered mail. The mail carrier chooses not to walk down the walk to the house, instead putting a note in the box that I should pick up the item in the post office; since this requires a two hour trip, it usually doesn't happen. What if you have no printer? Yes, you can use a piece of paper. However, include all info on the ordering form, including your email address (which I need to deal with any questions or problems). I ship orders only once or twice a month. And I can run out of stuff. So order early.

FOUNDATION SEED. I have designated the varieties I have bred and maintain myself and sell directly to you as foundation seed. (Most garden seed is many generations removed from foundation seed.) FVS is the only source of foundation seed of my varieties.

***ORGANIC SEED.** An asterisk before the variety name indicates seed that qualifies for use in growing USDA certified organic crops. Either the seed itself is USDA certified organic (as indicated), or it is grown using organic methods but not certified, and FVS is the only source of this variety or this grade of seed of this variety.

SURVIVAL PACKS/PACKETS. These seeds have been dried specially for long-term storage and packed in heavy duty 4 mil polyethylene bags suitable for long term storing or freezing. You can quickly take out what seed you need this year, seal the packet and toss the rest of the seed in the freezer. Or buy extra packets as an easy way to start your own DIY seed bank. Even at room temperature the survival packet seeds will last for years if stored out of the sun and the bag left sealed except for brief openings to remove what you need.

Sister* varieties are genetically identical except for 1 to 3 genes chosen so as to give different flavors or other characteristics. In addition, the particular genes are such that a little crossing between the varieties does not matter. This means sister* varieties may be grown side by side with little or no isolation. Sister* varieties represent my approach to facilitating seed saving by building ease of seed saving right into the genetics of the varieties.

CCC Junear Ann Spectrum Junear State State Proves

Safe Seed Pledge: Fertile Valley Seeds has signed the Safe Seed Pledge: "For the benefit of all farmers, gardeners and consumers who want an alternative, we pledge that we do not knowingly buy, sell or trade genetically engineered seeds or plants."

Seed initiative

Many of the vegetable varieties listed in seed catalogs these days are patented, or PVPed, or are distributed to the retail seed companies with licenses or bag-tag agreements that sign away some or most of our rights to the seed. Most (possibly all) larger retail seed companies are signing or accepting such restrictions with increasingly large portions of the seed they sell. The licenses or bag-tag agreements usually forbid all seed saving or breeding. *Such restrictions increasingly cover even heirloom or public domain varieties that the wholesale seed company grows and sells but played no part in breeding*. We, the retail seed company customers, are not usually being told about these restrictions. The result is that we often have no idea what our rights are when we buy seed these days. Not even with heirlooms or public domain varieties. And many hybrids are actually protected by patents or these other forms of intellectual property. We often don't actually own the seed we think we are buying. We are just renting the one-time use of the seed for specific limited purposes. The best way to fight back against these attacks on our seed rights is to grow Open Source Seed Initiative Pledged (OSSI-Pledged) varieties.

Open Source Seed Initiative aims at protecting and preserving plant varieties and germplasm from being patented, restricted, or transformed into private property. The distinctive green OSSI logo on variety descriptions and seed packet labels denotes OSSI-Pledged varieties—varieties Pledged to OSSI by their breeders, who thus indicate their intention that the varieties belong forever to all humankind. When you buy these varieties you obtain them accompanied by the OSSI Pledge, and are agreeing to abide by this Pledge: *You have the freedom to use these OSSI-Pledged seeds in any way you choose.*

In return, you pledge not to restrict others' use of these seeds or their derivatives by patents or other means, and to include this pledge with any transfer of these seeds or their derivatives.

What can you do with OSSI-Pledged varieties? Whatever you want! All you have to do is not restrict the seed yourself, and pass the Pledge along with the seeds. Here are the OSSI "Four Essential Seed Freedoms" you promulgate and protect by supporting OSSI and using OSSI-Pledged varieties:

- 1. The freedom to save or grow seed for replanting or for any other purpose.
- 2. The freedom to share, trade, or sell seeds to others.
- 3. The freedom to trial and study seed and to share or publish information about it.
- 4. The freedom to select or adapt the seed, make crosses with it, or use it to breed new lines and varieties.

There are now about 500 OSSI-Pledged varieties. I'm proud to have OSSI-Pledged all the varieties I've bred as well as to have enlisted Fertile Valley Seeds as an OSSI Partner Seed Company. In addition, I've joined the OSSI Board of Directors, and am editor of the OSSI quarterly on-line magazine *Free the Seed!*. OSSI is where the fight to take back our seeds is happening. For more information about the Open Source Seed Initiative, or to sign up for the (free) OSSI quarterly, see <u>http://osseeds.org/</u>.

Fertile Valley Seeds proudly offers the following 44 OSSI-Pledged varieties whose

photos appear on this and the following pages. These varieties were bred and Pledged to OSSI by me or these fellow OSSI-associated plant breeders: Andrew Still, Glenn Drowns, Hank Keogh, Joseph Lofthouse, Frank Morton, Dave Podoll, Jonathan Spero, and Don Tipping. When you buy these varieties, you are helping to create and support an alternate model of control of seeds—one in which we, the people, have full rights to the seed we buy, and can save, share, replant, or sell it, and even use it to breed new varieties of our own.



Beef-Bush Black Resilient dry bean



Beef-Bush Brown Resilient dry bean



Beefy Resilient Grex dry bean



Beef-Bush Gold Resilient dry bean



White Candle Gaucho dry bean



Hannan Popbean garbanzo



3



Solstice brocolli



Cascade CreamCap flint corn



Cascade Ruby-Gold flint corn



Landmark Flint corn



Magic Manna flour corn



Parching Red Manna flour corn



Pancake White Manna flour corn



Parching Starburst Manna flour corn



Brown Gravy Manna flour corn



Tuxana sweet corn



Top Hat sweet corn



Dakota Black Pop popcorn



Red Ursa kale (B. napus) Wild Garden Lacinato kale (B. oleracea)



Dazzling Blue Lacinato kale (B. oleracea)



Belgian Breeders Winter Mix leeks



Hyper Red Rumple Waved lettuce



Emerald Fan lettuce



Joker lettuce



Lofthouse-Oliverson Landrace melon



Blacktail Mountain watermelon



Sweet Dakota Rose watermelon



Dakota Tears onion



Aurora orach



Triple Purple orach



Green Velvet orach



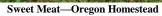
Goldini Zucchini summer & drying squash

Homestead Rainbow Grex winter squash



Lofthouse Landrace Moschata

Candystick Dessert Delicata





Bigger Better Butternut winter squash



Sundream winter squash



Prismatic Rainbow Swiss chard

Perfect Rogue tomato

Scarlet Ohno Revival turnip

Photo credits: Adaptive Seeds: Perfect Rogue tomato. Carol Deppe/Fertile Valley Seeds: all photos not indicated otherwise. Joseph Lofthouse: Lofthouse-Oliverson Landrace muskmelon, Lofthouse Landrace Moschata. Karen Morton/Wild Garden Seeds: Red Ursa kale, Wild Garden Lacinato kale, Dazzling Blue Lacinato kale, Belgian Breeders Winter Mix leeks, Hyper Red Rumple Waved lettuce, Joker lettuce, Aurora orach, Green Velvet orach, Triple Purple orach, Scarlet Ohno Revival turnip. Siskiyou Seeds: Sundream winter squash, Prismatic Rainbow Swiss chard. Praire Road Organic Seed: Dakota Black Pop, Sweet Dakota Rose, Dakota Tears. Jonathan Spero/Lupine Knoll Farm: Solstice broccoli, Tuxana sweet corn, Top Hat sweet corn, Siber-Frill kale, Emerald Fan lettuce. Southern Exposure Seed Exchange: Blacktail Mountain watermelon.

2019 SEED LIST

AMARANTH. See GREENS, EAT-ALL for dual-purpose green/grain variety.

BASIL

SWEET GENOVESE. 70 days. Best general purpose basil. Highest yielding variety. Best for pasta sauce, because it stands up to cooking. Also excellent for pesto or dried. \$5

BEANS—DRY/SHELLY (all species)

BEEF-BUSH BLACK RESILIENT bush dry bean. (*Phaseolus vulgaris*) OSSI-Pledged Variety. USDA-ORG. Bred for organics. My all-time favorite dry bean. Very beefy flavor—tastes more like beef than beef does. Genetically ¾ Gaucho and ¼ Beefy Resilient Grex. Sister to Beefy Resilient Grex and other Beef-Bush lines. Selected for determinate bush form and black color. A little later than Gaucho, but still pretty early. I suspect this bean actually contains a protein that in cooking breaks down to give Beefy Flavored Peptide or something analogous. (Beefy Flavored Peptide is the peptide responsible for the distinctive beefy flavor of aged browned beef.) There are still some short-vined types and some yellows in the variety. (Less than 5% each.) I soak for 24 hours because some of the seeds have thicker skins and imbibe slower. (Stir occasionally to provide enough oxygen so seeds imbibe optimally during soaking; replace water a couple times during soaking.) (I'm still selecting for uniformity for thin skins.) Bred by Carol Deppe/Fertile Valley Seeds. At least 50 Foundation Grade seeds -- \$5.

***BEEF-BUSH BROWN RESILIENT bush dry bean.** (*Phaseolus vulgaris*) OSSI-Pledged Variety. USDA-ORG. Bred for organics. Foundation seed. Sole source of foundation grade seed of this variety. Sister* to Beefy Resilient Grex and other Beef-Bush lines. Genetically ³/₄ Gaucho and ¹/₄ Beefy Resilient Grex. Selected for determinate bush form and brown color. Rich meaty flavor; excellent served plain with just a little salt, pepper, and butter. A little later than Gaucho, but still early. There are still some short vine types and some yellows in the variety. (5% or less of each.) I soak for 24 hours because some of the seeds have thicker skins and imbibe slower. (Stir occasionally to provide enough oxygen so seeds imbibe optimally during soaking; replace water a couple times during soaking.) (I'm still selecting for uniformity for thin skins.) Bred by Carol Deppe/Fertile Valley Seeds. At least 50 Foundation Grade seeds -- \$5.

