

CULTURE ADVICE

Euphorbia Cultivars Poinsettia group

Description: The poinsettia is one of the most important ornamental plant cultures. In its natural environment, the Central American shrub grows to a height of up to 4 m; when cultivated in the pot, it can be pruned to achieve a multitude of shapes in which the plant is sold, for example as single-shoot plant, multiple-shoot plant, bush or small tree. It is suitable for sale as a single plant in a pot or in combinations. The poinsettia is a facultative short-day plant that can be easily controlled.

Potting: High stems: calendar weeks 20 - 22; 17 - 23 cm pot
Pots: calendar weeks 27 - 33; 11 - 15 cm pot
] Midi: weeks 31 - 37; 9 - 10.5 cm pot
] Minis: weeks 34 - 40; 6 - 8 cm pot
] When potting, do not plant them in their final spacing!

Substrate: Structurally stable substrate (10 - 15 % clay) of good drainage properties.
pH 5.5 - 6.0

Fertilization: N 150-200 mg/l
P 120-140 mg/l
K 250-300 mg/l
Salt 1.8 to max. 2.3 g/l

A post-fertilization will often be of advantage; for the purpose, use a balanced, liquid complete fertilizer with an N:K ratio of 1:1. In order to prevent a molybdenum deficiency, sodium molybdate (0.2 g/l) may be added to the inhibitor that is sprayed on the plants every 2 to 3 weeks. Regular calcium spraying (0.15 % calcium chloride) during the entire cultivation may result in more stable plants, particularly in case of calcium-poor water. Have an eye on iron deficiency symptoms during cultivation. Should they occur, they can easily be remedied with conventional iron chelate fertilizers. Make sure to first sprinkle the plants and then rinse them to avoid a staining of the leaves.

Temperature: Optimum vegetative growth at average day temperatures of 20 to 24 °C. A high air humidity at the beginning is of advantage; especially in sunny weather, spray the plants several times a day. Night temperatures below 20 °C will delay rooting and may lead to fungal diseases in the root ball zone. It is therefore recommended to heat also in summer so as to guarantee a fast growth. Energy can be more effectively saved when the temperatures are lowered late in autumn. For a safe rooting, maintain a soil temperature of min. 20 °C. After 8 to 10 days, the temperature may be lowered to 18 - 20 °C. During the induction phase (in normal cultivation without darkening: from end of September) maintain a constant temperature of 17 to 20 °C day and night (light-leaved varieties induce optimally at temperatures around 20 °C, dark-leaved varieties prefer lower temperatures of around 17 °C). When the bracts start to come out and grow, maintain a temperature of 20 °C during the day and of approx. 18 °C at night. The size of the bracts and elongation growth will be enhanced when the day temperature is higher than that at night. Upon completion of the bract development, lower the temperature to

17 - 15 °C. Low temperatures before the selling time intensify the bract colour. Take care to keep the air humidity low

Light:

Facultative short-day plant, critical day length is 12 hours, max. 50 - 100 lux.

Optimum in November: 100 klxh (with assimilation light only during the day, max. 11 hours). In the weeks before and after lopping, shade to a level of approx. 25,000 lux.

Growth regulators:

Apply regularly before lopping, several times where necessary; treatment with an inhibitor shortly before and after lopping is recommended particularly in the case of large-sized ware (pots from 12 cm).

Cycocel 720: 0.075 to 0.12 %

Apply Topflor only on long days (until mid-September; 0.025 - 0.05 %. When using Topflor, note that an increased compression effect may occur when the temperature is below 18 °C and, above all, under low-light weather conditions.

Caution: Damage may occur if Caramba is not properly applied.

- Dif method: negative Dif (night temperature is higher than day temperature). Depending on the objective, the day temperature should be 2 - 4 °C below the night temperature (21 - 23 °C).
- Cool Morning: Short-time temperature drop to 12 - 14 °C for approx. 2 hours before sunrise.

Caution: Like the inhibitors, both the Dif method and Cool Morning have the effect of reducing the bract size on short days!

Pinching:

The pinching time is dependent on the planned selling size: Midi: approx. 5 Tage after potting, multiple-shoot plants: 2 to 4 weeks after potting depending on size. A high air humidity is advantageous for the formation of lateral shoots and shooting readiness.

Diseases / pest:

Rhizoctonia, thielaviopsis, pythium, botrytis, powdery mildew, white fly, fungus gnats.

Provide for sufficient air ventilation and circulation in order to prevent precipitations on the leaves and thus botrytis. This is a critical factor especially in case of major temperature drops at night or major temperature fluctuations. Take hygienic measures!

Water balance is of importance; the plants must not stand too wet, danger of botrytis, damage to roots and irregular plant build-up are the consequences.

Updated: 08/09/2009