

Cultural recommendation

Pelargonium

Description
Name: Pelargonium zonale, peltatum and interspecific
Family: Geraniaceae
Series: Sunrise®, Moonlight®, Marcada®, Balcon, Royal®, Decora
Product use
Use: Bedding and balcony plant
Exposure: Full sun – half shaded



Technical recommendations						
Potting and Spacing: Estimated finish crop time starting from RC . Spacing: for 10,5 cm pot ,20-25 plants/m2 and for 12-14 cm, 16-20 plants /m2)						
Pot Size	Early sales (March) weeks		Mid sales (April) weeks		Late sales (May +) weeks	
	North	South	North	South	North	South
10,5 cm	10-12	8-10	8-10	7-8	7-8	6-7
12 -14 cm	12-14	11-13	10-12	8-10	8-10	7-8
<i>Considerations:</i> Pelargoniums peltatum and zonale are Day Neutral (DNP) plants but crop time is strong influenced by potting date and light conditions						
Substrate: Use a well-drained, disease-free, soilless medium with a good structure and pH 5.6-6.2. As a basic fertilization starter a 1,5-2 g/l compound fertilizers should be in the substrate. Periodically, monitor the media and try to keep the pH at or above 6.0 to avoid iron/ manganese toxicity						
Fertilizer: Start feeding when first roots become visible. During the first 3-4 weeks, use a complete fertilizer 15-10-15 N-P-K with Ca, Mg and micronutrients at 1-1,5 gr/l in every watering. After this initial period switch to a fertilizer higher in potassium (K) 16-5-25 or 10-10-30 depending on the growth.						
<i>Recommended nutrient values in the soil (indications mg/l soil)</i>						
Nutrients	Start of growing	Middle	End of growing			
N	150	200	150-200			
P ₂ O ₅	100	150	100			
K ₂ O	180	200	300			
MgO	100	150	150			

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Temperature:

Growing stage	Day temp.	Night temp.
After potting (first two weeks):	19-22°C (66-72°F)	16-18 °C (61-64°F)
Vegetative period	18-20°C (64-68°F)	15-16°C (59-61°F)
Finish (two weeks before sale)	16-18°C (61-64°F)	14-15°C (57-59°F)

Humidity: Avoid high humidity in the greenhouse. Especially with a low temperature regimen you can quickly fall below the dew point which leads to condensation on the plants. Use ventilation and dehumidification programs, otherwise it could result in:

- Decreased transpiration
- Soft plants
- Less uptake of nutrients therefore nutrient deficiency may occur
- Higher risk of Botrytis
- High cell pressure leading to cell rupture
- Cork building, oedema

Light Levels: Pelargonium peltatum and zonale are a Day length neutral plant (DLN). The flower buds are formed regularly and subsequently develop if there are favorable energy conditions. Optimum range is between 25- 35 Klux. Up to 50 Klux the vegetation is hardened, however photosynthesis continues to increase.

Shading: only in case of high temperature and light conditions.

Pinch: Pinching is not recommended or needed. Current varieties are self branching

Growth regulation: Growth can be regulated by several growing techniques

- Do not delay spacing. Give the proper spacing for each pot size.
- Cultivate bright and dry.
- Choose the right variety for the desired product
- DIF and Cool morning techniques help to keep a compact growth

Cool Morning: Start to use when shoots have reached a length of 2,5 cm. Decrease the greenhouse temperature to 8-10° C (46-50°F) by opening the ventilation for 2-3 hours at dawn. This is a very useful measure in spring when outside temperature is cold early in the morning.

PGR's: For light control it's recommended to use Clormequat (Cycocel) and for moderate control a tank mix of Clormequat (Cycocel) + Daminozide (Dazide/Alar/B-nine). These recommendations for plant growth regulators should be used only as general guidelines. Growers must trial all PGR under their conditions and follow the registration uses of each chemical in their country.

Pest and diseases:

Pelargonium are sensitive to various pest under greenhouse conditions. Thrips, aphids, spider mites, caterpillars and white fly are the most common pest. Start with clean material a well disinfected facilities together with a proper pest management program using different control strategies: exclusion, monitoring, biological and chemical control, are the best tools to control these pests.

Pelargonium are also sensitive to several diseases like Botrytis, Pythium, Rhizoctonia, Xanthomonas, Rust, etc. Disease management should be addressed by sanitation strategies, environmental conditions control, biological and chemical control. For the chemical control, follow the registration uses of each product in each country.

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Crop schedule * 10,5 cm pot

	Early sales (March) weeks		Mid sales (April) weeks		Late sales (May +)weeks	
Pot Size	North	South	North	South	North	South
10,5 cm	10-12	8-10	8-10	7-8	7-8	6-7

* This is a reference time schedule that can vary depending on the variety, growing conditions and region. Schedule start from RC

Crop schedule * 12-14 cm pot

	Early sales (March) weeks		Mid sales (April) weeks		Late sales (May +)weeks	
Pot Size	North	South	North	South	North	South
12 -14cm	12-14	11-13	10-12	8-10	8-10	7-8

* This is a reference time schedule that can vary depending on the variety, growing conditions and region. Schedule start from RC

NOTE: Growers should use the information presented here as guidelines only. Selecta One recommends that growers conduct a trial of products under their own conditions. Crop times will vary depending on the climate, location, time of year, and greenhouse environmental conditions. It is the responsibility of the grower to read and follow all the current label directions relating to the products. Nothing herein shall be deemed a warranty or guaranty by Selecta One of any products listed herein