***BEEF-BUSH GOLD RESILIENT bush dry bean.** (*Phaseolus vulgaris*) OSSI-Pledged Variety. Not available in 2019. Bred for organics. Foundation seed. Sole source of foundation grade seed of this variety. Sister* to Beefy Resilient Grex and to the other two beef-bush lines. Early dry bush

bean. Very productive. I was just minding my own business not trying to be a bean breeder at all when my heirloom 'Gaucho' beans, supposedly *P. vulgaris*, crossed so cheerfully with 'Black Mitla' tepary, supposedly *P. acutifolius*, to give me material that I in due course released as 'Beefy Resilient Grex'. I was still not trying to be a bean breeder when I subsequently got several dozen unsolicited backcrosses of those crosses onto pure 'Gaucho'. The backcrossed plants were obvious by their generally short-viney bush type, purplish plants, and usually black or brown seed. One of these backcrossed plants produced 806 seeds, the most I have ever got from any legume. Really, what could I do? I saved the seed separately, of course. This plant, named "Resilient 800X' became the foundation plant for the Beef-Bush series, derived by selecting for bush type and pure colors. 'Beef-Bush Gold Resilient' is the first of these to be released. It looks just like 'Gaucho', but is a sister line to 'Beefy Resilient Grex' and not to 'Gaucho'. 'Beef-Bush Gold Resilient' is a full flavored dry bean. It's genetically ³/₄ Gaucho and ¹/₄ 'Black Mitla' "tepary". I soak for 24 hours because some of the seeds have thicker skins and imbibe slower. (Stir occasionally to provide enough oxygen so seeds imbibe optimally during soaking; replace water a couple times during soaking.) Bred by Carol Deppe (Fertile Valley Seeds). At least 150 Foundation Grade seeds -- \$5.

BEEFY RESILIENT GREX bush dry bean. (Phaseolus vulgaris X P. vulgaris/acutifolius) OSSI-Pledged Variety. Bred for organics. Foundation Seed. Sole source of foundation grade seed of this variety. Sister to Beef-Bush lines. Intense beefy flavor; tastes more like beef than beef does. Can substitute for beef or enhance rather than dilute the beef flavor in combinations of beef and beans. Pureed, makes a fantastic "beef" gravy. Plants are a mix of short vine and bush form. Short vines are held up off the ground, so the mix can be grown as bush beans. This is a segregating population of beans that represent the F6 and F7 of crosses between Gaucho common bean X Black Mitla "tepary." (Note: Black Mitla has long been listed as a tepary, but its flower anatomy is intermediate between what is expected of *P. vulgaris* and *P. acutifolius*. I am guessing Black Mitla, an heirloom from Mexico and popular in the Southwest, actually resulted from a cross between the two species.) Gaucho, an Argentine heirloom, is a very early, very delicious richly flavorful gold dry bean. Black Mitla is a widely adapted bean with a powerful delicious flavor. Both are small beans round in cross section and about twice as long as wide. Both are easy to thresh. Teparies are unusually heat resistant and drought hardy, and are resistant or tolerant to diseases common beans succumb to. Common bean varieties tend to yield more. In 2009 I was trying to do seed increases on the pure varieties, which I grew only 12 feet apart; they shouldn't have crossed if they were different species. In 2010, when I grew out what I expected to be pure gold Gaucho, about 5% of the plants produced black seed. Figuring that whatever the exact species identity of the parents, the cross was immensely interesting, I hand-sorted out several thousand black seeds representing those crosses and planted them in 2011 to produce Resilient Bean Breeder F3. These turned out to be the most productive dry beans I have ever seen. When I cooked up a pot of the mixed colors, the flavor blew me away. The beans taste more beefy than beef does. When the mix of all colors of beans proved so delicious just as is, I renamed the material Beefy Resilient Grex. The 2016 population is F5s and F6s from the original crosses. The plants are a mix of short-vined bushes and true bushes, mostly the short-vined bush types. They all hold their pods up off the ground and can be handled like bush beans. To harvest I clip or pull plants and roll up the tangled row-shaped mat of beans. About ³/₄ of the beans are black; the rest are brown, tan, gold, or speckled. Maturity is a little later than Gaucho but still quite early. (Presumably there will be continuing segregation for plant type, maturity, drought resistance, disease resistance, and bean color and flavor.) I am selecting gently for earliness (by eliminating any plants that are not dry along with the main crop) but not selecting otherwise. I want this material to retain as much of its heterogeneity as possible so that it will be

maximally useful for others to breed from. Save seed from the plants that do best for you and breed your own unique varieties adapted to your own needs and conditions. Or just use as a mix, as I am. This should be particularly good material from which to select varieties for short-seasons, cool or cold or hot summer weather, drought hardiness, yield, and disease resistance. (To cook Beefy Resilients, I soak for 24 hours with adequate stirs and occasional water changes; soaking time is variable, but they all swell completely in that time.) Bred by Carol Deppe/Fertile Valley Seeds. At least 150 FOUNDATION GRADE seeds – \$5

***FAST LADY NORTHERN SOUTHERN PEA.** (*Phaseolus unguiculata*) OSSI-Pledged Variety. Bred for organics. Foundation seed. Dry and shelly bush Southern pea (cowpea). Foundation Seed. Sole source of foundation grade seed of this variety. Early maritime- and northern-adapted cowpea. Small white seeds. Does not need soaking before cooking. Delicious but mild flavor with fine smooth-grained texture. I like to eat straight with just a little butter, salt, and pepper. Or in vegetable soup, where flavor complements without overwhelming vegetables. Easiest of all beans I have grown to thresh and clean. Good as either dry bean or shelly. Like most cowpeas, less vulnerable to rehydration or molding by rain when dry or near dry than common bean, and not palatable to cucumber beetles. Bush plants, but indeterminate; they keep growing and developing pods if watered. Hold water during last month to help beans finish up and dry down. Bred by Carol Deppe/Fertile Valley Seeds. At least 100 Foundation Grade seeds -- \$5.

GOLDEN GAUCHO bush dry bean (*Phaseolus vulgaris*) 85 days. Sister* to White Candle Gaucho. Very early productive bush bean for drying. Rich distinctive flavor. Gaucho beans made a good crop on Vancouver Island B.C. Canada in the unusually cold (even for Vancouver) summer of 2011. Gaucho is an heirloom dry bean from Argentina that came to me from the old Abundant Life Seed Foundation. It had some crosses to green beans; I've reselected for the original dry bean type. I've now cleaned this material up so that it is uniform and uniformly early, and am calling the cleaned up line "Golden Gaucho". Plant type is a very determinate bush that goes from completely green (and impervious to damage from rain or irrigation) to completely dry (and ready to harvest) in about 7 - 10 days, unusually fast even for a bush bean. Capable of yielding more than 20 lbs./100 row feet under ordinary relatively low-input organic field conditions, the highest yield I have ever had in a bush dry bean (except for Beefy Resilient Grex, for which it was one of the parents). At least 100 seeds – \$5.

*HANNAN POPBEAN Garbanzo/Chickpea Bush Dry Bean (*Cicer arietinum*) OSSI-Pledged Variety. Bred for organics. Foundation Seed. Sole source of foundation grade seed of this variety. Productive 2-foot tall bushes. Plant mid-March through April in Oregon. Later plantings give flowering on tiny plants, thus produce few seeds. Seedlings are freeze-hardy. Plant at or thin to 8 inches. Needs no irrigation in the maritime Northwest. Harvest when plants are dry, usually late July. I don't recommend this variety for regions where the ground is frozen into April. Selected for production under organic conditions in Willamette Valley Oregon, hotbed of aphid-spread pea diseases. Highly resistant to soil borne diseases including Fusarium and to aphid-borne diseases. Use as a regular garbanzo, as a shelly, or as a popbean. Bred by Carol Deppe/Fertile Valley Seeds. At least 100 FOUNDATION GRADE seeds – \$5.

★WHITE CANDLE GAUCHO bush dry bean. (*Phaseolus vulgaris*) OSSI-Pledged Variety. Not available in 2019. 85 days. Bred for organics. Foundation Seed. Sole source of foundation grade seed of this variety. Sister* to Golden Gaucho. This bean is the same size and shape as Golden Gaucho, but is white with a candle-shaped mark on the hilem. It arose as one plant in a Golden Gaucho planting. As for most white beans, the flavor is mild, and best for adding nutrition and succulence to poultry or vegetable soups or other dishes where a stronger-flavored bean would overwhelm. Like Golden Gaucho, the plant type is a very determinate bush that goes from completely green (and impervious to rain) to completely dry in 7 – 10 days. As for Golden Gaucho, White Candle Gaucho is capable of yielding more than 20 lbs./100 row feet under ordinary relatively low-input organic field conditions. White Candle and Golden Gaucho are sister* varieties. You can plant Golden and White Candle Gaucho at different ends of the row, eat the beans where the plantings come together in the middle, and save seed from the ends. Occasional crosses don't matter between sister varieties. Bred by Carol Deppe/Fertile Valley Seeds. At least 100 FOUNDATION GRADE seeds -- \$5.

GREEN BEANS

PROVIDER Bush Snap Bean (*Phaseolus vulgaris*). 50 days. Early productive green bean with fat medium green 5 1/2" pods with rich flavor. Can be planted earlier than most beans because it germinates well in cool soil. Widely adapted. Resilient to erratic weather and difficult growing conditions. Unlike most bush beans, will continue flowering and making beans after the first flush if kept watered. Tolerates cold weather. Purple seed. Resistant to CBMV, NY 15, DM, PM. At least 150 seeds -- \$5

ROYAL BURGUNDY Bush Snap Bean (*Phaseolus vulgaris*). 55 days. Early productive purple bush snap bean with good flavor. The most vigorous bush snap bean I have grown. Pods turn green when cooked. Does well in cold weather. Like Provider, and unlike most bush snap beans, will continue flowering and making pods after the first flush if kept watered. Provider and Royal Burgundy give an extended harvest more like that of pole beans than bush beans. Light brown/tan seed. Resistant to CBMV, NY15, PM. At least 150 seeds -- \$5.

KENTUCKY WONDER Pole Snap Bean. 68 days. Very productive heirloom, stringless up to about 7". My favorite bean when it comes to green bean flavor, and the standard to which all other green beans are compared. A few KW beans tossed into a soup or stew flavors the entire pot with that rich meaty savory KW flavor. Unlike most beans, must be cooked several minutes (to the point of being limp) to develop the characteristic flavor. (Such as boiling it for 10 minutes.) Also makes good shellys and dry beans. Brown seed. At least 150 seeds.

