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Vegetable variety recommendations

These recommendations are intended primarily for home and market gardeners. The varieties listed below are generally acceptable in Western Oregon, and usually in other parts of the state. The earliest of the varieties listed are adapted to the cooler areas such as the coastal plains and valleys. Some areas with higher summer temperatures, such as the Rogue River Valley, can use additional varieties not included. The list is not complete: in some cases the large number of new varieties precludes listing all of the acceptable ones, or we have been unable to observe all of them. therefore, made general suggestions; i. e., in the case of pickling cucumbers, to try any of the new F1 hybrids available. New varieties should be tried cautiously until adaptations to climate and cultural methods are confirmed.

In addition to the complete crop listings, the following comments about varieties, or factors affecting variety selection, may be of interest:

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Cucumbers have undergone drastic evolution in the past two decades. Modern varieties have resistance to one or up to six diseases, including scab, anthracnose, mosaic, powdery mildew, angular leafspot, and downy mildew. Old varieties such as Chicago Pickling had no specific disease resistance. In addition, many new hybrids, especially pickling types, are gynoecious (all female). ecious varieties bear a higher concentration of fruit early in the season than ordinary monoecious (male and female flower) type, and continue to produce well through the season. To supply pollen, seed of a normal monoecious line is usually mixed with the hybrid seed at a rate of about 12%. Gynoecious hybrids, such as Pioneer, Early Pak, and Victory Hybrid, are recommended for both home and commercial plantings. We have not tested all of them that are available.

Eggplants are marginal in cool
Western Oregon summers and should be
grown in a very sheltered warm place,
preferably over black plastic mulch.
The standard large varieties such as
Black Beauty and Black Magic, though beautiful, are not the best ones to grow.
Several smaller, elongated Japanese
varieties, Long Tom, Short Tom and Money

Maker, are much earlier and more productive in this area and have equal quality. Morden Midget is also early but rather poor in color and not desirable for market. Growers are likely to allow the small fruited varieties to become overmature if accustomed to picking by size. Picking by color and by squeeze test will generally result in proper maturity

Muskmelons should be grown on black plastic mulch in the Willamette Valley to increase yield, earliness, and quality. Even so, a season as cool as 1976 results in poor performance of recommended varieties such as Harper Hybrid, Burpee Hybrid, and Gold Star, which were almost total failures in our trials. Harper Hybrid, for example, developed a good number of fruit but they were generally inedible, showing break-down typical of overmaturity at the time they slipped from the vine. Ambrosia was a total failure in 1976 but is on the recommended list because it was outstanding in quality, holding characteristics, and yield in 1975. This variety needs further trial before large scale planting. New varieties recommended for trial, based on the 1976 season, are Roadside and Ball 1776 (mid-season orange fleshed hybrids); Alaska and Early Dawn (early, good size, possibly medium quality, orange fleshed hybrids); and Haogen (green fleshed, smooth rind).

Onions are somewhat specific in area adaptation because day-length determines when they start to form bulbs. In northern latitudes where onions are grown in the summer, long day varieties are grown because bulb formation is delayed long enough for sufficient leaf growth to occur. The result is a large plant and consequently a large bulb. If short day varieties (those grown in the south in the winter) are planted in Oregon, they usually bulb when the plants are very small and produce small bulbs. To successfully grow short day varieties, such as Crystal Wax, Eclipse, and Yellow Bermuda, they should be planted as early as possible, preferably from transplants started indoors. Some of these types, such as Eclipse, may be thickly planted late in the spring to produce miniature cocktail or pearl onions. Unfortunately, seed catalogs often do not identify short and long day varieties but the early varieties are more likely to be short day types. The list in this article gives a number of recommended long day varieties. Several hybrid varieites such as Spartan Banner and Spartan Sleeper are especially suited for mineral soils.

Peas in Western Oregon are often severely damaged from virus diseases (enation mosaic and pea streak) unless planted very early. In some seasons, even peas planted in March are damaged. Resistant varieties exist but are seldom available through regular retail outlets. Perfected Freezer 60 is sometimes listed but, though resistant to enation mosaic, is often damaged by pea streak. Oregon State University has released 'Corvallis' as a home garden variety highly resistant to enation mosaic and fairly resistant to pea streak. 'Corvallis' is not commercially available as yet and there is no assurance that it ever will be adopted by the seed industry. Trial packets are available from: J. R. Baggett, Department of Horticulture, Oregon State University, Corvallis, Oregon 97331.

