

## 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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