# GrowerFacts Osteospermum Akila

(Osteospermum ecklonis)

# Germination

#### Media

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

## Sowing

Plug Tray Size

Can be produced in a 105-cell size liner with one seed per cell (A bigger cell size liner such as 105 will help in promoting branching early on and also will reduce the total crop time slightly when compared production from a smaller cell size plug). Akila plugs can also be produced using a 288-cell size tray.

A medium covering of coarse-grade vermiculite is recommended at sowing to help maintain humidity around the germinating seed for better germination performance.

Germination takes approximately 5 to 6 days. **Germination temperature:** 65 to 68°F (18 to 20°C)

**Light:** Light is not required for germination.

Moisture: Keep the media moisture at medium wet

(level 4) during Stage 1

Relative humidity: Maintain 95 to 97% relative

humidity until cotyledons emerge.

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Stage 1 – Germination takes approximately 5 to 6 days

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**Moisture**: Keep the media moisture at medium wet (level 4) during Stage 1

Relative humidity: Maintain 95 to 97% relative

humidity until cotyledons emerge.

Stage 2

Soil Temperature: 68 to 72°F (20 to 22°C) days; 60 to

62°F (16 to 17°C) nights

**Light:** Can be up to 2,500 f.c. (26,900 Lux).

Media Moisture: Keep the media moisture at medium

(level 3) to medium wet (level 4).

**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.

Stage 3

Soil Temperature: 68 to 70°F (20 to 21°C) days; 60 to

62°F (16 to 17°C) nights

**Light:** Can be up to 2,500 f.c. (26,900 Lux).

**Media Moisture:** Keep the media moisture medium dry (level 2) to medium (level 3) during Stages 3 and

**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).

### **Plant Growth Regulators**

Generally not required for plug production, but if necessary can apply a foliar spray of B-nine/Alar (daminozide) at 2,500 to 3,500 ppm (3.0 to 4.2 g/l of 85% formulation or 4.0 to 5.6 g/l of 64% formulation) once at about 3 weeks after sowing to tone the plugs.

Stage 4

Soil Temperature: 65 to 68°F (18 to 20°C) days; 60°F

(16°C) nights

Light: Light levels can be up to 5,000 f.c. (53,800 Lux)

if temperatures can be maintained. **Media Moisture:** Same as Stage 3 **Fertilizer:** Same as Stage 3.

Growing On to Finish

Container Size: 306-packs, 4-in. (10-cm) pots.

Media

Use a well-drained, disease-free soilless media with a pH of 5.8 to 6.2 and a medium initial nutrient charge.

**Temperature** 

**Night:** 50 to 55°F (10 to 13°C) **Day:** 60 to 70°F (16 to 21°C)

Osteospermums in general perform best at cool

temperatures.

#### Light

Keep light levels as high as possible while maintaining the optimal temperatures.

#### Fertilizer

Starting a week after transplant, apply fertilizer at rate 3 (175 to 225 ppm N/1.2 to 1.5 mS/cm) using predominately nitrate-form fertilizer with low phosphorus. Maintain the media EC at 1.50 to 2.00 mS/cm and pH at 5.8 to 6.2.

#### Irrigation

Maintain optimal media moisture, i.e. not too wet or not too dry.

#### **Plant Growth Regulators**

PGRs are generally not required, especially when grown under cool temperatures, as temperature can be the best natural growth-controlling factor. If needed when producing the crop under warmer temperatures, apply a tank mix foliar application of B-Nine/Alar (daminozide) at 2,500 ppm (3.0 g/l of 85% formulation



or 4.0 g/l of 64% formulation) and Cycocel (chlormequat) at 500 ppm (4.3 ml/l of 11.8% formulation or 0.7 ml/l of 75% formulation) to control plant growth. One application at 2 weeks after transplant will be sufficient.

Akila also responds well to foliar application of Topflor (flurprimidol) at 10 to 15 ppm (2.6 to 4.0 ml/l of 0.38% formulation) applied once after transplant.

#### **Pinching**

Pinching is not required, as Akila is naturally well branched.

#### Crop Scheduling

**Sow to transplant:** It takes approximately 5 weeks to finish a 105-cell size liner and approximately 4 weeks for a 288-cell size plug.

**Transplant to finish in 306-packs and 4-in (10-cm) pots:** Crop time is dependent on season and production temperatures, it takes about 10-12 weeks in spring/cool temperatures and 7-9 weeks in Autumn/ warm temperatures.

Total crop time to finish can be a week longer when grown from a smaller size plug such as a 288-cell size.

#### **Common Problems**

**Note:** Avoid using insecticides containing active ingredient "Methiocarb", as it affects the flower color.

#### **Garden and Landscape Information**

Location: Full Sun

**Height:** 16 to 20 in. (41 to 51 cm) **Spread:** 16 to 20 in. (41 to 51 cm) **Spacing:** 10 to 12 in. (25 to 30 cm)

**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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http://www.panamseed.com/advancedsearch.aspx?srch

