

Watermelon Sugar Baby

(*Citrullus lanatus*)

Germination

Sow directly into finishing container

- Time of radicle emergence (2-4 days)
- Soil temperature 75-80°F (24-27°C).
- Keep media very moist, near saturation.
- Seed are to be covered.
- Soil pH 5.8-6.2 and soluble salts (EC) to less than 0.75 mmhos/cm (2:1 extraction).
- Avoid high salts and particularly high ammonium during germination.
- Keep ammonium levels to less than 10 ppm.

Plug Production

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After Stem and cotyledon emergence (7 days)

- Soil temperature 65-70°F (18-21°C).
- Reduce moisture levels. Allow the soil to dry out slightly before watering for best rooting.
- Keep soil pH 5.8-6.2 and EC to less than 0.75 mmhos/cm.
- Begin fertilizing with 50 75 ppm N from 14-0-14 or 15-5-15 or a calcium/potassium nitrate feed once cotyledons are fully expanded.
- Alternate feed with clear water.
- Irrigate early in the day so foliage is dry by nightfall to prevent diseases.

Growing On to Finish

Growth and development after the development of true leaves (4-5 weeks)

TEMPERATURE

- **Night:** 65-70°F (18-21°C)
- **Day:** 68-75°F (20-24°C)

Allow the soil to dry thoroughly between irrigations but avoid permanent wilting to promote root growth and

control shoot growth.

FERTILIZATION

- Increase feed to 100 150 ppm N from 20 10 20 alternating with 14 0 14 or 15-5-15 or other calcium/potassium nitrate fertilizer.
- Fertilize every 2nd 3rd irrigation.
- If using 15-0-15 supplement with magnesium 1 2x during this stage, using magnesium sulfate (16 oz/100 gal) or magnesium nitrate. Do not mix magnesium sulfate with calcium nitrate as precipitate will form!
- Maintain soil pH 5.8-6.2.

CONTROLLING HEIGHT

- Use DIF whenever possible, especially the first 2 hours after sunrise, to control plant height.
- Height can also be controlled by withholding fertilizer, especially phosphorous and ammonium-form nitrogen.
- Chemical PGR's can not be used on vegetables and herbs.

LIGHT

Maintain light levels as high as possible while maintaining moderate temperatures.

MEDIA

Use a well-drained, disease-free soil-less medium with a medium initial nutrient charge and a pH 5.8-6.2.

COMMON PROBLEMS:

Insects: White fly, Spider mites

Diseases: Fungal diseases

Post Production Care

TEMPERATURE

Optimum temperatures for Watermelon:

- **Night:** 65-70°F (18-21°C)
- **Day:** 70-75°F (18-24°C)

Optimum conditions may be difficult to maintain, especially if plants are displayed outside.

LIGHT

Watermelon prefers full sun although partial shade may be beneficial in retail areas.

