Crop	Carnation
Series	Can Can
Botanical name	*Dianthus caryophyllus*
Plant type	Annual
Seed type	Raw
Seed count	420 seeds / gr
Germination	20ºC - 5 days light favored
Growing	13-18ºC
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 mhos. Moisten the media and germinate at a temperature of 18-21ºC. The media should be kept uniformly moist as with other seeds. Overwatering while in the germination stage should be avoided as damping-off could develop.

Stage 2 (days 8-14) When the seedlings begin to emerge reduce moisture levels and place the seed trays in a bright greenhouse with a temperature of 18-21ºC. 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 first true leaves are appearing and seedlings can now be fertilized with 150 to 200 ppm of nitrogen to maintain a media EC of 1.0-1.2 mS/cm (1:2 slurry). Provide high light and good air movement and allow the soil to dry out in between watering to reduce disease pressure.

Stage 4 (days 29-35) Seedlings are approaching transplant stage. Reduce temperature to 15ºC and reduce watering to tone the plants and to maximize root hair growth.

Transplanting to finish: 15-20 weeks

Container Size: Carnation Can Can is easily produced in 10 cm for green bedding plant sales. However, it is best suited for 18-20cm pot sales in flower.

Media: Any media which is high in nutrient holding capacity and has a good drainage will suit the needs of Carnation Can Can. However, the soil structure should be sufficient to support the growth of this crop for 3 ½ to 4 ½ months. Ideal pH range is 5.8 to 6.2.

Temperature: After transplanting, the plants should be grown at a maximum day temperature of 15-18ºC and a minimum night temperature of 4-7ºC. Night temperatures lower than 4ºC 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 Can Can is a relatively heavy feeder. A constant liquid fertilization 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. A fertilizer contains higher boron levels along with calcium and magnesium is recommended 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 (1:2 slurry).

Photoperiod: Flower initiation and development are a function of total light calorie accumulation and temperature, not photoperiod, and will occur year round if optimum temperatures are maintained.

Flowering: Flowering of Carnation Can Can 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, Can Can 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 15-20 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.

Plant growth regulators: If grown cool with high light no plant growth regulator applications are needed.

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

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

Seasonal Recommendations: As is typical for this genus, Carnation Can Can is a cool season crop. Production will be limited to the cooler months of the year for any given production site. In areas with a year-round moderate climate, sowing should be possible at any time of the year, as long as the cool temperature requirements of this crop can be met. Areas or seasons cannot supply suitable temperature as above, it's not recommended to produce Can Can.