



## The DIRT Society

# Gardening with Less Sunlight

There are countless myths that serve only to make gardening sound more difficult than it is. One of the worst, because it discourages so many potential food-growers, is "Vegetables can only grow in full sun. Shady gardens are for flowers." This is completely untrue. There are many shade-loving vegetables, and dozens of ways to maximize sunlight so that you can make the most of a shaded space.

### How does shade inhibit vegetable growth?

Plants require photosynthesis (a process powered by light) to produce food and develop physically. If they are not exposed to enough light, they will develop more slowly. This could mean a much longer wait for produce, or none at all if the growing season ends before the plant is able to mature.

### Are there any benefits to shade?

In some ways, having a shaded garden plot is lucky. You won't have to water as often and, if you choose the right plants, flavor is actually enhanced. Furthermore, the long and slow growing season will allow vegetables to grow continuously without "bolting" in response to excess sunlight.



### What vegetables can be grown in shade?

Before discussing how to move crops, redirect light, and maximize output, consider the following list of delicious crops that flourish in partial shade:

Arugula	Dandelion	Mustard Greens
Basil	Endive	Peas
Beans	Gooseberry	Potatoes
Beets	Kale	Radish
Bok Choi	Leaf lettuce	Scallions
Brambleberry	Leeks	Spinach
Broccoli	Mesclun	Swiss Chard
Brussels Sprouts	Mint	Watercress
Cauliflower	Mizuna	
Collard Greens	Mushrooms	

You may be noticing a trend. Plants that provide leaves or flowers as crops tend to grow best in shade. Fruit-bearing varieties are almost entirely absent. Many stubborn gardeners have tried to grow, what they believe is, the picturesque ideal; tomatoes, squash and cucumbers towering over carrots and heads of lettuce. This is a poor way to approach gardening as it not only limits your scope, but means working against nature. Remember that plants grow in hospitable environments. That tendency gives us biodiversity and culinary variety. There's no reason to struggle with against such a beautiful system.

When choosing your fruit and vegetable varieties, it is always best to select those that mature quickly. With less sunlight, the expected time from seed to maturation may increase.



### Is there a way to maximize sunlight so that a few sun-loving crops can be grown?

Absolutely. Just because sunlight is hitting your garden space for less than the recommended six hours per day does not mean you are limited in what you can grow. If you are determined to plant more difficult crops, consider one of the following modifications:

**Vertical gardening:** If you have a tiny amount of sunny space available, consider planting sun-loving crops in a vertical arrangement. There are many ways you can accomplish this, but the idea is a simple one; tilt the garden to face the sun, as opposed to laying it out flat. By stacking and positioning crops so that they can receive the maximum possible amount of light each day, you may be able to compliment your shade-loving harvest with a few crops such as tomatoes, strawberries, potatoes and beyond.

**Container gardening:** Sun-loving crops can be planted in containers and moved onto surfaces that may be getting more sunlight than your designated garden space. If you have a sunny porch, patio, walkway or accessible roof, this could be an ideal option. Another great reason to grow these crops in containers is to allow for mobility. You are able to move them, if you choose, into sunny locations in the morning and afternoon.

### How can light be redirected to a shaded area?

If your garden is receiving light, but needs a little help getting all it requires, consider positioning a reflective panel that can catch and redirect the light. While this may sound unconventional, reflecting light to better grow food crops is growing in popularity as prime agricultural land becomes more scarce. Be sure to consider what materials reflect the most light while absorbing the least. You will also need to monitor the area of reflected light and make slight adjustments as the season changes. Lastly, be on the lookout for any disruption to wildlife. It isn't common, but some birds may exhaust or injure themselves attacking their own reflections. If this occurs, you will need to devise a system to redirect their attention.

Another helpful tool you may choose to improvise or purchase is reflective mulching. This is little more than a light-weight reflective sheet positioned around your plants. It has many benefits besides reflecting light: It helps retain moisture, keep the ground thermo-regulated and deters pests like aphids.

### A note on soil and moisture:

Sun-loving crops not only tolerate, but often benefit from, drier earth. If you've tried planting vegetables like tomatoes and peppers in cool, damp soil, shade might be the lesser of your problems. Consider the merits of offering different types of plants different plots or containers. This way, the soil can be tailored to the needs of the plant.

**More often than not, potential gardeners allow themselves to be discouraged before they try to make any serious attempts at using what light they have. With a little careful observation and creative manipulation of your resources, you should be able to grow a wealth of variety in whatever space you have available.**