

# New York State Flower Growers

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## Remove Your Shade

Shade reduces injury to plants because it prevents the leaves from becoming hot as would otherwise occur. A leaf in sun will be 5 to 20 degrees warmer than in intense shade. The leaf temperature will thus be 5 to 20 degrees higher than air temperature.

The high temperature of the leaf seldom directly causes injury but the injury is due to drying. The high temperature causes water to evaporate from the leaf at a very rapid rate and the water is not replaced from the roots rapidly enough to prevent the drying.

Shading reduces the frequency of watering necessary as it reduces the water loss from the plant by reducing temperature. The soil can become very dry and plants are not injured if heavily shaded but in full sun they will develop dead spots. If you can water enough, you need shade less. Shading also prevents direct injury to the green coloring in the leaf of some plants such as African violets, cyclamen, begonias, and a few others.

Shading is necessary on most plants only from April to September. Notice this is the period when maximum light intensity

reached on the brightest days is over 9000 foot-candles. Probably the duration of high intensity at any one time is as important as the intensity reached.

Most plants flower better at high light intensity than at low intensity and some plants flower poorly if light is too low during the bud forming period. Examples are: orchids, African violets, and poinsettias.

By October 15 the light intensity is only half that during mid-summer. At this time your shade should certainly be reduced to half that in summer.

If you are growing a crop requiring shade the year around (African violets), the amount of shade in December should be no more than one-third that in mid-summer. The duration of the high light intensity is also reduced so much in fall that the shade can be reduced even more than this.

Many florists shade to prevent burning, which is usually due to lack of sufficient water in the soil. Water frequently and you can shade less.