BEET

EARLY WONDER TALL TOP (*Beta vulgaris*) Very early vigorous red beet with large edible greens. 30 days to greens; 48 days to roots. Heaping TBS. seeds - \$5.

BROCOLLI

SOLSTICE (*Brassica oleracea*) OSSI-Pledged Variety. USDA-ORG. Bred for organics. Very early op brocolli. Deep blue-green, 3 - 5 inch heads stick up above the rest of the plant for easy harvest. Modest-sized instead of huge heads allows plants to put most of their efforts into producing generous yields of side-shoots. Start in flats late March and transplant to produce heads by June 21. Plant in summer for big heads in fall. (Plant a main season brocolli for heads in July.) Bred by Jonathan Spero by six generations of selection from gene pool material provided by Oregon State University. This seed grown by and bought from the breeder; the slightly higher price helps support his work. \$5.

CARROT

SCARLET NANTES (*Daucus carota*) 68 days. Classic favorite with bright orange 7" roots and small core. Heaping TBS seed - \$5.

COLLARD See Kale and Collards.

CORN—FLINT

CASCADE RUBY-GOLD Flint Corn. OSSI-Pledged Variety. Bred for organics. Foundation Seed. Sole source of foundation grade seed of this variety. 85 days. Sister to Cascade Creamcap. A very early, productive true flint corn superb for cornbread, jonny cakes, and polenta. Plants 5 1/2 feet high with 1 to 3 ears per stalk depending upon spacing and soil fertility. (In rows under field conditions--1 ear at 6"; 1-2 at 8"; 2 ears at 12"; 2-3 at wider spacing.) Ears 8-12" with 8-12 rows of big seeds on a medium-narrow cob that dries down easily. Single stalk or multiple stalks depending upon spacing and soil fertility. Good husk coverage for protection against birds and worms. Very vigorous. Does well even in downright cold summers. Cascade corns did well even on Vancouver Island, British Columbia, in the unusually cold summer of 2011. Produces solid-colored ears of several colors-red, red-brown, dark red, orange-gold, maple-gold, gold, and yellow. Interior kernel color is always yellow or gold. Each color of ear produces a different flavor of cornbread and polenta. The red shades make a rich-flavored cornbread; the yellow shades make a mild-flavored cornbread. Both make great polenta and jonny cakes. Recipes for cornbread, jonny cakes, and polenta made with this corn can be found in The Resilient Gardener: Food Production and Self-reliance in Uncertain Times. Although bred primarily to be gourmet-quality food, Cascade Ruby-Gold Flint also makes a great ornamental corn. I bred this corn to be the ultimate survival crop, the variety and crop you would choose if you could have only one variety to get you through good times and bad. Bred by crossing Roy's Calais (aka Abenaki) with Byron flint and selecting from there. Compared with Roy's Calais, CRG is equally early, more vigorous, more productive, has bigger ears with better husk coverage, is 8-12 row instead of only 8, has more ear colors, has gold instead of pale yellow interior color, and more of the yellow ears are gold instead of pale yellow. (Seed saving info: Cascade Ruby-Gold has orange flinty endosperm, and clear aleurone. It varies for pericarp colors, with different genes for pericarp color giving ears that are solid

colors of red, deep red, orange, maple, gold, or yellow. There should be no black or white kernels. Eliminate any ears showing white or sweet kernels from the planting stock. Number of rows between 8 and 12 are acceptable as long as the ear is not too thick to dry down readily. This is a very pure flint type. No flour or dent type kernels should be present.) Bred by Carol Deppe/Fertile Valley Seeds. SURVIVAL PACKET. At least 150 FOUNDATION GRADE seeds -- \$5. 1 lb. SURVIVAL PACK. At least 1200 seeds FOUNDATION GRADE seeds -- \$25 (\$20 for the seeds

+ \$5 for extra postage).

CASCADE CREAMCAP Flint Corn OSSI-Pledged Variety. Bred for organics. Foundation seed. Sole source of foundation grade seed of this variety. 85 days. Sister to Cascade Ruby-Gold. Characteristics of Cascade Creamcap are the same as for Cascade Ruby-Gold except for ear color and flavor. Cascade Creamcap has glassy white or peach-tinted white ears. This corn is the culinary and flavor equivalent of the classic Rhode Island Whitecap but produces bigger ears and more of them in spite of being a much earlier corn, and is much more widely adapted. The flavor is very mild and neutral, not like yellow corn at all. That neutral flavor is much better in situations where you want to taste just the other ingredients. I prefer CCC for eating with fine cheese or smoked salmon. (Regular yellow corn clashes with or detracts from these.) I also often prefer CCC when I use chunks of cornbread as a pasta substitute. (See recipes in The Resilient Gardener.). Makes great polenta. (Seed saving info: CCC has white endosperm, clear aleurone, and white or peachy-white pericarp. There should be no individual colored kernels, no black, no yellow, no sweet, and no floury or dent kernels. Flint kernels are glassy. To grow in the same field with CRG, give the CCC and CRG about 10' (ten feet) of isolation. And if there is a consistent wind direction, plant the CRG upwind. Alternately, just plant the corns side by side, and save seed from the middle of each patch and eat the rows where the varieties come together. Any crosses from CRG onto CCC will show up as gold kernels in the white ears, so can be culled. Crosses in the other direction can't be seen. But there is a little yellow still in the CCC, and a little white in the CRG anyway, since I developed both from the same material. So if you get occasional crosses but also cull out inappropriate ears regularly it will all work fine.) If you grow Cascade Ruby-Gold as an ornamental corn, a patch of Cascade Creamcap rounds out your color pallet. Bred by Carol Deppe/Fertile Valley Seeds. SURVIVAL PACKET. At least 150 FOUNDATION GRADE seeds -- \$5.

*LANDMARK Flint Corn. OSSI-Pledged Variety. USDA-ORG. Bred for organics. It takes a full-season corn to get maximum productivity per amount of land or labor. In addition, you need a sturdy full-season corn to grow pole beans on. And you need a true flint corn for the whole grain polenta that cooks fast and tastes great without bolting or screening. I crossed Cascade Ruby-Gold flint, which is very early, to Longfellow, the classic highest yielding late heirloom 8-row yellow flint. Then I grew the F1 out to produce F2 seed, which is what I'm selling. The idea is to distribute this F2 material far and wide and let every farm/region use it to develop full season flint corn varieties of their own adapted to their own climate, region, preferences, and growing methods. The ears of Landmark are redbrown, red, orange, or yellow. (Each ear is solid colored.) Interior kernel color is deep orange. Polenta meal is red-gold, that is gold with red flecks. Great flavor. Also spectacularly distinctive, flavorful in cornbread. Good sized ears. 8 to 12 rows. (See recipes for fast-cooking polenta and all-corn cornbread (with no artificial binders) in *The Resilient Gardener*.) I am selling Landmark in 1-pound amounts only because I do not recommend trying to plant just a small patch. I expect the F2 plants to vary in maturity widely enough so that ear fill would be a problem in a small patch. Note that you can plant at

8 inches in the row and select for plants that produce the biggest single ear. Or you can give the plants more space and select for plants that produce multiple large ears. If you care primarily about support for pole beans, you might try planting the corn in generously spaced hills, with beans planted in between the hills in one direction when corn is about 4 inches high. Bred by Carol Deppe/Fertile Valley Seeds. 1 lb. SURVIVAL PACK. At least 1200 seeds -- \$25.

CORN—FLOUR & PARCHING

MAGIC MANNA Flour Corn. OSSI-Pledged Variety. Bred for organics. Foundation Seed. Sole source of foundation grade seed of this variety. 85 days. Sister to other Manna varieties. Very early flour corn I bred from Painted Mountain that shares its earliness, vigor, and resilience. Selected for flavor and cooking characteristics. For parching, gravy, bread, sweet breads, pancakes, cookies, and cake. (Not for polenta.) Also a beautiful ornamental corn. Ears 8" long, 8-12 rows, on 5' plants. Solid colored ears of three basic colors-deep-red/red/pink, brown/tan, or white/peach. All make great cornbread. The red/pink (only) are also great parching corns. The brown/tan ears (only) make great brown gravy and savory bread (without sugar). White/peach ears (with added sugar) have a distinctive pancake flavor and are great for pancakes, cakes, and cookies. You can use Magic Manna corn flour to make angel food cake using any angel food cake recipe. Likewise, just substitute the corn for wheat flour to make pancakes, adjusting water to get the right consistency in the batter. (I add the baking powder last, after I have added just enough water to get a batter of the desired consistency. If you mix baking powder into the dry ingredients, you can't adjust the water amount easily.) To make bread or sweet breads, use the Universal Cornbread recipe in The Resilient Gardener. Magic Manna is described in detail in The Resilient Gardener along with recipes. Seed Saving information: Magic Manna has a white endosperm and a clear aleurone and is variable for pericarp (skin) color. Yellow and black kernels don't belong in the variety. Very pure flour corn type. If any flinty, dent, or sweet kernels appear, cull the entire ear they are on. Ear row numbers between 8 and 12 are acceptable. All "Manna" varieties are sister* varieties and can be grown side by side in the same field. Just eat the edge row where another Manna variety is adjacent and save seed from the rest. A little gene flow between the different varieties in the Manna series is fine. Bred by Carol Deppe/Fertile Valley Seeds. SURVIVAL PACKET. At least 125 FOUNDATION GRADE seeds -- \$5. SURVIVAL PACK of 1 lb. (At least 1200 FOUNDATION GRADE seeds) -- \$30 (\$25 for seeds, \$5 for extra postage).

***BROWN GRAVY MANNA flour corn.** OSSI-Pledged Variety. Bred for organics. Foundation Seed. Sole source of foundation grade seed of this variety. 85 days. Sister* to other Manna varieties. See Magic Manna listing. Brown Gravy Manna is just like Magic Manna except about ½ - 2/3 of the ears are brown/tan, the rest being the other colors typical of Magic Manna. This variety is for those who want more brown/tan ears for making gravy, thickening stews, or making savory cornbread, biscuits, and crackers. Bred by Carol Deppe/Fertile Valley Seeds.

SURVIVAL PACKET. At least 125 FOUNDATION GRADE seeds -- \$5.