 $\underline{\underline{\text{Peppers}}}$ grown for commercial purposes are most often of the large bell or stuffing type. There are a number of smaller bell peppers which are early, productive and well suited to home use or even local markets. Parkwonder, Early Bountiful, Vinette, Stokes Early, and Morgold are in this category. If the fruit are to be cut up and used for flavoring or frying, the long conical Italian Sweet would be a good choice because it is the earliest sweet pepper ever grown in our trials. Also good for these uses is Sweet Banana, yellow when immature, ripening orange-red, fairly early, and very productive. Fiery Festival is an attractive ornamental pepper with upright orange

red, very hot fruit suitable for drying.

Squash and Pumpkin include many old standards, such as Hubbard which has been in use since about 1800, but there are some modern developments as well. The compact growth habit, a shortened version of the indeterminate or vining type, is available in two pumpkins, Jackpot and Spirit, and will soon be available in a strain of Butternut. Several bush types, such as Table King (acorn type) and Gold Nugget are available and are useful where space is short. A new vining strain of Butternut, Ponca, is superior to the older strains in uniformity of size, shape, and rind color. Ponca is medium in size, weighing only about two thirds as much as the well known Waltham Butternut.

A high quality squash which should be tried in the home garden and for local market is Delicata. Belonging to the species Cucurbita pepo, this variety is easy to mature, has unusually fine sweet flavor and keeps well in storage. The flesh is somewhat thin.

Several recent pumpkin introductions feature the naked seed characteristic. Lacking a seedcoat, the seeds can be roasted in an oven to provide an excellent edible product. Varieties of this type are Eat All, Lady Godiva, Streaker, and Triple Treat.

Tomato - Because of the large number of tomato varieties available, formulation of limited recommendations is difficult and arbitrary. Testing tomato varieties can easily become a garden hobby if space is available. Variety lists are also complicated by differences between areas of the state. Thus, the coastal area growers must select only the earliest varieties, some of the late indeterminate types are suitable for the warmer valleys, and the Willamette Valley growers need early to medium-early determinate types. Determinate varieties (i.e. Willamette, Springset) because of compact plant habit, generally greater earliness, and concentrated cropping season, are preferred in all areas. In cool areas, indeterminate varieties (i.e. Burpee Big Boy) tend to grow a lot of vine with a late or sparse crop of fruit. However, we list some indeterminate varieties for the warmer areas; these can also extend the Willamette Valley season if fall weather is satisfactory. Because the plant spread can easily reach 6-8 feet, indeterminate varieties should be staked or enclosed in tall wire supports. Compact determinates usually spread 3-4 feet and are best supported in shorter wire cylinders or frameworks of some kind.

Our list generally includes only varieties we have grown for more than one season, or have data from other tests in the Northwest. Among the 64 varieties observed in 1976, the following tested for the first time were high scoring and deserve trial: Determinates Royal Flush, Bonus, Sunripe, Terrific, and Floramerica; indeterminates Super Fantastic, Monte Carlo and Ultra Girl; curly top resistant Idaho 2442; determinate paste type Royal Chico: early determinate yellow Golden Delight. Jetfire, an early variety not as yet grown in our trials, has done well in trials on the Oregon Coast. ASPARAGUS--Mary Washington, California 500.

BEANS

Green Bush: Tendercrop, Bush Blue Lake 274 and Bush Blue Lake 290 (later), Stringless Greenpod, Romano FM 14 and Roma (flat, Italian), Dwarf Horticultural. Wax Bush: Puregold, Earliwax, Kinghorn, Goldcrop, Pencil Pod Wax.

Pole, Green and Wax: Blue Lake, Kentucky Wonder, Romano (flat, Italian), Burpee Golden, Oregon Giant, King Horticultural (shell bean).

BEANS, LIMA

Bush, large pod Fordhood 242 and Concentrated Fordhook. Bush, small pod: Clark's Bush, Early Thoro-green, Kingston. Thaxter (mildew resistant), Henderson.

