

Our outgoing president, Jeff Rundell, gave a presentation on how to grow orchids using High Intensity Discharge (HID) lights. As we all know too well lately with our recent rainy weather the sun has been rather unreliable, playing hide and seek with our plants, and some days not showing up at all. A solution to this problem is to provide light for our plants artificially. To demonstrate how we can be in control of providing light at any time for our plants Jeff said, "And let there be light" ...and there was not. Although there were some technical difficulties with the HID lights that resulted in them not completely turning on during the demonstration, Jeff's discussion on lighting was very informative. Artificial lights allow you to be in charge of how you grow your orchids. You control when and how much light your plants will receive. Our plants need two different wavelengths from the sun in order to complete their photosynthesis, which are red and blue. Blue wavelengths are responsible for the vegetative growth phase for plants while the red wavelengths induce flowering. Jeff has successfully used HID lighting to grow orchids indoors in his basement when he lived in New York.

These lights are capable of illuminating an area approximately 7 feet x 7 feet when mounted (such as from the ceiling) 6-8 feet above your plants.

While growing his plants under lights it was necessary to use two different types of light bulbs to cover the entire light spectrum that the plants would need. A metal halide light bulb capable of producing a broad spectrum of light that plants use to grow healthy, and a high-pressure sodium vapor light bulb that would allow plants to produce blooms. As the gaseous mixture within these light bulbs age, the spectrum of light they produce changes slightly. Thus, light bulbs should be replaced at least once a year. The good news is the light bulbs are inexpensive, costing around \$20-30 per bulb. There are several benefits to growing your plants indoors using HID lights. They are a very affordable option for providing artificial light to plants. The ballast and light bulbs are inexpensive, especially when compared to other available lighting options such as LEDs. A single light source is capable of illuminating a relatively large area. These lights can produce a fair amount of heat when in use, as much as 15-20 degree differential between day and night temperatures, which can provide extra warmth for growing orchids during the cooler months.