SURVIVAL PACK of 1 lb. At least 1200 FOUNDATION GRADE seeds -- \$30 (\$25 for the seeds, \$5 for extra postage).

***PANCAKE WHITE MANNA flour corn.** OSSI-Pledged Variety. Bred for organics. Foundation Seed. Sole source of foundation grade seed of this variety. 85 days. Sister* to other varieties in the Manna series. Pancake White Manna is just like Magic Manna except about ½ - 2/3 of the ears are white, the rest being the other colors typical of Magic Manna. This variety is for those who want more white ears for use in pancakes, cakes, cookies, biscuits, and crackers. Bred by Carol Deppe/Fertile Valley Seeds.

SURVIVAL PACKET. At least 125 FOUNDATION GRADE seeds. -- \$5.

SURVIVAL PACK of 1 lb. At least 1200 FOUNDATION GRADE seeds. -- \$30 (\$25 for the seeds, \$5 for extra postage).

PARCHING RED MANNA Flour Corn. OSSI-Pledged Variety. Bred for organics. Foundation Seed. Sole source of foundation grade seed of this variety. 85 days. Sister to other Manna varieties. A selection from 'Magic Manna' flour corn having about half or more red or pink ears, the rest of the ears of all the colors typical of 'Magic Manna'. Has a white endosperm, clear aleurone, and is variable for pericarp color. For info on how to parch parching corn see *The Resilient Gardener: Food Production and Self-Reliance in Uncertain Times*. I love parched corn and a chunk of cheese for breakfast, or as travel food. Parched corn holds for more than two months at room temperature without going rancid. Also makes great sweetbreads, cakes, pancakes, and cookies. Seed saving info: Same as for 'Magic Manna' except select for red/pink ear color. Bred by Carol Deppe/Fertile Valley Seeds. SURVIVAL PACKET. At least 125 FOUNDATION GRADE seeds -- \$5.

SURVIVAL PACK of 1 lb. At least 1200 FOUNDATION GRADE seeds -- \$30 (\$25 for the seeds, \$5 for extra postage).

PARCHING STARBURST MANNA Flour Corn. OSSI-Pledged Variety. Bred for organics. Foundation Seed. Sole source of foundation grade seed of this variety. 85 days. Sister to other Manna varieties. Agronomically similar to other Manna varieties. A selection from off-type ears earlier in the breeding of 'Magic Manna' flour corn. 'Parching Starburst Manna' ears have a distinctive blaze/starburst pattern on most kernels. But there are jumping genes involved, so the pattern can be unruly. About half the ears in the variety have the starburst pattern; the rest have the colors typical of 'Magic Manna'. The flavor of starburst ears as parched corn is totally unlike that of 'Parching Red Manna', so provides a second flavor of parching corn. For info on how to parch parching corn see The Resilient Gardener: Food Production and Self-Reliance in Uncertain Times. I love parched corn and a chunk of cheese for breakfast, or as travel food. Parched corn holds for more than two months at room temperature without going rancid. Also great for savory corn bread, bread, crackers, and gravy. Seed saving info: Same as for 'Magic Manna' except select for starburst pattern in a red color and select against other colors, except leave some white ears in the variety. But eliminate brown (or starburst pattern in brown) color, as brown doesn't taste good parched. Bred by Carol Deppe/Fertile Valley Seeds. SURVIVAL PACKET. At least 125 FOUNDATION GRADE seeds -- \$5. SURVIVAL PACK of 1 lb. At least 1200 FOUNDATION GRADE seeds -- \$30 (\$25 for the seeds, \$5 for extra postage).

CORN—SWEET

***TOP HAT Sweet Corn.** OSSI-Pledged Variety. USDA-ORG. Bred for organics. Mid-season. Sugary-enhanced yellow op sweet corn with great holding ability on and off the plant. Excellent rich flavor raw as well as cooked. Ears 7 ½ inches long. 16 row of deep, tender kernels. Excellent husk coverage. Good cold soil emergence. (Nearly uniformly homozygous for *se*.) Bred by Jonathan Spero in Southern Oregon by six generations of selection from Tuxedo Hybrid. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. SURVIVAL PACKET. At least 125 seeds -- \$5.

***TUXANA Sweet Corn.** OSSI-Pledged Variety. USDA-ORG. Bred for organics. Late season. Sugary-enhanced white op sweet corn with great holding ability on and off the plant. Excellent rich flavor raw as well as cooked. Ears up to 9 inches long, 14 to 16 rows. Excellent cold soil emergence. 6 ¹/₂ feet. Bred by Jonathan Spero by six years of selection from a cross of Anasazi Sweet X Tuxedo hybrid. Large ears and deep kernels make it great for cutting off the ear for chowders or freezing in addition to eating fresh. This seed is grown by and purchased from Prairie Road Seeds; buying this seed helps support their breeding work. SURVIVAL PACKET. At least 125 seeds -- \$5.

CORN—POPCORN

***DAKOTA BLACK POP popcorn.** OSSI-Pledged Variety. USDA-ORG. Distinctive, delicious flavor. Yields well for a popcorn with 5 inch ears (big for a popcorn). Broadly adapted. Bred by Dave Podoll. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. At least 150 seeds – \$5.

CUCUMBER

MARKETMORE 76. (*Cucumis sativus*) 58 days. The most popular slicing cucumber in USA. Dark green, non-bitter, 8 – 9 inches. Does well in hot or cool weather. Extended harvest. Bred by Henry Munger (Cornell University), released in 1976, and still unexcelled. Tolerates CMV, DM, and DM; resistant to scab. At least 150 seeds - \$5.

GREENS, EAT-ALL GREENS GARDEN VARIETIES

Most of the greens I grow are not heads or buds like cabbage or broccoli. Those are excellent for shipping and storage. But for home gardeners they are not nearly as productive per unit space or amount of labor as growing certain varieties of leafy greens in a pattern I call the "eat-all greens garden." My new book, *The Tao of Vegetable Gardening* has an entire chapter about the eat-all greens garden and the varieties I've found that work for it.

I discovered the Eat-All Greens Garden approach with Green Wave Mustard by accident about 20 years ago, and have worked on developing the approach and finding additional varieties that will work with it since then. I think this approach and these varieties have the potential to completely transform the growing of nutritious greens everywhere from the small urban garden to the commercial

frozen greens operation. The Eat-All Greens Garden approach is particularly appropriate for small gardens, however, as it permits growing lots more greens per unit space available.

The basic characteristics of good eat-all varieties are: 1) They grow very fast and very vigorously so that a crop can be produced in a month or two, and the land can produce many crops per year. 2) The entire top of the plants—stem and leaves—is edible and tender, so you can harvest by clear-cutting the entire top of the patch with a serrated kitchen knife. 3) The varieties are so vigorous that when the seed is broadcast at appropriate density the plants outgrow and shade out weeds. No weeding is required. 4) The varieties are upright in growth habit at proper spacing so that they stay clean and no washing in the kitchen is needed. (At least in areas with clean air.) With the harvest being 100% edible and already clean, prep time in the kitchen is minimal. The minimal labor in both the garden and kitchen makes the eat-all crops the ideal greens for blanching and freezing or drying for winter. These varieties should also be much more economical to produce as commercial frozen vegetables than spinach. All have more substance to them than spinach, and all are tastier as well as much easier to grow and process. 5) The eat-all varieties all produce a large amount of biomass for the amount of space—up to half a pound of edible harvest per square foot in just a month or two.

Three of the eat-all varieties may be planted in early spring. This early planting combined with the fast growth means you can harvest an entire eat-all crop and then use the same land later in spring for tomatoes or other warm-season vegetables.

The thinnings and baby leaf stage of eat-all greens can be used raw in salads or sandwiches. I use the full-size main eat-all greens harvest in stir-fries, soups, stews, and as "messes o' greens." (For a "mess o' greens," boil very briefly, drain, then dress with salt and pepper and something oily or fatty and something sour. Examples: oil, vinegar, and Italian seasonings; meat drippings and vinegar; fried bacon, bacon grease, and vinegar. Or lemon juice or sauerkraut instead of vinegar. Or dress greens with salt, pepper, and vinegar or lemon only and serve under a chunk of fatty fish such as baked salmon or canned herring. Or use cooked cold greens with your favorite salad dressing.) I also dry eat-all greens for use in winter soups and stews, as delicious herbal tea.

With eat-all crops, it's easy to grow all the greens you need for summer and freeze or dry enough for a family for winter with minimal space and labor.

*AMARANTH, BURGUNDY for leaves/grain. (*Amaranthus ssp.*) USDA-ORG. Good eat-all variety. (See general info under 'Shunkyo' radish.) Dual purpose amaranth. Leaves are great for stir-fries, soups, stews, and messes of greens. Also can be used in salads and makes great baby leaf greens and microgreens. Plant late spring through late summer. I broadcast in a bed so plant will end up at about 4 inches apart, and cut and use the top 6 inches when 10 inches high. Eat-all bed ready in 2-3 months. Can harvest/thin eat-all bed to leave plants at 1' apart for grain. Leaves blanch and freeze well. 1 heaping TSP. seeds -- \$5.

***HUAZONTLE ("INDIAN SPINACH"), RED AZTEC.** (*Chenopodium berlandiera*) USDA-ORG. Good eat-all variety. This is a relative of lambsquarters and quinoa, but has bigger leaves, grows faster, and bolts much slower, so has plants that stay succulent and prime longer for use as greens. The word 'huazontle' (pronounced "wuh zont lay" refers to a traditional use of the flower buds for stir-fries, but I don't find that use compelling. (I suspect that this line has changed with respect to that characteristic, and/or development of really big buds needs a more southerly latitude.) Instead, I use the variety as an eat-all greens crop for soups, stews, mess of greens, blanching and freezing, or drying. Makes especially delicious dry greens and herbal tea. Also makes great baby leaf greens and microgreens. Plant late spring to early fall. I broadcast in beds, thin to about 4" apart, and grow to about 12" high, then harvest the entire top 8 inches, which is all succulent stalk and leaves. About 8 weeks for eat-all crop. One can pull all the plant stumps or debris and replant the bed. However, I prefer to leave a few 17

plant stumps spaced at about 12" apart to make nice bushes that produce tender shoots for greens all the rest of the season. Heirloom Native American variety. Emerging seedlings are red; older plants are red-tinted green. At least 1 TSP. -- \$5.

