

## What TotalGrow™ Customers Are Saying...

*We were very pleased with the results. Not only did the TotalGrow™ light outperform the HPS by 10%, but it did so using far less energy. This fall, we invested in enough lights to fill a greenhouse. We fully intend to switch over all our greenhouses over the next few years. For us, TotalGrow™ lights last longer and use less energy and give better yields – it just makes sense.*

**Steve Van Haitisma**

Owner, Mud Lake Farm; Hudsonville, MI

*We found that installing the TotalGrow™ light system has improved our plant quality and sped up our operations, which allows us to do more cycle turns and expand our business without putting up more greenhouse space.*

**Lynn Kemme**

Owner, Great Lakes Hops; Zeeland, MI

*All plants we have tested (petunia, basil, and tomato) looked healthier under your TotalGrow™ lighting and used far less energy than the competing light sources.*

**Youyoun Moon, Ph.D.**

West Virginia University; Morgantown, WV

*TotalGrow™ lights demonstrated the potential for drastic energy savings over HPS lights while producing crops of equal or better quality in our bedding plant testing. With 20% less PAR light intensity, our primrose plugs grew over 33% wider and taller with better green pigmentation than HPS.*

**Robert McMahon, Ph.D.**

The Ohio State Agricultural Technical Institute; Wooster, OH

*We have been extremely pleased with our Night & Day Management Lights. In addition to improving growth speeds and flowering times of our wave petunias, the uniformity of coverage, durability, and lower utility and installation costs of the lights are excellent.*

**Greg Nowak**

Owner, Stan Ouding Bedding Plants; Kalamazoo, MI

*Our TotalGrow™ light fixtures have made it possible for us to grow larger, healthier tomatoes in significantly less time.*

**David Allen**

Business Manager, Peckham Farms; Lansing, MI

*TotalGrow™ Night & Day Management Light bulbs were very effective at controlling flowering times across a large collection of my mum varieties this fall. The lights will allow me to greatly reduce my power consumption compared to my existing HPS lights with better plant quality.*

**Rick Ouding**

Owner, Kalamazoo Specialty Plants; Kalamazoo, MI

*I have been engaged with the product developers, biologists, optical engineers and sales team from the TotalGrow™ lights team for more than 2 years, working with them as they refined their TotalGrow™ light products. With their lights, I have proven that I can do things that I cannot do with other lights.*

**Rick Ouding**

Owner, Kalamazoo Specialty Plants; Kalamazoo, MI

*TotalGrow™ Broad Grow Spectrum Light bulbs, or the 'magic bulbs' as I call them, have allowed me to grow extremely high quality herbs and microgreens in my basement without any sunlight at all. I have experienced a faster grow cycle with these bulbs and have none of the problems that I had with the fluorescent bulbs I used in the past. These lights have allowed me to expand my business beyond my original customers and support some larger demand customers.*

**Christy Kaledas**

Restaurant Gardener / Garden Manager, Black Pearl Restaurant; Ann Arbor, MI

*We discovered that we can drastically reduce rooting times with TotalGrow™ Night & Day Management Lights for fuchsia, petunia, calibrachoa, verbena, bacopa and other crops – as little as 1/3 of the time compared to even high intensity HPS lighting with up to 98% power savings! We are also amazed by the coverage uniformity, utility savings and electrical infrastructure savings.*

**Andy Buist**

Head Grower, Micandy Gardens; Hudsonville, MI

*I am growing the best basil my customers have tasted faster than I thought possible under my TotalGrow Broad Grow Spectrum Lights. The TotalGrow staff have been very helpful while designing and expanding my vertical farm.*

**Jim Schutte**

Owner, Organic Michigan Grown Herbs; Grand Haven, MI

*We have installed TotalGrow light fixtures for both indoor and greenhouse grow areas with tremendous crop quality, growth rate and power saving results. In our tomato house, the TotalGrow lights are balancing out HPS light fixtures to create a better light spectrum and distribution pattern with reduce power needs. In our barn, their full spectrum and efficiency allow us to grow excellent leafy greens year-round.*

**Robert Miller**

General Manager, Miller Family Farm; Carney, MI

*The TotalGrow™ lights have the absolute best light spectrum and are very economical to use. They are low on electricity, very low. They are low wattage to begin with, but also don't create the heat of HPS, so I don't have to add as much humidity and do not need to pull heat out of the growing area. Both lower my overall cost and hassle. Stalks are fatter, leaves are healthier and all of that just leads to better medicinal product.*

**Robert McClanahan**

Owner, The Rainbow Makers; Louisville, CO

*We are very pleased with our results with TotalGrow lighting! Based on high grams harvested per watt of lighting used in our testing, we expect to produce up to 1.5 grams of product per watt of lighting with TotalGrow lights in our full production environments. Based on overall startup and running expenses, the TG lighting is superior. The size and shape of these lights were another benefit. We are planning at this time to promote TotalGrow lighting in our grow facility designs, consulting and to improve sustainability of cannabis cultivation. Within just a few months the reduction in electricity makes the TG's better on long term cost. Being able to use one lighting source throughout the life of the plant is another bonus.*

