

Lighting

Proper lighting is absolutely critical to ensure terrific growth and flowering. Certain crops will allow you to use minimal lighting, such as sprouts, grasses, and leafy greens. Other crops, such as flowering and fruiting plants, will require more intense lighting to give a substantial harvest. There are various types of lights depending on situation.

First, there is high intensity discharge, or HID lighting. There are a few types of lights within this category. To start, there is metal halide or MH lighting. This is available in a variety of wattages and intensity and is usually used for vegetative growth since it provides a blue dominant spectrum, simulating a summer lighting when plants are usually growing vegetatively.

For flowering, most people will traditionally switch to high pressure sodium, or HPS lighting. This is more dominant in the red spectrum, simulating autumn lighting, when plants finish fruiting. Both types of lighting are commonly available in 250w, 400w, 600w, and 1000w versions. They are offered in several different styles depending on which application they are used.

Something worth noting is that many growers now choose to explore flowering or growing full-term (vegetative and flowering) using a ceramic metal halide (CMH). Even though this is a MH type of lamp, the ceramic component assists in emitting a higher red spectra, essential for flowering especially. These are commonly available in 315w and 630w versions. This also allows for more coverage using less electricity, making them highly efficient.

Another type of lighting that many growers are starting to use, and is becoming more popular, is LED lighting. These, too are offered in a variety of shapes and sizes depending on the growers' needs. LED lights tend to be more expensive initially, but many experience lower operating costs such as cooling and electricity use. On a commercial basis, some states even offer substantial rebates for using LEDs. They are also able to be placed closer to the canopy of the garden for maximum light penetration. You are also able to run more lights for the same cost.

Lastly, many enlist in the use of T5 high output fluorescent lighting. These are not as strong as the other types of lighting previously mentioned, but provide substantial results in the earlier phases of growth, such as seedlings, cuttings, as well as juvenile and later vegetative growth. Other advantages for using this type of lighting includes lower electrical consumption and lower temperatures within the environment. They are used by both commercial and residential growers alike.

Results can be achieved with other types of light outside of these recommendations, but may not provide as substantial results as higher output lighting. Remember, you are trying to recreate the sun's intensity!!