## GrowerFacts

## Talinum Verde

(Talinum paniculatum)

## Germination

Sow seed in 400 to 288 -cell trays. In Europe, it can be sown in 264-cell trays. A light to medium vermiculite cover is recommended.

Germination - takes approximately 4 to 5 days for Limón, and 6 days for Verde.

Soil temperature: 68 to $74^{\circ} \mathrm{F}\left(20\right.$ to $\left.24^{\circ} \mathrm{C}\right)$
Light: Not required.
Moisture: Keep soil wet (level 4) during Stage 1.
Humidity: Maintain 95\%+ relative humidity (RH) until radicles emerge.

## Plug Production

## Media

Use a well-drained, disease-free, soilless medium with a pH of 5.5 to 6.1 and a medium initial nutrient charge (EC less than $0.75 \mathrm{mmhos} / \mathrm{cm}$ with a 1:2 extraction).

Stage 1 - Germination takes approximately 4 to 5 days for Limón, and 6 days for Verde.

Soil temperature: 68 to $74^{\circ} \mathrm{F}\left(20\right.$ to $\left.24^{\circ} \mathrm{C}\right)$
Light: Not required.
Moisture: Keep soil wet (level 4) during Stage 1.
Humidity: Maintain 95\%+ relative humidity (RH) until radicle emergence.

## Stage 2

Soil temperature: 68 to $72^{\circ} \mathrm{F}\left(20\right.$ to $\left.22^{\circ} \mathrm{C}\right)$
Light: Up to 2,500 f.c. (26,900 Lux)
Moisture: Reduce soil moisture slightly (level 3) to allow the roots to penetrate into the media.

Fertilizer: Apply fertilizer at rate 1 (less than 100 ppm $\mathrm{N} /$ less than $0.7 \mathrm{mS} / \mathrm{cm} \mathrm{EC}$ ) from nitrate-form fertilizers with low phosphorous.

## Stage 3

Soil temperature: 66 to $70^{\circ} \mathrm{F}\left(19\right.$ to $\left.21^{\circ} \mathrm{C}\right)$
Light: Up to 2,500 f.c. (26,900 Lux)
Moisture: Allow media to dry until the surface becomes light brown (level 2) before watering.

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

Growth Regulators: Not needed.
Stage 4
Soil temperature: 66 to $68^{\circ} \mathrm{F}\left(19\right.$ to $20^{\circ} \mathrm{C}$ )
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: 62 to $66^{\circ} \mathrm{F}\left(17\right.$ to $\left.19^{\circ} \mathrm{C}\right)$
Days: 66 to $74^{\circ} \mathrm{F}$ ( 19 to $23^{\circ} \mathrm{C}$ )

## Light

Growing Limón under slightly shady conditions will result in lighter lime-colored foliage, but avoid too much shade as plants will tend to stretch under very shady conditions. When grown under high light conditions, Verde will have slightly darker green foliage.

## Irrigation

Avoid both excessive watering and drought. Do not allow the plants to wilt.

## Fertilizer

Apply fertilizer at rate 3 (175 to 225 ppm N/1.2 to1.5 $\mathrm{mS} / \mathrm{cm} \mathrm{EC}$ ) once a week from a nitrate-form fertilizer
with low phosphorus. A balanced ammonium and nitrate form fertilizer may be applied as needed.

Maintain the media EC at 1.5 to $2.0 \mathrm{mS} / \mathrm{cm}$ and pH at 5.8 to 6.2. For constant fertilizer program, can apply fertilizer at rate 2 ( 100 to $175 \mathrm{ppm} \mathrm{N} / 0.7$ to $1.2 \mathrm{mS} / \mathrm{cm}$ ) while maintaining the above recommended EC and pH ranges.

## Growth Regulators

PGRs are not required for Limón.
Because Verde is slightly more vigorous in growth than Limón, B-Nine/Alar (daminozide) can be applied if needed at 2,500 to $3,500 \mathrm{ppm}$ ( 3 to $4.1 \mathrm{~g} / \mathrm{l} 85 \%$ formulation or 3.9 to $5.5 \mathrm{~g} / \mathrm{l}$ of $64 \%$ formulation) as a foliar spray once after transplant to tone the crop.

## Pinching

Pinching is not needed.

## Common Problems

Insect: Aphids
Disease: No known disease problems
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 chemical being used in accordance with all regulations.

