

## GROWING GRAINS IN HOME GARDENS

### WHEAT (*Triticum aestivum*)

Yield: up to 20 lbs./100 sq. ft. (up to 70 cups flour)

140 days to harvest

6-10 ounces seed

There are many varieties--hard and soft, red and white, winter and spring, etc. In our area, winter wheat is recommended: plant in fall for harvest the next summer. Good drainage is very important for winter wheat; if your soil is heavy and wet in winter, consider raised beds. Beware of too much nitrogen--it can cause excessive stem and leaf growth, and the stalks can lodge (fall over).

### BARLEY (*Hordeum vulgare*)

Yield: 5-24 lbs./100 sq. ft.

60-70 days to harvest

5 or more ounces seed

Hull-less barley is recommended, because barley is very difficult to de-hull. Hull-less barley still has hulls, but they come off easily with threshing. Full sun is preferred, but barley will tolerate some shade. It doesn't like acid soil, so you should amend accordingly.

### OATS (*Avena sativa*, *Avena byzantina*, *Avena nuda*)

Yield: 3-11 lbs./100 sq. ft.

90-120 days to harvest

6 ounces seed

As with barley, hull-less varieties are recommended (*Avena nuda*).

Plant as early in the spring as soil can be worked (or plant 6 to 10 weeks before winter sets in).

As well as nutritious, tasty grain, oats leave you with straw which makes a wonderful garden mulch and bedding and feed for rabbits and horses.

### RYE (*Secale cereale*)

Yield: 4-24 lbs./100sq. ft.

120 days to harvest (winter rye)

7-10 ounces seed

Don't confuse cereal rye with ryegrass (*Lolium spp.*)

Rye is very cold-hardy. Fall planting is recommended for highest yield and quality. Don't plant it in areas where water puddles.

Watch for disease problems; ERGOT is a particularly dangerous fungus, poisonous to humans and animals. You can identify it by small, black, grain-size growths which develop in place of individual grains.

Rye has no hull and is ready to cook or grind as soon as you harvest it.

### MILLET

Proso millet (*Panicum miliaceum*) is recommended for our climate. Pearl millet requires lots of hot weather over a long growing season.

Yield: 4-8 lbs./100sq. ft.

60-90 days to harvest

Millet germinates slowly and has trouble competing with weeds the first several weeks; make sure soil is well cultivated and weed-free. Don't plant till soil temperature has reached 60°. After threshing and winnowing, when you're ready to use some millet, you have to hull it. Small amounts can be rubbed between your hands, or you can modify your flour mill to hull the millet mechanically.

Toasting millet before cooking or grinding brings out its flavor. Use as a side dish, or in soups and casseroles, or as sprouts.

#### QUINOA (*Chenopodium quinoa*)

Yield: 6-26 lbs./100 sq. ft.

90-120 days to harvest

Not a grass--it's a broadleaf plant with leaves in many colors; height varies from 1-1/2 to 10 feet. It can do well in poor soil and prefers a cool climate. Plant mid-April to mid-May. Thin 2"-tall seedlings to 8 inches apart.

You can harvest by rubbing the seed heads to release the grain into a bucket.

Rinse the grain several times before cooking to remove the coating of saponin, a powdery, soapy-tasting substance which is indigestible.

Toasting the grain makes the flavor richer. Quinoa can be ground into flour or used whole as a cereal or in place of rice.

#### EMMER FARO, SPELT, AND EINKORN (*Triticum spp.*)

These are the ancestors of modern-day wheat. Grow as you would wheat.

The seeds are difficult to hull; consider modifying a flour mill to use as a huller, or find a commercial miller.

## SEEDS

Olympia Farmers Market: Pan Gardens, JoAnn Mahaffey.

The Farm Store, Chehalis, has fall and spring oats, cereal rye, and soft white and hard red wheat.

By mail:

Baker Creek Heirloom Seeds ([rareseeds.com](http://rareseeds.com))

Bluebird Grain Farms ([bluebirdgrainfarms.com](http://bluebirdgrainfarms.com)) Also milled flours.

Bountiful Gardens ([bountifulgardens.org](http://bountifulgardens.org)) Also seed-saving supplies.

Fedco Co-op Garden Supplies ([fedcoseeds.com](http://fedcoseeds.com))

Johnny's Selected Seeds ([johnnyseeds.com](http://johnnyseeds.com))

Nichols Garden Nursery ([nicholsgardennursery.com](http://nicholsgardennursery.com))

Peaceful Valley Farm and Garden Supply ([groworganic.com](http://groworganic.com)) Also milling equipment.

Seed Savers Exchange ([seedsavers.org](http://seedsavers.org)) Membership organization.

Seeds of Change ([seedsofchange.com](http://seedsofchange.com))

Southern Exposure Seed Exchange ([southernexposure.com](http://southernexposure.com))

Sproutpeople (sproutpeople.com)

Sustainable Seed Co. (sustainableseed.com) Certified organic heirloom seeds. sq

### **EQUIPMENT**

Pleasant Hill Grain (pleasanthillgrain.com) Large selection of mills; lots of information

Scythe Supply (scythesupply.com)

### **BOOKS**

Homegrown Whole Grains, by Sara Pitzer, Storey Publishing, 2009

Small-Scale Grain Raising, by Gene Logsdon, Chelsea Green Publishing, 2009

### **ALSO OF INTEREST**

NPR quinoa article: <http://www.npr.org/blogs/thesalt/2012/11/29/166155875/quinoa-craze-inspires-north-america-to-start-growing-its-own>

Washington Post blog quinoa article:

<http://www.washingtonpost.com/blogs/wonkblog/wp/2013/07/11/quinoa-should-be-taking-over-the-world-this-is-why-it-isnt/>

### **EVENT**

Kneading Conference West, September 12-14, Mount Vernon, WA

“Inspiration and education for bakers, grain growers, millers, scientists, wood-fired oven enthusiasts, food entrepreneurs, and anyone who loves hand-crafted breads.”

Registration: \$300.00

[kneadingconferencewest.com](http://kneadingconferencewest.com)

## **WSU Lewis County Master Gardeners**

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