



Winter Vegetable Gardening Tips from Joyce Gemmell

Spinach Leafy Crops

This is not an easy crop in warm areas unless you have found the right planting date for your micro-climate. In Southern California, spinach is a fall and spring crop. Planting too early in the fall is disastrous if the soil is above 70 degrees F. The germination rate drops to 50 %. If you have a soil thermometer, check the temperature at 2 - 4 inches depth before you plant in October. If it is above 70, shade the soil after preparing it for planting with a piece of 50% shade cloth laid over a frame 1 -2 feet above the soil. After a couple of days, check the temperature again. Water the bed to keep the soil moisture up: this will also help to cool it. As the temperature at night drops, your soil will gradually cool. Start planting seed in small blocks across the bed with a pre-spouted seed; soak seed overnight, then put between moist papers towels in a plastic bag. Refrigerate for a few days. Spinach likes light but only for 10 - 12 hours a day. Field testing at Cornell University showed that day length was the limiting factor in early spring planting because spinach bolts as days lengthen. They also found that wide ranges between day and night temperatures are factors in plant development -the plants thriving at 60 degrees day temperature and 40 - 45 degrees night temperature. This makes Spinach a mid-winter crop or between 9 and 11 hour day length.

Conclusion: Plant so crop can mature while days are short and cool. If weather cooperates, a direct seeding is in and out of the ground in eight weeks. Try Reemay row covers during Oct/Nov for a little shade and to keep birds from helping themselves.

Spinach needs lots of nitrogen. In addition to pre-plant fertilization, use a liquid fish at the four-leaf stage. Sow seed ½ inch deep, 2 inches apart and thin to 6 inches. Harvest begins when plants are 6



Planting Dates:

Coastal region

Seeds can be planted from September to April.

Inland Region

Seeds can be planted from September to March.

inches tall. Pick the outer leaves and leave a 2 inch growing center.

Spinach varieties: **Melody**, 43 days (semi-Savoy, All American Winner); **Tyee**, 53 days (good wintering over); **Olympia**, 46 days 9 plain leaf); and other new varieties every year.

Also check out ...

http://vric.ucdavis.edu/veg_info_crop/spinach.htm

<http://www.ipm.ucdavis.edu/PMG/selectnewpest.spinach.html>



Nutritional Information...

Nutritional value per 100 g (3.5 oz) of spinach

Energy	97 kJ (23 kcal)
Carbohydrates	3.6 g
Sugars	0.4 g
Dietary fiber	2.2 g
Fat	0.4 g
Protein	2.2 g
Vitamin A equiv.	469 µg (52%)
Vitamin A	9400 IU
- beta-carotene	5626 µg (52%)
- lutein and zeaxanthin	12198 µg
Folate (Vit. B9)	194 µg (49%)
Vitamin C	28 mg (47%)
Vitamin E	2 mg (13%)
Vitamin K	483 µg (460%)
Calcium	99 mg (10%)
Iron	2.7 mg (22%)

Percentages are relative to US recommendations for adults.

Source: Wikipedia : USDA Nutrient database