



# TEMPERATURE: An Introduction

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Every gesneriad grows best within a preferred range of temperatures. Most gesneriads can tolerate temperatures somewhat above or below their preferred levels, but they will die if exposed for long periods to temperatures beyond their tolerance range.

Temperature is measured using a thermometer which utilizes either the Fahrenheit or Celsius scales. Most thermometers have the capacity to simultaneously register temperature using both scales of measurement.

Gesneriads in their natural habitat are subject to temperatures varying from 40 degrees to 100 degrees Fahrenheit. *The most satisfactory or preferred temperature for gesneriads ranges between 65 and 80 degrees Fahrenheit (17 and 25 degrees Celsius).* This range is considered a reasonable year-round average for normal room temperatures in modern homes.

In general, a night-time temperature 5 or 10 degrees Fahrenheit lower than the daytime level is advisable. This drop in temperature is beneficial to gesneriads: it slows down the growth of the plants, permitting them to build up energy reserves for the following day's growth.

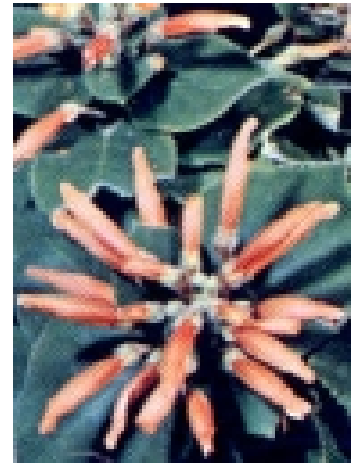
Too great a difference between daytime and night-time temperatures should be avoided. Fluctuations of more than about 20 degrees in the course of 24 hours are not healthy for almost all gesneriads. Normally when temperatures drop into the 50 to 60 degrees range, gesneriads will stop growing; temperatures falling below 50 degrees Fahrenheit are fatal to most gesneriads.

*Gesneriads are, however, better able to deal with and endure lower than recommended temperature levels as long as the low temperature level remains fairly steady.*

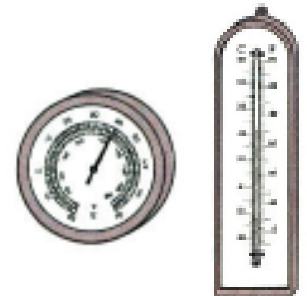
There are small numbers of gesneriads that do well at relatively cold or cooler temperatures, e.g., chirita, columnea. Moreover, *a cool winter growing period is often essential for certain gesneriads to bloom*, e.g., some saintpaulia and chirita species. Cooler temperatures (60 to 65 degrees Fahrenheit) also tend to intensify leaf colouring or variegation in most gesneriads, e.g., saintpaulia.

Conversely, the majority of *gesneriads can withstand quite high temperatures provided they have access to an adequate supply of moisture or water* -- misting on very hot days, may be necessary to cool the air around plants. In the summer months, however, the intense colouring in leaves or foliage induced by cooler temperatures often times becomes temporarily faded, appearing lifeless and dull, and only returning to normal once cooler conditions return.

Whatever the general level of warmth in the home, there are certain danger spots for gesneriads in virtually all rooms. When the weather is cold, a plant placed close to a window that is not protected by double-glazing or a storm window can be subjected to drafts and chills. Ill-fitting doors and windows can also create cold drafts at any time. And plants near radiators or heating ducts can suffer from the effects of rising currents of hot, dry air which can damage foliage.



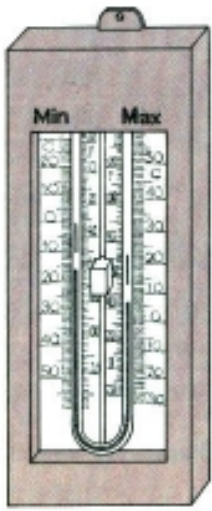
*The preferred temperature for gesneriads ranges between 65 and 80 degrees Fahrenheit or 17 and 25 degrees Celsius.*



*The temperature at any given moment is easily measured with a conventional thermometer.*



*A cool winter growing period is often essential for certain gesneriads to bloom.*



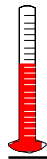
*Gesneriad growers often use a maximum/minimum thermometer.*



*Gesneriads are affected by temperatures which are either too high or too low.*



*Every gesneriad grower should have a thermometer located within their growing area.*

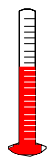


## How To Measure Temperature

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The temperature at any given moment is easily measured with a conventional thermometer. Cheaply priced and available at any household appliance outlet or drug store, *every gesneriad grower should have at least one thermometer located within their growing area.* Experienced gesneriad growers often recommend the use of a maximum/minimum thermometer with two linked columns of mercury. These columns move little metal indicators up or down, and the indicators stay in place at whatever extremes of temperature have been registered. Thus the maximum and minimum temperatures for a given period are automatically recorded.

When using a maximum/minimum thermometer you can find out how the temperature fluctuates during a day or week in various parts of a growing area. As a result of the thermometer's findings, you can judge with accuracy whether or not a particular spot suits the temperature preferences of your gesneriads.

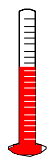


## Temperature Checklist

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Gesneriads will display a number of symptoms when affected by temperatures which are either too high (exceeding 85 degrees Fahrenheit or 28 degrees Celsius) or too low (dropping below 60 degrees Fahrenheit or 15 degrees Celsius).

When temperatures are consistently too high or too low for extended periods, gesneriad foliage will become lifeless, appearing yellowed or bleached. In addition, what growth plants attempt will be stunted and overly compact. Under extreme temperatures, the quantity and quality of bloom will also be substantially affected: what flower stalks are produced will be shorter than normal and the small number of blossoms they carry will be small and often malformed or streaked. In addition, high and cold temperatures will cause buds and flowers to "blast", i.e., dry out prematurely.



## REFERENCES

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