**Christian Barrett**

CFO, California Cannabis Collective; Temecula, CA

*The Night & Day bulbs are the perfect boom lights. I no longer waste time replacing burnt out bulbs or worrying about when a light failure will delay my production. The plants look great, and the costs are tiny for the area covered! I like knowing that all of the energy from the TotalGrow bulbs goes into the light plants need most, not wasted for human eye light.*

**Scott Gruppen**

Production Manager, Meadowridge, Inc; Zeeland, MI

*I hesitate to turn on my HID lights due to the energy costs, but I don't think twice about turning on my TotalGrow lights due to their efficiency and longevity.*

**Scott Gruppen**

Production Manager, Meadowridge, Inc; Zeeland, MI

*Through more than 14 months of testing on a variety of baby greens in our shipping container aquaponics systems, TotalGrow lights have grown our crops at least as well as all other light sources tested with excellent efficiency and the best overall cost effectiveness.*

**Fred Lau**

Owner, Mari's Garden; Mililani, HI

*Our hazelnut cuttings are thriving under our TotalGrow™ Broad Grow Spectrum Light bulbs. We are really pleased with the quality of growth we are seeing!*

**Alejandra Acevedo**

Head Micro Propagation Tech, Arbor Grove Nursery; St. Paul, OR

*Our canola plants had excellent flowering responses under our TotalGrow™ Night & Day Management Lights. The lights look good and are easy to work with.*

**Eric A. Flora**

Western Area Manager, Pacific Ag Research; San Luis Obispo, CA

We completed growing tests using the Venntis Technologies TotalGrow™ light fixtures. We tested several varieties of perennials and our results showed similar plant vigor and health while reducing our energy consumption.

**Troy Shumaker**

CFO, Walters Gardens; Zeeland, MI

*The lights are fantastic!!! We have seen a great improvement by having the lights. The plants are so much farther ahead of schedule than we had anticipated. They are growing great and we have not had a problem with them. The plants are not stretching for light and have thick stems and are growing nice and straight.*

**Kenny Adams**

Owner, Adams Greenhouse & Produce, LLC; Covington, OH

### *Benefits of Venntis Lights*

*In "sunny" South Florida, a super abundance of light is frequently as much of a problem as a benefit. Removing additional shading for the winter has long been standard practice at Motes Orchids. Providing additional artificial light was a novel concept. The installation of TotalGrow™ Broad Grow Spectrum Lights in our seedling area this past winter has changed our thinking. In a controlled experiment, our Vanda seedlings grew larger and stronger than seedlings grown under natural light. In some instances as much as 40% increase in mass was observed. The additional growth was most evident in the increased root mass of the seedlings grown under TotalGrow™ light, perhaps as a result of the photosynthetic ability of orchid roots.*

*Based on our experience at Motes Orchids, I can recommend TotalGrow™ lights to any grower as a benefit under low light conditions.*

**Martin R. Motes Ph.D.**

Owner, Motes Orchids; Homestead, FL

*Finally, an indoor garden! This past year I set up an indoor garden in my basement using TotalGrow light bulbs. I grew different microgreens and wheatgrass. Not only did I enjoy seeing the growth process, but I loved using the greens in my daily recipes. We used them in our smoothies, salads, on sandwiches and fish, and even in eggs. Delicious and healthy!*

**Elyse Cisler**

Home Grower; Holland, MI

*I set up my first indoor grow garden in my family room. We are using it for propagation of tomatoes and eggplant before spring planting outdoors. Also, I have started growing various types of lettuce and have treated family and guests with my first indoor home grown salads! The TotalGrow light spectrum works great!*

**Dan Fisher**

Home Grower; West Olive, MI

## Video Testimonials

<http://vimeo.com/alsentis/review/92327539/73b0ca9fa7>

## Selection of Articles about TotalGrow™ Lights

- <http://energyalliancegroup.org/increase-farm-productivity-energy-efficiency/>
- <http://energyalliancegroup.org/totalgrow-turns-greenhouse-into-a-year-round-operation/>
- <http://energyalliancegroup.org/redefining-fresh-farm-table-restaurants/>
- <http://energyalliancegroup.org/totalgrow-honolulu-trial-results-look-promising/>
- <http://energyalliancegroup.org/home-grown-hops-michigan-craft-brewing-industry/>
- <http://energyalliancegroup.org/area-restaurants-offer-high-quality-locally-grown-fresh-lettuce-middle-michigan-winter/>
- <http://energyalliancegroup.org/grow-light-technology-changing-food-grown/>
- [http://www.mlive.com/business/west-michigan/index.ssf/2014/01/holland\\_companys\\_led-based\\_pla.html](http://www.mlive.com/business/west-michigan/index.ssf/2014/01/holland_companys_led-based_pla.html)
- [http://www.mlive.com/business/west-michigan/index.ssf/2014/01/hydroponic\\_growers\\_finds\\_eager.html](http://www.mlive.com/business/west-michigan/index.ssf/2014/01/hydroponic_growers_finds_eager.html)
- [Holland Sentinel - Process of city farming growing in Holland and the Netherlands](#)