

# Gerbera growing commercially

In general Gerbera is a crop that grows best with lots of sunshine, not too hot, low night-day temperature difference, and moderate relative humidity. The Greenhouse used has to provide these conditions. The better we can control these parameters the better production and quality we will obtain.

- Substrate: Gerbera can be grown in soil or in substrate. Similar to hardening conditions, good drainage and water/air holding capacity are required. Also pH 5,5 – 6,2 and low salt concentration. Coco peat would be the most common substrate used in commercial production.
- Temperature: Day: 26-30 °C / Night: 15-16 °C / Minimum growth temperature: 8-10 °C / Damage temperature: 0-4 °C. With Gerbera it is always better to check soil temperature than air temperature.
- Day length: Naturally Gerberas are short days plants but will still flower in long days, but less. Commercial varieties are almost neutral to day length, still production tends to increase in early spring months from flowers formed in the natural short days. Complete black-outs (8 hours light) in long days could have a similar effect (if temperatures are not too high).
- Light: Although Gerbera loves sunshine, light intensity should not be above 50 to 60,000 lux. In summer, shading should be provided in warm areas. Too high light intensity changes leaf color, flower color, flower size and stem length. In countries with low light artificial light is a proven method to increase production in winter months.
- CO<sub>2</sub> fertilization: In closed greenhouses it has shown positive effects with 600-800 ppm.
- Relative Humidity: 60-85% is best. Lower values will lead to dehydration and stress, higher can result in botrytis problems.

All these growth conditions indicate what our greenhouses should be equipped with depending on our climate.

Very high tech greenhouses in cold areas and low tech in warm areas.