

Carnation Lillipot

Crop	Carnation
Series	Lillipot
Botanical name	<i>Dianthus caryophyllus</i>
Plant type	Annual
Seed type	Raw
Seed count	420 seeds / gr
Germination	20°C - 5 days light favored
Growing	13-18°C
Optimum pH	5.8-6.2

Plug Culture: 5 weeks (288 cell tray)

Stage 1 (days 1-7) Single sow seed into a well-drained sterile media and lightly cover the seed until it is no longer visible. Ideal media pH is 5.8 to 6.2 with an EC less than 1.0 mS/cm (2:1 slurry). Moisten the media and germinate at a temperature of 18-21°C. The media should be kept uniformly moist as with other seeds. Over watering while in the germination stage should be avoided to prevent damping off.

Stage 2 (days 8-14) When the seedlings begin to emerge reduce moisture levels and place the plug trays in a bright greenhouse with a temperature of 18-21°C. When the cotyledons are fully expanded feed lightly with 75 ppm of nitrogen using a well balanced calcium nitrate based fertilizer.

Stage 3 (days 15-28) The seedlings are beginning to fill in the plug trays. Fertilize as needed to maintain strong growth. Supplemental lighting will promote leaf expansion and root development; especially during the darker months of January and February. If needed, apply plant growth regulators at 1,500-2,500 ppm / 0.15-0.25% as the leaves reach the plug tray edge to control growth

Stage 4 (days 29-35) The plants are now reaching maturity and are ready for transplanting into pots.

Reduce moisture and hold at 16°C, if necessary, until transplanted.

Transplanting to finish: 15-23 weeks

Container Size: Carnation Lillipot is best produced in 10-15 cm pots with one plant per pot.

Media: Any media that is high in nutrient holding capacity and has a good drainage will suit the needs of Carnation Lillipot. However, the soil structure should be sufficient to support the growth of this crop for 3 and half to 5 and half months. Ideal pH range is 5.8 to 6.2.

Temperature: After transplanting, the plants should be grown at a maximum day temperature of 15-18°C and a minimum night temperature of 4-7°C. Night temperatures lower than 4°C will delay growth and flowering. In general, the cooler the night temperature, within the recommended range, the greater the branching and the tighter, more compact the habit. Outdoor production is possible in mild climates. Similar to other carnations, growth can be hastened or slowed by raising or lowering the temperature.

Fertilizer: Carnation Lillipot is a relatively heavy feeder. A constant liquid feed of 150 to 200 ppm of nitrogen will yield a sturdy, compact plant with a profusion of flowers. Carnations are sensitive to boron deficiency and boron levels should be monitored closely. Pansy special fertilizers, like 15-3-20 calcium / magnesium, are recommended since they contain higher boron levels along with calcium and magnesium for strong stems. An application of slow release fertilizer is beneficial and if used the liquid fertilizer should be applied at 140 ppm nitrogen. Ideal EC range is 1.2 to 1.5 mS/cm (2:1 slurry).

Flowering: Flowering of Carnation Lillipot is dependent on the total amount of light calories that

the plant receives. In areas where the light levels are not reduced, the crop time will vary much less as the seasons change from autumn to winter to summer. As with other carnations Lillipot will respond to supplemental lighting during the darker months of the year. This will reduce the production time and allow a grower to even out year-round cropping time. Flowering will occur in 15-23 weeks from transplanting depending on the season, production temperatures and grower's location. All of these factors are related to the effect of temperature and total light calories that the plants receive.

Pinching: No Pinching is required as Lillipot is self-branching.

Disbudding / Center Budding: No flower bud removal is recommended for Carnation Lillipot. The plants will naturally produce an abundance of 5 cm flowers.

Seasonal Recommendations: As is typical for this genus, Carnation Lillipot is a cool season crop. Production will be limited to the cooler months of the year for any given production site.

All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on Asian conditions such as in Japan and Sakata cannot be held responsible for any crop damage related to the information given herein. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best.