

## POINSETTIA

### How to save heating energy cost

Energy can be saved mainly by lower night temperatures (75% of the total heating costs originate from the nights)

#### Before starting the crop

- Check shade nets / energy-screens / roof: no holes, closing tightly everywhere. In poly house, consider double layer.
- Check sensors, if they measure temperature and humidity accurately – this is decisive for exact climate control including dehumidification.



#### During the crop

- Ensure minimum 16°C (night) during the first growing stages until first cold nights in Oct to achieve a good root system. Good roots will allow cold night temperatures in the decisive period, the last third of the crop time.
- Close shade nets at least one hour before sunset. If outside irradiation is below 8 Klux, close already earlier.
- Open your shade nets not earlier than 1-2 hours after sunrise. Start this procedure latest Sept. 20. If you have a second screen (only energy-screen), leave it closed on cold, dull days. This has 2 effects: First effect is direct energy saving, second effect is to prepone induction. By this you can finish your crop cooler and still aiming at your desired sales-date.
- Do not drop temperatures below 13-14°C (55-57F) at night, root injury can occur, and flower development will stop. You can only drop night temperatures with healthy roots and not with wet pots or wet floors. Check media temperatures, specially if you are not using bottom heat.
- Schedule irrigation sequence to avoid wet media and high humidity at night. Water early in the morning, increase air flow and push humid air out of the greenhouse before dusk.
- Cold-growing will reduce water uptake. Adjustments of the irrigation frequency / timing are crucial to avoid disease. Overwatering under cool conditions will lead to root diseases like Pythium and Thielaviopsis late in production. With improper watering, excess humidity can build up cause greenhouse condensation and diseases (Botrytis) on bracts .
- Set your ventilation temperatures a bit higher and use higher values for the night-setting to capture the energy from the day, which will lead to later need of your heating system.
- Take advantage of natural heat on sunny days. On cloudy days keep the greenhouse at 24°C (75F). The goal is to maintain an ADT (average day temperature ) in November of 16-18°C (60-64F).
- Don't use cool morning during cold and dull weather. Rather apply one more PGR if necessary.
- Once plants are mature and ready to ship, temperatures can be reduced further to "holding" temperatures. Hold plants at an ADT of 16°C (61F). Same night temperatures but cooler days. Keep the greenhouse air dry and monitor soil moisture levels closely
- Use varieties, which are most suitable for these energy-saving-strategies: Universe, SK 199, Feelings. For later sales: Song. Those varieties not only allow cool culture, but also save energy indirectly by high number of plants per sqm, which means less costs per pot. Also remember, that some older varieties like Holy Day and Christmas Eve still have their value regarding energy-saving.

**NOTE:** Growers should use the information presented here as guidelines only. Crop times will vary depending on the climate, location, time of year, and greenhouse environmental conditions. Nothing herein shall be deemed a warranty or guaranty by Selecta One of any products listed herein