

Happy Hour & Tequila™ Series Portulaca

P. grandiflora (Moss Rose)

Approximate seed count: 7,500 to 10,300 pellets/oz. (260-360 pellets/g); 263,000 to 284,000 S./oz. (9,300 to 10,000 S./g)

Plug Production

Media

Use a well-drained, disease-free, soilless medium with a pH of 5.8 to 6.2 and an EC less than 0.75 (mmhos/cm with a 1:2 extraction). Portulaca is very sensitive to high salts, particularly high ammonium, during germination.

Sowing

Happy Hour and Tequila portulaca is offered as multi-seeded pellets and as raw seed. Each multi-seeded pellet will generally yield 2 to 4 plants. Plug tray size from 406 to 288 cells. Do not cover the seed.

Photoperiod

Portulaca is sensitive to short days, even during the plug stage. When daylength is shorter than critical, plants can rosette (stop growing without flowering). Once plants rosette, they will not recover even when given long day treatment.

To prevent plants from rosetting, sow seed when the natural daylength is longer than 10 hours, 30 minutes for **Happy Hour** (30 minutes less than Margarita, which means that **Happy Hour** can be sown two weeks earlier than Margarita), and 10 hours 15 minutes for **Tequila**. If sowing earlier than suggested here, provide long day conditions (daylength extension to 12 to 13 hours) during all phases of production until critical natural daylength is achieved.

Stage 1 – Germination takes 2 to 3 days.

Soil temperature: 71 to 79°F (22 to 26°C)

Light: Light (more than 10 f.c.) is not required, but beneficial for germination.

Moisture: Keep soil moist but not saturate (level 4) during Stage 1 for optimal germination.

Humidity: Maintain 95% relative humidity (RH) until radicles emerge.

Stage 2

Soil temperature: 71 to 73°F (22 to 23°C)

Light: Up to 2,500 f.c. (26,900 Lux)

Moisture: Start to slightly reduce soil moisture (level 3) to allow the soil to dry out slightly before watering for best rooting.

Fertilizer: Apply fertilizer at rate 1 (less than 100 ppm N/less than 0.7 mS/cm EC) from nitrate-form fertilizers with low phosphorous. Keep ammonium levels less than 10 ppm.

Stage 3

Soil temperature: 68 to 73°F (20 to 23°C)

Light: Up to 2,500 f.c. (26,900 Lux)

Moisture: Allow media to further dry till the surface becomes light brown (level 2) before watering. Keep the moisture to wet-dry cycle (moisture level 4 to 2).

Portulaca prefers warm, high light and dry conditions. Best root growth will be obtained under these conditions.

Irrigate early in the day so foliage is dry by nightfall to prevent diseases. Damping off (*Rhizoctonia*) is the most common problem when the plants are grown too wet.

Fertilizer: Increase fertilizer to rate 2 (100 to 175 ppm N/0.7 to 1.2 mS/cm EC).

Growth Regulators: Growth regulators are not needed.

Stage 4

Soil temperature: 65 to 67°F (18 to 19°C)

Light: Up to 5,000 f.c. (53,800 Lux) if temperature can be controlled.

Moisture: Same as Stage 3.

Fertilizer: Same as Stage 3.

Growing On to Finish

Media

Use a well-drained, disease-free, soilless medium with a pH of 5.5 to 6.2 and a medium initial nutrient charge.

Temperature

Nights: 65 to 67°F (18 to 19°C)

Days: 68 to 76°F (20 to 25°C)

Flower buds may not develop or open if temperatures are too low.

Light

Maintain light levels as high as possible while maintaining recommended temperatures. Flower buds may not open if light levels are too low.

Photoperiod

Happy Hour

If transplanting plugs when the daylength is shorter than 10 hours, 30 minutes, provide long day conditions after transplanting. Daylength extension to 12 to 13 hours can be used. Make sure that the plugs/plants have been produced with the proper daylength as noted under **Plug Production – Photoperiod**.

Tequila

If transplanting plugs when the daylength is shorter than 10 hours, 15 minutes, provide long day conditions after transplanting. Daylength extension to 12 to 13 hours can be used. Make sure that the plugs/plants have been produced with the proper daylength as noted under **Plug Production – Photoperiod**.

Irrigation

Do not overwater. Allow the media to dry thoroughly between watering. Plants can be allowed to wilt slightly after the roots reach the side of the container.

Fertilizer

Fertilize every other irrigation with 15-0-15 alternating with 20-10-20 at 150 to 200 ppm N.

Growth Regulators

PGRs are not needed. Height can be controlled by allowing the soil to dry thoroughly between waterings. Plants can be allowed to wilt slightly after the roots reach the side of the container.

Height can also be controlled by withholding fertilizer, especially phosphorous and ammonium-form nitrogen.

Crop Scheduling

Sow to transplant (400-cell plug tray): 4 to 5 weeks, add one more week for 288-cell plug tray.

Portulaca is very sensitive to cool temperatures and low light levels. Plants grown under these conditions are likely to have longer crop times than noted below.

Container Size	Plugs* Per Flat/Pot	Weeks From Transplant
606 flat	36	5
4-in. (10-cm) pot	1	5 to 6

*Plugs are grown from multi-seeded pellets. Each multi-seeded pellet will generally yield 2 to 4 plants.

Common Problems

Insects: Spider mites, thrips

Diseases: *Rhizoctonia*, *Pythium*

Tips for Landscapers and Gardeners

- Plant in full sun after all danger of frost is past.
- Space plants 10 to 12 in. (25 to 30 cm) apart in well-drained soil.
- Flowers close at night.

Tequila™ has shown to be slightly more tolerant to cooler and moister landscape planting conditions than Sundial in Midwestern trial locations.

NOTE: Growers should use the information presented here as a starting point. Crop times will vary depending on the climate, location, time of year and greenhouse environmental conditions. Chemical and PGR recommendations are only guidelines. It is the responsibility of the applicator to read and follow all the current label directions for the specific.

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