

Onion Red Zeppelin

(*Allium cepa*)

Germination

Sow directly into finishing container

- Time of radicle emergence (2-4 days)
- Soil temperature 70-75°F (21-24°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 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 (12-15weeks)

TEMPERATURE

Night: 55-60°F (13-16°C)

Day: 65-70°F (18-21°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:

Diseases: Fungal diseases

Post Production Care

TEMPERATURE

Optimum temperatures for Onions:

Night: 62-65°F (17-18°C)

Day: 65-70°F (18-21°C)

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

LIGHT

Onions grow best in full sun; however partial shading may be beneficial during retail display.