Pole: King of the Garden.

REFTS -- Detroit Dark Red (mildew-resistant strain), Green Top Bunching, Ruby Queen, Burgundy, Firechief, Early Wonder; Burnee Golden is attractive and excellent for garden use.

BROCCOLI -- Waltham 29, Northwest Waltham, Green Comet, Spartan Early (small, early), Gem, Green Duke, Crusader.

BRUSSELS SPROUTS -- Jade Cross, Jade E, Green Gem, Catskill or Long Island (more variable sprout size and maturity).

CABBAGE

Early and midseason: Earliana, Golden Acre, Emerald Cross, Early Jersey Wakefield, Green Acre, Tastie, Copenhagen Market, Bonanza, Market Topper, Market Prize, Market Victor, Stonehead, Ventura, Little Rock, Head Start.

Late: Danish Ballhead and Oregon Ballhead.

Small: Babyhead, Little Leaguer.

Savoy: Chieftan, Savoy King, Uneek (smaller, early).
Red: Redhead, Red Acre, Ruby Ball.

Use strains resistant to Fusarium yellows if this disease has been a problem. Good, new F1 hybrids are being introduced each year.

CARROT -- Red Cored Chantenay, Royal Chantenay, Danvers, Spartan Bonus. Oxheart is good for wet fall areas, especially with heavy soils. Imperator, Gold Pak, Hi Pak, Grenadier, and Nantes are longer carrots for lighter textured soils.

CAULIFLOWER--Early Snowball, Snowball Y, Monarch 73M, Snow Crown, Snow Diana. Winter varieties for a range of maturity times are available. Early Purple Head and Royal Purple are good garden varieties. Green Ball is green with good flavor and quality, best in late season.

CELERY--Utah 52-70, Utah 15-B, and Giant Pascal for fall crops; Summer Pascal for early spring planting. CELERIAC -- Alabaster.

CORN, SWEET

Early: Earlibele, Earliking, Springgold, Northern Belle, Seneca Beauty, Blitz, Sundance, Rapidpak. Main Season: (best yield and quality): Jubilee, Stylepak, Golden Cross Bantam, Commander, Tendertreat.

White or Bicolor: Tokay Sugar, Silver Sweet, Harmony, Silver Queen (very late).

Supersweet: Illini Xtra Sweet, Early Xtra Sweet, Illini Chief.

CUCUMBER

Pickling: Pioneer, Spartan Dawn, Spartan Advance, Patio Pik, Crusader, and other F1 hybrids should be tried. Other disease resistant and productive

varieties are SMR 58, SMR 18, and MR 17.
Slicing: Marketmore 70, Gemini, M&M, Burpee Hybrid, Spartan Salad, Cherokee, Poinsett, Spartan Valor, Slicemaster, and Saticoy Hybrid.

Burpless or Burpless Hybrid 26 is mild flavored, long and nearly seedless. Sunnybrook and Ashley are standard varieties which have been found low in occurrence of bitterness.

EGGPLANT--Black Magic, Black Beauty, Burpee Hybrid, Jersey King Hybrid, Blackjack, Morden Midget (home garden only). Short Tom, Long Tom and Money Maker are early small types. LETTUCE

Leaf: Oak Leaf, Salad Bowl, Bronze Leaf (Prizehead), Green Ice.

Crisphead: Pennlake for spring; Ithaca for all seasons except where mildew occurs in late fall, in which case Valtemp is recommended.

Butterhead: Buttercrunch, Bibb, Summer Bibb. MUSKMELON--Hales Best and Hearts of Gold for warm areas. For Western Oregon: Fusarium Wilt resistant varieties - Iroquois, Harvest Queen, Delicious 51, and Resistant Honey Rock; resistant F1 hybrids Gold Star, Classic, Harper Hybrid, Supermarket, and Saticoy Hybrid. Burpee Hybrid and Ambrosia (see notes) are also recommended where Fusarium wilt is not a problem. All varieties are better when grown on black plastic mulch. Crenshaw is grown only in the warmer areas, but Burpee Early Hybrid Crenshaw will

mature well in Western Oregon.

