

Lucius and Starmaker Luzula

Luzula nivea (Lucius) and *sylvatica* (Starmaker)

Approximate seed count (multi-seed pellet):

Lucius: 4,335 S./oz. (153 S./g)

Starmaker (TBD)

Plug Production

Media

Use a well-drained, disease-free media with a pH range of 5.8 to 6.2, and EC of 0.75mS/cm (2:1 extraction).

Sowing

Plug tray size: Use 288-cell plug tray or larger cell. Cover seeds with a medium of coarse-grade vermiculite.

Stage 1 – Germination takes approximately 10 to 12 days.

Germination temperature: 64 to 68°F (18 to 20°C).

Light: required for germination.

Media moisture: Keep soil moist (level 4) for optimal germination.

Relative humidity: Maintain 95 to 97% relative humidity until cotyledons emerge.

Stage 2

Temperature: 64 to 68°F (18 to 20°C).

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

Moisture: Once the plug trays come out of the germination chamber, reduce soil moisture slightly from level 4 to 3 to allow the roots to penetrate into the soil.

Fertilizer: Apply fertilizer at rate 1 (less than 100 ppm N/less than 0.7 mS/cm EC) with a nitrate-form fertilizer with low phosphorous. Maintain a media pH of 5.8 to 6.2 and EC at 0.5 to 0.7 mS/cm (1:2 extraction).

Stage 3

Temperature: 64 to 68°F (18 to 20°C)

Light: Can go up to 5,000 f.c. (54,000 Lux).

Moisture: Keep the media moisture between medium and medium dry (level 3 to 2). Allow the media to dry until the surface becomes light brown (level 2) before watering. Make sure they don't get too wet.

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

media pH of 5.8 to 6.2 and EC at 0.7 to 1.0 mS/cm (1:2 extraction).

Stage 4

Temperature: 61 to 64°F (16 to 18°C)

Light: Can be up to 5,000 f.c. (54,000 Lux) if temperatures can be maintained.

Moisture: Maintain moisture condition level 3 to 2.

Fertilizer: Maintain the fertilizer rate at 2. Maintain a media pH of 5.8 to 6.2 and EC at 0.7 to 1.0 mS/cm (1:2 extraction).

Growth Regulators

Not required.

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 (EC 0.75 mmhos/cm).

Temperature

Nights: 64 to 66°F (18 to 19°C)

Days: 66 to 74°F (19 to 23°C)

Can be also grown in cooler temperature; however, plants will grow more slowly.

Light

Keep light levels as high as possible while maintaining moderate temperatures. *Luzula* Lucius can tolerate light shade.

Irrigation

Keep media moist. Avoid growing in dry media as this will cause yellowing on the tip of shoots.

Fertilizer

Starting 1 week after transplant, apply fertilizer at rate 3 (175 to 225 ppm N/1.2 to 1.5 mS/cm) with nitrate-form fertilizer with low phosphorus once a week. Avoid using excessive ammonia nitrogen-form fertilizers and overfeeding, as these will result in less upright plants. Maintain the media EC at 1.50 to 2.00 mS/cm and pH at 5.5 to 6.2.

Growth Regulators

PGR's are not needed.

Crop Scheduling

Sow to transplant 288-cell plug tray or larger:

4 to 7 weeks

Transplant to saleable size (from 288 cell):

Container Size	Plants per pot/basket	Weeks from transplant	Total weeks
306-cell pack	1 plant per cell	8-9	13-15
4 to 4.5-in. (10-11 cm)	1 plant per pot	8-9	13-15
6-6.5 in. (15 cm) Gallon (18cm)	3 plants per pot	9-10	14-16

Note: Add one more week for Luzula Starmaker.

Common Problems

Insects: Mites, thrips

Diseases: Powdery mildew

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.

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