***Eat-All Brassica--GREEN WAVE MUSTARD** (*Brassica juncea*). USDA-ORG. Good eat-all variety. Very vigorous fast-growing mustard that is the best mustard for eat-all growing. Erect plant form. Outgrows weeds. Firey hot raw; mild and richly flavored when grown eat-all style and cooked briefly. Plant early spring or fall. (Plant in March in Willamette Valley Oregon for spring eat-all crop; bolts too soon planted later in spring.) Also can be planted in summer after solstice in mild-summer areas. Cook just a minute or two. Great in soups, stews, and messes of greens. One of my favorites for drying for use in soups and stews in winter or as a delicious herbal tea. (Drying also removes firey flavor.) Can yield up to about a half pound edible greens per square foot in six weeks. At least 1 TBS. seed -- \$5.

*Eat-All Brassica--GRONINGER BLUE COLLARD-KALE (*Brassica napus*) (Grown organically but not certified. As far as I know, FVS is the only source in USA except Nichols, which buys it from me.)This is my new favorite kale of all time. In extensive tests of kales, this is the only one I've found that meets the criteria necessary to be an eat-all variety. Most kales do not grow fast enough or have enough biomass as young plants, and/or do not have central stems that are succulent. Groninger, has the purplish stems and leaves of other Red Russian types. However, the leaves are whole and undivided. And the plants grow much more rapidly. And the young plants produce a tremendous amount of biomass in a short time, and the entire plant is succulent. Excellent flavor planted in spring and used in summer or in July for harvest fall, winter, and spring. This is a Dutch heirloom that apparently has been grown primarily using the eat-all style for centuries. All the best characteristics of both a collard and a kale. Groninger overwinters well in both maritime Oregon and continental Canada. In the three years I have grown it it overwintered with no damage at all and made huge 6 foot high flowering bushes in spring. Grow for eat-all in beds from mid-spring on. Can also be grown with the same style as ordinary kale. (I thank William Dam Seeds for preserving this heirloom in Canada as part of their Dutch-Canadian heritage.)

At least 1 TBS. seed -- \$5. 1/2 pound of seed -- \$75.

***Eat-All Brassica**—**TOKYO BEKANA LOOSE LEAF CHINESE CABBAGE** (*Brassica rapa*) USDA-ORG. Good eat-all variety. Very vigorous, fast growing, unfussy loose leaf cabbage that is mostly leaf instead of stem. Distinctive yellow-green color, great flavor, and crunchy texture. Great in salads or as cooking greens. 30 days to eat-all stage; 45 days to loose heads. I think this variety is the best Chinese cabbage for salads. It's also great in stir-fries, soups, and stews, and should be excellent for kimchee. I'm guessing that Tokyo Bekana is more nutritious than most Chinese cabbage since it is more leaf and less stem. Flower scapes are also edible. Color is so beautiful I find myself using Tokyo Bekana as a catch crop partly just to add more of its glorious splashes of bright chartreuse to the landscape. Plant late spring through early fall. At least 1 TSP. of seed -- \$5.

*Eat-All Brassica—YUKINA SAVOY Choy (*Brassica rapa*). USDA-ORG. Similar to Tatsoi but has more erect leaves, so is more suitable as an eat-all green. Sow and grow like other eat-all greens. At least 1 TSP. seeds -- \$5.

PEA, OREGON GIANT SUGAR (*Pisum sativa*) Edible-pod pea with huge pods and big crinkled seeds. Pods are sweetest after seeds have reached full size, but are tasty from small size up until they 18

start drying down, giving an unusually large harvesting window. Also excellent for eat-all pea shoots patch. Resistant to pea enation, pea wilt, and powdery mildew. (With this resistance repertoire, peas may be planted for harvest spring through fall in Willamette Valley rather than being just a spring crop.) In Willamette Valley plant February through mid-August to harvest spring through fall; plant in early October to overwinter. Plants grow to about 3 feet and need some support. When harvested at full size with fully expanded seeds they are as sweet as snap peas, just a different shape. Hold on vine and in the refrigerator a long time. This pea is so good I no longer grow snap or shelling peas. Bred by Jim Baggett/Oregon State University.Vigor and large-sized leaves make this variety especially nice for pea shoots. To use as an eat-all pea shoot crop, sow in a wide row or bed at about 2" apart in all directions. When plants are about 6 inches high, harvest the top 4 inches. At least 200 seeds. -- \$5.

*Eat-All Quinoa **KASLALA MULTICOLORED.** (*Chenopodium quinoa*) **USDA ORG.** Dualpurpose greens/grain. An especially nice quinoa for greens. Large multicolored seed. Germinates and grows faster than most quinoas. Slow-bolting, so gives you a longer harvest window. This seed is only semi-cleaned. At least 1 TSP seed -- \$5.

* Eat-All RADISH, SHUNKYO SEMI-LONG Dual-Purpose Leaf/Root (*Raphanus sativus*) USDA-ORG. Good eat-all variety. Leaves of leaf-bred radish varieties have more and bigger leaves than root-bred varieties, and the leaves are more upright, more succulent, and less prickly. Leaf-bred radish leaves are widely used in China, Japan, and Korea for stir-fries, soups, fermented greens, and kimchee. They're also good in salads and as micro and baby-leaf greens. Leaf radishes grow much faster and more vigorously than any other greens. What is available now is mostly hybrids, which I'm in the process of dehybridizing. Meanwhile, I recommend growing this dual-purpose Chinese heirloom variety. Shunkyo makes tasty 4-inch long 1-inch wide red roots in about 40 days. (Roots are delicious raw, sweet and pungent. But I usually cook them along with the greens.) Here in the maritime NW plant succession plantings about once/month from early spring through fall. Summer-planted mature plants can stand mild freezes, so can be harvested through early winter. In Willamette Valley, fall-planted plants overwinter, and continue growing all winter whenever the weather is above freezing.

To grow Shunkyo as an eat-all crop, I broadcast the seed in beds, thin to about 3 inches apart in all directions, and harvest the top 8 inches of the entire bed when plants are about 12 inches high, at roughly 6-8 weeks. I often harvest so as to leave some plants a little longer at a little wider spacing, then harvest these for both greens and roots. Shunkyo thinnings make good baby leaves and salad leaves. Younger leaves have a distinctly radishy flavor that is nice in salads. At least 1 TSP. seed -- \$5.

KALE & COLLARDS (not eat-all types)

GRONINGER BLUE COLLARD-KALE. (*Brassica napus*) My all-time favorite kale. See GREENS, EAT-ALL VARIETIES section.

***DAZZLING BLUE LACINATO** (*Brassica oleracea*). OSSI-Pledged Variety. USDA-ORG. Bred for organics. Full-flavored lacinato type bred by Hank Keogh. Narrow strap-like blue-green leaves with purple veins. The most winter-hardy of the Lacinato types. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. At least 2 g -- \$5. ***RED URSA** (*Brassica napus*). OSSI-Pledged Variety. USDA-ORG. Bred for organics. Frank Morton wanted the frilly leaves of Siberian combined with the beautiful red color of Red Russian. So he crossed them and selected and stabilized out this beautiful broad-leaf but frilly kale. Selected for flavor and productivity at the baby leaf stage (leaves up to 6 inches) for use in salads, but is a great general purpose kale as well. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. At least 2 g -- \$5.

SIBER-FRILL (*Brassica napus*) OSSI-Pledged Variety. USDA-ORG. Bred for organics. For use in salads, frilly leaves are great because they provide loft and hold the salad dressing. This frilly kale is sweet and produces over a long season, standing well into winter. Bred by Jonathan Spero by selection for the frilly type from a mixed *B. napus* kale population developed by Tim Peters. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. Packet of at least 1 TSP seed -- \$5.

WILD GARDEN LACINATO (*Brassica oleracea*). OSSI-Pledged Variety. USDA-ORG. Bred for organics. (a.k.a. LACINATO—MORTON). Green-black strap-shaped heavily savoyed leaves with rich flavor. Bred by Frank Morton by crossing the Italian heirloom Lacinato (a.k.a. Tuscan or Dinosaur Kale) to a cabbage, then selecting the progeny in subsequent generations for lacinato type. (So the result was a new variety, which should not have been called by the same name as one of the parents.) This is more variable in color and type than most other lacinato-style lines but is considerably more vigorous and overwinters better. Good flavor raw as well as cooked. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. At least 2 g -- \$5.

LEEKS

*Belgian Breeder's Winter Mix. (*Allium porrum*). OSSI-Pledged Variety. USDA-ORG. Bred for organics. Breeding material from a Belgian breeder, selected additionally for overwintering in maritime Oregon by Frank Morton. The variability otherwise has been left in this population to facilitate our selecting out our own new varieties. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. Seed germination 75%. At least 1 g -- \$5.

LETTUCE

*CRISPY CRUNCHY GREEN-GOLD Romaine (*Lactuca sativa*) USDA-ORG. Best-flavored lettuce I've ever tasted. Delicious just eaten straight out of the garden. Narrow green-gold leaves and a texture as crunchy as head lettuce. aka Brown Goldring, a name that doesn't do this variety justice, so I gave it this alias. At least 2 g -- \$5.

***EMERALD FAN** (*Lactuca sativa*) OSSI-Pledged Variety. USDA-ORG. Bred for organics. Shiny green leaves, tall romaine form, heat tolerant, great flavor. Leaves go great in salads, or as scoops or wraps for bits of cheese or tunafish salad. Bred by Jonathan Spero from genetically mixed material developed by Frank Morton. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. At least 2 g -- \$5.

*HYPER RED RUMPLE WAVED (*Lactuca sativa*) OSSI-Pledged Variety. USDA-ORG. Bred for organics. Deep red semi-cos lettuce with leaves savoyed on top of savoys. The most intensely red/purple of the Morton lettuce varieties. Good flavor and texture. Stunning in salads as well as in the garden. Plant in spring; doesn't germinate well in warm weather. Highly resistant to Sclerotinia and downy mildew. Bred by Frank Morton. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. At least 2 g -- \$5.

***JOKER** (*Lactuca sativa*) OSSI-Pledged Variety. USDA-ORG. Bred for organics. One of Frank Morton's two all-time favorite lettuces. Genuine head lettuce. Thick, crunchy, savoyed leaves, green with red splashes, excellent flavor. Very versatile all-season lettuce. Excellent cold and heat tolerance. Can survive down to about 20°F without protection. Bred by Frank Morton. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. At least 1 g -- \$5.

