


# CREATE A FLOWER BOWER 

by Fran Maierhauser

If you've ever longed for a "green thumb" with house plants-or if you'd like to make the thumb you now have even greener-try using artificial light. By using one of the special fluorescent lamps especially designed for growing flowers and plants or by using fluorescent and incandescent lamps to prolong the "day-hours" your plants are exposed to light, you can grow more beautiful plants than you ever have before.

Light, as you know, supplies the energy on which all plant life is based. Research has shown that plants actually waste a large part of the light they get from the sun. Plants look green because they merely reflect most of the sun's green and yellow light energy. What plants actually absorb and use is the sun's red and blue light energy. If you want to buy a lamp specifically for growing a flowery bower in a room in your home, you'll discover that that particular lamp emits more red and blue light energy than the white light of the sun. For that reason, some of those lamps have a kind of lavender cast to the light they give out.

You can use artificial light to bring light to plants in dark corners of rooms where sunlight doesn't reach. Artificial light will also serve to lengthen shorter days and cause blooming of out-ofseason flowers. If you want a special lamp for promoting flower growth, you might try the GROLUX lamp, made by Sylvania. Other lamp manufacturers also have special grow-lamps. The GRO-LUX lamp looks much like a regular fluorescent and can be purchased in a number of different lengths.

## How Length of Light Period Affects Flowering

The length of time a plant is exposed to light has a definite effect on flowering, as we're sure you know. Plants are classified in
long day, short day and indeterminate groups, depending on the length of the light period they require to flourish. Short day plants need 10 to 13 hours of light. Included in this group are Christmas begonias, poinsettias, chrysanthemums, and gardenias. You may not be growing many of this group.

Long day plants need 14 to 18 hours of light. In this group are China asters, calceolaria, coreopsis, dahlias, nasturtiums, and many of the annuals grown for spring flowering. We'll be talking later about sprouting some of this group of plants before setting them out into the sunlight.

Indeterminate day plants will flower at all seasons of the year with varying degrees of abundance, whether they receive $12,14,16$, or 18 hours of light. This group includes roses, carnations and the great majority of house plantssuch as African violets, gloxinias, begonias, geraniums, and coleus. When you are growing plants indoors, it's a good idea to group them according to their need for light. If you have an automatic timer, you can even insure that the plants get the proper amount of light even when you are not at home.

## Regulating Light Intensity

The intensity of the light also affects plant growth. Depending on how much light they require, plants are classified in low and high energy groups. Although there is some overlapping between the two, most of the houseplants are in the low energy group. Florists' plants and vegetables and fruits are in the high energy group.

If you're planning to germinate flower seeds (or other plant seeds, for that matter), place the lamps 6 to 8 inches above the earth or box in which you've planted the seeds. For growing plants, the light should be located about twice
that distance from the plant- 12 to 15 inches.

## Other Factors for Successful Plant Growth

In addition to light, there are a number of other factors that you need to know in order to have healthy plants. To begin with, soil conditions should be of the type recommended for each plant. Since these vary widely, we'll have to discuss that another time.

Correct temperatures are also much more important than many people realize. For most plants, best night temperatures are around $60^{\circ}$ to $65^{\circ} \mathrm{F}$. Cool temperatures aid in the assimilation of the food the plant manufactures during the hours of light. Day temperatures-when the lights are on as well as the daylight hoursshould be around $70^{\circ}$ to $75^{\circ} \mathrm{F}$.
Good ventilation is another important factor. It is important in preventing the development of disease organisms. Proper humidity is likewise essential. Between 50 per cent and 60 per cent humidity is recommended for normal growth of most plants. You can get some of this humidity by locating pans of water near but not under plants.

Plant spacing also deserves attention. Crowding results in long, weak stems and encourages the development of foliage diseases because of insufficient exposure to the air. Don't crowd plants in pots or boxes-and don't crowd pots in too small a space.

How often you water a plant depends again on the type of plant. But, as a general rule, enough water should be used to soak all the soil in the pot. Watering a little bit and often is not considered good practice. The best time to water a plant is in the morning when the temperature is rising and there is a greater need for water. For most plants, make sure the water is lukewarm, not cold.

## Special Plant Fixtures

There are, on the market, a number of fixtures which will hold lamps designed to assist in the growing of plants and flowers. They have been made to maintain an even level of illumination over the growing area, as well as the prescribed distance between the plants and the light source.
If you have a handyman in your home, it's easy to build your own units, using economical fluorescent "strip" fixtures of sturdy metal. These will hold lamps, singly or
in pairs, and can be purchased from any store that handles lighting devices.
Strip fixtures can be mounted on the under side of table-like constructions of metal or plywood on legs, with sides deep enough to conceal lamps from view. Sides can be straight, scalloped, or given a decorative edging. Such units can be painted to match the floral colors or to coordinate with the color scheme of the room.
To get some different decorative effects of unusual charm, you might want to have lighting units built into various types of furniture which lend themselves to the purposesuch as room dividers, bookcases, hutch cabinets, or dry sinks. In such cases, one shelf can be removed if necessary, and the lamp strip built in with wood or metal shielding a few inches deep across the front to hide the lamps from view. You could also use the same treatment for a recess in a wall, a niche, or a built-in cupboard.
Why not try to "green-up" your thumb this spring by growing real, live plants in your home?


