



## Food: Just Grow It!



# ONION

### Types and climatic requirements

Bulb (or dry) onions are classified into three major groups based on daylength requirements: short day, medium day, and long day. Only the short day and medium day types can be grown successfully in Hawaii, and they must be planted at the appropriate time of year. For example, short day varieties should be seeded from September to March; planting during the summer months will result in premature bulbing and small bulbs. Medium day varieties should be seeded from March to May.

Varieties requiring long days (13 hours or more) to bulb are not adapted in Hawaii. Short day, mild flavored varieties include 'Yellow Granex' hybrid, 'Tropic Ace' hybrid, 'Early Texas Grano 502', 'Excel', and 'Yellow Bermuda'. 'Maui' onions include any of these varieties grown under Maui conditions. Short day, pungent varieties are 'Awahia' and 'Red Creole'. Medium day varieties include 'Early Harvest' hybrid, 'Amber Express' hybrid, 'Pronto S' hybrid, and 'San Joaquin'.

Other onion types commonly grown are scallions, 'Rakkyo' ('Rankyo'), green onions, and shallots. Scallions are bulb onions harvested before maturity when the bulbs measure 1 2 inches in diameter and the top growth is still green and upright. The bulb portion is used for green salads and is very mild and sweet at this stage of growth.

'Rakkyo' is grown for its small bulbs, which are used for pickling. Its growth habit is similar to the shallot, but its flavor and odor are quite different. Planting is done from November through February by means of sprouting bulbs (no seeds are available). A single bulb will divide into several tillers until bulb formation begins in June July. After bulb formation,

the top growth will die down completely, usually between August and September.

Green onions are grown for their white stems and green leaves. Only the multiplying (or dividing) types of onion and shallot are grown in Hawaii for harvest as green onions. There are two types: the small leaved and the large leaved (futo negi) strains. Propagation of the local small leaved green onion strains and local shallot strains is by stem divisions (sets). Propagation of the popular 'Koba' small leaved strain is by seed. 'Koba' and the local strains of green onion can be planted year-round. Hawaiian shallots should be planted from September to May, as the top growth dries out soon after small bulb formation in late summer. Futo negi types are propagated by seed.

### Soil Management & Fertilizers

Onions thrive in well drained, slightly acid to neutral soils with high organic matter content. Composts or manure can be applied at 10 20 lb per 100 square ft to improve soil condition and fertility. Onions are susceptible to nematodes. If nematodes are present, replace one half of the compost with well-rotted chicken manure. Apply a complete fertilizer such as 8-8-8 at 3 to 4 lbs. per 100 sq. ft. Apply the fertilizer in two applications, half at planting time and the other half six weeks later. Another application of nitrogen such as bone meal can be made 12 weeks later (or before bulb formation) to enhance bulb size.

### Insect & Disease Control

Thrips may infest the leaves of onions and may be controlled with Neem insecticide sprays.

## Seed Availability

For the purposes of the Food: Just Grow It! Project, seeds of green onion are available from the project directors at the University of Hawaii.

**Information from:** University of Hawaii, College of Tropical Agriculture and Human Resources Home and Garden Vegetable Series No. 16.

<b>Nutrition Facts</b>	
Serving Size 1 tsp. (2.0g)	
Servings Per Container	
Amount Per Serving	
<b>Calories</b> 0	Calories from Fat 0
<b>% Daily Value*</b>	
<b>Total Fat</b> 0g	<b>0%</b>
Saturated Fat 0g	<b>0%</b>
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 0mg	<b>0%</b>
<b>Total Carbohydrate</b> 0g	<b>0%</b>
Dietary Fiber 0g	<b>0%</b>
Sugars 0g	
<b>Protein</b> 0g	
Vitamin A 0%	• Vitamin C 0%
Calcium 0%	• Iron 0%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	