

Light and Plants

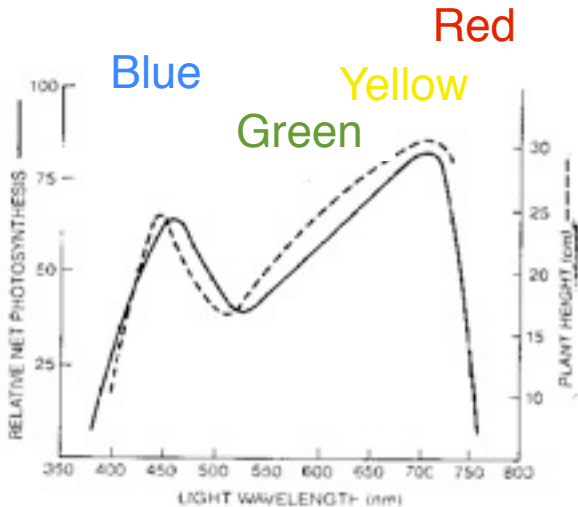
Light intensity affects growth by influencing the **rate of photosynthesis** . This effect varies with different plants. Some species require high light intensity. These are often *termed sun loving plants.e.g. corn, potatoes, sugar cane and many grasses.*

Other species do not grow so well at high light intensity and can be referred to as *shade loving plants. There are usually plants that evolved on the forest floors e.g. African violets, orchids.*

The nature of light.

Light is electromagnetic energy usually derived from the sun. Visible light is a small part of this energy. Within the visible light there are different wave lengths. Different wavelengths of visible light appear to us as colours. Plants respond to the visible light and small sections of the invisible light just out side the visible wavelengths.

Plants, however do not use all wavelengths equally.



Practical Ways to modify Light intensity.

1. Shelter
2. Reflective mulches ie white plastic
3. Pruning
4. Training vines.

Light Duration (day length)

This determines the amount that light is available for photosynthesis.
One of the measures of light available is - “sunshine hours”.

These vary from location to location.

ie Auckland = 2066 hrs a year

Wellington = 2053 “

Christchurch = 2035 “

Gore = 1638 “

What causes the difference ?