# GrowerFacts **Hibiscus** Luna

(Hibiscus moscheutos)

## Germination

## Media

Use a well-drained, disease-free, soilless medium with a pH of 5.5 to 6.3 and a medium initial nutrient charge (EC 0.75 mmhos/cm with a 1:2 extraction).

## **Plug Tray Size**

The recommended size is 200-cell or larger plug. Sowing

Cover the seed with plug media. Seed can be germinated in a germination chamber or directly on the bench. When germinated in a chamber, the plug travs should be moved out as soon as radicle emergence occurs, to prevent seedling stretch.

### Temperature

Germinate at 68 to 75°F (20 to 24°C). Germination is slower but more uniform at the lower temperature range.

## Humidity

As long as the soil is kept evenly moist, high air humidity is not required for germination.

#### Light

Light is not required for Stage 1.

## Plug Production

### Temperature

Keep air temperature at 68 to 75°F (20 to 24°C) and soil temperature at 68 to 70°F (20 to 21°C) from germination to transplant.

## Light

Supplemental lighting is not required, but will decrease total crop time.

#### Fertilizer

At radicle emergence, apply 50 to 75 ppm N. Increase to 100 to 150 ppm N as leaves develop.

#### Moisture

Keep soil media evenly moist. Do not allow the seedlings to wilt.

## **Plant Growth Regulators**

A Cycocel spray at 300 ppm applied 10 days after sowing can be used if needed. This treatment will reduce the plug height by about 50% and make the foliage darker green as compared to non-treated plugs.

(European Rate: 0.4ml/1, 75% a.i.)

## Growing On to Finish

## Container Size

Luna Hibiscus is best suited to quart, gallon or larger containers (15 cm or larger). For guart and gallon containers (15-19 cm), use one plant per pot. For large containers (>19 cm), use 1 to 3 plants per pot.

### Media

Use a disease-free, peat-based, soilless medium with a pH of 6.0 to 6.5 and a medium initial nutrient charge (EC 0.75 mmhos/cm with a 1:2 extraction). "Nursery mixes" that contain soil can also be used, but may require an additional week of crop time and plants will have darker, green foliage.

#### Temperature

Days: 70 to 85°F (21 to 30°C)

Nights: 65 to 70°F (18 to 21°C) Warmer growing conditions result in shorter crop times. Do not allow average daily temperatures to drop below 68°F (20°C). Plants can become chlorotic and sensitive to pesticide spray (phytotoxicity) when grown at cooler temperatures.

#### Light

Keep light levels as high as possible. Plants grow best under full sun. Space plants to allow light to reach basal area, as this promotes better branching.

## Photoperiod

Luna Hibiscus requires a minimum of 12 hours of daylength to flower. Flowering is faster when daylength is 14 hours or longer. Supplemental lighting should be used under shorter days.

#### Watering

Keep media moist to wet. Consistent soil moisture is important and plants should not be allowed to wilt. Growing plants too dry will result in flower bud abortion.

### Fertilizer

Feed plants weekly at 200 to 250 ppm N in a complete fertilizer.

## Pinching

Pinching is not recommended. Luna Hibiscus branches naturally without pinching. Best branching occurs when plants are spaced when the foliage touches the sides of the pot.

#### **Plant Growth Regulators**

A tank mix of Cycocel at 750 to 1,000 ppm and B-Nine at 2,500 ppm has been tested in different climates in the U.S. and shown effective. Apply PGRs 2 weeks after transplant. Repeat application 2 weeks later if necessary.

Optional treatment: Bonzi drench at a very low rate of 0.25-0.5 ppm with multiple applications (2 to 3 times) is also effective. Be careful when using Bonzi drench as it is very easy to stunt plants, especially for northern growers.

If you are growing in a nursery mix that includes soil, less PGRs may be needed. One application 3 to 4 weeks after transplanting may be sufficient

PGR for Northern Europe: A weekly spray of a low concentration Cycocel (0.5ml/1, 75% a.i.) has been tested and shown effective in Risjenhout, Netherlands. If there is additional clay in the soil, it may turn out to be an alternative for the use of PGRs.

To determine the best rate for your conditions, we recommend that you run an in-house trial.



#### **Common Problems**

**Insect:** Thrips, aphids, spider mites. fungus gnats. **Note:** Use caution when using Adept, an insect growth regulator, as it could cause phytotoxicity on Hibiscus. To control fungus gnats, it is recommended to use Gnatrol or Distance as a drench for the larvae, and Decathlon or Talstar as a foliar spray for adults. **Disease:** No serious problem.

## Green Thumb Tips

Plant Luna Hibiscus in full sun locations (at least 6 hours of direct sunlight). Luna hibiscus can be planted in soil near ponds or water gardens. It will also tolerate dry conditions once it is established. When planted in a row, Luna Hibiscus makes a hedge 2 to 3 ft. (60 to 90 cm) tall and about 2 ft. (60 cm) wide. Luna Hibiscus can also be used in larger patio containers. Water and fertilize regularly with an all-purpose fertilizer for best results. If the foliage turns light green, it is an indication that plants need to be fertilized. Luna Hibiscus are perennial to USDA Hardiness Zone 5. Plants die back all the way to the ground in the Winter, then usually do not start growing until late May when the soil warms up. Overwintered plants will flower from mid-July on, with flowering decreasing in cooler Fall weather.

Ref. : 7 May 2013 http://www.panamseed.com/advancedsearch.aspx?srch

