



## Unit 8 Plant Nourishment

## \* Glossary

**Figure:** a number

**Guesswork:** the process of finding an answer to something without knowing all the facts

**Hallway:** the room or space just inside the front entrance of a house or flat

**Roof overhangs:** parts of a roof that project over the side of a building

**Light for indoor plants**

Light is essential for plant life processes, and optimum levels ensure healthy, long-lived indoor plants. In general, there are three categories of light intensity for interior plants measured in what is referred to as foot-candles or fc: high, 150-1000 fc; medium, 75-150 fc; and low, 25-75 fc.

It is important to match plants with locations that satisfy their basic light requirements. A wide variety of light meters are available for measuring light intensities in indoor environments. Some may be purchased at a relatively low cost from garden centres or from garden catalogues. Their readings of low, medium and high fcs can give approximate **figures**, and they can eliminate much of the **guesswork** in selecting plants that can adapt to light levels in a given location.

If sunlight is your major light source you can determine the category into which your indoor location falls by using the following:

- **high light:** areas within four feet of large south-east or west facing windows;
- **medium light:** locations in a range of four to eight feet from south and east facing windows and west facing windows that do not receive direct sun;
- **low light:** areas more than eight feet from windows such as in the centre of a room, a **hallway** or an inside wall. Northern exposures often fall into this category, even close to the window. Many locations that receive only artificial light are also considered low light situations.

The intensity and duration of natural sunlight that reaches indoor locations varies throughout the year. In winter, days are shorter and the sun's path is lower and farther to the south. Therefore, most plants will receive fewer hours of intense sunlight from a more southerly angle in the winter. However, plants growing close to an unshaded south window may receive more direct sunlight at this time of year because of the low angle of the sun. In summer the days are longer and the sun's path is higher above the horizon. For many plants this is the peak growth period.

Keep in mind that there are less obvious factors which affect sunlight levels indoors. These include the following: the colour of interior walls and floors, types of window coverings, **roof overhangs**, nearby buildings and trees that filter or block incoming light.

Plants grown in their light preference are vigorous, compact and bushy. The colour is vibrant, the leaves are a normal size, and the stems are sturdy. Blooming is promoted by correct light.





**Glossary**

**Leggy:** having a stem that is excessively long and growing in an irregular way

Plants grown at a light intensity below their optimum will have smaller leaves and a less vivid colour. They often grow more open and **leggy** and pruning may be necessary to maintain a compact form. Keep these plants drier than those in bright light and fertilize them less often. A plant that receives significantly less than its preferred amount of light may survive for several months to a year, though gradually deteriorating in appearance and vigour.

When light levels are too high, plant leaves show an overall yellowing that results from the destruction of green pigment. In time large brown spots of dead tissue may develop. This is often referred to as leaf scorch or leaf burn.

Artificial light can be used to supplement or replace natural sunlight. Cool white fluorescent lights alone or in combination with warm light fluorescent lights are the most economical and best all-purpose lamps.

[Adapted from: E. Davison, *Indoor Plants: Selection and Care*, University of Arizona, 1998]

**Understanding the text**

1. Find terms and adjectives in the text that are associated with the following ones. One has been done as an example.

- 1. **Indoor** ..... plants
- 2. .... candles
- 3. .... meter
- 4. ...., ....., .....  
..... light
- 5. ...., ....., ..... sunlight
- 6. .... hours
- 7. .... coverings
- 8. .... overhangs
- 9. .... buildings/trees
- 10. .... leaves
- 11. .... yellowing
- 12. ...., ..... fluorescent lights

2. Replace the verbs in bold with the correct synonym. Choose from the ones given. Remember to use the correct tense for each verb.

meet • integrate • guarantee • remember • change

- 1. Light is essential for plant life processes, and optimum levels **ensure** ..... healthy, long-lived indoor plants.
- 2. It is important to match plants with locations that **satisfy** ..... their basic light requirements.
- 3. The intensity and duration of natural sunlight that reaches indoor locations **varies** ..... throughout the year.
- 4. **Keep in mind** ..... that there are less obvious factors which affect sunlight levels indoors.
- 5. Artificial light can be used to **supplement** ..... or replace natural sunlight.



**Writing**

**3. Read the text again and answer the following questions. Use some of the word associations and verbs from the previous exercises.**

1. How is light intensity calculated for indoor plants?
2. How can it be measured?
3. What are the three categories into which sunlight can be classified?
4. What happens during the winter?
5. Which less obvious factors may influence sunlight levels indoors?
6. Describe the difference between a plant grown with the correct amount of light and one grown with too much or too little light.
7. What can be used when natural light is insufficient?

A large rectangular area with a spiral binding on the left side and horizontal dotted lines for writing.