

Cultural Information for:	Impatiens Carnival	Annual
Common Name:	Impatiens	
Botanical Name:	Impatiens walleriana	
Seed Count:	51,000 /ounce	1,800 / gram
Optimum Germination Temperature:	74-75 °F / 23-24 °C	
Optimum Growing Temperature:	60-65 °F / 15-18 °C	

Plug Culture: 5 weeks - 288

Stage One (days 1-7) Select a well-drained media with a pH between 5.8 and 6.2 and a soil EC of 0.5 to 0.75 mmhos (2:1 slurry). A 288 cell plug tray works well. Impatiens require light to germinate but a light cover of coarse vermiculite is advisable to help maintain sufficient moisture. Soil should be kept moist but not saturated. Optimum germination temperature is 74– 75 °F / 23 – 24 °C..

Stage Two (days 8-15) After emergence place the plug trays in a well-ventilated greenhouse with high light. In low light areas supplemental lighting at 350-450 foot candles/ 3,700-4,600 lux will enhance plant growth. Maintain a day temperature of 72-76 °F / 21-24 °C and a night temperature of 66-68 °F / 19-20 °C. If there is not a starter charge in the media lightly feed with 50 ppm N with a Cal/Mag Special.

Stage Three (days 16-30) Water and fertilize as needed to maintain healthy plugs. An application of 75 ppm N with a Cal/Mag Special is recommended at least once a week. Allow the plug trays to dry slightly between irrigations to avoid lush growth. Maintain the E.C. at 0.75-1.0 mmhos (2:1 slurry) and a temperature of 66-72 °F / 19-22 °C.

Stage Four (days 30-35) The plants are approaching the transplant stage. Reduce moisture but do not allow the plants to wilt. One can drop the air temperature to 62 °F / 17 °C to hold plug trays for a few days. Avoid temperatures below 60 °F / 15°C as this will invite disease problems.

Finished Production: 4-7 weeks

Container Size: Impatiens Carnival series is recommended for 606, and 1801 jumbo packs, 4-inch pots and hanging baskets.

Media: Peat-lite mixes work well at a soil pH of 5.8 – 6.2 and an E.C. of 0.5 mmhos.

Temperature: Following transplant maintain 65 °F/18 °C until the plants are well established. Finish the plants at temperatures of 60-64 °F / 15-18 °F. Low temperatures control vegetative growth, promote bud formation and ensure adequate hardening. DIF can also be used to control growth with a temperature of 65 °F / 18 °C at night and 60 °F / 15 °C during the day.

Fertilizer: Fertilize as needed to maintain optimum growth. The use of Cal/Mag formulations at 100 ppm N works well to produce strong and healthy plants. Avoid applying fertilizer that are high in urea and ammonium as they promote soft growth and plant stretching. Lower concentrations of fertilizer are recommended which result in more compact plants and enhanced flowering. Optimum E.C. level is 0.75 – 1.0 mmhos (2:1 slurry).

Watering: Avoid over watering for the best plant quality. Allowing the plants to dry slightly between watering promotes root development and compact plants. Overly dry conditions cause yellowing of leaves and deformed blooms.

Growth Regulation: It is best to use cultural methods to control plant stretch but, but if needed Alar (B-9), Bonzi and Sumagic are effective.

Diseases: Alternaria leaf spot, Botrytis, Impatiens Necrotic Spot Virus, Pythium, Rhizoctonia, Root Rot and Tomato Spotted Wilt Virus,

Pests: Thrips, aphids and spider mites.

Scheduling:

Cell pack – 4-5 weeks after transplanting.

4 inch (10 cm) pot – 5-6 weeks after transplanting (1 plant per pot).

10 inch (20 cm) basket – 7 weeks after transplanting (5 plants per pot).

Plants ultimately will reach 10 -12 inches (25-30 cm) tall by 8 - 10 inches (20-25 cm) wide outdoors in beds. Average flower size is 2 inches in diameter.