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

## Plug Culture – 5 weeks (200 / 10 x 20 tray)

**Stage One** (days 1-10) Single sow seed into a well drained sterile media with a pH between 5.8-6.2 and an EC level of 0.5 mmhos (2:1 dilution). Lightly cover the seed with medium vermiculite and maintain a temperature of 77°F/25°C. A 300 ppm Cycocel® spray at day 10 prevents stem stretch.

**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 N using a well-balanced calcium nitrate-based fertilizer.

**Stage Three** (days 21-29) The first true leaves are forming. Fertilize with 100-150 ppm N as needed to maintain a media EC 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/10°C or delay transplanting.

## Transplanting to flower

**Container:** Hibiscus Disco 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 EC of 0.5 mmhos (2:1 dilution). The addition of mineral soil is beneficial in adding weight to the pot for better stability for growing outdoors.

**Fertilizer:** Hibiscus Disco Belle requires moderately high fertility in order to produce robust plants. Fertilize with 200-250 ppm N to maintain a media EC 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.

**Pinching:** Not recommended as plants naturally branch.

**Growth retardants:** A tank mix of B-Nine® (daminozide) //Cycocel® (chlormequat) at 2,500 / 1,000 ppm is effective at controlling plant stretch. Apply a few weeks after transplanting, when roots have

expanded, followed by a second application 2 weeks later. Incorporating clay or mineral soil into the media also aids in reducing plant height since it keeps the media from staying too wet and exerts a slight moisture stress on the plants.

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

**Watering:** Maintain even moisture to promote optimum growth and flowering. Subjecting the plants to drought stress (wilting) results in yellowing of the flower buds and eventual flower bud abortion.

**Photoperiod:** Hibiscus Disco Belle 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 Disco Belle is not prone to any major diseases.

**Crop Scheduling:** Is greatly influenced by photoperiod and temperature.

## Total crop Time

| Temperature   | Photoperiod | Total Crop Time |
|---------------|-------------|-----------------|
| 68 °F / 20 °C | 16 hours    | 19 weeks        |
| 75 °F / 23 °C | 16 hours    | 14 weeks        |
| 79 °F / 26 °C | 16 hours    | 13 weeks        |
| 84 °F / 29 °C | 16 hours    | 12 weeks        |

## Weeks from visible bud to flowering

| Temperature   | 11-13 hour photoperiod | 16 hour photoperiod or 4 hr. night interruption |
|---------------|------------------------|---|
| 68 °F / 20 °C | 14 weeks               | 7 ½ weeks                                       |
| 75 °F / 23 °C | 9 weeks                | 5 ½ weeks                                       |
| 79 °F / 26 °C | 8 weeks                | 4 ½ weeks                                       |
| 84 °F / 29 °C | 7 weeks                | 4 weeks   |

**Hardiness:** Disco Belle is hardy to USDA zone 5B (-15°F/-26°C).

*“All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on North American conditions and Sakata cannot be held responsible for any crop damage related to the information given herein. Application of recommended growth regulators and chemicals are subject to local and state regulations. Always follow manufacturer’s label instructions. Testing a few plants prior to treating the entire crop is best.”*