



# QUINOA

## *Chenopodium quinoa*

Quinoa ("keen-wa") has been cultivated for at least 5000 years. It has nutritious leaves and large seedheads jam-packed with grain. Quinoa is 15-16% protein and is high in E and B vitamins, calcium, iron and phosphorous. It is easy to digest and has a delicious flavor.

### PLANTING

Quinoa will germinate in fairly cool conditions (40-45 degrees) and prefers light, well-drained soil and full sun. Quinoa has a small seed and looks like lamb's quarters when young, so we find it easier to start quinoa in flats and transplant. Aim for 8-18" between seedlings and 15-24" between rows. We had our best luck seeding in flats in late February and transplanting in mid-April.

### GROWING METHODS

#### MAINTENANCE

Quinoa is drought tolerant and does not like much water. Weed regularly to reduce competition for nutrients. If plants get very tall they can fall over towards the end of the season. Staking may be considered. Most varieties grow 4-8' tall.

#### HARVEST

Quinoa is ready to harvest when the plants are dry and the leaves have dropped. You should not be able to dent the seed with your fingernail. In dry autumns, seeds can be harvested by simply stripping them from the stalk between thumb and forefinger. If rain threatens, plants may have to be cut and brought under cover to continue drying. Quinoa will sprout readily on the plant in the rain.

### THRESHING

Simply rub the dry seeds into a bucket or rub through a screen set over a wheelbarrow. Winnow off the chaff in front of a steady fan and use screens to help in cleaning the seed.

### PROCESSING

#### SEED-SAVING/STORAGE

Quinoa varieties will cross, and will also cross with lamb's quarters, a common weedy relative. Weed out lamb's quarters and grow only one variety of quinoa if you want to save seed. Be sure to further dry your seed before storage by spreading it out on screens or trays in a warm, dry location.

### COOKING TIPS

Quinoa must be thoroughly rinsed in several changes of water until the water runs clear, to remove the bitter saponins. Simmer it like rice for 15 minutes with a ratio of 1 cup quinoa: 1.5 cups water. Young greens can be eaten raw in salads and older greens can be cooked like spinach or stir-fried.

### YIELDS & LABOR

Quinoa is reported to yield 6-26 lbs per 100 SF. 1-2 oz per plant is common, with up to 6 oz per plant when grown in fertile ground.

### BBGP RESEARCH

#### VARIETIES

We grow a multi-hued quinoa from Salt Spring Seeds. The other 7 quinoas we have trialed did not perform well here. Quinoa is day-length sensitive and it is necessary to find varieties that are quick to mature and grow well at our latitude (southern Andes varieties tend to do well).

### ADDITIONAL INFORMATION

Quinoa is reportedly tolerant of a wide range of growing conditions, including saline soil and infertile soil with pH 4.8-8.5.