ONTON

Long day bulbing: Yellow Globe Danvers, Early Yellow Globe, Spartan Banner, Spartan Sleeper, Southport Red Globe, Ebenezer, Australian Brown, Ringmaster, White Sweet Spanish, El Capitan, Sweet Spanish, Peckhams Strain Sweet Spanish (Sweet Spanish types are late maturing in Western Oregon).

Short day bulbing: Crystal Wax, Eclipse, Barletta, Yellow Bermuda, (These are best grown as pearl onions because early bulbing results in small size).

Green or bunching: Evergreen.

PEAS--Perfected Freezer 60 is resistant to enation mosaic virus occurring in Western Oregon. Plant early to avoid virus diseases in general. Frosty, Little Marvel, Alderman (tall), Thomas Laxton (tall), Green Arrow and Lincoln are other varieties usually available. For edible pods use Mammoth Melting Sugar, or Burpee Sweetpod, both planted early to avoid diseases; Oregon Sugarpod is virus resistant in Western Oregon, has large pods on a short plant. **PEPPERS**

Large bell: Yolo Wonder, Yolo Wonder L, Early Calwonder, Keystone Resistant Giant, California Wonder 300, Belaire, Mercury, Jade, Midway, Bellringer, Bellboy, Early Niagrara Giant, Emerald Giant.

Small early bell: Vinedale, Early Bountiful, Morgold (orange), Vinette, Parkwonder, Stokes Early, New Ace. Hot peppers: Red Chili, Large Red Thick Cayenne. Others: Italian Sweet is long conical and very early. Sweet Banana is a good, long, yellow, sweet variety; Hungarian Wax is similar but hot.

PUMPKIN--New England Pie (Small Sugar), Jack O'Lantern, Connecticut Field, Young's Beauty, and other Jack O' Lantern types; Dickinson; Big Max for exhibition. Cinderella is a Jack O'Lantern with bush growth habit. Spirit and Jackpot have large fruit, short vine. Naked seed (for roasting): Lady Godiva, Streaker; for

naked seed and pies: Triple Treat. RHUBARB--Valentine, MacDonald, Riverside Giant. SUMMER SQUASH--Zucchini, Caserta, Yellow Straightneck, Yellow Crookneck, and White Scallop or F1 hybrids of these varietal types. Burpee Hybrid, Seneca Zucchini, Elite, and Zucchini Hybrid are exceptionally productive green varieties which are easy to pick. Seneca Butterbar and Goldbar are yellow straightneck types of exceptional quality. Eldorado and Sundance are promising new yellow hybrids. Scallopini, new dark green scallop. There are many other new F₁ hybrids of both the yellow and green types which are good. Avoid Dark Green Zucchini and Black Zucchini which have heavy foliage. WINTER SQUASH -- Hubbard (many types well adapted), Golden Delicious, Banana, Table Queen, Sweet Meat, Buttercup are outstanding for home use and are easily matured in Western Oregon; they are of convenient size and high in quality, but they are not adapted to long storage. Waltham Butternut and new Ponca are superior Butternut types. Sweet Meat has good quality and is long keeping.

TOMATO (F=Fusarium wilt resistance, V=verticillium res.

N=nematode res.)

Early determinate: Fireball, New Yorker (V), Starshot (V), Immuna Prior Beta, Pixie, Presto, Willamette, Springset (VF), Medford.

Medium early determinate: Redpak (VF), Heinz 1350(VF), Bigset VFN, Spring Giant (VF), Sunup(F).

Early indeterminate: Early Girl (V)

Medium early indeterminate: Super Fantastic (VF), Jet Star (VF), Moreton Hybrid (VF).

Late indeterminate: Burpee Big Boy, Whopper, Ramapo (VF).

Cherry: Small Fry (VFN), Large German Cherry, Sweet 100.

Paste: Chico III (F), Royal Chico (VF).

Yellow, early determinate: Golden Delight, Orange

Yellow, late indeterminate: Golden Boy, Sunray (F),

Jubilee, Caro Red.
Curly top resistant: (determinate, medium maturity):
Saladmaster (VF) Roza (VF).
WATERMELON--Klondike (Many strains), New Hampshire
Midget (early icebox type, very small), Charleston
Gray (Fusarium resistant, good shipper, relatively
late maturing), and Crimson Sweet (Fusarium resistant).
Newer icebox melons should be tried. Sugar Baby is
a medium small, dark, green melon which is fairly

SEED SOURCE

Some seed sources are listed here. Probably no single seed source can provide all of the varieties listed. Listing these retail catalog seed sources is not intended to be a warranty of their seed by Oregon State University; neither is the exclusion of other seed companies intended as a lack of approval.