MELONS & WATERMELON

*BLACKTAIL MOUNTAIN watermelon. OSSI-Pledged Variety. USDA-ORG. 76 days. 6-12 lbs. Very early watermelon with deep green-black skin, orange flesh, and excellent flavor. Vines to 10 feet. Melons picked a little unripe will finish in storage and store two months. So you can pick everything that doesn't mature at the end of the season and have watermelon on Thanksgiving. Does well in cool weather. Bred by Glen Drowns. At least 30 seeds -- \$5.

***LOFTHOUSE-OLIVERSON LANDRACE Muskmelon.** OSSI-Pledged Variety. Bred for organics. Very early melons with powerful traditional muskmelon aroma and flavor. Round to oval. 3 to 5 lbs. Fruits slip when ready to pick and turn yellow when ready to eat. Bred by Joseph Lofthouse and Susan Oliverson. FVS pays a voluntary royalty to the breeder to support his breeding work. At least 25 seeds -- \$5.

MINNESOTA MIDGET Muskmelon. 65 days. Very early melon. Small 4-inch melons with tasty orange flesh edible all the way to the skin. Widely adapted. Compact plant; vines run out only about 3 feet. Bred at University of Minnesota. At least 100 seeds -- \$5.

***SWEET DAKOTA ROSE watermelon.** OSSI-Pledged Variety. USDA-ORG. 85 days. Bred for organics. Large red-fleshed watermelon bred by David Podoll for cool, short seasons and erratic

weather. One of the sweetest op melons. Excellent flavor. Thin firm light and dark green-striped skin. Few small seeds. May range from 8 lbs up to 20 or more depending upon region, growing conditions, and weather. Stores well. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work.

At least 20 seeds -- \$5.

ONION

***DAKOTA TEARS yellow storage onion.** OSSI-Pledged Variety. USDA-ORG. Bred for organics. Bred by Dave Podoll. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. Packet -- \$5.

ORACH (*Atriplex hortensis*). I far prefer "mountain spinach" (orach) to ordinary spinach. Orach is my favorite ingredient for salads along with the tastiest of lettuces. Since the tastiest lettuces are all green or mostly green, the vivid colors of some orach varieties is where I prefer to get the color contrasts in leafy salads. Orach tastes much better raw than spinach. It is easier to grow and grows faster than spinach. It bolts so much slower that a single spring planting yields greens all spring and most of the summer. And orach comes in a wider range of colors than spinach. And the red/purple orachs taste pretty much the same as the greens, that is, delicious. Orach is also good cooked, but it is so good raw I generally eat all mine raw. I broadcast orach in beds in early spring using the eat-all method exactly as if it was an eat-all amaranth variety. The plant form and style is like an amaranth. Orach grows a little too slowly to qualify as an eat-all crop, making a full-size eat-all style bed in about 3 months instead of 2. I harvest-thin plants to 1 foot apart in all directions, then top them and harvest the tips of the new branches the rest of the summer. I've tried, I think, just about every orach variety available. In my opinion the best by far are the Morton-bred varieties.

*AURORA. (*Atriplex hortensis*) OSSI-Pledged Variety. USDA-ORG. Bred for organics. A vigorous segregating population of orachs of many colors—red, green, gold, pink, purple, and everything in between. Bred by Frank Morton. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. \$5.

***GREEN VELVET.** (*Atriplex hortensis*) OSSI-Pledged Variety. Not available in 2019. USDA-ORG. Bred for organics. A vigorous delicious orach with large, deep, blue-green, savoyed leaves. The germlings are purple, as are the seedlings up to a few inches high. Then the plants suddenly decide that green is beautiful, and turn green and stay green thereafter. (Another green variety, Golden, is an attractive yellow-green heirloom, but grows much slower than Green Velvet.) Bred by Frank Morton. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. \$5.

***TRIPLE PURPLE.** (Atriplex hortensis) OSSI-Pledged Variety. USDA-ORG. Bred for organics.

Vigorous delicious orach with large, deep purple, savoyed leaves. This is *much* more intensely purple than Double Purple, and also is slower to bolt. (Comparison to Magenta Magic: MM is fucia-red and is iridescent when the light is behind it exactly right. Most of the time and on most plants, the light isn't so perfect, so a patch of MM doesn't look as striking as a patch of Triple Purple. In addition, Triple Purple is much more vigorous and grows faster than MM.) (Comparison to Double Purple: DP grows as fast as TP, but is not nearly so purple, and bolts earlier.) This variety is the most beautiful purple thing I have ever grown. Bred by Frank Morton. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. \$5.

PEAS. See Oregon Giant Sugar in GREENS, EAT-ALL VARIETIES.

MUSTARD (*Brassica juncea*) See Green Wave Mustard in GREENS, EAT-ALL VARIETIES.

MUSTARD (*Brassica rapa*) See Tokyo Bekana Loose Leaf Chinese Cabbage and Yukina Savoy Choy in GREENS, EAT-ALL VARIETIES. Also see TURNIPS for 2 *Brassica rapa* varieties good for both greens and leaves.

RADISH. See Shunkyo dual purpose radish in GREENS, EAT-ALL VARIETIES.

SQUASH, SUMMER

COSTATA ROMANESCO Summer and Drying Squash (*Cucurbita pepo*). 60 days. Light green, flavorful summer squash that is also one of the best squashes for drying (of slices of green fruit harvested in the summer squash stage, as I describe in *The Resilient Gardener*). Firm texture, even when cooked. Magnificent powerful flavor dried. Italian heirloom. At least 20 seeds – \$5.

Solution Solution Solution

informal trials, has proved to germinate and grow faster than competing hybrids as well as yield more and earlier. Most of the plants show resistance to powdery mildew if kept picked. Also capable of thriving in cold weather, and long bearing; the plants, if picked, continue bearing until cut down by freezes in fall. In addition, Goldini has been shown to work well in California sold and marketed by variety name, even at prices twice as high as most squash. (To get full benefits of the variety, teach your customers that it is prime at larger sizes and market them at 1 to 1.5 lbs.) Plants are all vigorous productive bushes with early fruit development. Leaves are a diversity of shapes and colors. This is intentional. (If you want something that is uniform for traits that don't matter, buy something else.) A small percent of green-fruited or bi-color fruited plants may segregate and should be selected against. Bred by Carol Deppe/Fertile Valley Seeds. SURVIVAL PACKET. FOUNDATION GRADE seeds. 20 for \$5; 100 for \$15; 1000 for \$120.

SQUASH, WINTER squash and pumpkins

*BIGGER BETTER BUTTERNUT winter squash (*Cucurbita moschata*). OSSI-Pledged Variety. USDA-ORG. Bred for organics. Foundation grade seed. Sole source of foundation grade seed of this variety. This is a dehybridization of Ultrabutternut HP Hybrid. Up to 15 lbs. Most are 8 – 12 lbs. Selected for long, thick necks (straight or curved) and large size. Very early for a butternut this size. Finishes reliably in Corvallis, Oregon, even though Waltham, which is smaller, does not. Cure for two months. Very long storing. (Routinely stores more than a year. I use the BBBs from the prior year while the current year's BBBs are curing. Can be stored stacked in piles.) Vigorous vines. Some plants have mottled leaves, some solid; I am leaving both leaf types in the variety. Use tip: If you chop off what you need of the neck, let the cut end of the fruit "bleed" for a few minutes, then spread the resinous juice over the cut end with a clean finger to seal the fruit, the rest of the fruit will store for several days at room temperature without drying out or molding. You just chop off what you need for each meal. This characteristic of butternuts makes big butternuts practical even for the small family. And big butternuts have *considerably* less waste in prep and are more efficient to harvest, store, and prepare than small ones. The long-neck butternuts are the premiere squash for using raw by cutting skin off neck rounds for salads or roasting or making soups, stews, or stir-fries. Bred by Carol Deppe/Fertile Valley Seeds. SURVIVAL PACKET. FOUNDATION GRADE seeds. 20 for \$5; 100 for \$15; 500 for \$50.

BURGESS BUTTERCUP Winter Squash (*Cucurbita maxima*). 95 days. Deep green 3-5 lb. squash that is the flavor and quality standard for *C. maxima* squash to which all others are compared. There are a few equally delicious, but none better. At least 30 seeds -- \$5.

***CANDYSTICK DESSERT DELICATA winter squash** (*Cucurbita pepo*). OSSI-Pledged Variety. Bred for organics. Foundation Seed. Sole source of foundation grade seed of this variety. 90 days. Vigorous productive delicata with intensely sweet flesh and a rich complex flavor reminiscent of Medjool dates. Flesh as thick or thicker and fruits as big or bigger than all other delicata lines. Absolutely no bitter contamination as is a problem in many delicata lines. Fruits up to 3 lbs. Tan and green striped fruits range from loaf to longer shapes, often on the same plant. I think this is the most vigorous and most productive delicata in existence as well as having the best flavor. Allow 2-3 weeks after harvest for curing indoors before eating. Keeps indoors through December. (Note: This squash is so dry and has such a high sugar content that I recommend baking in a covered roasting pan to avoid its drying out or scorching. Put the cut deseeded but not scraped or cleaned halves upside down on the roasting-pan rack and cover the pan with the lid with the vents open. (With all squash, it's easiest to scrape away interior debris after the squash is cooked, and that debris helps keep the squash from drying out while cooking. Start oven at 400° F while the squash are coming up to temperature, then switch to 325° F to finish the squash without scorching.) I recommend eating Candystick without any additions at all, not even butter or salt. I eat them at the end of the meal, as the dessert. Bred by Carol Deppe and Nate France/Fertile Valley Seeds. SURVIVAL PACKET. FOUNDATION GRADE seeds. 20 for \$5; 200 for \$20; 1000 for \$50.

KAKAI HULLESS-SEEDED pumpkin (Cucurbita pepo). Seeds are completely hulless. Grown for the seeds, not for the flesh. I prefer Kakai to other hulless pumpkins because the seeds actually are completely hulless, and because they have a rich delicious flavor raw as well as cooked, and I like pumpkin seeds raw. (Styrian, for comparison, also has completely hulless seeds, but raw, they taste just like little bland greasy wads of Crisco. (Which might be great for pressing into oil, but not so great for just eating the seeds.)) Fruits of Kakai average about 5 pounds, and are roundish pumpkin in shape, light orange with green stripes. As with all hulless-seeded pumpkin varieties, start the seeds indoors and transplant. And don't expect to eat the flesh of a hulless-seeded pumpkin variety, no matter what the catalog descriptions say. At least 20 seeds -- \$5.

