

Juncus Starhead

Juncus ensifolius

Approximate seed count (multi-seed pellet):
32,296 S./oz. (1,140 S./g)

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. Do not cover the seeds.

Stage 1 – Germination takes approximately 7 to 10 days.

Germination temperature: 64 to 72°F (18 to 22°C).

Light: Optional.

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 79°F (18 to 26°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 72°F (18 to 22°C)

Light: Can go up 2,500 f.c. (26,900 Lux).

Moisture: Keep the media moisture medium and medium dry (level 3 to 2). Allow the media to dry until the surface becomes light brown (level 2) before watering but do not allow the seedlings to wilt.

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 to 2. Maintain a media pH of 5.8 to 6.2 and EC at 0.7 to 1.0 mS/cm (1:2 extraction). Check for powdery mildew from this stage onwards.

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. Juncus Starhead can tolerate light shade.

Irrigation

Keep media moisture medium wet to medium (level 4-3). Avoid growing in dry media as this will cause yellowing on the tip of shoots. Can be grown under saturated conditions.

Fertilizer

Starting 1 week after transplant, apply fertilizer at rate 3 (175 to 225 ppm N/1.2 to 1.5 mS/cm) once a week with nitrate-form fertilizer with low phosphorus. 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:

6 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	7-8	13-15
4 to 4.5-in. (10-11 cm)	1 plant per pot	7-8	13-15
6-6.5 in. (15-16 cm) Gallon (18cm)	3 plants per pot	8-9	14-16

Common Problems

Insects: No serious problems.

Diseases: No serious problems.

Garden and Landscape Information

Location: Juncus Starhead can tolerate light shade and saturated conditions.

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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