Appendix T Constructing a PVC Light Rack

If you will be using the indoor gardening options, an indoor light rack may help your plants to grow better than they would without a dedicated light source. Thus, you may want to work with a Master Gardener or other volunteer to build a light rack out of PVC pipe.

Fluorescent light fixtures and ballast can be purchased and hung from the light rack.

Directions are excerpted from Exploring with Wisconsin Fast Plants, © 1995.

Tools
- flathead screwdriver
- Phillips screwdriver
- pliers

Hardware
- four 3/16” x 1 1/2” bolts and four nuts
- two 3/16” x 2 1/2” bolts and two nuts
- four screw eyes (size 6)
- two 3/16” x 2 1/2” eye bolts and two nuts
- four 18” lengths of chain
- eight S-hooks
- one power cord
- one sash handle with screws

Parts list*
A. two bases (each consisting or two 10” lengths of 1” PVC pipe, two end caps, and a T-joint)
B. two side supports (two 24” lengths of 1” PVC pipe)
C. one cross bar (one 51 1/2” length of 1” PVC pipe, two elbows, and two eye bolts with nuts)
D. two 3/4” x 3 1/2” x 16” boards (with metal eye screws on each end)
E. one 1” x 2” x 46 1/2” board

Instructions
Purchase three 4-foot fluorescent light fixtures from local hardware store. The 40 watt bulbs and ballast are sold separately. Each ballast runs two bulbs in one strip unit. These units must be put together to make a “light bank.” Remove all light fixtures from boxes. Using screwdriver, remove center panel from underside of fixtures, exposing holes in light fixtures that will be used for attaching fixtures to 3/4” x 3 1/2” x 16” wood pieces (D).

Place 1” x 2” x 46 1/2” wood piece on a table. Center the two 3/4” x 3 1/2” x 16” wood pieces on each end of E. Place the 1st light fixture on the two 3/4” x 3 1/2” x 16” (D) wood pieces so that its holes line up with the center of wood pieces D and the ends of wood piece E; then bolt the three pieces together using two 1/8” x 2 1/2” bolts, nuts and washers.

Attach 2nd and 3rd fixtures to each end of 3/4” x 3 1/2” x 16” wood pieces (D) in same manner using four 1/8” x 1 1/2” bolts, nuts and washers. Replace center panels on underside of fixtures.

Use screws to attach sash handle to center of wood piece E. Attach light bank to support frame using four chains and S-hooks.