

Lighting for Growing Transplants at Home

By Heather Bryant, Extension Educator, Agricultural Resources

Believe it or not here in the Extension office planning for the 2010 gardening season is well underway, and I have already received a number of questions about growing transplants at home. With 2009's unfortunate late blight challenges, I anticipate more such questions over the next couple of months (given that growing your own transplants is one way to reduce your late blight risk). One of the most common questions so far is whether or not you need supplemental lighting.

When I was a kid, my mom always managed to grow healthy tomato and pepper transplants without lights, because being the thrifty New Englander that she is, she likes to look for the least expensive option. Instead, she supplemented her indoor light by putting the plants outdoors on warm days, bringing them in later in the day when the temperatures started to drop.

During a particularly cold spring, for apartment dwellers, or for people who are not home during the day, that may not be an option. Here are some tips and questions to help you decide what is best for you.

First, do you have a south or southwest facing window to put the transplants in? If you do, you may be able to get away with using only natural light. You can further improve the natural lighting by washing the window right before you start your transplants – even if the glass already looks clean, your plants will notice the difference.

If the plants start to get tall and spindly, they don't have enough light. If that is the case, one solution is to put them outdoors on days when the temperature gets to about 55-60F. Even if it is a little colder than that you still have options. While the seedlings are small you may be able to warm them up to 55F by covering the container with plastic wrap, but do not let the plastic touch the plant or stay on once the temperatures start to warm up.

Some stores sell miniature plastic tents or "greenhouses". These can be put out on your porch, with your plants inside, on days when the temperature is close to 55F. You can get the same effect by using a cold frame which is basically a wooden box with a window for a roof. The following website gives instructions for building a simple cold frame. <http://bit.ly/8plMnv> If you are a more visual learner you can search YouTube for instructional videos -- I found several that were both entertaining and informative and included a couple different design options. Any inexpensive outdoor thermometer will help you monitor the temperature in the cold frame or tent; just remember to shade the thermometer so you get an accurate reading. You don't want to let the temperature get much over 70-75F.

Naturally apartment dwellers, and people who are not home during the day, cannot put plants outdoors, and in this case investing in lights is a good solution. There are special grow lights on the market or you can use 40 watt cool white or warm white fluorescent white tubes. Grow lights will come with instructions. If you use the fluorescent lights you will want to place your plants on blocks so that they are 6-8 inches from the light and can be lowered as they grow. Most vegetable transplants will thrive with 12 hours of light per day.

My mother has rubbed off on me a bit, so I will end by telling you to remember that lights, plastic tents, and cold frame building supplies can be expensive. If your garden is small or you have never gardened before and only wish to "test the waters" this year, you may find it more cost effective to buy your transplants from a local nursery.

If you have any other questions about growing your own transplants you can call me at 787-6944 or attend the transplanting workshop we will be hosting in North Haverhill in mid March.

Look for next week's column by County Forester David Falkenham.

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