

Using Grow Lights to Start Seedlings

It is very common to start seedlings indoors in the late winter for spring planting. Many gardeners can get a jump on spring vegetable and flower gardens by planting seedlings that are already thriving.

Often, seedlings are planted in a growing medium and placed by a window to sprout and grow; however, the light from a window is seldom good enough for strong seedlings to grow. Seeds will sprout, but the plants will often be leggy and thin straining towards the source of light. Therefore, an alternative is needed. One way for home gardeners to provide adequate light is to use a grow light which provides a full color spectrum of light beneficial to the plants' growth. The red and blue wavelengths of the light spectrum are the most important to plant growth, but these wavelengths may not be present in typical home lighting.

There are many types of lights from which to choose that provide both the red and blue wavelengths: incandescent, fluorescent, and LED lights. A brief discussion:

- Incandescent lights lean more to the red spectrum with a little blue light which is not the most effective light for growth. Incandescent lights also produce heat which may dry out or burn seedlings.
- Cool white fluorescent lights have fewer red rays and more blue and green rays. Fluorescent bulbs, used in conjunction with a grow light, can be very efficient. It is recommended to use two cool white fluorescent bulbs and one grow light.
- LED grow lights are now available for purchase. They have been used by NASA and been shown to be effective for plant growth. They produce little heat, have long lives, and use less power than other forms of lighting.

It is important to remember the efficiency of the light is reduced by its distance from the plant. Therefore, light sources should be no further than six inches from the top of the growing plant to produce a thicker, stockier growth. Happy early growing!