GrowerFacts

PanAmerican Seed...

Grass Juncus inflexus Blue Arrows

(Juncus inflexus)

Germination

Sow multi-seed pellets in 400 to 288-cell trays. In Europe, pellets can be sown in 264-cell trays. Do not cover pellets.

Days to Germinate:

Deschampsia Zephyr: 3-4 days Eragrostis Wind Dancer: 2-3 days Isolepis Live Wire: 6 days Juncus Blue Arrows: 12 days Juncus Blue Dart: 7-8 days Juncus Javelin: 5-6 days Juncus Twisted Arrows: 7-8 days Koeleria Blue Sprite: 4-5 days Stipa Capriccio: 4-5 days Stipa Sirocco: 5-6 days

Plug Production

Media

Use a well-drained, disease-free, soilless media with a pH of 5.5 to 6.2 and a medium initial nutrient charge (EC 0.75 mmhos/cm).

Stage 1

Soil temperature: 64 to 75°F (18 to 24°C)

Light: Required for germination and early seedling growth.

Moisture: Keep soil wet (level 4) during Stage 1.

Humidity: Maintain 100% relative humidity (RH) until radicles emerge.

Stage 2

Soil temperature: 64 to 70°F (18 to 21°C)

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 N/less than 0.7 mS/cm EC) from nitrate-form fertilizers with low phosphorous.

Stage 3

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

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. Do not allow the seedlings to wilt.

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

Growth Regulators: Not needed.

Stage 4

Soil temperature: 64 to 66°F (18 to 19°C)

Light: Up to 5,000 f.c. (53,800 Lux) if temperature can

be controlled.

Moisture: Maintain wet/dry cycle. Do not allow the

seedlings to wilt.

Fertilizer: Same as Stage 3.

Growing On to Finish

Media

Use a well-drained, disease-free, soilless media with a pH of 5.5 to 6.2 and a medium initial nutrient charge (EC 0.75 mmhos/cm).

Transplanting

Do not bury the plugs too deeply when transplanting.

Temperature

Nights: 59 to 64°F (15 to 18°C)

Days: 62 to 74°F (17 to 23°C)

These grasses can be grown under temperatures as low as 50°F (10°C) but the crop time will increase significantly.

See crop scheduling chart for additional cultural suggestions.

Light

Maintain light levels as high as possible if temperature can be controlled.

Irrigation

Maintain medium moisture conditions. See crop scheduling chart for additional watering suggestions.

Fertilizer

Apply fertilizer at rate 3 (175 to 225 ppm N/1.2 to 1.5 mS/cm EC) once a week from nitrate-form fertilizer with low phosphorus. Avoid using excessive ammonia nitrogen-form fertilizers and overfeeding, as these will result in less upright plants.

Growth Regulators

PGRs are not needed. However, for Juncus Javelin, a Bonzi (paclobutrazol) spray at 30 ppm (7.5ml/l, 0.4% formulation) 2 weeks after transplant is beneficial to reduce leaf bending by making the plants more compact and stronger.

Pinching

Pinching is not needed.

Spacing

Can be grown pot tight.

Container Size

306 Premium pack: 1 plug per cell

2.5-in. (6-cm) pot: 1 plug per cell

4-in. (10-cm) pot: 1 plug per pot

6-in. (15-cm) pot: 1 to 3 plugs per pot

1-gallon (18-cm) pot: 1 to 3 plugs per pot

Common Problems

No major insect or disease issues.

Crop Scheduling

Deschampsia Zephyr

Sow to Transplant: 4-5 weeks Transplant to Finish: 5-6 weeks

Cultural Notes: Do not allow plants to wilt.

Eragrostis Wind Dancer

Sow to Transplant: 3-5 weeks Transplant to Finish: 5-6 weeks

Cultural Notes: Cooler temperatures will help to make

a more compact plant.

Isolepis Live Wire

Sow to Transplant: 5-6 weeks Transplant to Finish: 5-6 weeks

Cultural Notes: Do not allow plants to wilt.

Juncus Blue Arrows

Sow to Transplant: 5-6 weeks Transplant to Finish: 6-7 weeks

Cultural Notes: Can be grown under saturated

conditions.

Juncus Blue Dart

Sow to Transplant: 6-7 weeks Transplant to Finish: 6-7 weeks

Cultural Notes: Can be grown under saturated

conditions.

Juncus Javelin

Sow to Transplant: 5-6 weeks Transplant to Finish: 5-6 weeks

Cultural Notes: High light and Bonzi spray will make

plants more compact and stronger.

Juncus Twisted Arrows

Sow to Transplant: 5-6 weeks Transplant to Finish: 6-8 weeks

Cultural Notes: Can be grown under saturated

conditions.

Koeleria Blue Sprite

Sow to Transplant: 5-6 weeks Transplant to Finish: 6-7 weeks

Stipa Capriccio

Sow to Transplant: 4-5 weeks Transplant to Finish: 6-7 weeks

Stipa Sirocco

Sow to Transplant: 5-6 weeks Transplant to Finish: 6-8 weeks

Cultural Notes: Coloration is better under cool

conditions with high light.

*The transplant to finish time for 6-in. (15-cm) and gallon containers is based on 3 plugs per pot. Add 2 more weeks to the crop time when planting 1 plug per 6-in. (15-cm) and gallon (18-cm) container.

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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