*HOMESTEAD RAINBOW GREX Winter Squash (Cucurbita maxima). OSSI-Pledged Variety. USDA-ORG. Bred for organics. Foundation seed. Sole source of foundation seed of this material. I started by crossing Sweet Meat—Oregon Homestead and Sunshine F1 hybrid, then went to the F3. I want a great-flavored squash of good size with multiple colors from one variety. I want it to be somewhat earlier than SM—OH for resilience to weather issues and other vicissitudes. I want the flesh thickness, storage life, seed quality, and NW adaptation of SM-OH, and the earliness, droughttolerance, and genes for orange color and undiluted color from Sunshine. Size varies from 4 to 22 pounds but most are 8 to 16. Colors may be pink, orange, green, blue, mosaic, or even white. Most plants are vigorous vines, but there are a few bushes too. About a month earlier than SM-OH. Most have relatively thick flesh. Flavor ranges from excellent to poor, with most being merely okay or good. Flesh texture of some is good but most are fairly coarse. Most store better than Sunshine F1 but not nearly as good as SM—OH. Not prime to grow to eat as it stands now, but has many possibilities as breeding material. Suggest if you grow a few each year and self-pollinate each plant, when the occasional really good one turns up, you'll be all set and on your way to something interesting. But just mass selecting within the population is unlikely to be useful. The patch is visually glorious with all its sizes and colors. Bred by Carol Deppe/Fertile Valley Seeds. SURVIVAL PACKET. At least 30 FOUNDATION GRADE seeds - \$5.

LOFTHOUSE LANDRACE MOSCHATA Winter Squash (*Cucurbita moschata*). OSSI-Pledged Variety. Bred for organics. 100 days. Joseph Lofthouse wanted to grow butternuts or other moschatas on his homestead on a mountain in Utah, but none would ripen in his short season nor stand

up to his blazing hot summers. So he mixed every moschata variety he could find together in one field,

let them all intercross, and selected rigorously for earliness year after year. The result is this very early

vigorous landrace. Round pumpkins and butternuts of all shapes range from about 4 to 30 lbs. Most are good culinary quality, and just slightly sweet, so great for salads, soups, stews, and stir-fries. (Other squash are better for sweet dishes. But this squash, being not so sweet, is actually a better day in day out staple.) Huge vines. Very productive. Matures even in cold summers in the maritime Northwest. Keeps well. Cure one month before eating. (Note: With butternut shaped squash, you can cut off what you need of the neck, let the neck veins bleed for a few minutes, then spread the sap around the cut surface with your clean finger, which seals it so that the cut squash will keep weeks at room temperature. You don't need to use the whole squash at once. This means you can afford to grow the big squash that are most efficient to handle, store, and prepare.) Bred by Joseph Lofthouse. FVS pays a voluntary royalty to the breeder to support the breeding work. **Seed saving info:** Isolate from other *Cucurbita moschata* and from *Cucurbita mixta*. SURVIVAL PACKET. At least 30 seeds -- \$5.

MOOREGOLD Winter Squash (*Cucurbita maxima*). 95 days. Orange hard-shelled kabocha, up to 5 lbs and 7 inches x 5 inches. Sometimes called a buttercup, but it has no cup and is shaped like a kabocha. Excellent flavor, productivity, and storage life. Hard-shelled squash are just the thing if you have trouble with rodents, and are also less vulnerable to bruising (and subsequent rotting) during handling and storage. You can store them stacked up in crates with air flow rather than needing to put them in monolayers, as with softer-skinned squash. It's also actually easier to open hard-shelled squash than softer-shelled ones. Just drop them on the driveway or sidewalk. Drop from the right height and they will split exactly in half. Bred by James G. Moore (University of Wisconsin, Madison) back in the 60s. An excellent variety now in danger of being lost because most people these days don't grok hard-shelled squash. At least 20 seeds -- \$5.

***SUNDREAM Winter Squash** (*Cucurbita maxima*) OSSI-Pledged Variety. USDA-ORG. Bred for organics. Very early, red-orange squash with excellent flavor. Up to about 5 lb. Dehybridized and selected from Sunshine F1 and with rich Sunshine flavor. Full vines rather than semi-bush like Sunshine F1. As with Sunshine F1, eat before February; does not store beyond then. Seeds a mix of brown and white in color; don't worry about it. Bred by Don Tipping. This seed was grown by and purchased from the breeder; buying this seed helps support Don's breeding work. 20 seeds -- \$5.

SWEET MEAT—OREGON HOMESTEAD Winter Squash (*Cucurbita maxima*). OSSI-Pledged Variety. Bred for organics. 110 days. Foundation Seed. Sole source of foundation grade seed of this variety. (Not the same as Sweet Meat without the modifier. Much bigger, more vigorous, and more NW-adapted than Gills line, and with much bigger seeds.) This line of Sweet Meat represents my reselection of a crossed up version of an old farmer line of Sweet Meat, reselecting for all its traditional virtues—sweet thick dry flesh of unsurpassed flavor, fruits 12 – 25 lbs, huge delicious seeds, long storing, and ability to germinate in cold mud and grow vigorously in cool weather. (These characteristics have largely been lost from the current commercial lines.) Cure indoors at least one month. Oregonians traditionally open their first Sweet Meat for Thanksgiving. Gets sweeter and more delicious in storage. Stores at least 6 months. Freezes well. Cooked mashed squash makes good fruit leather. Immature squash left at the end of the growing season make good summer squash and drying squash. Bred by Carol Deppe/Fertile Valley Seeds. SURVIVAL PACKET. FOUNDATION GRADE seeds. 15 for \$5; 100 seeds for \$20. (Note: Those who are selling this variety for less per seed are usually selling much smaller seed (harvested from all the fruits rather than just the biggest), and it is not foundation grade. FVS is the sole source of foundation grade seed of this variety.)

SWISS CHARD

***PRISMATIC RAINBOW Swiss chard.** OSSI-Pledged Variety. USDA-ORG. Bred for organics. A chard with an unusually mild flavor and leaves with wide petioles in multiple shades of pink, red, green, yellow, orange, or striped. Bred by Don Tipping. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. \$5.

ТОМАТО

*AMISH PASTE. USDA-ORG. 72 days. Indeterminate heirloom. Good for both fresh eating and processing. Up to 12 oz/340 g. Few seeds. Amish Paste regularly wins flavor contests as both a fresh eating and processing tomato. Does well in cool weather or partial shade. My favorite main-crop red tomato for fresh eating or cooking. At least 40 seeds -- \$5.

***BLACK KRIM.** USDA-ORG. 80 days. Indeterminate heirloom. Tomatoes up to 18 oz./510 g. Black flavor class, and my favorite black. Rich, complex flavor. Does well in cool weather or partial shade. At least 40 seeds -- \$5.

***CHEROKEE PURPLE.** USDA-ORG. 72 days. Indeterminate tomato up to 13 oz/369g. Rich complex flavor. At least 40 seeds -- \$5.

(III)

*PERFECT ROGUE. OSSI-Pledged Variety. USDA-ORG. Bred for organics. 70 days. Indeterminate. Try this one as an open-pollinated substitute for Early Girl Hybrid. Early, medium-sized red tomato selected from a potato-leafed rogue that appeared in a planting of Early Girl Hybrid. Bred by my friend Andrew Still. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. At least 40 seeds -- \$5.

***PINK BERKELEY TIE-DIED.** USDA-ORG. Bred for organics. 65 days. Indeterminate. Red and green striped tomatoes up to 12 ounces. Rich, complex, delicious flavor. Very early for a tomato this size. Bred by Brad Gates of Wild Boar Farm. At least 40 seeds -- \$5.

***PRUDEN'S PURPLE**. USDA-ORG. Bred for organics. 67-72 days. Indeterminate heirloom. Tomatoes up to a bit over 1 lbs./453 g. Huge size for such an early tomato. Pink type and flavor class; tomatoes look red. Flavor very similar to Brandywine, but much earlier. My favorite pink. Does well in cool weather or partial shade. At least 40 seeds -- \$5.

***STUPICE**. USDA-ORG. 60 days. Indeterminate heirloom from Czechoslovakia. Red tomatoes up to 2.5 inches/6.5 cm. Rich full tomato flavor in a tomato that is earlier than even most of the early determinates. Relatively small vines. Potato-leaf foliage. Cold tolerant. Grows and produces full-flavored tomatoes even in cool summers or partial shade. High yielding. Produces all season. At least 40 seeds -- \$5.

TURNIP

PURPLE TOP WHITE GLOBE (*Brassica rapa*). 55 days. Classic heirloom turnip for fresh eating and storage. Makes good greens as well as roots. Prime at 3-4" in diameter, though it can get up to 6". At least 100 seeds -- \$5.

SCARLET OHNO REVIVAL (*Brassica rapa*). OSSI-Pledged Variety. USDA-ORG. 50 days. Hot pink turnips. A Morton reselection and salvation of a Japanese variety that is very popular for pickling. Dual purpose, with excellent, hairless, strap-like leaves. Interiors have pink centers with the rest white to light pink. Bred by Frank Morton. This seed was grown by and purchased from the breeder; buying this seed helps support the breeding work. At least 100 seeds -- \$5.

MY GARDENING BOOKS:

The Tao of Vegetable Gardening: Cultivating Tomatoes, Greens, Peas, Beans, Squash, Joy, and Serenity (Chelsea Green, January 2015). List price: \$24.95.

The Resilient Gardener: Food Production and Self-Reliance in Uncertain Times (Chelsea Green, 2000). List price: \$29.95.

Breed Your Own Vegetable Varieties: The Gardener's Guide to Plant Breeding and Seed Saving 2nd ed. (Chelsea Green, 2000.) List price: \$29.95.