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early. Seedless varieties should be tried.

W. Atlee Burpee Co. P.O. Box 6929 Philadelphia, PA 19132

Farmers Seed & Nursery Co. Fairbault, MN 55021

Gurney Seed & Nursery Co. 1448 Page St. Yankton, SD 57078

Joseph Harris Co. Inc. Moreton Farms 3670 Buffalo Road Rochester, NY 14624

Jackson & Perkins P.O. Box 1028 Medford, OR 97501 Nichols Garden Nursery 1190 N. Pacific Hwy. Albany, OR 97321

George W. Park Seed Co. Inc. P.O. Box 31 Greenwood, SC 29646

Seedway Inc. P.O. Box 15 Hall, NY 14463

Stokes Seeds Inc. P.O Box 548, Main Post Office Buffalo, NY 14240

Burgess Seed & Plant Co. P.O. Box 2000 Galesburg, MI 49053

New Butternut type squash varieties observed

The 'Butternut' variety of Cucurbita moschata has become one of the most important squashes for home garden and fresh market purposes. A convenient size range, a soft rind which makes preparation easy, the large solid neck and small seed cavity which result in minimal waste, mild flavor, and a desirable texture contribute to its popularity. Lacking the long keeping characteristics of the 'Hubbard' and 'Sweetmeat' varieties, 'Butternut' is well adapted for commercial market use during the late fall and early winter (October - December). In the Willamette Valley of Oregon, 'Butternut' tends to be a slow starter because of cold spring weather, but matures well by October 15 in most seasons. It is not as well adapted to cool areas as some varieties of Cucurbita maxima or the C. pepo varieties such as 'Delicata' or 'Table Queen.'

The development of the original 'Butternut' is somewhat obscure, but it was reportedly selected by a farmer near Boston, Massachusetts, from 'Canada Crookneck', a variety introduced in the seed trade by 1834 and considered to be in the Cushaw group. The description of 'Canada Crookneck' generally fits 'Butternut' as it is known today. 'Butternut' has become a complex or a type as a result of the introduction of many named strains. Examples are 'Improved Butternut', 'Butternut 23', 'Baby Butternut', 'Harris Butternut', 'Burpee Butternut', 'Hercules', and 'Waltham Butternut'. Many breeders have attempted to eliminate variations in size and shape, especially the atypical long-neck fruits which tend to appear sporadically on the same plants with typical fruit. Others have developed small fruited (Baby Butternut), large fruited (Waltham Butternut), or heavy necked strains (Hercules).

In 1976, on the Vegetable Research Farm at Corvallis, two new named varieties of Butternut type, 'Ponca' and 'Patriot', were observed along with a breeding line with compact growth habit. 'Ponca' and 'Patriot' were released last year by Dermot Coyne of the University of Nebraska. The compact line is under development by Henry Munger of Cornell University. The Harris strain of 'Butternut' and the popular, large fruited 'Waltham Butternut' were grown for comparison.

Each variety was grown in a single 20 foot plot in rows 12 feet apart under apparently uniform conditions. Fruits were harvested to determine weight and length averages and to estimate relative uniformity. A second plot, in a home garden in the Corvallis area, provided additional information on fruit cracking.

The varieties were sharply separated into two size groups: very large including 'Waltham Butternut' and 'Patriot', and small including 'Ponca', Harris, and the Compact strain. While the last three were very similar in size, 'Ponca' was slightly shorter which is a reflection of a more blocky shape.

The most uniform variety in general appearance was 'Ponca.' It tended to peak strongly in one weight and length class, but there were three very long cylindrical off-types, possibly from one plant (Figure 1). It was also the most uniform and attractive in color with a distinctly darker tan shade which developed earlier in the season. Flesh color was deeper and more orange than in the others. 'Ponca' appeared to have a high yield potential.

