

Too few windows needn't deter you from growing houseplants indoors. With artificial plant lights (often called grow-lights), you can garden in the darkest corners on the cloudiest days. Grow-lights have the added advantage of giving foliage plants a richer, darker color and flowering plants brighter blooms.

What is light? Pure "white" sunlight is made up of all the colors you can see, plus some you can't see. Passing white light through a prism breaks it down into the specific wavelengths called visible colors. A rainbow does this naturally.

Plants don't use all the wavelengths in the visible spectrum. They do use those we see as blue for good foliage development and those we see as red, at the other end of the spectrum, to produce blossoms. They don't use the colors in between--those from orange through green.

It doesn't take long to learn that plants don't do as well in normal household artificial light as they do in sunlight. And it's easy to understand why. Incandescent bulbs are strong in the red end of the spectrum but lack the blue needed for foliage. The reverse is true with fluorescents; they produce ample blue light, but they lack the red needed to make flowering plants bloom.

Commercial growers, who have been aware of this fact for years, solve the problem by growing plants beneath a combination of incandescent bulbs and fluorescent lamps. But this presents a problem for home hobbyists who usually can't easily combine fluorescent and incandescent light in their homes.

Fortunately, there's an easier solution: simply use grow-lights, special incandescent bulbs and fluorescent lamps designed to produce wavelengths in the spectrum the plants actually need--reds and blues. They emit very little of the mid-range wavelengths, so they appear less bright than regular bulbs or tubes, and they glow with a pinkish or bluish hue.