Please buy my books on-line or from your local bookstore. (I lose money trying to mail-order these at any price even approximately competitive with on-line.) If you buy online, please go to my website and follow the link to your choice of vendors. This helps me a lot, as the referral fee is actually higher than the royalty. (And I get a referral fee on everything you buy in that session, whether it's my books or not. O)

DONATIONS. Breeding open source or public domain, open-pollinated vegetables is more of a public service than an economically viable activity. Do you like the work I've been doing? Can you help? If so, send me a donation, or include a donation along with your order on the line provided. Donations in any amount will be very welcome.

PATRONS NEEDED. It has become obvious that I can't do the plant breeding I want to do with my current resources. My book royalty income has dropped dramatically in recent years. And Fertile Valley Seeds, at its current size, is more effective as a means of distributing my varieties and information about them than as a source of income. And any attempt to expand it to a more profitable size takes it to a size that has proved to be beyond what I can handle.

I believe that because of changes in late blight lines, it's going to become impossible to grow all heirloom tomatoes outdoors almost everywhere in North America within the next 5 to 10 years. None of the heirlooms have adequate defenses against late blight. There are commercial late blight resistant varieties produced by university breeders and big seed companies. But these are all in the form of hybrids, not open pollinated varieties. Worse yet, they pretty much all taste awful. They are bred to

have uniform gorgeous color, which requires the u gene (uniform shoulders). The u gene actually causes sugar content and aromatics (flavor) to drop. In addition the commercial varieties usually have tough, unpalatable skins for resistance to damage in handling and shipping, and additional genes associated with slow ripening that confer longer shelf life, but also destroy flavor. That is not what most gardeners want to grow and eat.

I've begun a major project that involves crossing major genetics for late blight resistance as well as resistance to other major diseases into a large repertoire of heirloom varieties. My basic plan is to cross resistant hybrids to each of a couple dozen heirlooms, backcross once to the respective heirlooms, choose the offspring that carry an appropriate repertoire of late blight and other disease resistance genes, take those to the F2, OSSI-Pledge these lots as breeding material, then distribute that material far and wide for hundreds of gardeners and farmers and seed companies to use to select hundreds of new varieties of heirloom-quality open-pollinated OSSI-Pledged tomato varieties with late blight and other disease resistance combined with heirloom-quality flavor. I hope in this fashion that we can replace all the current heirlooms with equally delicious late blight resistant versions before the late blight situation gets so bad that our current heirlooms become ungrowable. This project is going to require major resources in land and labor. In addition, the step of "choosing the offspring that carry an appropriate repertoire of late blight and other disease resistant genes" from which to get the F2s to distribute will involve marker assisted selection. That alone will require several thousand dollars in lab fees per year for a number of years. However, the result of this project should be a new generation of heirloom-quality tomatoes that are not only resistant to late blight, but also carry the other important genes for disease resistance that most heirloom tomato varieties currently lack.

In addition, I'm breeding new lines of eat-all greens crops as well as more corn, beans, and squash. My varieties are being designed and selected to grow faster and more vigorously and yield better than commercial hybrids under organic growing conditions as well as to taste a lot better and create new niches in the food, farming, and gardening worlds.

Do you like my work? Would you like to help me continue it? Are you so situated such that you might be able to make a major contribution? If so, will you become a patron of my plant breeding work?

Patrons for any given year contribute \$500 or more as individuals, \$1000 or more if institutions. They will be acknowledged on my website unless they choose to be anonymous. In addition, as a small token of my appreciation, patrons will automatically be sent all new releases of finished varieties as I release them. Please send any Patron checks to Carol Deppe, 7263, NW Valley View Dr., Corvallis OR 97330. Please include an email address and phone number so I can call you, thank you personally, and get to know you a little. (I have also included a section for Patron-level donations at the end of the order form.)

PLEASE PRINT OUT AND USE THE ORDERING FORM and ordering

information on the next pages (or download the form separately from my website <u>http://www.caroldeppe.com/</u>. It makes filling your order much easier and helps prevent errors. If you have no printer and cannot use my form, write your order on a piece of paper, but make sure you include all the information on the form—name, full address, email address, and phone number. I need your email address to contact you if there are any problems or issues with your order. (I respect your privacy. I do not share your email address with anyone.)

Carol Deppe/Fertile Valley Seeds 2019 ORDER FORM

Make checks payable to CAROL DEPPE and send to: Carol Deppe, Fertile Valley Seeds, 7263 N.W. Valley View Drive, Corvallis, OR 97330, U.S.A.

ORDERING DEADLINE: April 30, 2019. Open for ordering January through April 30 only.

(The rest of the year I'm gardening, breeding plants and writing.) Order by ordinary mail only, not registered mail or email or phone. (Mail carrier does not feel like walking down the path to the house to deliver registered mail, instead leaving a note to pick up in the post office, requiring a 2 hour errand to get the item, which usually doesn't happen. Stick with ordinary mail.) Payment must accompany order. Checks must be in US dollars (except Canada). Make checks out to Carol Deppe. Acceptable payment: check, money order, and any piece of paper my bank will consider money. NOT anything I have to go some special place or join some organization to cash.

Deliver to (NAME)				
Street address or P.O. Box				
City	State	Country	ZIP	
email		phone		_
			# wanted	Price
basil SWEET GENOVESE \$	5			
dry bean BEEF-BUSH BLAC	CK RESILIENT bu	sh dry bean OSSI \$5		
dry bean BEEF-BUSH BROWN RESILIENT bush dry bean OSSI \$5				
dry bean BEEFY RESILIEN	Γ GREX bush dry	bean OSSI \$5		
dry bean/shellie FAST LADY	' NORTHERN SOI	THERN PEA OSSI \$5		
dry bean GOLDEN GAUCH				
dry bean/shellie HANNAN PO	ě			
green bean PROVIDER bush	snan hean \$5			
green bean ROYAL BURGU		an \$5		
green bean KENTUCKY WC	▲	-		
beet EARLY WONDER TAL	L TOP \$5			
broccoli SOLSTICE. OSSI p				
carrot SCARLET NANTES	•			
corn CASCADE RUBY-GOL	D Flint. OSSI pack	xet \$5		
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corn CASCADE CREAMCA	P Flint. OSSI pack	et \$5		
corn LANDMARK FLINT. 1				
corn MAGIC MANNA Flour	. OSSI packet \$5			
OSSI 1 lb. \$30	· · · · · · · · · · · · · · · · · · ·			
corn BROWN GRAVY MAN	NA Flour. OSSI pa	acket \$5		

OSSI 1 lb. \$30

corn PANCAKE WHITE MANNA OSSI Flour. packet \$5	
OSSI 1 lb. \$30	
corn PARCHING RED MANNA. OSSI packet \$5	
OSSI 1 lb. \$30	
corn PARCHING STARBURST MANNA. OSSI packet \$5	
OSSI 1 lb. \$30	
corn TOP HAT sugary-enhanced sweet corn. OSSI \$5	
corn TUXANA sugary-enhanced sweet corn. OSSI \$5	
corn DAKOTA BLACK POP popcorn OSSI \$5	
cucumber MARKETMORE 76 slicer \$5	
GREENS: EAT-ALL (10 total.)	
amaranth BURGUNDY \$5	
huazontle ("Indian Spinach") RED AZTEC \$5	
eat-all brassica GREEN WAVE mustard (<i>B. juncea</i>) \$5	
eat-all brassica (<i>B. napus</i>) GRONINGER BLUE collard-kale, pkt. \$5	
¹ / ₂ lb. \$75	
eat-all brassica TOKYO BEKANA loose leaf Chinese cabbage (B. rapa) \$5	
eat-all brassica YUKINA SAVOY choy. (Brassica rapa) \$5	
eat-pea OREGON GIANT SUGAR dual purpose, shoots/pods \$5	
eat-all quinoa KASLALA MULTICOLORED greens/grain \$5	
eat-all radish SHUNKYO dual purpose leaf/root \$5	
(KALE: 5)	
kale (B. napus) GRONINGER BLUE (See Greens, Eat-All)	
kale (B. napus) DAZZLING BLUE OSSI \$5	
kale (B. napus) RED URSA OSSI \$5	
kale (B. napus) SIBER-FRILL OSSI \$5	
kale (B. oleracea) WILD GARDEN LACINATO OSSI \$5	
leek BELGIAN BREEDERS WINTER MIX OSSI \$5	
lettuce CRISPY CRUNCHY GREEN-GOLD ROMAINE \$5	
lettuce EMERALD FAN OSSI \$5	
lettuce HYPER RED RUMPLE WAVED OSSI \$5	
lettuce JOKER OSSI \$5	
melon BLACKTAIL MOUNTAIN watermelon OSSI \$5	
melon LOFTHOUSE-OLIVERSON LR. MUSKMELON OSSI \$5	
melon MINNESOTA MIDGET muskmelon \$5	
melon SWEET DAKOTA ROSE watermelon \$5	
onion DAKOTA TEARS yellow storage onion OSSI \$5	
orach AURORA OSSI \$5	

pea OREGON SUGAR POD. See Greens, Eat-All.

radish Shunkyo dual purpose greens/roots. See Greens, Eat-All		
squash COSTATA ROMANESCO summer/drying squash \$5		
squash GOLDINI ZUCCHINI summer/drying/cucumber squash OSSI 20 seeds for \$5		
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squash HOMESTEAD RAINBOW GREX winter squash OSSI \$5		
squash LOFTHOUSE LANDRACE MOSCHATA winter sq. OSSI \$5		
squash MOOREGOLD winter squash \$5		
squash SUNDREAM winter squash OSSI \$5		
squash SWEET MEAT—OREGON HOMESTEAD winter squash OSSI \$5 15 seeds for \$5	5	
100 seeds for \$20		
Swiss chard PRISMATIC RAINBOW OSSI \$5		
tomato AMISH PASTE \$5		
tomato BLACK KRIM \$5		
tomato CHEROKEE PURPLE \$5		
tomato PERFECT ROGUE OSSI \$5		
tomato PINK BERKELEY TIE-DIE \$5		
tomato PRUDEN'S PURPLE \$5		
tomato STUPICE \$5		
turnip PURPLE TOP WHITE GLOBE \$5		
turnip SCARLET OHNO REVIVAL OSSI \$5		

SUBTOTAL:

SHIPPING AND HANDLING:

\$1000 institutional) Do you prefer to be acknowledged on my website ____ or anonymous ____?

GRAND TOTAL:

If I run out of a variety you ordered: ____Refund please. ___Credit. ___Donate to support your work. ____Substitute: