

Cultural Information for: Hibiscus Southern Belle Perennial
Common Name: Hibiscus or Rose Mallow
Botanical Name: Hibiscus moscheutos
Seed Count: 2,400 /ounce 85 /gram
Optimum Germination Temperature: 77 °F / 25 °C
Optimum Growing Temperature: 75 °F / 25 °C

Plug Culture – 200 cell size – 5 weeks

Stage One (days 1-10) Single sow seed into a well drained sterile media with a pH between 5.8 – 6.2 and an E.C. level of 0.5 mmhos (2:1 slurry). Lightly cover the seed with medium vermiculite and maintain a temperature of 77 °F/25 °C.

Stage Two (days 11—20) After emergence place the plug tray in a bright greenhouse with good air movement and reduce the temperature to 70-72 °F/21-22 °C. Lightly feed the seedlings with 75-100 ppm Nitrogen using a well balanced calcium nitrate based fertilizer.

Stage Three (days 21-29) The first true leaves are forming. Fertilize with 100-150 ppm Nitrogen as needed to maintain a media E.C. of 0.8 – 1.0 and a temperature of 68-72 °F/20-22 °C.

Stage Four (days 30-35) The seedlings are approaching transplant size. Reduce moisture and fertilizer to tone the plants and prepare them for the transition from the plug stage to the final container. Do not hold the plugs at less than 50 °F/11 °C or delay transplanting.

Transplanting to flower

Container: Hibiscus Southern Belle can be sold green in 4 inch/10 cm. pots or in flower in 1 gallon/4 liter pots.

Media: Plants grow best in well drained but moist media with a high organic content. The optimum media pH is 5.8 to 6.2 with an E.C. of 0.5 mmhos (2:1 slurry). The addition of mineral soil is beneficial in adding weight to the pot for better stability for growing outdoors.

Fertilizer: Hibiscus Southern Belle requires moderately high fertility in order to produce robust plants. Fertilize with 200-250 ppm Nitrogen to maintain a media E.C. of 1.5 to 1.8 mmhos.

Temperature and humidity: Hibiscus is a tropical plant and grows best between 68-85 °F/20-29 °C with high relative humidity. Plants may develop leaf chlorosis if grown cool at temperatures below 59 °F/15 °C.

Growth retardants: B-9/Alar at 2,500 ppm or a tank mix of B-9/Alar at 2,500 ppm and Cycocel at 750-1,000 ppm is effective at controlling plant stretch. Incorporating clay or mineral soil into the media also aids in reducing plant height since it keeps the media from staying too wet thus puts a slight moisture stress on the plants.

Light: Full Sun is best for maximizing flowers and reducing height.

Photoperiod: Hibiscus Southern Bell is an obligate long day plant. Begin forcing when the plants have 4-9 true leaves. Under photoperiods of 10 hours or less, plants remain vegetative. All plants can be rapidly induced to flower when the photoperiod exceeds 14 hours. Flowering is fastest when the photoperiod is 16 hours or longer or under natural days plus a 4 hour night interruption from 10 pm to 2 am. Provide a minimum of 10 foot candles/1,000 lux. Under long day conditions temperature has the greatest influence on flower development. Increasing the temperature decreases the time to flower.

Insects and Disease: Aphids, Thrips, Spider Mites and Whitefly are the major pests. In the garden caterpillar larvae and Japanese beetles can damage leaves. Hibiscus Southern Belle is not prone to any major diseases.

Crop Scheduling:

Weeks to flower from the start of forcing (5-7 weeks after sowing) when the plants have 4 - 9 true leaves.

Temperature	11-13 hours of photoperiod	16 hours of light or 4-hour night interruption
68 °F / 20 °C	16 weeks	9 ½ weeks
75 °F / 23 °C	11 weeks	8 ½ weeks
79 °F / 26 °C	10 weeks	6 ½ weeks
84 °F / 29 °C	9 weeks	6 weeks

Hardiness: Southern Belle is hardy to U.S.D.A zone 5 (-20 °F/ - 29 °C).