The Harris and Compact strains were very similar in size and in tendency to produce long pear shapes. The rind color of compact was possibly slightly better than Harris, and it was less variable in weight, but not length

The two large varieties were similar in range of weight and length, but 'Patriot' was the largest and seemed to have highest potential for total yield of the group. Both of the large varieties were uneven in color with a tendency for green or immature appearance even though there was no indication from eating quality that these varieties were actually less mature.

'Patriot' cracked very seriously, much more than any of the others in both the Vegetable Research Farm plot and home garden plot (Table 1). The cracks were deep and sometimes there were several inter-connected, especially near the peduncle end. Although the cracks occur early and are completely healed at harvest time, they make the fruits unsightly and commercially undesirable. We received a verbal report of a cracking problem in 'Patriot' from another Northwest location but it has not occurred in tests in other sections of the United States.

Limited observations did not indicate major differences in quality. In a test involving only two fruits for each variety, 'Ponca' had a higher percent soluble solids. However, apparent dry matter (consistency) was better in 'Patriot' than in 'Ponca', and possibly better than in 'Waltham', but this may only reflect a difference in maturity. Both 'Ponca' and 'Patriot' seem to be slightly more fibrous but this is an appearance factor only since there is no textural difference when the flesh is eaten. All the varieties can be considered acceptable in quality.

The compact plant characteristic may be of importance in the future. This type of plant differs from bush types such as 'Gold Nugget' and the summer squashes in that it is a true indeterminate or vining plant but with short internodes. The compact line tested here seemed to be close to the Harris strain in fruit type, quality, and yield, but the plant spread was only about 7 feet compared to about 20 feet for normal types. Home gardeners and possibly market growers may find this advantageous. In our test, the compact line had a sizable number of immature fruits which had set after the main crop matured.

Of the three new varieties tested, 'Ponca' is the most interesting at present. The large number of fruits of uniform size, shape, and color should be good reason for trial plantings by market growers. The small size should be well received by consumers because 'Waltham Butternut' may often be too large. 'Patriot' is not to be recommended here because of cracking, though additional trials may show that this does not occur consistently here or in other Northwest locations. The compact type is recommended for trial as soon as it is available.

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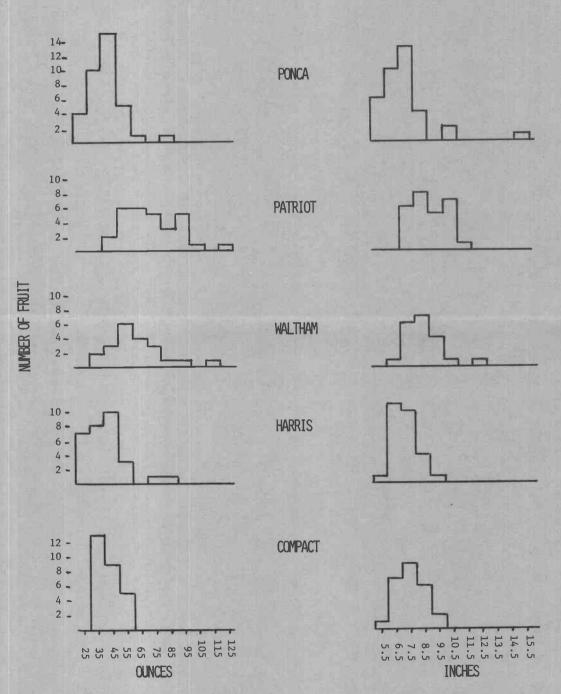


Figure 1. Weight and length variation in strains of 'Butternut' squash.

Table 1. Butternut squash performance, Corvallis, Oregon, 19761

Strain	Weight		20000	Research farm		Home garden	
	Total	Average	Average Length In.	Number Observed	Cracked	Number Observed	Cracked
Ponca	1537	42.7	6.62	36	16.7	50	2
Patriot	2083	74.4	8.9	28	78.6	33	48.5
%aitham	1294	61.6	8.3	21	0.0	28	3.6
larris	1188	39.6	7.1	30	23.3		7.7
Compact	1128	41.8	7.3	27	7.4		

¹Weight and length data obtained from one 20-foot plot at the Vegetable Research Farm. Total weight may be erroneous because of stand variations. Cracking data were from same source and from the home garden of the author. Three atypical fruit excluded.

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